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		1 1180 1 0
Incident ID	NMLB1204437755	
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 19.15.2	9.11 NMAC
Photographs of the remediated site prior to backfill or phot must be notified 2 days prior to liner inspection)	tos of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate O	DDC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file cer may endanger public health or the environment. The acceptance should their operations have failed to adequately investigate and human health or the environment. In addition, OCD acceptance compliance with any other federal, state, or local laws and/or reg	plete to the best of my knowledge and understand that pursuant to OCD rules tain release notifications and perform corrective actions for releases which of a C-141 report by the OCD does not relieve the operator of liability remediate contamination that pose a threat to groundwater, surface water, of a C-141 report does not relieve the operator of responsibility for gulations. The responsible party acknowledges they must substantially conditions that existed prior to the release or their final land use in a OCD when reclamation and re-vegetation are complete.
Printed Name: Dale Woodall	Title: Environmental Professional
Signature: Dale Woodall	Date: 11/1/2022
email: dale.woodall@dvn.com	Date: 11/1/2022 Telephone: 575-748-1838
OCD Only	
Received by:	Date:
	rty of liability should their operations have failed to adequately investigate and ce water, human health, or the environment nor does not relieve the responsible nd/or regulations.
Closure Approved by: Ashley Maxwell	Date: 2/03/2023
Printed Name: Ashley Maxwell	Title: Environmental Specialist

# Devon Energy Production Company Cotton Draw Unit #156H

# Closure Report UL A, Section 35, T24S, R31E Eddy County, New Mexico

NMLB1204437755

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
Wesley Mathews	Devon Energy	575-578-6195	Wesley.Mathews@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 Cotton Draw Unit #156H. According to the C-141, an approximate 20 bbls of fluid was released, 16 bbls oil, 4 bbls of produced water. It was determined that the release was a result of a knick in the flowline to the West of the pad. Vacuum truck was called, and fluid was recovered. This site is situated in Eddy County, Section 35, Township 24S, and Range 31E.

SESI personnel performed an assessment of the site in August 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; however, since no wells less than 25 years old and less than a half mile away are known to be present, SESI will delineate this release to the most stringent criteria established by NMOCD.

#### Characterization

In August of 2020, SESI personnel performed sampling to determine vertical extent of the release. SESI advanced multiple auger holes within the leak area. The samples were properly packaged and preserved and sent to Hall Laboratories for analysis. The results of the testing are captured in the summary below:

Devon Energy CDU # 156H Soil Sample Results: Hall Environmental Laboratories 8/25/20											
SAMPLE ID Chloride GRO DRO MRO Benzene Toluene Ethyl benzene Total Xylenes											
H-1 South	ND	ND	ND	ND	ND	ND	ND	ND			
AH-2 @ Surface	ND	ND	ND	ND	ND	ND	ND	ND			
H-3 West	ND	ND	ND	ND	ND	ND	ND	ND			
H-4 East	ND	ND	ND	ND	ND	ND	ND	ND			
AH-5 @ Surface	ND	ND	760	1200	ND	ND	ND	ND			
AH-5 @ 1'	ND	ND	ND	ND	ND	ND	ND	ND			
H-6 West	ND	ND	ND	ND	ND	ND	ND	ND			
H-7 East	ND	ND	ND	ND	ND	ND	ND	ND			
AH-8 @ Surface	ND	ND	ND	ND	ND	ND	ND	ND			
H-9 West	ND	ND	ND	ND	ND	ND	ND	ND			

H-10 East	ND							
AH-11 @ Surface	ND							
H-12 West	ND							
H-13 East	ND							
AH-14 @ Surface	ND							
H-15 West	ND							
AH-16 @ Surface	ND							
H-17 Northwest	ND							
H-18 South	ND							
AH-19 @ Surface	ND							
H-20 North	ND							
H-21 South	ND							
H-22 East	ND							
H-23 North	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 ft as practicable. In October of 2020, contaminated material was removed by excavating the affected area. Confirmation samples were taken to ensure remediation was successful and that the vertical and horizontal extent of the release area had been established. The samples were properly preserved and packaged then sent to Hall Laboratories for analysis. The results of the sampling is captured in the table below.

Devon Energy CDU #156H									
	Soil Samp	le Result	s: Hall En	vironmer	ntal Laborato	ories 10/21,	/20		
SAMPLE ID	Chloride	GRO	DRO	MRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	
SP-24 @ 1'	ND	ND	ND	ND	ND	ND	ND	ND	
SP-25 @ 1'	ND	ND	ND	ND	ND	ND	ND	ND	
			Hori	zontal Ext	ent				
H-26 North	ND	ND	ND	ND	ND	ND	ND	ND	
H-27 East	ND	ND	ND	ND	ND	ND	ND	ND	
H-28 West	ND	ND	ND	ND	ND	ND	ND	ND	
H-29 South	ND	ND	ND	ND	ND	ND	ND	ND	

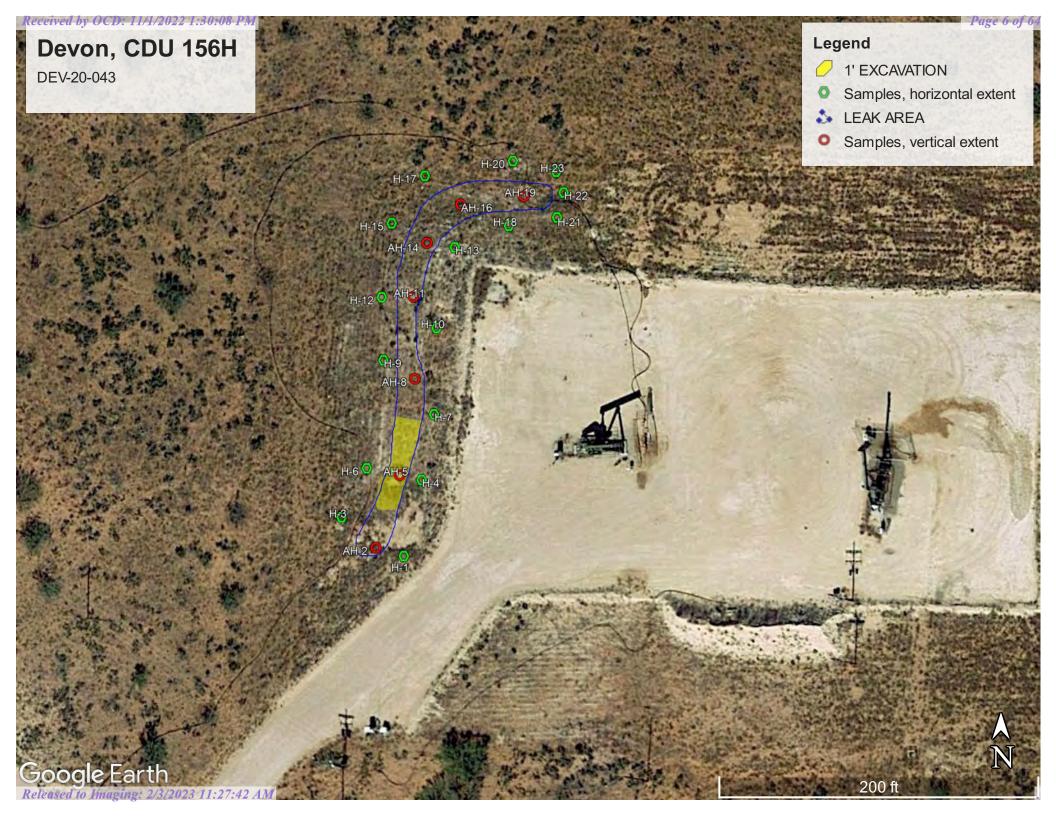
Once sample results verified both successful remediation and horizontal extent, the site was backfilled with clean soil. Pictures of the remediation are included in this report.

#### **Closure Request**

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

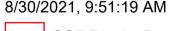
#### **Supplemental Documentation for Closure**

Map of Release with sample locations Photos of release and remediation NMOCD Oil and Gas Map BLM Cave Karst Map Laboratory Analysis C-141



# **OSE PUBLIC PRINT**



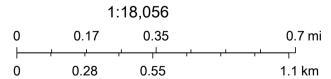


OSE District Boundary

New Mexico State Trust Lands

Subsurface Estate

Both Estates
SiteBoundaries



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

# **Devon Energy**

Received by OCD: 11/1/2022 1:30:08 PM

CDU #156H A-35-T24S-R31E Karst Map - Low NMLB1204437755

### Legend

32.1804924, -103.7421951

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32.1804924, -103.7421951



# Devon Energy – CDU #156H Remediation & Backfill Photos









# Devon Energy – CDU #156H Remediation & Backfill Photos









# Devon Energy – CDU #156H Remediation & Backfill Photos







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

September 03, 2020

Bob Allen Safety & Environmental Solutions PO Box 1613 Hobbs, NM 88241

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

RE: Devon Cotton Draw 156H OrderNo.: 2008E81

#### Dear Bob Allen:

Hall Environmental Analysis Laboratory received 24 sample(s) on 8/27/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order **2008E81**Date Reported: **9/3/2020** 

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: H-1 South

**Project:** Devon Cotton Draw 156H **Collection Date:** 8/24/2020 10:50:00 AM

**Lab ID:** 2008E81-001 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	8/31/2020 11:15:42 PM	54828
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	8/28/2020 11:20:53 PM	54745
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/28/2020 11:20:53 PM	54745
Surr: DNOP	38.3	30.4-154	%Rec	1	8/28/2020 11:20:53 PM	54745
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/29/2020 11:32:21 AM	54738
Surr: BFB	102	75.3-105	%Rec	1	8/29/2020 11:32:21 AM	54738
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	8/29/2020 11:32:21 AM	54738
Toluene	ND	0.048	mg/Kg	1	8/29/2020 11:32:21 AM	54738
Ethylbenzene	ND	0.048	mg/Kg	1	8/29/2020 11:32:21 AM	54738
Xylenes, Total	ND	0.096	mg/Kg	1	8/29/2020 11:32:21 AM	54738
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	8/29/2020 11:32:21 AM	54738

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

Qualifiers:

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

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

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**EPA METHOD 8021B: VOLATILES** 

Surr: 4-Bromofluorobenzene

Benzene

Toluene

Ethylbenzene

Xylenes, Total

### **Analytical Report**

Lab Order **2008E81**Date Reported: **9/3/2020** 

Analyst: NSB

8/29/2020 11:56:02 AM 54738

8/29/2020 11:56:02 AM 54738

8/29/2020 11:56:02 AM 54738

8/29/2020 11:56:02 AM 54738 8/29/2020 11:56:02 AM 54738

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-2 Surface

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/24/2020 11:05:00 AM

 Lab ID:
 2008E81-002
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride ND 60 mg/Kg 20 8/31/2020 11:28:06 PM 54828 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM Diesel Range Organics (DRO) ND 9.5 mg/Kg 8/28/2020 11:30:54 PM 54745 ND Motor Oil Range Organics (MRO) 47 mg/Kg 1 8/28/2020 11:30:54 PM 54745 Surr: DNOP 68.0 8/28/2020 11:30:54 PM 54745 30.4-154 %Rec Analyst: NSB **EPA METHOD 8015D: GASOLINE RANGE** 8/29/2020 11:56:02 AM 54738 Gasoline Range Organics (GRO) ND 4.8 mg/Kg 1 Surr: BFB 96.6 %Rec 8/29/2020 11:56:02 AM 54738 75.3-105

ND

ND

ND

ND

102

0.024

0.048

0.048

0.095

80-120

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

1

1

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: H-3 West

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/24/2020 11:30:00 AM

 Lab ID:
 2008E81-003
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride ND 60 mg/Kg 20 8/31/2020 11:40:30 PM 54828 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM Diesel Range Organics (DRO) ND 9.4 mg/Kg 8/28/2020 11:40:59 PM 54745 ND 8/28/2020 11:40:59 PM 54745 Motor Oil Range Organics (MRO) 47 mg/Kg 1 Surr: DNOP 8/28/2020 11:40:59 PM 54745 66.1 30.4-154 %Rec Analyst: NSB **EPA METHOD 8015D: GASOLINE RANGE** 8/29/2020 12:19:27 PM 54738 Gasoline Range Organics (GRO) ND 4.8 mg/Kg 1 Surr: BFB 102 %Rec 8/29/2020 12:19:27 PM 54738 75.3-105 **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND 8/29/2020 12:19:27 PM 54738 Benzene 0.024 mg/Kg Toluene ND 0.048 mg/Kg 8/29/2020 12:19:27 PM 54738 Ethylbenzene ND 0.048 mg/Kg 1 8/29/2020 12:19:27 PM 54738 Xylenes, Total ND 0.096 mg/Kg 8/29/2020 12:19:27 PM 54738 Surr: 4-Bromofluorobenzene 8/29/2020 12:19:27 PM 54738 104 80-120 %Rec

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: H-4 East

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/24/2020 11:55:00 AM

 Lab ID:
 2008E81-004
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride ND 60 mg/Kg 20 8/31/2020 11:52:55 PM 54828 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM Diesel Range Organics (DRO) ND 9.9 mg/Kg 8/28/2020 11:50:59 PM 54745 ND 8/28/2020 11:50:59 PM 54745 Motor Oil Range Organics (MRO) 50 mg/Kg 1 Surr: DNOP 74.1 30.4-154 %Rec 8/28/2020 11:50:59 PM 54745 Analyst: NSB **EPA METHOD 8015D: GASOLINE RANGE** 8/29/2020 12:42:53 PM 54738 Gasoline Range Organics (GRO) ND 4.6 mg/Kg 1 Surr: BFB 95.1 75.3-105 %Rec 8/29/2020 12:42:53 PM 54738 Analyst: NSB **EPA METHOD 8021B: VOLATILES** ND 8/29/2020 12:42:53 PM 54738 Benzene 0.023 mg/Kg Toluene ND 0.046 mg/Kg 8/29/2020 12:42:53 PM 54738 Ethylbenzene ND 0.046 mg/Kg 1 8/29/2020 12:42:53 PM 54738 Xylenes, Total ND 0.093 mg/Kg 8/29/2020 12:42:53 PM 54738 Surr: 4-Bromofluorobenzene 101 80-120 %Rec 8/29/2020 12:42:53 PM 54738

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

Qualifiers:

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

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

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# Analytical Report Lab Order 2008E81

Date Reported: 9/3/2020

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

**Lab ID:** 2008E81-005

Client Sample ID: AH-5 Surface

**Collection Date:** 8/24/2020 12:15:00 PM

**Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: CJS
Chloride	ND	60		mg/Kg	20	9/1/2020 5:51:07 PM	54828
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	BRM
Diesel Range Organics (DRO)	760	190		mg/Kg	20	8/29/2020 12:00:58 AM	54745
Motor Oil Range Organics (MRO)	1200	970		mg/Kg	20	8/29/2020 12:00:58 AM	54745
Surr: DNOP	0	30.4-154	S	%Rec	20	8/29/2020 12:00:58 AM	54745
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/29/2020 1:06:28 PM	54738
Surr: BFB	97.6	75.3-105		%Rec	1	8/29/2020 1:06:28 PM	54738
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.024		mg/Kg	1	8/29/2020 1:06:28 PM	54738
Toluene	ND	0.048		mg/Kg	1	8/29/2020 1:06:28 PM	54738
Ethylbenzene	ND	0.048		mg/Kg	1	8/29/2020 1:06:28 PM	54738
Xylenes, Total	ND	0.096		mg/Kg	1	8/29/2020 1:06:28 PM	54738
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	8/29/2020 1:06:28 PM	54738

Matrix: SOIL

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: AH-5 1ft

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/24/2020 12:40:00 PM

 Lab ID:
 2008E81-006
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses Analyst: CJS **EPA METHOD 300.0: ANIONS** Chloride ND 60 mg/Kg 20 9/1/2020 10:11:58 AM 54839 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM Diesel Range Organics (DRO) ND 9.5 mg/Kg 8/29/2020 12:10:53 AM 54745 ND Motor Oil Range Organics (MRO) 47 mg/Kg 1 8/29/2020 12:10:53 AM 54745 Surr: DNOP 8/29/2020 12:10:53 AM 54745 75.6 30.4-154 %Rec **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 8/29/2020 3:27:54 PM Gasoline Range Organics (GRO) ND 54741 4.9 mg/Kg 1 Surr: BFB 96.5 75.3-105 %Rec 8/29/2020 3:27:54 PM 54741 **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND 8/29/2020 3:27:54 PM 54741 Benzene 0.025 mg/Kg Toluene ND 0.049 mg/Kg 8/29/2020 3:27:54 PM 54741 Ethylbenzene ND 0.049 mg/Kg 1 8/29/2020 3:27:54 PM 54741 Xylenes, Total ND 0.099 mg/Kg 8/29/2020 3:27:54 PM 54741 Surr: 4-Bromofluorobenzene 8/29/2020 3:27:54 PM 103 80-120 %Rec 54741

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

Qualifiers:

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

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

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Lab Order **2008E81** 

# Hall Environmental Analysis Laboratory, Inc. Date Reported: 9/3/2020

CLIENT: Safety & Environmental Solutions Client Sample ID: H-6 West

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/24/2020 1:10:00 PM

 Lab ID:
 2008E81-007
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 10:49:13 AM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	8/29/2020 12:20:49 AM	54745
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/29/2020 12:20:49 AM	54745
Surr: DNOP	73.2	30.4-154	%Rec	1	8/29/2020 12:20:49 AM	54745
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/29/2020 4:38:42 PM	54741
Surr: BFB	102	75.3-105	%Rec	1	8/29/2020 4:38:42 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	8/29/2020 4:38:42 PM	54741
Toluene	ND	0.048	mg/Kg	1	8/29/2020 4:38:42 PM	54741
Ethylbenzene	ND	0.048	mg/Kg	1	8/29/2020 4:38:42 PM	54741
Xylenes, Total	ND	0.096	mg/Kg	1	8/29/2020 4:38:42 PM	54741
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	8/29/2020 4:38:42 PM	54741

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

Qualifiers:

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

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

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# Analytical Report Lab Order 2008E81

Date Reported: 9/3/2020

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

**Lab ID:** 2008E81-008

Client Sample ID: H-7 East

**Collection Date:** 8/24/2020 1:35:00 PM

Received Date: 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 11:26:26 AM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	8/29/2020 12:30:49 AM	54745
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/29/2020 12:30:49 AM	54745
Surr: DNOP	73.8	30.4-154	%Rec	1	8/29/2020 12:30:49 AM	54745
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/29/2020 5:49:23 PM	54741
Surr: BFB	99.4	75.3-105	%Rec	1	8/29/2020 5:49:23 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	8/29/2020 5:49:23 PM	54741
Toluene	ND	0.049	mg/Kg	1	8/29/2020 5:49:23 PM	54741
Ethylbenzene	ND	0.049	mg/Kg	1	8/29/2020 5:49:23 PM	54741
Xylenes, Total	ND	0.098	mg/Kg	1	8/29/2020 5:49:23 PM	54741
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	8/29/2020 5:49:23 PM	54741

Matrix: SOIL

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: AH-8 Surface

**Project:** Devon Cotton Draw 156H **Collection Date:** 8/24/2020 1:50:00 PM

**Lab ID:** 2008E81-009 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 12:03:40 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	8/29/2020 12:40:44 AM	54745
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/29/2020 12:40:44 AM	54745
Surr: DNOP	56.3	30.4-154	%Rec	1	8/29/2020 12:40:44 AM	54745
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/29/2020 6:13:00 PM	54741
Surr: BFB	98.2	75.3-105	%Rec	1	8/29/2020 6:13:00 PM	54741
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	8/29/2020 6:13:00 PM	54741
Toluene	ND	0.048	mg/Kg	1	8/29/2020 6:13:00 PM	54741
Ethylbenzene	ND	0.048	mg/Kg	1	8/29/2020 6:13:00 PM	54741
Xylenes, Total	ND	0.096	mg/Kg	1	8/29/2020 6:13:00 PM	54741
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	8/29/2020 6:13:00 PM	54741

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

Qualifiers:

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

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

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# Analytical Report Lab Order 2008E81

Date Reported: 9/3/2020

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

**Lab ID:** 2008E81-010

Client Sample ID: H-9 West

**Collection Date:** 8/24/2020 2:10:00 PM

Received Date: 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 12:16:04 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	8/29/2020 12:50:39 AM	54745
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/29/2020 12:50:39 AM	54745
Surr: DNOP	57.5	30.4-154	%Rec	1	8/29/2020 12:50:39 AM	54745
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/29/2020 6:36:38 PM	54741
Surr: BFB	102	75.3-105	%Rec	1	8/29/2020 6:36:38 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	8/29/2020 6:36:38 PM	54741
Toluene	ND	0.048	mg/Kg	1	8/29/2020 6:36:38 PM	54741
Ethylbenzene	ND	0.048	mg/Kg	1	8/29/2020 6:36:38 PM	54741
Xylenes, Total	ND	0.095	mg/Kg	1	8/29/2020 6:36:38 PM	54741
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/29/2020 6:36:38 PM	54741

Matrix: SOIL

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: H-10 East

**Project:** Devon Cotton Draw 156H **Collection Date:** 8/25/2020 9:30:00 AM

**Lab ID:** 2008E81-011 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 12:28:28 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/29/2020 1:00:32 AM	54745
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/29/2020 1:00:32 AM	54745
Surr: DNOP	59.7	30.4-154	%Rec	1	8/29/2020 1:00:32 AM	54745
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/29/2020 7:00:08 PM	54741
Surr: BFB	101	75.3-105	%Rec	1	8/29/2020 7:00:08 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	8/29/2020 7:00:08 PM	54741
Toluene	ND	0.046	mg/Kg	1	8/29/2020 7:00:08 PM	54741
Ethylbenzene	ND	0.046	mg/Kg	1	8/29/2020 7:00:08 PM	54741
Xylenes, Total	ND	0.093	mg/Kg	1	8/29/2020 7:00:08 PM	54741
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	8/29/2020 7:00:08 PM	54741

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-11 Surface

**Project:** Devon Cotton Draw 156H **Collection Date:** 8/25/2020 9:55:00 AM

**Lab ID:** 2008E81-012 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 12:40:53 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	8/29/2020 1:10:28 AM	54745
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/29/2020 1:10:28 AM	54745
Surr: DNOP	56.2	30.4-154	%Rec	1	8/29/2020 1:10:28 AM	54745
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/29/2020 7:23:37 PM	54741
Surr: BFB	102	75.3-105	%Rec	1	8/29/2020 7:23:37 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	8/29/2020 7:23:37 PM	54741
Toluene	ND	0.046	mg/Kg	1	8/29/2020 7:23:37 PM	54741
Ethylbenzene	ND	0.046	mg/Kg	1	8/29/2020 7:23:37 PM	54741
Xylenes, Total	ND	0.093	mg/Kg	1	8/29/2020 7:23:37 PM	54741
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/29/2020 7:23:37 PM	54741

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: H-12 West

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/25/2020 10:15:00 AM

 Lab ID:
 2008E81-013
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 12:53:17 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	8/29/2020 1:20:30 AM	54745
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/29/2020 1:20:30 AM	54745
Surr: DNOP	86.3	30.4-154	%Rec	1	8/29/2020 1:20:30 AM	54745
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/29/2020 7:47:07 PM	54741
Surr: BFB	98.1	75.3-105	%Rec	1	8/29/2020 7:47:07 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	8/29/2020 7:47:07 PM	54741
Toluene	ND	0.047	mg/Kg	1	8/29/2020 7:47:07 PM	54741
Ethylbenzene	ND	0.047	mg/Kg	1	8/29/2020 7:47:07 PM	54741
Xylenes, Total	ND	0.093	mg/Kg	1	8/29/2020 7:47:07 PM	54741
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	8/29/2020 7:47:07 PM	54741

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: H-13 East

**Project:** Devon Cotton Draw 156H **Collection Date:** 8/25/2020 10:35:00 AM

**Lab ID:** 2008E81-014 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 1:05:42 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	8/31/2020 12:45:24 PM	54763
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/31/2020 12:45:24 PM	54763
Surr: DNOP	87.1	30.4-154	%Rec	1	8/31/2020 12:45:24 PM	54763
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/29/2020 8:10:34 PM	54741
Surr: BFB	103	75.3-105	%Rec	1	8/29/2020 8:10:34 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	8/29/2020 8:10:34 PM	54741
Toluene	ND	0.046	mg/Kg	1	8/29/2020 8:10:34 PM	54741
Ethylbenzene	ND	0.046	mg/Kg	1	8/29/2020 8:10:34 PM	54741
Xylenes, Total	ND	0.092	mg/Kg	1	8/29/2020 8:10:34 PM	54741
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	8/29/2020 8:10:34 PM	54741

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

Client Sample ID: AH-14 Surface

Project: Devon Cotton Draw 156H Collection Date: 8/25/2020 10:55:00 AM

**Lab ID:** 2008E81-015 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 1:18:07 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	8/31/2020 12:55:02 PM	54763
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/31/2020 12:55:02 PM	54763
Surr: DNOP	87.7	30.4-154	%Rec	1	8/31/2020 12:55:02 PM	54763
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/29/2020 8:34:03 PM	54741
Surr: BFB	98.8	75.3-105	%Rec	1	8/29/2020 8:34:03 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	8/29/2020 8:34:03 PM	54741
Toluene	ND	0.048	mg/Kg	1	8/29/2020 8:34:03 PM	54741
Ethylbenzene	ND	0.048	mg/Kg	1	8/29/2020 8:34:03 PM	54741
Xylenes, Total	ND	0.096	mg/Kg	1	8/29/2020 8:34:03 PM	54741
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/29/2020 8:34:03 PM	54741

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: H-15 West

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/25/2020 11:15:00 AM

 Lab ID:
 2008E81-016
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 1:30:32 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: ЈМЕ
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	8/31/2020 1:04:40 PM	54763
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/31/2020 1:04:40 PM	54763
Surr: DNOP	96.5	30.4-154	%Rec	1	8/31/2020 1:04:40 PM	54763
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/29/2020 9:44:19 PM	54741
Surr: BFB	98.8	75.3-105	%Rec	1	8/29/2020 9:44:19 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	8/29/2020 9:44:19 PM	54741
Toluene	ND	0.049	mg/Kg	1	8/29/2020 9:44:19 PM	54741
Ethylbenzene	ND	0.049	mg/Kg	1	8/29/2020 9:44:19 PM	54741
Xylenes, Total	ND	0.097	mg/Kg	1	8/29/2020 9:44:19 PM	54741
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	8/29/2020 9:44:19 PM	54741

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

Qualifiers:

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

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

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# Analytical Report Lab Order 2008E81

Date Reported: 9/3/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-16 Surface

**Project:** Devon Cotton Draw 156H **Collection Date:** 8/25/2020 11:35:00 AM

**Lab ID:** 2008E81-017 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 1:42:56 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	8/31/2020 1:14:19 PM	54763
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/31/2020 1:14:19 PM	54763
Surr: DNOP	93.6	30.4-154	%Rec	1	8/31/2020 1:14:19 PM	54763
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/29/2020 10:07:41 PM	54741
Surr: BFB	98.4	75.3-105	%Rec	1	8/29/2020 10:07:41 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	8/29/2020 10:07:41 PM	54741
Toluene	ND	0.048	mg/Kg	1	8/29/2020 10:07:41 PM	54741
Ethylbenzene	ND	0.048	mg/Kg	1	8/29/2020 10:07:41 PM	54741
Xylenes, Total	ND	0.097	mg/Kg	1	8/29/2020 10:07:41 PM	54741
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	8/29/2020 10:07:41 PM	54741

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

Qualifiers:

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

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

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Lab Order 2008E81

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/3/2020

CLIENT: Safety & Environmental Solutions Client Sample ID: H-17 North West

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/25/2020 11:55:00 AM

 Lab ID:
 2008E81-018
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses Analyst: CJS **EPA METHOD 300.0: ANIONS** Chloride ND 60 mg/Kg 20 9/1/2020 1:55:20 PM 54839 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 9.5 mg/Kg 8/31/2020 1:23:59 PM 54763 Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/31/2020 1:23:59 PM 54763 Surr: DNOP 97.1 30.4-154 %Rec 8/31/2020 1:23:59 PM 54763 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 8/29/2020 10:31:08 PM 54741 Gasoline Range Organics (GRO) ND 5.0 mg/Kg 1 Surr: BFB 95.8 75.3-105 %Rec 8/29/2020 10:31:08 PM 54741 **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND 8/29/2020 10:31:08 PM 54741 Benzene 0.025 mg/Kg Toluene ND 0.050 mg/Kg 8/29/2020 10:31:08 PM 54741 Ethylbenzene ND 0.050 mg/Kg 1 8/29/2020 10:31:08 PM 54741 Xylenes, Total ND 0.10 mg/Kg 8/29/2020 10:31:08 PM 54741 Surr: 4-Bromofluorobenzene 8/29/2020 10:31:08 PM 54741 103 80-120 %Rec

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

Qualifiers:

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

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

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Surr: 4-Bromofluorobenzene

### **Analytical Report**

Lab Order **2008E81**Date Reported: **9/3/2020** 

8/29/2020 10:54:41 PM 54741

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: H-18 South

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/25/2020 12:20:00 PM

 Lab ID:
 2008E81-019
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CJS 9/1/2020 2:32:34 PM Chloride ND 60 mg/Kg 20 54839 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 8.8 mg/Kg 8/31/2020 1:33:39 PM 54763 Motor Oil Range Organics (MRO) ND mg/Kg 1 8/31/2020 1:33:39 PM 54763 44 Surr: DNOP 102 30.4-154 %Rec 8/31/2020 1:33:39 PM 54763 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 8/29/2020 10:54:41 PM 54741 Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 Surr: BFB 96.9 %Rec 8/29/2020 10:54:41 PM 54741 75.3-105 **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND 8/29/2020 10:54:41 PM 54741 Benzene 0.023 mg/Kg Toluene ND 0.047 mg/Kg 8/29/2020 10:54:41 PM 54741 Ethylbenzene ND 0.047 mg/Kg 1 8/29/2020 10:54:41 PM 54741 Xylenes, Total ND 0.093 mg/Kg 8/29/2020 10:54:41 PM 54741

102

80-120

%Rec

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

Qualifiers:

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

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

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Lab Order **2008E81** 

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/3/2020

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-19 Surface

Project: Devon Cotton Draw 156H Collection Date: 8/25/2020 12:40:00 PM

**Lab ID:** 2008E81-020 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 2:44:59 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	8/31/2020 1:43:20 PM	54763
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/31/2020 1:43:20 PM	54763
Surr: DNOP	103	30.4-154	%Rec	1	8/31/2020 1:43:20 PM	54763
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/29/2020 11:18:11 PM	54741
Surr: BFB	102	75.3-105	%Rec	1	8/29/2020 11:18:11 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	8/29/2020 11:18:11 PM	54741
Toluene	ND	0.048	mg/Kg	1	8/29/2020 11:18:11 PM	54741
Ethylbenzene	ND	0.048	mg/Kg	1	8/29/2020 11:18:11 PM	54741
Xylenes, Total	ND	0.097	mg/Kg	1	8/29/2020 11:18:11 PM	54741
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/29/2020 11:18:11 PM	54741

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: H-20 North

**Project:** Devon Cotton Draw 156H **Collection Date:** 8/25/2020 1:15:00 PM

**Lab ID:** 2008E81-021 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 2:57:23 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	8.6	mg/Kg	1	8/31/2020 1:53:02 PM	54763
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	8/31/2020 1:53:02 PM	54763
Surr: DNOP	88.1	30.4-154	%Rec	1	8/31/2020 1:53:02 PM	54763
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/29/2020 11:41:32 PM	54741
Surr: BFB	98.3	75.3-105	%Rec	1	8/29/2020 11:41:32 PM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	8/29/2020 11:41:32 PM	54741
Toluene	ND	0.046	mg/Kg	1	8/29/2020 11:41:32 PM	54741
Ethylbenzene	ND	0.046	mg/Kg	1	8/29/2020 11:41:32 PM	54741
Xylenes, Total	ND	0.092	mg/Kg	1	8/29/2020 11:41:32 PM	54741
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	8/29/2020 11:41:32 PM	54741

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: H-21 South

**Project:** Devon Cotton Draw 156H **Collection Date:** 8/25/2020 1:35:00 PM

**Lab ID:** 2008E81-022 **Matrix:** SOIL **Received Date:** 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	61	mg/Kg	20	9/1/2020 3:09:48 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	8/31/2020 2:02:54 PM	54763
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/31/2020 2:02:54 PM	54763
Surr: DNOP	85.4	30.4-154	%Rec	1	8/31/2020 2:02:54 PM	54763
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/30/2020 12:04:57 AM	54741
Surr: BFB	98.4	75.3-105	%Rec	1	8/30/2020 12:04:57 AM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	8/30/2020 12:04:57 AM	54741
Toluene	ND	0.047	mg/Kg	1	8/30/2020 12:04:57 AM	54741
Ethylbenzene	ND	0.047	mg/Kg	1	8/30/2020 12:04:57 AM	54741
Xylenes, Total	ND	0.093	mg/Kg	1	8/30/2020 12:04:57 AM	54741
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/30/2020 12:04:57 AM	54741

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

Qualifiers:

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

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

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# Analytical Report Lab Order 2008E81

Date Reported: 9/3/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: H-22 East

 Project:
 Devon Cotton Draw 156H
 Collection Date: 8/25/2020 1:50:00 PM

 Lab ID:
 2008E81-023
 Matrix: SOIL
 Received Date: 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CJS
Chloride	ND	59	mg/Kg	20	9/1/2020 3:22:13 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	8/31/2020 2:12:47 PM	54763
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/31/2020 2:12:47 PM	54763
Surr: DNOP	69.5	30.4-154	%Rec	1	8/31/2020 2:12:47 PM	54763
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/30/2020 12:28:23 AM	54741
Surr: BFB	97.8	75.3-105	%Rec	1	8/30/2020 12:28:23 AM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	8/30/2020 12:28:23 AM	54741
Toluene	ND	0.048	mg/Kg	1	8/30/2020 12:28:23 AM	54741
Ethylbenzene	ND	0.048	mg/Kg	1	8/30/2020 12:28:23 AM	54741
Xylenes, Total	ND	0.096	mg/Kg	1	8/30/2020 12:28:23 AM	54741
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	8/30/2020 12:28:23 AM	54741

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

Qualifiers:

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

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

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Lab Order **2008E81**Date Reported: **9/3/2020** 

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

**Lab ID:** 2008E81-024

Client Sample ID: H-23 North

**Collection Date:** 8/25/2020 2:10:00 PM

Received Date: 8/27/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	9/1/2020 3:34:38 PM	54839
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	8/31/2020 2:22:39 PM	54763
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/31/2020 2:22:39 PM	54763
Surr: DNOP	76.7	30.4-154	%Rec	1	8/31/2020 2:22:39 PM	54763
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/30/2020 12:51:55 AM	54741
Surr: BFB	96.8	75.3-105	%Rec	1	8/30/2020 12:51:55 AM	54741
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	8/30/2020 12:51:55 AM	54741
Toluene	ND	0.049	mg/Kg	1	8/30/2020 12:51:55 AM	54741
Ethylbenzene	ND	0.049	mg/Kg	1	8/30/2020 12:51:55 AM	54741
Xylenes, Total	ND	0.097	mg/Kg	1	8/30/2020 12:51:55 AM	54741
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/30/2020 12:51:55 AM	54741

Matrix: SOIL

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

Qualifiers:

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

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

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **2008E81** 

03-Sep-20

Client: Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Sample ID: MB-54828 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 54828 RunNo: 71527

Prep Date: 8/31/2020 Analysis Date: 8/31/2020 SeqNo: 2498406 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-54828 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 54828 RunNo: 71527

Prep Date: 8/31/2020 Analysis Date: 8/31/2020 SeqNo: 2498407 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.9 90 110

Sample ID: MB-54839 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **54839** RunNo: **71522** 

Prep Date: 9/1/2020 Analysis Date: 9/1/2020 SeqNo: 2499640 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-54839 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 54839 RunNo: 71522

Prep Date: 9/1/2020 Analysis Date: 9/1/2020 SeqNo: 2499641 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.8 90 110

#### Qualifiers:

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

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

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### Hall Environmental Analysis Laboratory, Inc.

Safety & Environmental Solutions

WO#: 2008E81 03-Sep-20

**Client:** 

**Project:** Devon Cotton Draw 156H

Sample ID: MB-54763 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 54763 RunNo: 71495

Prep Date: 8/28/2020 Analysis Date: 8/31/2020 SeqNo: 2496911 Units: mg/Kg

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

Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 10 10.00 102 30.4 154

Sample ID: LCS-54763 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 54763 RunNo: 71495 Prep Date: 8/28/2020 Analysis Date: 8/31/2020 SeqNo: 2496915 Units: mg/Kg

Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 74.8 Diesel Range Organics (DRO) 10 70 37 50.00 130

Surr: DNOP 5.0 5.000 99.1 30.4 154

Sample ID: LCS-54745 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 54745 RunNo: 71513

Prep Date: 8/27/2020 Analysis Date: 8/28/2020 SeqNo: 2498055 Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 53 10 50.00 0 105 70 130

Surr: DNOP 2.0 5.000 39.7 30.4 154

Sample ID: MB-54745 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 54745 RunNo: 71513

Prep Date: 8/27/2020 Analysis Date: 8/28/2020 SeqNo: 2498057 Units: mg/Kg

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

Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 5.2 10.00 51.5 30.4 154

#### Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Н

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit % Recovery outside of range due to dilution or matrix Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 26 of 30

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2008E81 03-Sep-20** 

Client: Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Sample ID: mb-54738 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 54738 RunNo: 71474

Prep Date: 8/27/2020 Analysis Date: 8/29/2020 SegNo: 2495652 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 990 1000 99.3 75.3 105

Sample ID: Ics-54738 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 54738 RunNo: 71474

Prep Date: 8/27/2020 Analysis Date: 8/29/2020 SeqNo: 2495653 Units: mg/Kg

HighLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 25.00 O 82.3 72.5 106 Surr: BFB S 1100 1000 107 75.3 105

Sample ID: mb-54741 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 54741 RunNo: 71474

Prep Date: 8/27/2020 Analysis Date: 8/29/2020 SeqNo: 2495676 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 99.7 75.3 105

Sample ID: Ics-54741 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 54741 RunNo: 71474

Prep Date: 8/27/2020 Analysis Date: 8/29/2020 SeqNo: 2495677 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 21 5.0 84.6 25.00 72.5 106 Surr: BFB 1100 1000 106 75.3 105 S

Sample ID: 2008e81-006ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: AH-5 1ft Batch ID: 54741 RunNo: 71474

Prep Date: **8/27/2020** Analysis Date: **8/29/2020** SeqNo: **2495679** Units: **mg/Kg** 

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 20 4.8 0 61.3 23.83 81.9 114 Surr: BFB 1000 953.3 106 75.3 105 S

Sample ID: 2008e81-006amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: AH-5 1ft Batch ID: 54741 RunNo: 71474

Prep Date: **8/27/2020** Analysis Date: **8/29/2020** SeqNo: **2495680** 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

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# Hall Environmental Analysis Laboratory, Inc.

WO#: **2008E81** 

03-Sep-20

Client: Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Sample ID: 2008e81-006amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: AH-5 1ft Batch ID: 54741 RunNo: 71474

Prep Date: 8/27/2020 Analysis Date: 8/29/2020 SeqNo: 2495680 Units: mg/Kg

110p Bate. 0/21/2020	7 mary 515 Bate. 6/25/2020			704110. Z	+55000	Office. Hig/Ng					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	21	4.8	23.95	0	86.8	61.3	114	6.26	20		
Surr: BFB	1000		957.9		108	75.3	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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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# Hall Environmental Analysis Laboratory, Inc.

1.0

WO#: **2008E81** *03-Sep-20* 

Client: Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Sample ID: <b>mb-54738</b>	SampT	Гуре: <b>МЕ</b>	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	h ID: <b>54</b>	738	F	RunNo: 7	1474				
Prep Date: 8/27/2020	Analysis D	Date: 8/	29/2020	9	SeqNo: 2	495731	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylhonzono	ND	0.050								

 Surr: 4-Bromofluorobenzene
 1.0
 1.000
 104
 80
 120

Sample ID: LCS-54738	Sample ID: LCS-54738 SampType: LCS		Tes	tCode: El	PA Method	8021B: Volat	tiles			
Client ID: LCSS	Batc	h ID: <b>54</b>	738	F	RunNo: 7	1474				
Prep Date: 8/27/2020	Date: 8/27/2020 Analysis Date: 8/29/2020		8	SeqNo: 2	495732	Units: mg/K	ζg			
Analyte Result PQL SPK value S		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.94	0.025	1.000	0	93.6	80	120			
Toluene	0.94	0.050	1.000	0	93.8	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: <b>mb-54741</b>	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	n ID: <b>54</b>	741	F	RunNo: 7	1474				
Prep Date: 8/27/2020	Analysis D	oate: 8/	29/2020	S	SeqNo: 2	495755	Units: mg/K	g		
Analyte Result PQL SPK v		SPK value	SPK Ref Val	%REC	LowLimit	t HighLimit %RPD RPDLimit			Qual	
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	zene ND 0.050									
Xylenes, Total	ND	0.10								

1.000

Sample ID: LCS-54741	ample ID: LCS-54741 SampType: LCS			Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	h ID: <b>54</b> 7	741	F	RunNo: 7	1474				
Prep Date: 8/27/2020	te: <b>8/27/2020</b> Analysis Date: <b>8/29/2020</b>			9	SeqNo: 2	495756	Units: mg/K	(g		
Analyte Result PQL SPK value S		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.96	0.025	1.000	0	95.6	80	120			
Toluene	0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.3	80	120			
Surr: 4-Bromofluorobenzene 1.1 1.000		107 80 120								

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

104

80

120

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 29 of 30

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2008E81** 

03-Sep-20

Client: Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Sample ID: 2008e81-007ams SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: H-6 West RunNo: 71474 Batch ID: 54741 Prep Date: 8/27/2020 Analysis Date: 8/29/2020 SeqNo: 2495759 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Benzene 0.91 0.024 0.9579 0 95.4 76.3 120 Toluene 0.94 0.048 0.9579 0.01077 96.6 78.5 120 0.95 0.048 99.3 78.1 Ethylbenzene 0.9579 0 124 Xylenes, Total 2.9 0.096 2.874 0 99.6 79.3 125 Surr: 4-Bromofluorobenzene 1.0 0.9579 108 80 120

Sample ID: 2008e81-007amsd	SampT	уре: МS	SD	Tes	tCode: El	PA Method	8021B: Volat	iles		•
Client ID: H-6 West	Batch	n ID: <b>54</b> 7	741	F	RunNo: 7	1474				
Prep Date: 8/27/2020	Analysis D	Date: <b>8/</b> 2	29/2020	SeqNo: <b>2495760</b> Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9597	0	93.2	76.3	120	2.18	20	
Toluene	0.92	0.048	0.9597	0.01077	94.9	78.5	120	1.55	20	
Ethylbenzene	0.93	0.048	0.9597	0	97.4	78.1	124	1.71	20	
Xylenes, Total	2.8	0.096	2.879	0	98.1	79.3	125	1.39	20	
Surr: 4-Bromofluorobenzene	1.0		0.9597		104	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 Quanitative Limit

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

Page 30 of 30



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

# Sample Log-In Check List

Client Name:	Safety & Environmental Solutions	Work Order Num	ber: 2008E81		RcptNo:	1
Received By:	Cheyenne Cason	8/27/2020 8:00:00	A <b>M</b>			
Completed By:	Juan Rojas	8/27/2020 8:32:31	AM	Hansen &		
Reviewed By:	JR 8/27/20					
Chain of Cus	<del></del>			_		
1. Is Chain of C	Custody complete?		Yes 🗹	No 🗆	Not Present 🗌	
<ol><li>How was the</li></ol>	sample delivered?		<u>Courier</u>			
<u>Log In</u>						
3. Was an atter	npt made to cool the sample:	3?	Yes 🗹	No 🗌	NA $\square$	
4. Were all sam	ples received at a temperatu	re of >0° C to 6.0°C	Yes 🗹	No 🗌	na 🗆	
5. Sample(s) in	proper container(s)?		Yes 🔽	No 🗆		
6. Sufficient san	nple volume for indicated test	(s)?	Yes 🗹	No 🗌		
7. Are samples	(except VOA and ONG) prop	erly preserved?	Yes 🗹	No 🗆		
8. Was preserva	ative added to bottles?		Yes 🗌	No 🗹	NA 🗆	
9. Received at le	east 1 vial with headspace <1	/4" for AQ VOA?	Yes 🗌	No 🗌	NA 🗹	
10. Were any sai	mple containers received bro	ken?	Yes	No 🗹 🛚	# of preserved	
	ork match bottle labels? ancies on chain of custody)		Yes 🗹	No 🗆	bottles checked for pH:	>12 unless noted)
	соптесту identified on Chain of	of Custody?	Yes 🗸	No 🗆	Adjusted?	
	it analyses were requested?	•	Yes 🗹	No 🗆		<u></u>
	ing times able to be met?		Yes 🗹	No 🗆	Checked by:	PA 8.27
Special Handl	ling (if applicable)				J	
	otified of all discrepancies wit	h this order?	Yes 🗌	No 🗌	NA 🗹	
Person	Notified:	Date	Committee Commit			
By Who	om:	Via:	eMail :	Phone 🗌 Fax	☐ In Person	
Regard	ling:					
Client I	nstructions:	September 1997			100 CO	
16. Additional re	marks:					
17. Cooler Infor	CONTRACTOR		V.N.24.00.00			
Cooler No	<u></u>	Seal Intact   Seal No	Seal Date	Signed By		
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Chain-of-Custody Record	Time:	to Davy		HALL	ENVI	ENVIRONMENTAL	ITAL
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882	Project #:	13	Tel. 505-345-3975		Fax 50	Fax 505-345-4107	
Phone #: 575-397.0510	DC0-40-	045		Ans	Analysis Request	quest	
email or Fax#:	Project Manager:	7	(0)		700	(Ju	
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HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com kins NE - Albuquerque, NM 87109 345-3975 Fax 505-345-4107 Analysis Request						, i
ENVIRONMENTA YSIS LABORATOR environmental.com Albuquerque, NM 87109 Fax 505-345-4107						Fine: Relingalshed by:  Received by: Via: Date Time Remarks:  Received by: Via: Date Time Remarks:  Received by: Via: Date Time 3.1 ± 0 = 3.1 ± 0
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HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	BTEX / MTBE / TMB's (8021) TPH:8015D(GRO / DRO / MRO) 8081 Pesticides/8082 PCB's EDB (Method 504.1) PAHs by 8310 or 8270SIMS RCRA 8 Metals CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> 8260 (VOA) 8270 (Semi-VOA) Total Coliform (Present/Absent) Total Coliform (Present/Absent)		Filme: Relinguished by:   Received by: Via:   Pate Time   Remarks:     Pate Time   Remarks:     Pate Time   Pate
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Chajn-of-Custody Record  Client: Subdy of Church Mush  Mailing Address: 705 e. Church  (Lobb N. W. 88240  Phone #: 575-597-0510	email or Fax#:  QA\OC Package:  QA\CC Package:  C-Standard	8625 1360 S H-22 GAST 8625 1410 S H-23 NORTH	Pare: Time: Relinguished by:  Date: Time: Relihedished by:  Date: Time:



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

October 30, 2020

Bob Allen Safety & Environmental Solutions PO Box 1613 Hobbs, NM 88241

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

RE: Devon Cotton Draw 156H OrderNo.: 2010B15

#### Dear Bob Allen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/23/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 10/30/2020

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

**Lab ID:** 2010B15-001

Client Sample ID: SP-24 1 FT

**Collection Date:** 10/21/2020 10:15:00 AM

Received Date: 10/23/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	CAS
Chloride	ND	60	mg/Kg	20	10/29/2020 11:18:16 AM	1 56097
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst:	DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/25/2020 6:31:03 AM	56003
Surr: BFB	89.5	70-130	%Rec	1	10/25/2020 6:31:03 AM	56003
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst:	mb
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/26/2020 2:56:43 PM	56014
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/26/2020 2:56:43 PM	56014
Surr: DNOP	93.2	30.4-154	%Rec	1	10/26/2020 2:56:43 PM	56014
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst:	DJF
Benzene	ND	0.025	mg/Kg	1	10/25/2020 6:31:03 AM	56003
Toluene	ND	0.049	mg/Kg	1	10/25/2020 6:31:03 AM	56003
Ethylbenzene	ND	0.049	mg/Kg	1	10/25/2020 6:31:03 AM	56003
Xylenes, Total	ND	0.098	mg/Kg	1	10/25/2020 6:31:03 AM	56003
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	10/25/2020 6:31:03 AM	56003
Surr: 4-Bromofluorobenzene	99.6	70-130	%Rec	1	10/25/2020 6:31:03 AM	56003
Surr: Dibromofluoromethane	107	70-130	%Rec	1	10/25/2020 6:31:03 AM	56003
Surr: Toluene-d8	103	70-130	%Rec	1	10/25/2020 6:31:03 AM	56003

Matrix: SOIL

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

#### Qualifiers:

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

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

Page 1 of 10

Date Reported: 10/30/2020

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Surr: Dibromofluoromethane

Surr: Toluene-d8

**Lab ID:** 2010B15-002

Client Sample ID: SP-25 1 FT

Collection Date: 10/21/2020 12:05:00 PM Received Date: 10/23/2020 8:00:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses Analyst: CAS **EPA METHOD 300.0: ANIONS** Chloride ND 60 mg/Kg 20 10/29/2020 11:55:29 AM 56097 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: DJF Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 10/25/2020 7:00:22 AM 56003 Surr: BFB 10/25/2020 7:00:22 AM 56003 90.3 70-130 %Rec 1 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.7 mg/Kg 10/26/2020 3:20:44 PM 56014 Motor Oil Range Organics (MRO) ND 1 10/26/2020 3:20:44 PM 56014 48 mg/Kg Surr: DNOP 93.0 30.4-154 %Rec 10/26/2020 3:20:44 PM 56014 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF ND 10/25/2020 7:00:22 AM 56003 Benzene 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 10/25/2020 7:00:22 AM 56003 Ethylbenzene ND 0.049 mg/Kg 1 10/25/2020 7:00:22 AM 56003 Xylenes, Total ND mg/Kg 10/25/2020 7:00:22 AM 56003 0.097 Surr: 1,2-Dichloroethane-d4 102 70-130 %Rec 1 10/25/2020 7:00:22 AM 56003 Surr: 4-Bromofluorobenzene 100 70-130 %Rec 1 10/25/2020 7:00:22 AM 56003

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103

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10/25/2020 7:00:22 AM 56003

10/25/2020 7:00:22 AM 56003

Matrix: SOIL

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

Qualifiers:

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

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

Page 2 of 10

Date Reported: 10/30/2020

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

**Lab ID:** 2010B15-003

Client Sample ID: H-26 North

**Collection Date:** 10/21/2020 12:45:00 PM

**Received Date:** 10/23/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	CAS
Chloride	ND	60	mg/Kg	20	10/29/2020 4:40:52 PM	56097
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst:	DJF
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/25/2020 7:29:53 AM	56003
Surr: BFB	88.6	70-130	%Rec	1	10/25/2020 7:29:53 AM	56003
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst:	mb
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/26/2020 4:08:41 PM	56014
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/26/2020 4:08:41 PM	56014
Surr: DNOP	94.7	30.4-154	%Rec	1	10/26/2020 4:08:41 PM	56014
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst:	DJF
Benzene	ND	0.025	mg/Kg	1	10/25/2020 7:29:53 AM	56003
Toluene	ND	0.050	mg/Kg	1	10/25/2020 7:29:53 AM	56003
Ethylbenzene	ND	0.050	mg/Kg	1	10/25/2020 7:29:53 AM	56003
Xylenes, Total	ND	0.10	mg/Kg	1	10/25/2020 7:29:53 AM	56003
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	10/25/2020 7:29:53 AM	56003
Surr: 4-Bromofluorobenzene	99.9	70-130	%Rec	1	10/25/2020 7:29:53 AM	56003
Surr: Dibromofluoromethane	109	70-130	%Rec	1	10/25/2020 7:29:53 AM	56003
Surr: Toluene-d8	101	70-130	%Rec	1	10/25/2020 7:29:53 AM	56003

Matrix: SOIL

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

#### Qualifiers:

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

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

Page 3 of 10

Date Reported: 10/30/2020

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

**Lab ID:** 2010B15-004

**Client Sample ID:** H-27 East

**Collection Date:** 10/21/2020 11:10:00 AM

**Received Date:** 10/23/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	CAS
Chloride	ND	60	mg/Kg	20	10/29/2020 4:53:16 PM	56097
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/25/2020 7:59:30 AM	56003
Surr: BFB	90.0	70-130	%Rec	1	10/25/2020 7:59:30 AM	56003
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	mb
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/26/2020 4:32:43 PM	56014
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/26/2020 4:32:43 PM	56014
Surr: DNOP	88.3	30.4-154	%Rec	1	10/26/2020 4:32:43 PM	56014
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	DJF
Benzene	ND	0.025	mg/Kg	1	10/25/2020 7:59:30 AM	56003
Toluene	ND	0.050	mg/Kg	1	10/25/2020 7:59:30 AM	56003
Ethylbenzene	ND	0.050	mg/Kg	1	10/25/2020 7:59:30 AM	56003
Xylenes, Total	ND	0.10	mg/Kg	1	10/25/2020 7:59:30 AM	56003
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	10/25/2020 7:59:30 AM	56003
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	10/25/2020 7:59:30 AM	56003
Surr: Dibromofluoromethane	109	70-130	%Rec	1	10/25/2020 7:59:30 AM	56003
Surr: Toluene-d8	102	70-130	%Rec	1	10/25/2020 7:59:30 AM	56003

Matrix: SOIL

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

Qualifiers:

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

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

Page 4 of 10

Date Reported: 10/30/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: H-28 West

 Project:
 Devon Cotton Draw 156H
 Collection Date: 10/21/2020 11:50:00 AM

 Lab ID:
 2010B15-005
 Matrix: SOIL
 Received Date: 10/23/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	10/29/2020 5:30:29 PM	56097
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/25/2020 8:29:17 AM	56003
Surr: BFB	89.4	70-130	%Rec	1	10/25/2020 8:29:17 AM	56003
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	: mb
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	10/26/2020 4:56:37 PM	56014
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/26/2020 4:56:37 PM	56014
Surr: DNOP	83.1	30.4-154	%Rec	1	10/26/2020 4:56:37 PM	56014
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	: DJF
Benzene	ND	0.024	mg/Kg	1	10/25/2020 8:29:17 AM	56003
Toluene	ND	0.049	mg/Kg	1	10/25/2020 8:29:17 AM	56003
Ethylbenzene	ND	0.049	mg/Kg	1	10/25/2020 8:29:17 AM	56003
Xylenes, Total	ND	0.097	mg/Kg	1	10/25/2020 8:29:17 AM	56003
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	10/25/2020 8:29:17 AM	56003
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	10/25/2020 8:29:17 AM	56003
Surr: Dibromofluoromethane	109	70-130	%Rec	1	10/25/2020 8:29:17 AM	56003
Surr: Toluene-d8	104	70-130	%Rec	1	10/25/2020 8:29:17 AM	56003

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

Qualifiers:

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

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

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Date Reported: 10/30/2020

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

**Lab ID:** 2010B15-006

Client Sample ID: H-29 South

**Collection Date:** 10/21/2020 10:35:00 AM

**Received Date:** 10/23/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	6.0	mg/Kg	2	10/29/2020 5:42:53 PM	56097
EPA METHOD 8015D MOD: GASOLINE RANGE	<b>:</b>				Analyst	DJF
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/25/2020 8:59:13 AM	56003
Surr: BFB	87.6	70-130	%Rec	1	10/25/2020 8:59:13 AM	56003
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	mb
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/26/2020 5:20:46 PM	56014
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/26/2020 5:20:46 PM	56014
Surr: DNOP	94.0	30.4-154	%Rec	1	10/26/2020 5:20:46 PM	56014
EPA METHOD 8260B: VOLATILES SHORT LIST	Γ				Analyst	DJF
Benzene	ND	0.025	mg/Kg	1	10/25/2020 8:59:13 AM	56003
Toluene	ND	0.050	mg/Kg	1	10/25/2020 8:59:13 AM	56003
Ethylbenzene	ND	0.050	mg/Kg	1	10/25/2020 8:59:13 AM	56003
Xylenes, Total	ND	0.10	mg/Kg	1	10/25/2020 8:59:13 AM	56003
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	10/25/2020 8:59:13 AM	56003
Surr: 4-Bromofluorobenzene	98.4	70-130	%Rec	1	10/25/2020 8:59:13 AM	56003
Surr: Dibromofluoromethane	108	70-130	%Rec	1	10/25/2020 8:59:13 AM	56003
Surr: Toluene-d8	100	70-130	%Rec	1	10/25/2020 8:59:13 AM	56003

Matrix: SOIL

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

Qualifiers:

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

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

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# Hall Environmental Analysis Laboratory, Inc.

WO#: **2010B15** 

30-Oct-20

Client: Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Sample ID: MB-56097 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 56097 RunNo: 73010

Prep Date: 10/29/2020 Analysis Date: 10/29/2020 SeqNo: 2567071 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-56097 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 56097 RunNo: 73010

Prep Date: 10/29/2020 Analysis Date: 10/29/2020 SeqNo: 2567073 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.4 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 2010B15 30-Oct-20

**Client:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Sample ID: LCS-56014 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 56014 RunNo: 72917

Prep Date: 10/24/2020 Analysis Date: 10/26/2020 SeqNo: 2563396 Units: mq/Kq

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Diesel Range Organics (DRO) 54 10 50.00 Λ 108 70 130

Surr: DNOP 5.3 5.000 106 30.4 154

Sample ID: MB-56014 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 56014 RunNo: 72917

Prep Date: 10/24/2020 Analysis Date: 10/26/2020 SeqNo: 2563397 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 10.00 105 30.4 154 11

Sample ID: LCS-56030 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 56030 RunNo: 72933

Prep Date: 10/26/2020 Analysis Date: 10/27/2020 SeqNo: 2565384 Units: %Rec

Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: DNOP 4.3 5.000 85.3 30.4 154

Sample ID: MB-56030 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 56030 RunNo: 72933

Prep Date: 10/26/2020 Analysis Date: 10/27/2020 SeqNo: 2565385 Units: %Rec

SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual Surr: DNOP 9.1 10.00 90.5

Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

30.4

154

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 8 of 10

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2010B15** 

30-Oct-20

Client: Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Sample ID: mb-56003	Samp	SampType: MBLK			TestCode: EPA Method 8260B: Volatiles Short List					
Client ID: PBS	Batc	Batch ID: 56003			RunNo: <b>72903</b>					
Prep Date: 10/23/2020	Analysis [	Date: 10	)/25/2020	S	SeqNo: 2	562554	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		105	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID: Ics-56003	Sampl	SampType: LCS4			TestCode: EPA Method 8260B: Volatiles Short List					
Client ID: BatchQC	Batcl	Batch ID: 56003			RunNo: <b>72903</b>					
Prep Date: 10/23/2020	Analysis D	Date: 10	)/25/2020	9	SeqNo: 2	562555	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.4	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.1	0.050	1.000	0	105	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.9	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

#### Qualifiers:

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

- 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, Inc.

WO#: **2010B15** 

30-Oct-20

Client: Safety & Environmental Solutions

**Project:** Devon Cotton Draw 156H

Sample ID: mb-56003 SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: PBS Batch ID: 56003 RunNo: 72903

Prep Date: 10/23/2020 Analysis Date: 10/25/2020 SeqNo: 2562591 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 450 500.0 89.3 70 130

Sample ID: Ics-56003 SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: LCSS Batch ID: 56003 RunNo: 72903

440

Prep Date: 10/23/2020 Analysis Date: 10/25/2020 SeqNo: 2562592 Units: mg/Kg

500.0

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 22 5.0 25.00 0 87.4 70 130

88.5

70

130

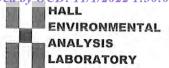
#### Qualifiers:

Surr: BFB

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

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

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

# Sample Log-In Check List

Client Name:	Safety & E Solutions	invironmenta	l Work C	order Num	ber: 201	0B15		RcptNo: 1	
Received By:	Cheyenne	e Cason	10/23/20	20 8:00:00	) AM				
Completed By:	Desiree D	Oominguez	10/23/20	20 8:55:32	2 AM		TA		
Reviewed By:	SPA	10.23	20				X		
Chain of Cus	tody								
1. Is Chain of Cu	ustody comp	olete?			Yes	~	No 🗌	Not Present	
2. How was the	sample deliv	vered?			Cou	rier			
Log In									
<ol><li>Was an attem</li></ol>	npt made to	cool the sam	ples?		Yes	<b>V</b>	No 🗌	NA 🗆	
4. Were all samp	oles received	l at a temper	ature of >0° C to	6.0°C	Yes		No 🗹	NA 🗆	
5. Sample(s) in p	proper conta	iner(s)?			Sam Yes	-	ot frozen. No		
	proper conta				res	•	NO L		
6. Sufficient sam	ple volume f	for indicated	test(s)?		Yes	<b>V</b>	No 🗌		
7. Are samples (	except VOA	and ONG) pi	roperly preserved	?	Yes	<b>V</b>	No 🗌		
8. Was preservat	tive added to	bottles?			Yes		No 🗹	NA 🗆	
9. Received at le	ast 1 vial wit	h headspace	e <1/4" for AQ VO	A?	Yes		No 🗌	NA 🗸	
0. Were any sam	nple containe	ers received	broken?		Yes		No 🔽	# of preserved	/
1. Does paperwo (Note discrepa			v)		Yes	<b>V</b>	No 🗆	bottles checked for pH:	2 unless noted)
2. Are matrices c					Yes	~	No 🗆	Adjusted?	a amess noted)
<ol> <li>Is it clear what</li> </ol>						V	No 🗆		
4. Were all holdin (If no, notify cu	ng times able	e to be met?				<u> </u>	No 🗆	Checked by: JR	10/23/20
pecial Handli	ing (if app	olicable)							
15. Was client not	tified of all d	iscrepancies	with this order?		Yes		No 🗌	NA 🗹	
Person	Notified:			Date:					
By Who	m:			Via:	eMa	ail 🔲	Phone Fax	☐ In Person	
Regardi	ng:								
Client In	structions:								
6. Additional ren	marks:								
7. Cooler Inform	mation								
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Da	ate	Signed By		
1	0.2	Good	Not Present	200,110			oignou by		
2	4.0	Good	Not Present						
3	-0.6	Good	Not Present						

Received by OCD: 11/1/2022	30:08 PM		Page 59 of 64
HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	TPH:8015D(GRO / DRO / MRO)  8081 Pesticides/8082 PCB's  EDB (Method 504.1)  PAHs by 8310 or 8270SIMS  RCRA 8 Metals  CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> 8260 (VOA)  8270 (Semi-VOA)  Total Coliform (Present/Absent)		Time: Relinquished by: Received by: Via: Date Time Remarks: 0 2 ± 0 = 2 Seng to the 1 of the serves as notice of this possibility. Any sub-contracted on the analytical report.
	BTEX / MTBE / TMB's (8021)		Rem (A)
5day 1564 1564	HEAL NO.	900- 500- 500-	Date Time (2/22/22 087)  Date Time (U/23/32 0802)
Time: Sush	Ager:  Levy (Complete of the properties of the p		Via: Via:  Via:  CCW accredited laborat
Turn-Around Time:  Standard  Project Name: Standard  Project #:	Project Manager:  Sampler:  On Ice:  Cooler Temp(instuding cF):  Container  Type  Type  Type		Received by: Received by:
Chain-of-Custody Record  Chain-of-Custody Record  Chain-of-Custody  Chain  Chai	Az Compliance Other  atrix Sample Name  SP. 24   FM	4-26 Worth 4-27 CART 4-28 West 4-29 South	d by: dr by:
-of-Custo	□ Az Cor □ Other Matrix	NANN	Relinquished by: Relinquished by: samples submitted
Chain-Client: Chain-Mailing Address: Chone #: 57	gg :: gg ::	1245	Time:
Released to Imaging: 2/3/2023	Accreditation    Date   Time		Date: Date:

Received by OCD: 11/1/2022 1:30:08 PM Form C-141 State of New Mexico Page 6 Oil Conservation Division

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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Incident ID	NMLB1204437755
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.

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 ODG	C District office must be notified 2 days prior to final sampling)						
■ Description of remediation activities							
and regulations all operators are required to report and/or file certainay endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and remuman health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the conaccordance with 19.15.29.13 NMAC including notification to the Conprinted Name:  Dale Woodall	nditions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in DCD when reclamation and re-vegetation are complete.  Title: Environmental Professional						
Signature: Dale Woodall	Date: 11/1/2022 Telephone: 575-748-1838						
email: dale.woodall@dvn.com	Telephone: 575-748-1838						
OCD Only							
Received by:	Date:						
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.						
Closure Approved by:Ashley Maxwell	Date:2/03/2023						
Printed Name: Ashley Maxwell	Title:Environmental Specialist						

#### **ADDENDUM**

Location name: Cotton Draw Unit 156H

OCD Spill Number: NMLB1204437755

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-4643-POD1 was installed on June 6-20, 2022, to a depth of 305 feet below ground surface. Groundwater was encountered at 110 feet below ground surface. Well C-4643-POD1 is 0.4 miles east of the Cotton Draw Unit 156H.

The spills were remediated to criteria for DTW of less than 50 feet bgs.

A boring log of the well C-4643-POD1 is attached.



OSE 011 AUG 1.9 2022 PM2:48

	OSE POD NO.	(WELL NO.)		WELL TAG ID NO.		OSE FILE NO(S	5).			
ION	P	100		21068		C4	643			
CAT	WELL OWNE	ER NAME(S)		,		PHONE (OPTIO	ONAL)			
07	tul-	ton	Valenzu	iela						
П	,	ER MAILING A	DDRESS			CITY	1 7	STATE	ZIP	
WE	602	1 5	5 Thomas	son kead		Carls	bed	N/M 88	220	
ND	WELL			GREES MINUTES SEC	ONDS					
NL A	LOCATIO	N LATIT	TUDE 3	2 20 18	154 N		REQUIRED: ONE TEN	TH OF A SECOND		
ER	(FROM GP	S) LONG	GITUDE - 10	4 12 16	.04 W	* DATUM REC	QUIRED: WGS 84			
GENERAL AND WELL LOCATION	DESCRIPTIO	N RELATING	WELL LOCATION TO	STREET ADDRESS AND COMMON LAND	MARKS – PLS	SS (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVAILABLE		
	SE	NE	NE	Sec 5 7235	1276					
	LICENSE NO.		NAME OF LICENSED I				NAME OF WELL DR	ILLING COMPANY		
	175	5	Tohn	Norris			Hungry	Horse, LL		
	DRILLING ST		DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HO	LE DEPTH (FT)	DEPTH WATER FIRE	ST ENCOUNTERED (FT	)	
	6JUN 27 20 JUN 22 305 175									
_	COMPLETED WELL IS: ARTESIAN DRY HOLE SHALLOW (UNCONFINED)  STATIC WATER LEVEL IN COMPLETED WELL (FT)  ATTEMPT ARTESIAN DATE STATIC MEASURED									
LION	DRILLING FI	TIID.	AIR	MUD ADDITIVES – SI	PECIFY:	(1.1)	109			
DRILLING & CASING INFORMATION	DRILLING METHOD: ROTARY HAMMER CABLE TOOL OTHER - SPECIFY: CHECK HERE IF PITLESS ADAPTER IS INSTALLED									
FOR			T	CASING MATERIAL AND/OR	T				T	
Z	DEPTH (	TO	BORE HOLE	GRADE		ASING	CASING	CASING WALL THICKNESS	SLOT SIZE	
NIS	FROM	10	DIAM (inches)	(include each casing string, and	1	NECTION TYPE	INSIDE DIAM. (inches)	(inches)	(inches)	
CAS	01	2001	10.10	note sections of screen)	(add coup	ling diameter)	111			
8	225	3051	10'	DUC	- 6	lued by		27	.125	
ZI	16	105	10	PV C		mes	U	R 3	4 (2)	
RIL									1	
2. DI									1	
		-								
	DEPTH (	(feet bgl)	BORE HOLE	LIST ANNULAR SEAL N	IATERIAL	AND	AMOUNT	МЕТНО	DD OF	
F	FROM	ТО	DIAM. (inches)	GRAVEL PACK SIZE-RAN			(cubic feet)	PLACE		
ERI/		201	10 11	(enert)	SOUT		20	10	P	
ATI	201	305	10"	Un' lata-la	d Gra	4	2 VA/6	TO	P	
RM	10	30 5	10	14 W/SAC	0 0		9/11/			
JLA										
ANNULAR MATERIAL										
3. A					7 ,					
FOR	OSE INTER	NAL USE				WR-20	0 WELL RECORD	& LOG (Version 01/2	28/2022)	
FILE	ENO.	1643	-PON 1	POD NO.	1	TRN			,	
LOC	CATION Z	35 7	-PODI	7.7	,	WELL TAG II	DNO. 71063		E 1 OF 2	

						- W				
	DEPTH (	feet bgl)	THICKNESS (feet)	INCLUDE WAT	ND TYPE OF MAT ER-BEARING CA pplemental sheets	VITIES OR FRA	CTURE ZONE	S BEA	ATER RING? 5 / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	0	- 1	<i>-</i> 1	Tooss				Y	8	ZONES (gpiii)
	0	5	5'	TOPSVIL				Y	(N)	
	5	30	25'	Red Cky				Y	<b>O</b>	
	301	90'	60	. /				Y	(S)	
	90'	110	201	White Clay				0	N	
	110	140'	30'	1	10-41/6	1		0		
ELL	140'	160'	20'		tone w/cb	/		Y	<u> </u>	
FW	160'		60'	hhiteha	K 100			Ø	N	
0 9	a	275'	55'	whote clay	1 sand stoy	ne		Y	(D)	
070	275'	305	30'	white 10	i e			Y		
950								Y	N N	
70C								Y		
4. HYDROGEOLOGIC LOG OF WELL								Y	N N	
YDR								Y	N	
4. H								Y	N	
								Y	N N	
								Y	N	
								Y	N	
								Y	N	
2	METHODI	GED TO EG	TIMATE WELD	OF WATER BEARIN	IO OTTO A TA			Y TOTAL FOTT	N	
				OF WATER-BEARIN		11/	_	TOTAL ESTI WELL YIEL		
	PUM	P [Al	IR LIFT	BAILER O	THER – SPECIFY:	N/7			(81).	
/ISION	WELL TES			ACH A COPY OF DA ME, AND A TABLE S						
	MISCELLA	NEOUS INF	ORMATION:							
TEST; RIG SUPER							09	SE DIT AUG	19 202	2 рм2:43
LESJ	PRINT NAM	ME(S) OF DE	RILL RIG SUPER	RVISOR(S) THAT PRO	OVIDED ONSITE S	SUPERVISION (	OF WELL CON	STRUCTION (	OTHER TH	IAN LICENSEE:
S.										
SIGNATURE	CORRECT I	RECORD OF	F THE ABOVE D	TIES THAT, TO THE I DESCRIBED HOLE AT 0 DAYS AFTER COM	ND THAT HE OR	SHE WILL FILE				
SIG	,	hh'	Many	Toh.	1 NOLLY	5		7-17	-22	
9	1	SIGNATI	URE OF DRILLE					/ / /	DATE	
	OSE INTERI		10		DOD NO.		1			rsion 01/28/2022)
FIL	E NO. <b>C</b> -	0464	5		POD NO.		TRN NO.	1273	06	

WELL TAG ID NO. 21068

PAGE 2 OF 2

Released to Imaging: 2/3/2023 11:27:42 AM

FILE NO. C-04643 LOCATION 235. 27E. O5. 4. 2. 2.

District I
1625 N. French Dr., Hobbs, NM 88240
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**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 155331

#### **CONDITIONS**

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	155331
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

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