

Incident ID	NDHR1914456327
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: Environmental Professional

Signature: _____ Date: 11/1/2022

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

OCD Only

Received by: OCD Date: 11/01/2022

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: 2/03/2023

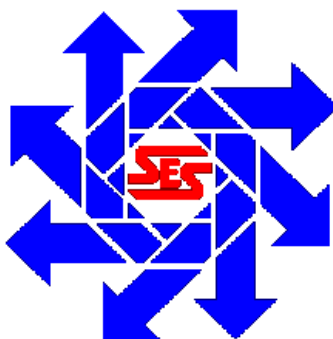
Printed Name: Ashley Maxwell Title: Environmental Specialist

**Devon Energy Production Company
CDU 18 Fed Com 1H**

**Closure Report
UL M, Section 18, T25S, R32E
Eddy County, New Mexico**

NDHR1914456327

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 CDU 18 Fed Com 1H location concerning a release of 500 gallons of Methanol from a vessel. According to the C-141, a fire was the cause of the release. No fluids were recovered. This site is situated in Lea County, Section 18, Township 25S, and Range 32E.

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 unknown. 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 2020, SESI personnel performed sampling to determine vertical extent of the release. SESI advanced 8 auger holes within the leak area. 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 CDU 18 Fed Com 1H Soil Sample Results: Hall Environmental Laboratories 3/6/20								
SAMPLE ID	Chloride	GRO	DRO	MRO	Benzene	Toluene	Ethyl benzene	Total Xylenes
AH1 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND
AH2 @ SURFACE	610	ND	54	69	ND	ND	ND	ND
AH3 @ SURFACE	400	ND	ND	ND	ND	ND	ND	ND
AH4 @ SURFACE	610	ND	56	66	ND	ND	ND	ND
AH5 @ SURFACE	410	ND	ND	ND	ND	ND	ND	ND
AH6 @ SURFACE	410	ND	ND	ND	ND	ND	ND	ND
AH7 @ SURFACE	1200	ND	700	860	ND	ND	ND	ND
AH8 @ SURFACE	2500	ND	1400	1900	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 foot as practicable. In May of 2020, approximately 60 yds of stained material was removed via backhoe then confirmation and horizontal samples were taken to ensure remediation was successful and that the horizontal extent of the release area had been established. Auger holes at locations 7 & 8 were deepened to 1' in order to verify proper remediation of these "hot spots". The decision was made to excavate the entire area to a depth of 1'. The samples were properly preserved and packaged then sent to Hall Laboratories for analysis. The result of the sampling is captured in the table below.

Devon Energy CDU 18 Fed Com 1H Soil Sample Results: Hall Environmental Laboratories 4/1/20								
SAMPLE ID	Chloride	GRO	DRO	MRO	Benzene	Toluene	Ethyl benzene	Total Xylenes
SP-1 BTM @ 1'	ND	ND	ND	ND	ND	ND	ND	ND
SP-2 BTM @ 1'	ND	ND	ND	ND	ND	ND	ND	ND
SP-3 NORTH WALL	61	ND	ND	ND	ND	ND	ND	ND
SP-4 NORTH WALL	ND	ND	ND	ND	ND	ND	ND	ND
SP-5 WEST WALL	ND	ND	ND	ND	ND	ND	ND	ND
SP-6 SOUTH WALL	ND	ND	ND	ND	ND	ND	ND	ND
SP-7 SOUTH WALL	ND	ND	ND	ND	ND	ND	ND	ND
SP-8 BOTTOM	ND	ND	ND	ND	ND	ND	ND	ND
SP-9 BOTTOM	ND	ND	ND	ND	ND	ND	ND	ND
SP-10 BOTTOM	ND	ND	ND	ND	ND	ND	ND	ND
SP-11 BOTTOM	ND	ND	ND	ND	ND	ND	ND	ND
SP-12 NORTH WALL	ND	ND	ND	ND	ND	ND	ND	ND
SP-13 WEST WALL	ND	ND	ND	ND	ND	ND	ND	ND
SP-14 NORTH WALL	63	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

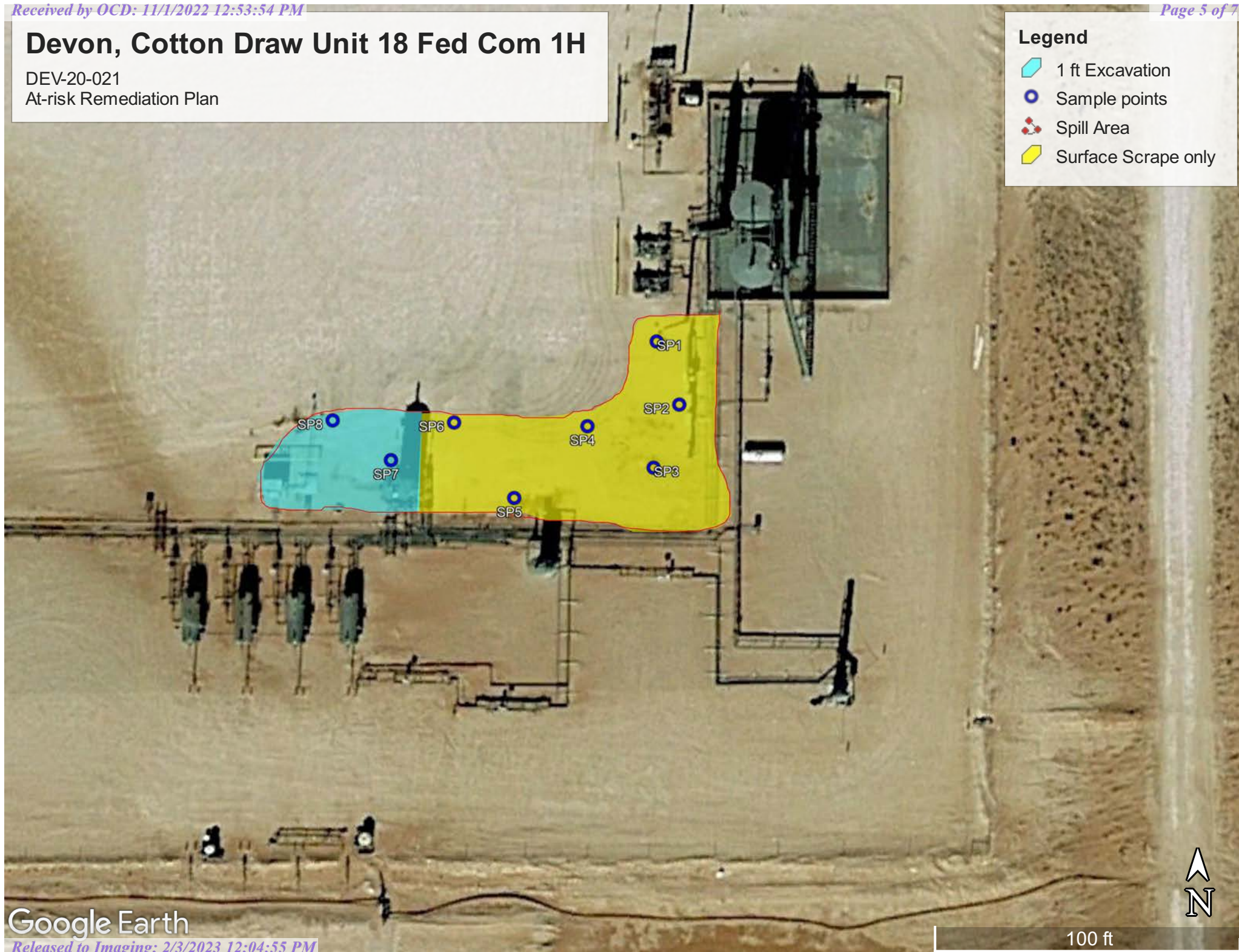
Map of Release with sample locations
 Photos of release and remediation
 BLM Cave Karst Map
 Laboratory Analysis
 C-141, pages 3-6

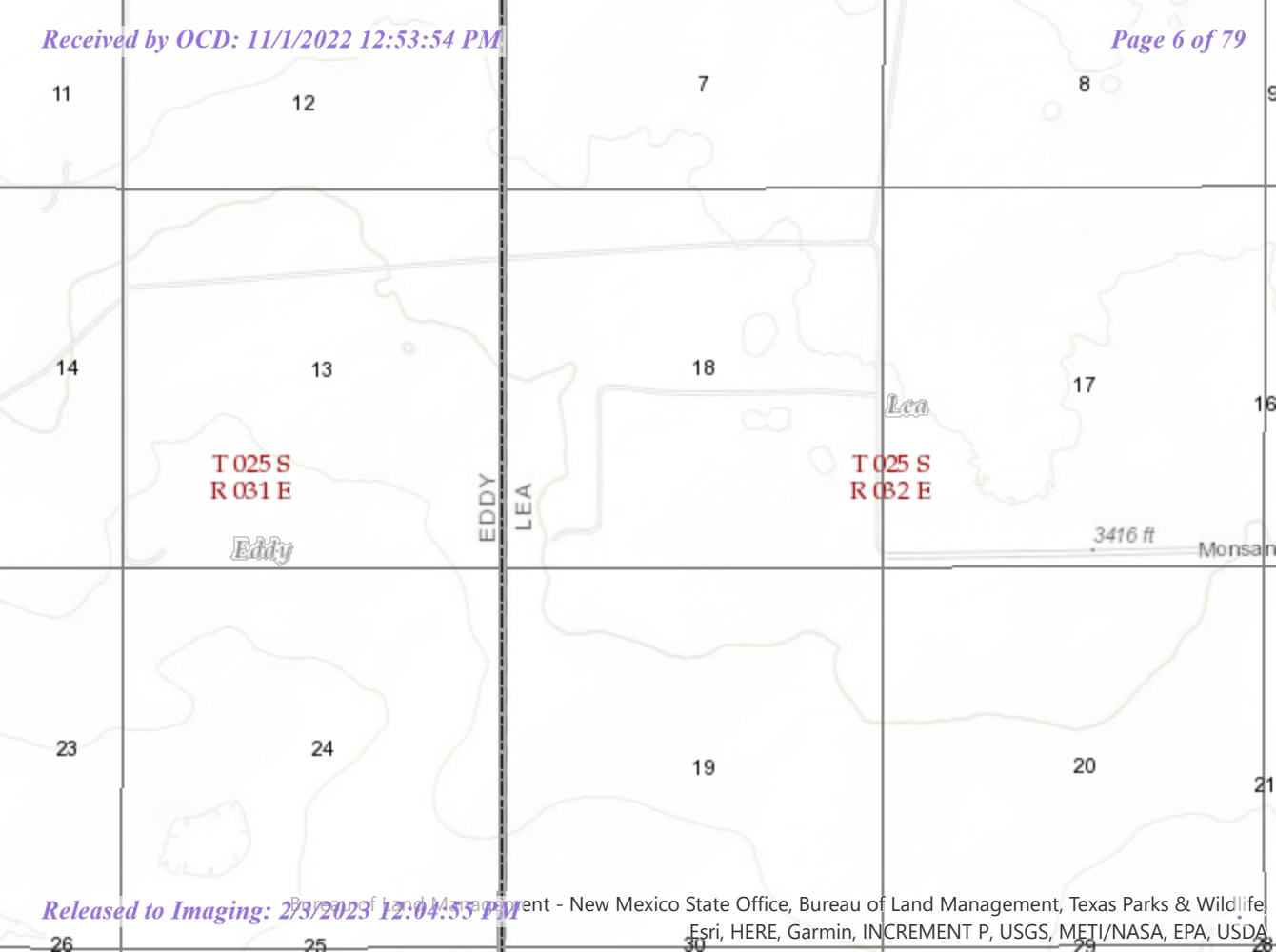
Devon, Cotton Draw Unit 18 Fed Com 1H

DEV-20-021
At-risk Remediation Plan

Legend

-  1 ft Excavation
-  Sample points
-  Spill Area
-  Surface Scrape only





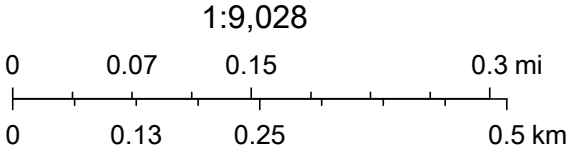


OSE PUBLIC PRINT



8/19/2021, 11:29:58 AM

-  OSE District Boundary
-  SiteBoundaries



Esri, HERE, iPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, iPC, Maxar




National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: New Mexico GO

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](#) 

Click to hide state-specific text

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- No sites found

No sites were found for groundwater level data using your search criteria.

The sites you requested may be available offline. For more information, contact [USGS Water Data Inquiries](#).

Site name contains string = 25S.32E

Minimum number of levels = 1

Use the "Back" button on your browser to change your search criteria.

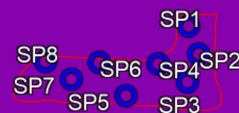
Return To Previous Page

Devon Energy

CDU 18 Fed Com 1H
Karst Map - Low
UL M - Sec 18 - T25S - R 32E

Legend

-  1 ft Excavation
-  Feature 1
-  High
-  Low
-  Medium
-  Spill Area
-  Surface Scrape only



DEVON
COTTON DRAW 18 FIRE
INITIAL PHOTOS



**DEVON
COTTON DRAW 18 FIRE
INITIAL PHOTOS**



**DEVON
COTTON DRAW 18 FIRE
INITIAL PHOTOS**



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COTTON DRAW 18 FIRE
INITIAL PHOTOS

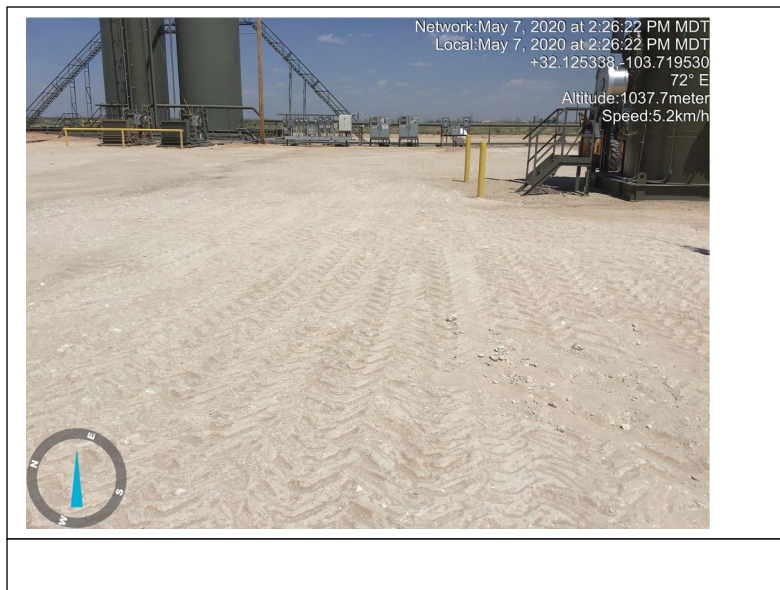
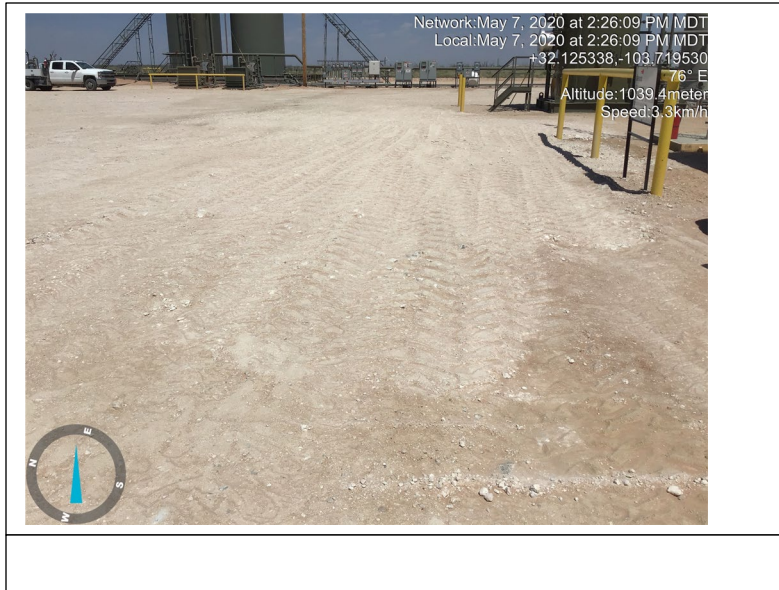


**DEVON
COTTON DRAW 18 FIRE
INITIAL PHOTOS**



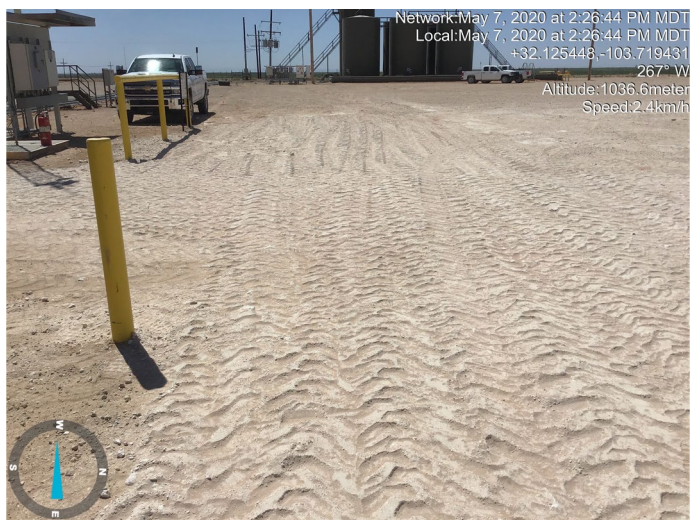
Devon Energy

CDU 18 Fed Com 1H Excavation & Remediation



Devon Energy

CDU 18 Fed Com 1H Excavation & Remediation



Devon Energy

CDU 18 Fed Com 1H Excavation & Remediation





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

March 18, 2020

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

RE: Devon Cotton Draw Unit 18 Fed Cu 1h 1RP-5501

OrderNo.: 2003406

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/10/2020 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2003406

Date Reported: 3/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: AH-1 Surface

Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1

Collection Date: 3/6/2020 12:40:00 PM

Lab ID: 2003406-001

Matrix: SOIL

Received Date: 3/10/2020 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/13/2020 12:31:23 AM	51072
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/13/2020 10:38:22 AM	51063
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/13/2020 10:38:22 AM	51063
Surr: DNOP	106	55.1-146		%Rec	1	3/13/2020 10:38:22 AM	51063
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/13/2020 7:20:39 PM	51041
Surr: BFB	87.4	66.6-105		%Rec	1	3/13/2020 7:20:39 PM	51041
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/13/2020 7:20:39 PM	51041
Toluene	ND	0.048		mg/Kg	1	3/13/2020 7:20:39 PM	51041
Ethylbenzene	ND	0.048		mg/Kg	1	3/13/2020 7:20:39 PM	51041
Xylenes, Total	ND	0.096		mg/Kg	1	3/13/2020 7:20:39 PM	51041
Surr: 4-Bromofluorobenzene	94.2	80-120		%Rec	1	3/13/2020 7:20:39 PM	51041

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

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

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Analytical Report

Lab Order 2003406

Date Reported: 3/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: AH-2 Surface

Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1

Collection Date: 3/6/2020 12:50:00 PM

Lab ID: 2003406-002

Matrix: SOIL

Received Date: 3/10/2020 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	610	60		mg/Kg	20	3/13/2020 1:08:25 AM	51072
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	54	10		mg/Kg	1	3/13/2020 10:47:27 AM	51063
Motor Oil Range Organics (MRO)	69	50		mg/Kg	1	3/13/2020 10:47:27 AM	51063
Surr: DNOP	109	55.1-146		%Rec	1	3/13/2020 10:47:27 AM	51063
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/13/2020 7:44:05 PM	51041
Surr: BFB	83.5	66.6-105		%Rec	1	3/13/2020 7:44:05 PM	51041
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/13/2020 7:44:05 PM	51041
Toluene	ND	0.048		mg/Kg	1	3/13/2020 7:44:05 PM	51041
Ethylbenzene	ND	0.048		mg/Kg	1	3/13/2020 7:44:05 PM	51041
Xylenes, Total	ND	0.097		mg/Kg	1	3/13/2020 7:44:05 PM	51041
Surr: 4-Bromofluorobenzene	90.9	80-120		%Rec	1	3/13/2020 7:44:05 PM	51041

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

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

Analytical Report

Lab Order 2003406

Date Reported: 3/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: AH-3 Surface

Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1

Collection Date: 3/6/2020 1:00:00 PM

Lab ID: 2003406-003

Matrix: SOIL

Received Date: 3/10/2020 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	400	60		mg/Kg	20	3/13/2020 1:45:29 AM	51072
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/13/2020 10:56:33 AM	51063
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/13/2020 10:56:33 AM	51063
Surr: DNOP	119	55.1-146		%Rec	1	3/13/2020 10:56:33 AM	51063
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/13/2020 10:04:57 PM	51041
Surr: BFB	82.9	66.6-105		%Rec	1	3/13/2020 10:04:57 PM	51041
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/13/2020 10:04:57 PM	51041
Toluene	ND	0.049		mg/Kg	1	3/13/2020 10:04:57 PM	51041
Ethylbenzene	ND	0.049		mg/Kg	1	3/13/2020 10:04:57 PM	51041
Xylenes, Total	ND	0.098		mg/Kg	1	3/13/2020 10:04:57 PM	51041
Surr: 4-Bromofluorobenzene	89.4	80-120		%Rec	1	3/13/2020 10:04:57 PM	51041

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

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

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Analytical Report

Lab Order 2003406

Date Reported: 3/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: AH-4 Surface

Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1

Collection Date: 3/6/2020 1:10:00 PM

Lab ID: 2003406-004

Matrix: SOIL

Received Date: 3/10/2020 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	610	60		mg/Kg	20	3/13/2020 1:57:49 AM	51072
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	56	9.7		mg/Kg	1	3/13/2020 11:05:39 AM	51063
Motor Oil Range Organics (MRO)	66	49		mg/Kg	1	3/13/2020 11:05:39 AM	51063
Surr: DNOP	110	55.1-146		%Rec	1	3/13/2020 11:05:39 AM	51063
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/13/2020 10:28:31 PM	51041
Surr: BFB	88.4	66.6-105		%Rec	1	3/13/2020 10:28:31 PM	51041
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/13/2020 10:28:31 PM	51041
Toluene	ND	0.048		mg/Kg	1	3/13/2020 10:28:31 PM	51041
Ethylbenzene	ND	0.048		mg/Kg	1	3/13/2020 10:28:31 PM	51041
Xylenes, Total	ND	0.097		mg/Kg	1	3/13/2020 10:28:31 PM	51041
Surr: 4-Bromofluorobenzene	95.7	80-120		%Rec	1	3/13/2020 10:28:31 PM	51041

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

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

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Analytical Report

Lab Order 2003406

Date Reported: 3/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: AH-5 Surface

Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1

Collection Date: 3/6/2020 1:20:00 PM

Lab ID: 2003406-005

Matrix: SOIL

Received Date: 3/10/2020 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	410	60		mg/Kg	20	3/13/2020 2:10:10 AM	51072
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/13/2020 11:14:44 AM	51063
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/13/2020 11:14:44 AM	51063
Surr: DNOP	113	55.1-146		%Rec	1	3/13/2020 11:14:44 AM	51063
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/13/2020 10:52:05 PM	51041
Surr: BFB	84.7	66.6-105		%Rec	1	3/13/2020 10:52:05 PM	51041
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/13/2020 10:52:05 PM	51041
Toluene	ND	0.047		mg/Kg	1	3/13/2020 10:52:05 PM	51041
Ethylbenzene	ND	0.047		mg/Kg	1	3/13/2020 10:52:05 PM	51041
Xylenes, Total	ND	0.094		mg/Kg	1	3/13/2020 10:52:05 PM	51041
Surr: 4-Bromofluorobenzene	90.6	80-120		%Rec	1	3/13/2020 10:52:05 PM	51041

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

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

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Analytical Report

Lab Order 2003406

Date Reported: 3/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: AH-6 Surface

Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1

Collection Date: 3/6/2020 1:45:00 PM

Lab ID: 2003406-006

Matrix: SOIL

Received Date: 3/10/2020 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	410	60		mg/Kg	20	3/13/2020 2:22:31 AM	51072
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/13/2020 11:23:51 AM	51063
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/13/2020 11:23:51 AM	51063
Surr: DNOP	121	55.1-146		%Rec	1	3/13/2020 11:23:51 AM	51063
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/13/2020 11:15:38 PM	51041
Surr: BFB	89.7	66.6-105		%Rec	1	3/13/2020 11:15:38 PM	51041
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/13/2020 11:15:38 PM	51041
Toluene	ND	0.049		mg/Kg	1	3/13/2020 11:15:38 PM	51041
Ethylbenzene	ND	0.049		mg/Kg	1	3/13/2020 11:15:38 PM	51041
Xylenes, Total	ND	0.098		mg/Kg	1	3/13/2020 11:15:38 PM	51041
Surr: 4-Bromofluorobenzene	97.1	80-120		%Rec	1	3/13/2020 11:15:38 PM	51041

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

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

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Analytical Report

Lab Order 2003406

Date Reported: 3/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: AH-7 Surface

Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1

Collection Date: 3/6/2020 2:00:00 PM

Lab ID: 2003406-007

Matrix: SOIL

Received Date: 3/10/2020 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	1200	60		mg/Kg	20	3/13/2020 2:34:52 AM	51072
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	700	96		mg/Kg	10	3/13/2020 11:32:57 AM	51063
Motor Oil Range Organics (MRO)	860	480		mg/Kg	10	3/13/2020 11:32:57 AM	51063
Surr: DNOP	0	55.1-146	S	%Rec	10	3/13/2020 11:32:57 AM	51063
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/13/2020 11:39:10 PM	51041
Surr: BFB	85.2	66.6-105		%Rec	1	3/13/2020 11:39:10 PM	51041
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/13/2020 11:39:10 PM	51041
Toluene	ND	0.047		mg/Kg	1	3/13/2020 11:39:10 PM	51041
Ethylbenzene	ND	0.047		mg/Kg	1	3/13/2020 11:39:10 PM	51041
Xylenes, Total	ND	0.094		mg/Kg	1	3/13/2020 11:39:10 PM	51041
Surr: 4-Bromofluorobenzene	90.9	80-120		%Rec	1	3/13/2020 11:39:10 PM	51041

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

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

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Analytical Report

Lab Order 2003406

Date Reported: 3/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: AH-8 Surface

Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1

Collection Date: 3/6/2020 2:20:00 PM

Lab ID: 2003406-008

Matrix: SOIL

Received Date: 3/10/2020 8:37:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2500	150		mg/Kg	50	3/14/2020 6:12:23 PM	51072
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	1400	98		mg/Kg	10	3/13/2020 11:42:03 AM	51063
Motor Oil Range Organics (MRO)	1900	490		mg/Kg	10	3/13/2020 11:42:03 AM	51063
Surr: DNOP	0	55.1-146	S	%Rec	10	3/13/2020 11:42:03 AM	51063
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/14/2020 12:02:45 AM	51041
Surr: BFB	85.0	66.6-105		%Rec	1	3/14/2020 12:02:45 AM	51041
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/14/2020 12:02:45 AM	51041
Toluene	ND	0.046		mg/Kg	1	3/14/2020 12:02:45 AM	51041
Ethylbenzene	ND	0.046		mg/Kg	1	3/14/2020 12:02:45 AM	51041
Xylenes, Total	ND	0.092		mg/Kg	1	3/14/2020 12:02:45 AM	51041
Surr: 4-Bromofluorobenzene	92.0	80-120		%Rec	1	3/14/2020 12:02:45 AM	51041

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2003406
18-Mar-20

Client: Safety & Environmental Solutions

Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1RP-550

Sample ID: MB-51072		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 51072		RunNo: 67231						
Prep Date: 3/12/2020		Analysis Date: 3/12/2020		SeqNo: 2317744			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-51072		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 51072		RunNo: 67231						
Prep Date: 3/12/2020		Analysis Date: 3/12/2020		SeqNo: 2317745			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	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 Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

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

WO#: 2003406

18-Mar-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1RP-550

Sample ID: LCS-51063	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 51063	RunNo: 67261								
Prep Date: 3/12/2020	Analysis Date: 3/13/2020	SeqNo: 2317963	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	93.8	70	130			
Surr: DNOP	4.5		5.000		90.0	55.1	146			

Sample ID: MB-51063	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 51063	RunNo: 67261								
Prep Date: 3/12/2020	Analysis Date: 3/13/2020	SeqNo: 2317965	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		97.3	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2003406

18-Mar-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw Unit 18 Fed Cu 1h 1RP-550

Sample ID: mb-51041	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 51041	RunNo: 67276								
Prep Date: 3/11/2020	Analysis Date: 3/13/2020	SeqNo: 2318736	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	880		1000		88.0	66.6	105			

Sample ID: lcs-51041	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 51041	RunNo: 67276								
Prep Date: 3/11/2020	Analysis Date: 3/13/2020	SeqNo: 2318737	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	85.6	80	120			
Surr: BFB	950		1000		95.4	66.6	105			

Qualifiers:

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

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

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

WO#: 2003406

18-Mar-20

Client: Safety & Environmental Solutions**Project:** Devon Cotton Draw Unit 18 Fed Cu 1h 1RP-550

Sample ID: mb-51041	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 51041	RunNo: 67276								
Prep Date: 3/11/2020	Analysis Date: 3/13/2020	SeqNo: 2318846	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: 4-Bromofluorobenzene	0.95		1.000		95.1	80	120			

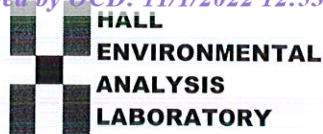
Sample ID: LCS-51041	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 51041	RunNo: 67276								
Prep Date: 3/11/2020	Analysis Date: 3/13/2020	SeqNo: 2318847	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.3	80	120			
Toluene	0.93	0.050	1.000	0	93.3	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.6	80	120			
Surr: 4-Bromofluorobenzene	0.96		1.000		95.6	80	120			

Qualifiers:

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

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

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

Sample Log-In Check List

Client Name: Safety Env Solutions

Work Order Number: 2003406

RcptNo: 1

Received By: Juan Rojas

3/10/2020 8:37:00 AM

Juan Rojas

Completed By: Juan Rojas

3/10/2020 12:02:38 PM

Juan Rojas

Reviewed By:

*LR**3/10/2020*Chain of Custody1. Is Chain of Custody sufficiently complete? Yes ☒ No ☐ Not Present ☐2. How was the sample delivered? CourierLog In3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°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? Yes ☒ No ☐

(Note discrepancies on chain of custody)

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

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *DAD 3/10/20*Special Handling (if applicable)15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

*Allen Bob*Date: *3/10/20*

By Whom:

*Leah Baca*Via: ☐ eMail ☒ Phone ☐ Fax ☐ In Person

Regarding:

sample name on bottles SP

Client Instructions:

Go with names on COC

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good				
2	2.3	Good				



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

April 07, 2020

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

RE: Cotton Draw 18 Fed Com 1H Devon WO 20715202

OrderNo.: 2004068

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/2/2020 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2004068

Date Reported: 4/7/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-7 1ft

Project: Cotton Draw 18 Fed Com 1H Devon WO

Collection Date: 4/1/2020 9:00:00 AM

Lab ID: 2004068-001

Matrix: SOIL

Received Date: 4/2/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	74	60		mg/Kg	20	4/5/2020 10:32:22 PM	51572
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/5/2020 7:30:21 PM	51530
Surr: BFB	99.4	70-130		%Rec	1	4/5/2020 7:30:21 PM	51530
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/5/2020 5:38:10 PM	51541
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/5/2020 5:38:10 PM	51541
Surr: DNOP	95.2	55.1-146		%Rec	1	4/5/2020 5:38:10 PM	51541
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	4/5/2020 7:30:21 PM	51530
Toluene	ND	0.049		mg/Kg	1	4/5/2020 7:30:21 PM	51530
Ethylbenzene	ND	0.049		mg/Kg	1	4/5/2020 7:30:21 PM	51530
Xylenes, Total	ND	0.098		mg/Kg	1	4/5/2020 7:30:21 PM	51530
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%Rec	1	4/5/2020 7:30:21 PM	51530
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/5/2020 7:30:21 PM	51530
Surr: Dibromofluoromethane	96.8	70-130		%Rec	1	4/5/2020 7:30:21 PM	51530
Surr: Toluene-d8	99.2	70-130		%Rec	1	4/5/2020 7:30:21 PM	51530

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

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

Page 1 of 6

Analytical Report

Lab Order 2004068

Date Reported: 4/7/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-8 1ft

Project: Cotton Draw 18 Fed Com 1H Devon WO

Collection Date: 4/1/2020 9:20:00 AM

Lab ID: 2004068-002

Matrix: SOIL

Received Date: 4/2/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	85	59		mg/Kg	20	4/5/2020 10:44:47 PM	51572
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/5/2020 7:59:24 PM	51530
Surr: BFB	99.0	70-130		%Rec	1	4/5/2020 7:59:24 PM	51530
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/5/2020 6:02:37 PM	51541
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/5/2020 6:02:37 PM	51541
Surr: DNOP	93.9	55.1-146		%Rec	1	4/5/2020 6:02:37 PM	51541
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	4/5/2020 7:59:24 PM	51530
Toluene	ND	0.049		mg/Kg	1	4/5/2020 7:59:24 PM	51530
Ethylbenzene	ND	0.049		mg/Kg	1	4/5/2020 7:59:24 PM	51530
Xylenes, Total	ND	0.097		mg/Kg	1	4/5/2020 7:59:24 PM	51530
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%Rec	1	4/5/2020 7:59:24 PM	51530
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	1	4/5/2020 7:59:24 PM	51530
Surr: Dibromofluoromethane	95.5	70-130		%Rec	1	4/5/2020 7:59:24 PM	51530
Surr: Toluene-d8	102	70-130		%Rec	1	4/5/2020 7:59:24 PM	51530

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2004068
07-Apr-20

Client: Safety & Environmental Solutions
Project: Cotton Draw 18 Fed Com 1H Devon WO 20715

Sample ID: MB-51572		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 51572		RunNo: 67876						
Prep Date: 4/5/2020		Analysis Date: 4/5/2020		SeqNo: 2344946			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-51572		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 51572		RunNo: 67876						
Prep Date: 4/5/2020		Analysis Date: 4/5/2020		SeqNo: 2344947			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			

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

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

WO#: 2004068

07-Apr-20

Client: Safety & Environmental Solutions
Project: Cotton Draw 18 Fed Com 1H Devon WO 20715

Sample ID: MB-51541	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 51541	RunNo: 67859								
Prep Date: 4/3/2020	Analysis Date: 4/5/2020	SeqNo: 2344068			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	9.0		10.00		89.6	55.1	146			

Sample ID: LCS-51541	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 51541	RunNo: 67859								
Prep Date: 4/3/2020	Analysis Date: 4/5/2020	SeqNo: 2344069			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	90.3	70	130			
Surr: DNOP	4.3		5.000		85.8	55.1	146			

Sample ID: MB-51554	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 51554	RunNo: 67859								
Prep Date: 4/4/2020	Analysis Date: 4/6/2020	SeqNo: 2345130			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		100	55.1	146			

Sample ID: LCS-51554	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 51554	RunNo: 67859								
Prep Date: 4/4/2020	Analysis Date: 4/6/2020	SeqNo: 2345131			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.3	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2004068

07-Apr-20

Client: Safety & Environmental Solutions
Project: Cotton Draw 18 Fed Com 1H Devon WO 20715

Sample ID: mb-51530	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 51530	RunNo: 67853								
Prep Date: 4/2/2020	Analysis Date: 4/5/2020	SeqNo: 2343895	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	0.43		0.5000		85.8	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.4	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.49		0.5000		97.3	70	130			

Sample ID: lcs-51530	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 51530	RunNo: 67853								
Prep Date: 4/2/2020	Analysis Date: 4/5/2020	SeqNo: 2343896	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	86.5	80	120			
Toluene	1.1	0.050	1.000	0	105	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.1	70	130			
Surr: Toluene-d8	0.50		0.5000		99.2	70	130			

Sample ID: mb-51487	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 51487	RunNo: 67881								
Prep Date: 4/1/2020	Analysis Date: 4/5/2020	SeqNo: 2345162	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.5	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.0	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.2	70	130			
Surr: Toluene-d8	0.49		0.5000		98.8	70	130			

Sample ID: lcs-51487	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 51487	RunNo: 67881								
Prep Date: 4/1/2020	Analysis Date: 4/5/2020	SeqNo: 2345164	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.48		0.5000		97.0	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Qualifiers:

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

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

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

WO#: 2004068

07-Apr-20

Client: Safety & Environmental Solutions
Project: Cotton Draw 18 Fed Com 1H Devon WO 20715

Sample ID: mb-51530	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 51530	RunNo: 67853								
Prep Date: 4/2/2020	Analysis Date: 4/5/2020	SeqNo: 2343932		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		97.5	70	130			

Sample ID: lcs-51530	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 51530	RunNo: 67853								
Prep Date: 4/2/2020	Analysis Date: 4/5/2020	SeqNo: 2343933		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.5	70	130			
Surr: BFB	500		500.0		101	70	130			

Sample ID: mb-51487	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 51487	RunNo: 67881								
Prep Date: 4/1/2020	Analysis Date: 4/5/2020	SeqNo: 2345213		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	490		500.0		98.6	70	130			

Sample ID: lcs-51487	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 51487	RunNo: 67881								
Prep Date: 4/1/2020	Analysis Date: 4/5/2020	SeqNo: 2345214		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	500		500.0		99.3	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

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



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

Sample Log-In Check List

Client Name: Safety Env Solutions

Work Order Number: 2004068

RcptNo: 1

Received By: **Isaiah Ortiz**

4/2/2020 8:30:00 AM

I-Of

Completed By: **John Caldwell**

4/2/2020 9:52:50 AM

John Caldwell

Reviewed By:

50

9/2/20

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 <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 5. Sample(s) in proper container(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Sufficient sample volume for indicated test(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Are samples (except VOA and ONG) properly preserved? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Was preservative added to bottles? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/> |
| 9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| 10. Were any sample containers received broken? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| 11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Are matrices correctly identified on Chain of Custody? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 13. Is it clear what analyses were requested? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 14. Were all holding times able to be met?
(If no, notify customer for authorization.) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
- # of preserved bottles checked for pH: (<2)

Adjusted? ✓

Checked by: _____

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: DAD 4/2/70

Special Handling (if applicable)

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

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

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good				
2	1.2	Good				



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

May 18, 2020

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

RE: Devon Cotton Draw 18 1 WO 20715202

OrderNo.: 2005394

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 14 sample(s) on 5/9/2020 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-1 Bottom 1FT

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 9:10:00 AM

Lab ID: 2005394-001

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	59		mg/Kg	20	5/13/2020 3:39:29 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/12/2020 3:12:42 PM	52384
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/12/2020 3:12:42 PM	52384
Surr: DNOP	99.2	55.1-146		%Rec	1	5/12/2020 3:12:42 PM	52384
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/12/2020 2:10:16 AM	52369
Surr: BFB	99.1	66.6-105		%Rec	1	5/12/2020 2:10:16 AM	52369
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 2:10:16 AM	52369
Toluene	ND	0.050		mg/Kg	1	5/12/2020 2:10:16 AM	52369
Ethylbenzene	ND	0.050		mg/Kg	1	5/12/2020 2:10:16 AM	52369
Xylenes, Total	ND	0.099		mg/Kg	1	5/12/2020 2:10:16 AM	52369
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	5/12/2020 2:10:16 AM	52369

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-2 Bottom 1FT

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 9:30:00 AM

Lab ID: 2005394-002

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 4:16:44 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/12/2020 4:03:16 PM	52384
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/12/2020 4:03:16 PM	52384
Surr: DNOP	101	55.1-146		%Rec	1	5/12/2020 4:03:16 PM	52384
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2020 2:34:13 AM	52369
Surr: BFB	97.0	66.6-105		%Rec	1	5/12/2020 2:34:13 AM	52369
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 2:34:13 AM	52369
Toluene	ND	0.049		mg/Kg	1	5/12/2020 2:34:13 AM	52369
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2020 2:34:13 AM	52369
Xylenes, Total	ND	0.099		mg/Kg	1	5/12/2020 2:34:13 AM	52369
Surr: 4-Bromofluorobenzene	91.0	80-120		%Rec	1	5/12/2020 2:34:13 AM	52369

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-3 North Wall

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 9:40:00 AM

Lab ID: 2005394-003

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	61	60		mg/Kg	20	5/13/2020 4:29:08 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/12/2020 4:27:21 PM	52384
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/12/2020 4:27:21 PM	52384
Surr: DNOP	97.6	55.1-146		%Rec	1	5/12/2020 4:27:21 PM	52384
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/12/2020 2:57:50 AM	52369
Surr: BFB	98.3	66.6-105		%Rec	1	5/12/2020 2:57:50 AM	52369
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 2:57:50 AM	52369
Toluene	ND	0.050		mg/Kg	1	5/12/2020 2:57:50 AM	52369
Ethylbenzene	ND	0.050		mg/Kg	1	5/12/2020 2:57:50 AM	52369
Xylenes, Total	ND	0.099		mg/Kg	1	5/12/2020 2:57:50 AM	52369
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	5/12/2020 2:57:50 AM	52369

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-4 North Wall

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 9:45:00 AM

Lab ID: 2005394-004

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 4:41:32 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/12/2020 4:51:29 PM	52384
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/12/2020 4:51:29 PM	52384
Surr: DNOP	96.6	55.1-146		%Rec	1	5/12/2020 4:51:29 PM	52384
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2020 3:21:43 AM	52369
Surr: BFB	99.9	66.6-105		%Rec	1	5/12/2020 3:21:43 AM	52369
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/12/2020 3:21:43 AM	52369
Toluene	ND	0.049		mg/Kg	1	5/12/2020 3:21:43 AM	52369
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2020 3:21:43 AM	52369
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2020 3:21:43 AM	52369
Surr: 4-Bromofluorobenzene	94.4	80-120		%Rec	1	5/12/2020 3:21:43 AM	52369

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-5 West Wall

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 9:55:00 AM

Lab ID: 2005394-005

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 4:53:56 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/12/2020 5:15:36 PM	52384
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/12/2020 5:15:36 PM	52384
Surr: DNOP	98.1	55.1-146		%Rec	1	5/12/2020 5:15:36 PM	52384
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2020 3:45:38 AM	52369
Surr: BFB	102	66.6-105		%Rec	1	5/12/2020 3:45:38 AM	52369
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/12/2020 3:45:38 AM	52369
Toluene	ND	0.049		mg/Kg	1	5/12/2020 3:45:38 AM	52369
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2020 3:45:38 AM	52369
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2020 3:45:38 AM	52369
Surr: 4-Bromofluorobenzene	95.6	80-120		%Rec	1	5/12/2020 3:45:38 AM	52369

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

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

Page 5 of 21

Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-6 South Wall

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 10:15:00 AM

Lab ID: 2005394-006

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 5:06:21 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/12/2020 5:39:57 PM	52384
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/12/2020 5:39:57 PM	52384
Surr: DNOP	99.6	55.1-146		%Rec	1	5/12/2020 5:39:57 PM	52384
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2020 4:09:30 AM	52369
Surr: BFB	100	66.6-105		%Rec	1	5/12/2020 4:09:30 AM	52369
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 4:09:30 AM	52369
Toluene	ND	0.049		mg/Kg	1	5/12/2020 4:09:30 AM	52369
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2020 4:09:30 AM	52369
Xylenes, Total	ND	0.099		mg/Kg	1	5/12/2020 4:09:30 AM	52369
Surr: 4-Bromofluorobenzene	94.8	80-120		%Rec	1	5/12/2020 4:09:30 AM	52369

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-7 South Wall

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 10:25:00 AM

Lab ID: 2005394-007

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 5:18:46 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/12/2020 6:04:25 PM	52384
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/12/2020 6:04:25 PM	52384
Surr: DNOP	99.0	55.1-146		%Rec	1	5/12/2020 6:04:25 PM	52384
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/12/2020 4:32:56 AM	52369
Surr: BFB	101	66.6-105		%Rec	1	5/12/2020 4:32:56 AM	52369
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 4:32:56 AM	52369
Toluene	ND	0.050		mg/Kg	1	5/12/2020 4:32:56 AM	52369
Ethylbenzene	ND	0.050		mg/Kg	1	5/12/2020 4:32:56 AM	52369
Xylenes, Total	ND	0.10		mg/Kg	1	5/12/2020 4:32:56 AM	52369
Surr: 4-Bromofluorobenzene	95.8	80-120		%Rec	1	5/12/2020 4:32:56 AM	52369

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-8 Bottom

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 11:00:00 AM

Lab ID: 2005394-008

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 5:31:10 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/12/2020 2:25:13 PM	52392
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/12/2020 2:25:13 PM	52392
Surr: DNOP	100	55.1-146		%Rec	1	5/12/2020 2:25:13 PM	52392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/12/2020 4:56:18 AM	52369
Surr: BFB	95.8	66.6-105		%Rec	1	5/12/2020 4:56:18 AM	52369
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 4:56:18 AM	52369
Toluene	ND	0.050		mg/Kg	1	5/12/2020 4:56:18 AM	52369
Ethylbenzene	ND	0.050		mg/Kg	1	5/12/2020 4:56:18 AM	52369
Xylenes, Total	ND	0.099		mg/Kg	1	5/12/2020 4:56:18 AM	52369
Surr: 4-Bromofluorobenzene	91.0	80-120		%Rec	1	5/12/2020 4:56:18 AM	52369

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-9 Bottom

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 11:20:00 AM

Lab ID: 2005394-009

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 5:43:34 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/12/2020 4:03:03 PM	52392
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/12/2020 4:03:03 PM	52392
Surr: DNOP	95.7	55.1-146		%Rec	1	5/12/2020 4:03:03 PM	52392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2020 10:53:19 AM	52375
Surr: BFB	98.6	66.6-105		%Rec	1	5/12/2020 10:53:19 AM	52375
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 10:53:19 AM	52375
Toluene	ND	0.049		mg/Kg	1	5/12/2020 10:53:19 AM	52375
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2020 10:53:19 AM	52375
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2020 10:53:19 AM	52375
Surr: 4-Bromofluorobenzene	94.6	80-120		%Rec	1	5/12/2020 10:53:19 AM	52375

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-10 Bottom

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 12:10:00 PM

Lab ID: 2005394-010

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 5:55:59 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/12/2020 4:27:23 PM	52392
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/12/2020 4:27:23 PM	52392
Surr: DNOP	79.5	55.1-146		%Rec	1	5/12/2020 4:27:23 PM	52392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2020 12:03:59 PM	52375
Surr: BFB	102	66.6-105		%Rec	1	5/12/2020 12:03:59 PM	52375
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 12:03:59 PM	52375
Toluene	ND	0.049		mg/Kg	1	5/12/2020 12:03:59 PM	52375
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2020 12:03:59 PM	52375
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2020 12:03:59 PM	52375
Surr: 4-Bromofluorobenzene	97.3	80-120		%Rec	1	5/12/2020 12:03:59 PM	52375

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-11 Bottom

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 1:00:00 PM

Lab ID: 2005394-011

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 6:08:23 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/12/2020 4:51:47 PM	52392
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/12/2020 4:51:47 PM	52392
Surr: DNOP	90.2	55.1-146		%Rec	1	5/12/2020 4:51:47 PM	52392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2020 1:14:42 PM	52375
Surr: BFB	99.0	66.6-105		%Rec	1	5/12/2020 1:14:42 PM	52375
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 1:14:42 PM	52375
Toluene	ND	0.049		mg/Kg	1	5/12/2020 1:14:42 PM	52375
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2020 1:14:42 PM	52375
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2020 1:14:42 PM	52375
Surr: 4-Bromofluorobenzene	94.3	80-120		%Rec	1	5/12/2020 1:14:42 PM	52375

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-12 North Wall

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 11:50:00 AM

Lab ID: 2005394-012

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2020 6:45:37 PM	52432
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/12/2020 5:16:23 PM	52392
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/12/2020 5:16:23 PM	52392
Surr: DNOP	86.4	55.1-146		%Rec	1	5/12/2020 5:16:23 PM	52392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2020 1:38:27 PM	52375
Surr: BFB	99.1	66.6-105		%Rec	1	5/12/2020 1:38:27 PM	52375
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 1:38:27 PM	52375
Toluene	ND	0.049		mg/Kg	1	5/12/2020 1:38:27 PM	52375
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2020 1:38:27 PM	52375
Xylenes, Total	ND	0.099		mg/Kg	1	5/12/2020 1:38:27 PM	52375
Surr: 4-Bromofluorobenzene	93.1	80-120		%Rec	1	5/12/2020 1:38:27 PM	52375

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

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

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Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-13 West Wall

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 2:10:00 PM

Lab ID: 2005394-013

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	5/15/2020 5:54:00 PM	52493
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/12/2020 5:41:16 PM	52392
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/12/2020 5:41:16 PM	52392
Surr: DNOP	110	55.1-146		%Rec	1	5/12/2020 5:41:16 PM	52392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/12/2020 2:01:53 PM	52375
Surr: BFB	99.0	66.6-105		%Rec	1	5/12/2020 2:01:53 PM	52375
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 2:01:53 PM	52375
Toluene	ND	0.049		mg/Kg	1	5/12/2020 2:01:53 PM	52375
Ethylbenzene	ND	0.049		mg/Kg	1	5/12/2020 2:01:53 PM	52375
Xylenes, Total	ND	0.098		mg/Kg	1	5/12/2020 2:01:53 PM	52375
Surr: 4-Bromofluorobenzene	94.4	80-120		%Rec	1	5/12/2020 2:01:53 PM	52375

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

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

Analytical Report

Lab Order 2005394

Date Reported: 5/18/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-14 North Wall

Project: Devon Cotton Draw 18 1 WO 20715202

Collection Date: 5/7/2020 2:20:00 PM

Lab ID: 2005394-014

Matrix: SOIL

Received Date: 5/9/2020 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	63	60		mg/Kg	20	5/15/2020 6:06:25 PM	52493
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/12/2020 6:06:09 PM	52392
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/12/2020 6:06:09 PM	52392
Surr: DNOP	85.8	55.1-146		%Rec	1	5/12/2020 6:06:09 PM	52392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/12/2020 2:25:22 PM	52375
Surr: BFB	99.8	66.6-105		%Rec	1	5/12/2020 2:25:22 PM	52375
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/12/2020 2:25:22 PM	52375
Toluene	ND	0.050		mg/Kg	1	5/12/2020 2:25:22 PM	52375
Ethylbenzene	ND	0.050		mg/Kg	1	5/12/2020 2:25:22 PM	52375
Xylenes, Total	ND	0.099		mg/Kg	1	5/12/2020 2:25:22 PM	52375
Surr: 4-Bromofluorobenzene	94.7	80-120		%Rec	1	5/12/2020 2:25:22 PM	52375

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

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

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

WO#: 2005394

18-May-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 18 1 WO 20715202

Sample ID: MB-52432	SampType: ms	TestCode: EPA Method 300.0: Anions								
Client ID: BatchQC	Batch ID: 52432	RunNo: 68855								
Prep Date: 5/13/2020	Analysis Date: 5/13/2020	SeqNo: 2383894 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5	15.00	0	0	50.4	161			S

Sample ID: LCS-52432	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 52432	RunNo: 68855								
Prep Date: 5/13/2020	Analysis Date: 5/13/2020	SeqNo: 2383895 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

Sample ID: MB-52493	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 52493	RunNo: 68940								
Prep Date: 5/15/2020	Analysis Date: 5/15/2020	SeqNo: 2386107 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-52493	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 52493	RunNo: 68940								
Prep Date: 5/15/2020	Analysis Date: 5/15/2020	SeqNo: 2386108 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2005394

18-May-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 18 1 WO 20715202

Sample ID: LCS-52392	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 52392	RunNo: 68810								
Prep Date: 5/11/2020	Analysis Date: 5/12/2020	SeqNo: 2381688 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	3.9		5.000		77.4	55.1	146			

Sample ID: MB-52392	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 52392	RunNo: 68810								
Prep Date: 5/11/2020	Analysis Date: 5/12/2020	SeqNo: 2381689 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	9.9		10.00		98.6	55.1	146			

Sample ID: MB-52384	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 52384	RunNo: 68819								
Prep Date: 5/11/2020	Analysis Date: 5/12/2020	SeqNo: 2381742 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	9.2		10.00		92.2	55.1	146			

Sample ID: LCS-52384	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 52384	RunNo: 68819								
Prep Date: 5/11/2020	Analysis Date: 5/12/2020	SeqNo: 2381743 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.4	70	130			
Surr: DNOP	4.1		5.000		82.3	55.1	146			

Sample ID: 2005394-008AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: SP-8 Bottom	Batch ID: 52392	RunNo: 68810								
Prep Date: 5/11/2020	Analysis Date: 5/12/2020	SeqNo: 2382996 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.7	48.31	0	103	47.4	136			
Surr: DNOP	4.6		4.831		94.4	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2005394

18-May-20

Client: Safety & Environmental Solutions**Project:** Devon Cotton Draw 18 1 WO 20715202

Sample ID: 2005394-008AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: SP-8 Bottom	Batch ID: 52392	RunNo: 68810								
Prep Date: 5/11/2020	Analysis Date: 5/12/2020	SeqNo: 2382997	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.9	49.50	0	107	47.4	136	6.41	43.4	
Surr: DNOP	4.9		4.950		98.3	55.1	146	0	0	

Sample ID: LCS-52417	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 52417	RunNo: 68847								
Prep Date: 5/12/2020	Analysis Date: 5/13/2020	SeqNo: 2383136	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		101	55.1	146			

Sample ID: MB-52417	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 52417	RunNo: 68847								
Prep Date: 5/12/2020	Analysis Date: 5/13/2020	SeqNo: 2383137	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

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

Page 17 of 21

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

WO#: 2005394

18-May-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 18 1 WO 20715202

Sample ID: mb-52369	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 52369	RunNo: 68802								
Prep Date: 5/9/2020	Analysis Date: 5/11/2020	SeqNo: 2380989 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	980		1000		98.2	66.6	105			

Sample ID: lcs-52369	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 52369	RunNo: 68802								
Prep Date: 5/9/2020	Analysis Date: 5/11/2020	SeqNo: 2380990 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.8	80	120			
Surr: BFB	1100		1000		106	66.6	105			S

Sample ID: mb-52375	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 52375	RunNo: 68813								
Prep Date: 5/10/2020	Analysis Date: 5/12/2020	SeqNo: 2382289 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	1000		1000		101	66.6	105			

Sample ID: lcs-52375	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 52375	RunNo: 68813								
Prep Date: 5/10/2020	Analysis Date: 5/12/2020	SeqNo: 2382290 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.6	80	120			
Surr: BFB	1100		1000		107	66.6	105			S

Sample ID: 2005394-010ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: SP-10 Bottom	Batch ID: 52375	RunNo: 68813								
Prep Date: 5/10/2020	Analysis Date: 5/12/2020	SeqNo: 2382293 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.49	0	87.6	80	120			
Surr: BFB	1100		979.4		111	66.6	105			S

Sample ID: 2005394-010amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: SP-10 Bottom	Batch ID: 52375	RunNo: 68813								
Prep Date: 5/10/2020	Analysis Date: 5/12/2020	SeqNo: 2382294 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2005394

18-May-20

Client: Safety & Environmental Solutions

Project: Devon Cotton Draw 18 1 WO 20715202

Sample ID: 2005394-010amsd		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: SP-10 Bottom		Batch ID: 52375		RunNo: 68813						
Prep Date: 5/10/2020		Analysis Date: 5/12/2020		SeqNo: 2382294		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.65	0	88.8	80	120	2.09	20	
Surr: BFB	1100		986.2		110	66.6	105	0	0	S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2005394

18-May-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 18 1 WO 20715202

Sample ID: mb-52369	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 52369	RunNo: 68802								
Prep Date: 5/9/2020	Analysis Date: 5/11/2020	SeqNo: 2381030 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: 4-Bromofluorobenzene	0.94		1.000		94.1	80	120			

Sample ID: LCS-52369	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 52369	RunNo: 68802								
Prep Date: 5/9/2020	Analysis Date: 5/11/2020	SeqNo: 2381031 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.9	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.5	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.8	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.8	80	120			

Sample ID: mb-52375	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 52375	RunNo: 68813								
Prep Date: 5/10/2020	Analysis Date: 5/12/2020	SeqNo: 2382359 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: 4-Bromofluorobenzene	0.96		1.000		96.2	80	120			

Sample ID: LCS-52375	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 52375	RunNo: 68813								
Prep Date: 5/10/2020	Analysis Date: 5/12/2020	SeqNo: 2382360 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.1	80	120			
Toluene	0.97	0.050	1.000	0	96.6	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.7	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.8	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		94.5	80	120			

Qualifiers:

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

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

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

WO#: 2005394

18-May-20

Client: Safety & Environmental Solutions**Project:** Devon Cotton Draw 18 1 WO 20715202

Sample ID: 2005394-009ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: SP-9 Bottom	Batch ID: 52375	RunNo: 68813								
Prep Date: 5/10/2020	Analysis Date: 5/12/2020	SeqNo: 2382362	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9625	0	92.1	78.5	119			
Toluene	0.96	0.048	0.9625	0	99.6	75.7	123			
Ethylbenzene	0.98	0.048	0.9625	0	102	74.3	126			
Xylenes, Total	2.9	0.096	2.887	0	101	72.9	130			
Surr: 4-Bromofluorobenzene	0.92		0.9625		95.5	80	120			

Sample ID: 2005394-009amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: SP-9 Bottom	Batch ID: 52375	RunNo: 68813								
Prep Date: 5/10/2020	Analysis Date: 5/12/2020	SeqNo: 2382363	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	0.9881	0	94.2	78.5	119	4.80	20	
Toluene	0.99	0.049	0.9881	0	99.9	75.7	123	2.95	20	
Ethylbenzene	1.0	0.049	0.9881	0	102	74.3	126	2.42	20	
Xylenes, Total	3.0	0.099	2.964	0	101	72.9	130	2.46	20	
Surr: 4-Bromofluorobenzene	0.98		0.9881		98.9	80	120	0	0	

Qualifiers:

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

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



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: **2005394**

RcptNo: 1

Received By: **Isaiah Ortiz**

5/9/2020 7:15:00 AM

I-Ox

Completed By: **Isaiah Ortiz**

5/9/2020 7:53:19 AM

I-Ox

Reviewed By:

5/9/2020

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°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: _____

IO
5/9/20

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Not Present			

[illegible]

Turn-Around Time: 5 Day	
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush
Project Name: Devon Cotton Straw 18-1 w/ 20715202	
Project #: Dev-20-021	
Project Manager: Allen Bob	
Sampler: SSA Jerry	
On Ice: <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
# of Coolers: 1	
Cooler Temp (including CF): 4.9-0 [CF] 4.9 (°C)	
Container Type and #	Preservative Type
1	HEAL No. 7005394
1	-013
	-014
Received by: [Signature]	Via: [Signature]
Date: 5/8/20	Time: 1600
Received by: [Signature]	Via: [Signature]
Date: 5/9/20	Time: 0715

Chain-of-Custody Record			
Client: Safety & Environmental Solutions			
Mailing Address: 703 E Clinton Gabbbs NM 88240			
Phone #: 575-397-0910			
email or Fax#:			
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____			
<input type="checkbox"/> EDD (Type) _____			
Date	Time	Matrix	Sample Name
5/6/7	1410	S	SP-13 West Wall
5/6/7	1420	S	SP-14 North Wall
Date:	Time:	Relinquished by:	
5/6/8	1600	Sgt. J. [Signature]	
Date:	Time:	Relinquished by:	
5/6/8	1600	[Signature]	

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.

ADDENDUM

Location name: Cotton Draw Unit 18 Fed Com 1H.

OCD Spill Number: NDHR1914456327

From: Dale Woodall, Devon Energy

Date: 11/1/2022

Since this report for the above referenced spill(s) was written, there has been an update in the status of the PODs for the location.

A review of New Mexico Office of the State Engineers (OSE) online water well database (New Mexico Office of the State Engineer (NMOSE) online water well database https://gis.ose.state.nm.us/gisapps/ose_pod_locations/) that POD C-4618-POD1 was installed on June 7, 2022, to a depth of 55 feet below ground surface. Groundwater was not encountered during the placement of the test boring. Well C-4618-POD1 is 0.22 miles east of the Cotton Draw Unit 18 Fed Com 1H.

The spills were remediated to criteria for DTW of 51-100 feet bgs.

A boring log of the well C-4618-POD1 is attached.



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4618		
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL) 575-748-1838		
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia	STATE NM	
					ZIP 88210		
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 7	SECONDS 25.94	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
	LONGITUDE 103	43	0.69	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SW SE SW Sec.18 T25S R32S NMPM							
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.	
	DRILLING STARTED 6/1/2022		DRILLING ENDED 6/1/2022		DEPTH OF COMPLETED WELL (FT) Temporary Well	BORE HOLE DEPTH (FT) ±55	DEPTH WATER FIRST ENCOUNTERED (FT) N/A
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED 6/7/2022
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	0 55		±6.5	Boring-HSA	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT	


FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-4618	POD NO. 1	TRN NO. 725951
LOCATION 25S.32E.18 343	WELL TAG ID NO. —	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	6	6	Sand, Fine-grained, poorly graded, 2.5 YR 5/6, Red	Y ✓ N	
	6	24	18	Sand, Fine-grained, poorly graded, unconsolidated, with Caliche 7.5 YR 7/6, Red	Y ✓ N	
	24	55	31	Sand, Fine-grained, poorly graded, unconsolidated, 7.5 YR 7.5/6, Brown	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface. 23 Cotton Draw Unit 507H <div style="text-align: right; color: blue;">OSE DTI JUN 10 2022 AM 9:22</div>	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 Jackie D. Atkins SIGNATURE OF DRILLER / PRINT SIGNEE NAME	6/9/2022 DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-4618	POD NO. 1	TRN NO. 725951
LOCATION 25S. 32E. 18 343	WELL TAG ID NO. -	PAGE 2 OF 2

Incident ID	NDHR1914456327
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: Environmental Professional

Signature: _____ Date: 11/1/2022

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

OCD Only

Received by: OCD Date: 11/1/2022

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: 2/03/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 155303

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 155303
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	2/3/2023