Page 1 of 104

Incident ID	NOY1701331626
District RP	
Facility ID	
Application ID	

## **Closure**

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC						
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office						
☐ Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)						
☐ Description of remediation activities							
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in						
Printed Name:Dale Woodall	Title: Env. Professional						
Signature: Dale Woodall	Date: <u>11/17/2022</u>						
email:dale.woodall@dvn.com	Telephone: 575-748-1838						
OCD Only							
Received by:	Date:11/17/2022						
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.							
Closure Approved by: Ashley Maxwell	Date: <u>2/08/2023</u>						
Printed Name: Ashley Maxwell	Title:Environmental Specialist						

## Devon Energy Production Company Cotton Draw Unit 181 SWD

Closure Report UL H, Section 36, T24S, R31E Eddy County, New Mexico

> NAB1530234949 NAB1626756642 NOY1701331626 NAB1726355760 NRM2003439614 NRM2008733329

**December 19, 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 CDU 181 SWD concerning multiple historic releases of produced water in and outside of containment. This site is situated in Eddy County, Section 36, Township 24S, and Range 31E.

Releases at this location date back to February of 2015 and span to March of 2020. A total of 6 releases are contained in this report, and as they collectively were released on the site, they are addressed in total in this closure document separately.

SESI personnel performed an assessment of the site in July of 2020 based on generator knowledge of the leak locations. SESI personnel mapped the leak areas 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 315' bgs; however, since no wells less than 25 years old and less than a half mile away are known to be present, SESI will delineate this release to the most stringent criteria established by NMOCD.

## Characterization for NAB1530234949, NAB1626756642, NAB1726355760, NRM2003439614, NRM2008733329

Each of these incident numbers had some amount of release that was outside of containment. Many of them had the potential to impact soil, therefore, due to the historic nature of some of the releases, they were bundled together and approached as one much larger leak area for feasibility. In July of 2020, SESI personnel performed sampling to determine vertical extent of the releases. 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 181 SWD Soil Sample Results: Hall Environmental Laboratories 7/23/20											
SAMPLE ID	Chloride	GRO	DRO	MRO	Benzene	Toluene	Ethyl benzene	<b>Total Xylenes</b>				
AH-1 H NORTH	200	ND	ND	85	ND	ND	ND	ND				
AH-2 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-3 H WEST	340	ND	2600	2500	ND	ND	ND	ND				
AH-4 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-5 SURFACE	68	ND	ND	ND	ND	ND	ND	ND				
AH-6 H SOUTH	67	ND	ND	ND	ND	ND	ND	ND				
AH-7 SURFACE	310	ND	ND	ND	ND	ND	ND	ND				
AH-8 H SOUTH	ND	ND	ND	ND	ND	ND	ND	ND				
AH-9 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-10 H SE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-11 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-12 SURFACE	230	ND	ND	ND	ND	ND	ND	ND				
AH-13 SURFACE	120	ND	ND	ND	ND	ND	ND	ND				
AH-14 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-15 SURFACE	67	ND	ND	ND	ND	ND	ND	ND				
AH-16 SURFACE	200	ND	ND	ND	ND	ND	ND	ND				
AH-17 SURFACE	200	ND	ND	ND	ND	ND	ND	ND				
AH-18 H EAST	ND	ND	ND	ND	ND	ND	ND	ND				
AH-19 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-22 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-21 SURFACE	81	ND	ND	ND	ND	ND	ND	ND				
AH-24 SURFACE	430	ND	ND	ND	ND	ND	ND	ND				
AH-24 @ 1'	79	ND	ND	ND	ND	ND	ND	ND				
AH-23 H EAST	180	ND	ND	ND	ND	ND	ND	ND				
AH-25 H NE	220	ND	ND	ND	ND	ND	ND	ND				
AH-26 SURFACE	220	ND	ND	ND	ND	ND	ND	ND				
AH-27 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-28 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-29 H NORTH	ND	ND	ND	ND	ND	ND	ND	ND				
AH-30 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-31 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				
AH-32 SURFACE	290	ND	ND	ND	ND	ND	ND	ND				
AH-33 SURFACE	ND	ND	ND	ND	ND	ND	ND	ND				

Further investigation was needed at the AH-1 H North sample point and the AH-3 H West sample point. Auger was advanced to 1' and resampled, the results are presented below.

Devon Energy CDU 181 SWD										
Soil Sample Results: Hall Environmental Laboratories 9/15/20										
SAMPLE ID	MPLE ID Chloride GRO DRO MRO Benzene Toluene Ethyl benzene Total Xylene									
AH-1 H NORTH	ND	ND	ND	ND	ND	ND	ND	ND		
AH-3 @ 1'	@ 1' 130 ND ND ND ND ND ND						ND			

#### Remediation

Based on the results of the delineation, SESI, determined the best course of action is to excavate the contaminated soil to a depth of 1ft as practicable. The areas with appreciable DRO and MRO contamination were marked for excavation. In January of 2021, approximately 60 yrds of contaminated material was removed via shovel or backhoe. Confirmation and horizontal samples were taken to ensure remediation was successful and that the 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 181 SWD Soil Sample Results: Hall Environmental Laboratories 1/25/21										
SAMPLE ID Chloride GRO DRO MRO Benzene Toluene Ethyl benzene Total Xylenes										
SP-1 BTM @ 1'	120	ND								
SP-2 BTM @ 1'	ND	ND	ND	ND	ND	ND	ND	ND		
SP-3 BTM @ 1'	ND	ND	ND	ND	ND	ND	ND	ND		
SP-4 BTM @ 1'	ND	ND	ND	ND	ND	ND	ND	ND		
SP-5 N WALL	ND	ND	14	ND	ND	ND	ND	ND		
SP-6 W WALL	ND	ND	ND	ND	ND	ND	ND	ND		
SP-7 E WALL	ND	ND	ND	ND	ND	ND	ND	ND		
SP-8 N WALL	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.

#### NOY1701331626

This release was completely contained inside of the SPCC. An initial 45 bbls of produced water was released, and a vacuum truck recovered all 45 bbls from the lined containment area. A visual liner inspection was subsequently performed with no deficiencies. No further remedial actions were needed, and this report shall serve as a closure request for this incident number as well.

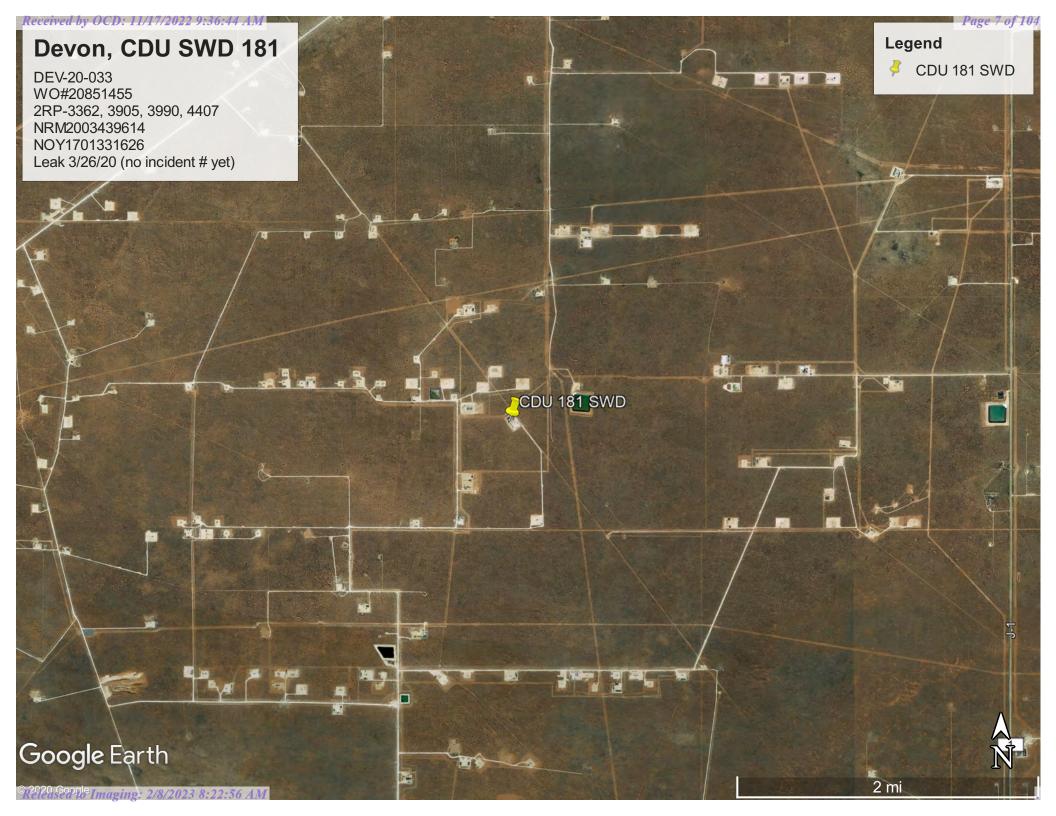
#### **Closure Request**

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 the following releases.

NAB1530234949 NAB1626756642 NOY1701331626 NAB1726355760 NRM2003439614 NRM2008733329 Supplemental information has been included in this report to support our closure request.

## **Supplemental Documentation for Closure**

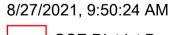
Map of Release with sample locations Photos of release and remediation NMOCD Oil and Gas Map BLM Cave Karst Map Laboratory Analysis C-141,





## **OSE PUBLIC PRINT**





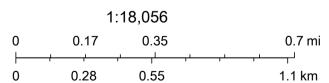
OSE District Boundary

New Mexico State Trust Lands

Subsurface Estate

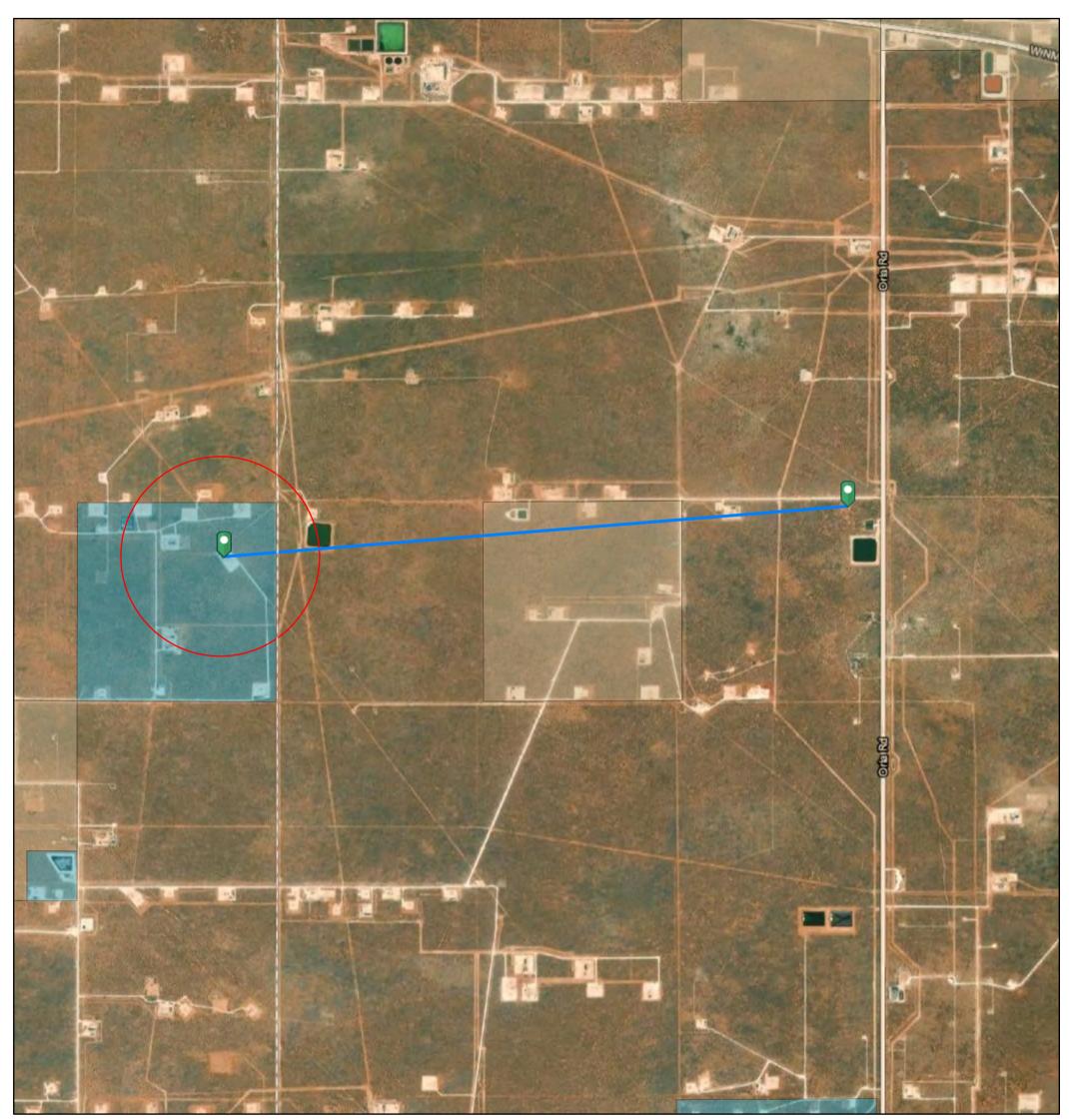
Both Estates

SiteBoundaries



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

# OSE PUBLIC PRINT



8/27/2021. 10:05:01 AM

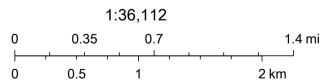
OSE District Boundary

New Mexico State Trust Lands

Subsurface Estate

Both Estates

SiteBoundaries



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

PAGE 1 OF 2

WELL TAG ID NO.

OSE DII JUL 9 2021 PM 1:52



## WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

GSE DII JUN 21 2021 PM10:14

	1912								/.		
	OSE POD NO	(WELL NO	.)	1	ELL TAG ID NO.			OSE FILE NO(	S).		
S N	E1536-	109	> (	20	)E37			C-4536	V		
GENERAL AND WELL LOCATION	WELL OWN		ES RANCHES LLC					PHONE (OPTI	ONAL)		
LL	WELL OWN	ER MAILING	G ADDRESS					CITY	· · · · · ·	STATE	ZIP
WEL	3300 N A	STREET,	BLDG 1, STE 220					MIDLAND TX 79705			
AND	WELL		DE	GREES 32							
ΔĽ,	LOCATIO	277	TITUDE	N N				'REQUIRED: ONE TEN' QUIRED: WGS 84	TH OF A SECOND		
NER	(FROM GI	LONGITUDE 103 40 23.5 W									
1. GE	DESCRIPTION	ON RELATIN	NG WELL LOCATION TO	STREET ADDRESS	S AND COMMON	N LANDMA	RKS – PLS	S (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVAILABLE	
	LICENSE NO	<u> </u>	NAME OF LICENSED	DDILLED					NAME OF WELL DR	H LING COMPANY	
<u> </u> -	WD1		TABLE OF BICEROES		yce Wallace				Į	Drillers Corporation	
	DRILLING S 06/09		DRILLING ENDED 06/10/21	DEPTH OF COMP	DEPTH OF COMPLETED WELL (FT)  500  BORE HOLE DEPTH (FT)  500  DEPTH WATER FIRST ENCOUNTERED (FT)  314						
Z	COMPLETED WELL IS: ARTESIAN DRY HOLE SHALLOW (UNCONFINED)  STATIC WATER LEVEL IN COMPLETED WELL (FT)								ELL (FT)		
ATIC	DRILLING FLUID: AIR MUD ADDITIVES - SPECIFY:										
RM	DRILLING METHOD: ROTARY HAMMER CABLE TOOL O						ОТНЕ	R - SPECIFY:			
INFC	DEPTH	(feet bgl)	BORE HOLE	l .	TERIAL AND	O/OR	CA	ASING	CASING	CASING WALL	SLOT
CASING INFORMATION	FROM	ТО	DIAM (inches)	(include eacl	RADE n casing string, tions of screen)		CONN T	NECTION YPE	INSIDE DIAM. (inches)	THICKNESS (inches)	SIZE (inches)
& C	0	20	12 3/4		STEEL			N/A	8.28	.337	
	0	300	7 7/8	<u> </u>	R17 PVC		SF	LINE	4.3	SDR17	
2. DRILLING	300	500	7 7/8	SD	R17 PVC		SF	LINE	4.3	SDR17	.032
. DR						-					ļ
7											-
											-
	DEPTH	(feet bgl)	BORE HOLE		ANNULAR SI				AMOUNT	метно	
IVR	FROM	то	DIAM. (inches)	GRAVE	L PACK SIZE		BY INTE	RVAL	(cubic feet)	PLACE	
TER	0	20	12 3/4			MENT			10	TOPI	
MA	0	20	7 7/8			MENT	<u> </u>		6	TOP	
LAR	300	500	7 7/8		8/16 SIL	ICA SAN	υ ·····		46	TOPI	LIPP
ANNULAR MATERIAL			-					<u>:</u>			
3. AN			-		· · · · · · · · ·						
							<del> </del>				
	000 7			l					<u> </u>		
FOR	OSE INTER	NAL USE			· <del></del>			WR-2	0 WELL RECORD	& LOG (Version 06/3	50/17)

## OSE DII JUL 9 2021 PM1:53

05E DII JUN 21 2021 PM10:14

0 3 12 180 235	3 12 180	3			ZONES (gpm)
12			RED SAND	Y VN	
180	180	9	CALICHE	Y ✓N	
		168	RED CLAY	Y ✓N	
2,35	235	415	TAN SANDSTONE	Y ✓N	
	480	245	TAN SANDSTONE & CLAY STRINGERS	✓ Y N	4.00
480	500	20	RED CLAY WITH SAND STRINGERS	Y ✓N	
				Y N	
				Y N	
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				Y N	
			<u></u>	TOTAL ESTIMATED WELL YIELD (gpm):	4.00
1 0.141	مين	Men 1	DAILER OTHER - SPECIF 1.		
WELL TEST					
MISCELLA	NEOUS INF	FORMATION:			
PRINT NAM	E(S) OF DI	RILL RIG SUPER	VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CON	STRUCTION OTHER TE	HAN LICENSEE:
CORRECT R	ECORD O	F THE ABOVE DI	ESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL R	EF, THE FOREGOING IS ECORD WITH THE STA	S A TRUE AND TE ENGINEER
M	· W		Bryce Wallace	06/16/2021	
	SIGNAT	URE OF DRILLER	R / PRINT SIGNEE NAME	DATE	
OSE INTERN	IAL USE		WR-20 WE	LL RECORD & LOG (Ve	rsion 06/30/2017)
NO.C-L	1536	1464-	POD NO. TRN NO.	195378	
	PUMP WELL TEST MISCELLAY PRINT NAM THE UNDER CORRECT R AND THE P	PUMP TATEST STAR  WELL TEST STAR  MISCELLANEOUS INI  PRINT NAME(S) OF D  THE UNDERSIGNED BE CORRECT RECORD O AND THE PRIMIT HO  SIGNAT  DISE INTERNAL USE  NO C - 4534	TEST RESULTS - ATTASTART TIME, END TIME MISCELLANEOUS INFORMATION:  PRINT NAME(S) OF DRILL RIG SUPER  THE UNDERSIGNED HEREBY CERTIFIC CORRECT RECORD OF THE ABOVE DI AND THE PRIMIT HOLDER WITHIN 20  SIGNATURE OF DRILLER  DSE INTERNAL USE  NO C - 4536 - 101	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INC START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OV  MISCELLANEOUS INFORMATION:  PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CON  THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELL  CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL R  AND THE PRIMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:  Bryce Wallace  SIGNATURE OF DRILLER / PRINT SIGNEE NAME  OSE INTERNAL USE  WR-20 WE  NO C - 4 5 36 - 100 POD NO. TRN NO. C	Y N  Y N  Y N  Y N  Y N  Y N  Y N  Y N

Received by OCD: 11/17/2022 9:36:44 AM



Southeast corner facing North inside



Location sign facing West Released to Imaging: 2/8/2023 8:22:56 AM



Southeast corner facing West inside



Southeast corner facing North inside



East side facing West inside



Southeast corner facing West outside



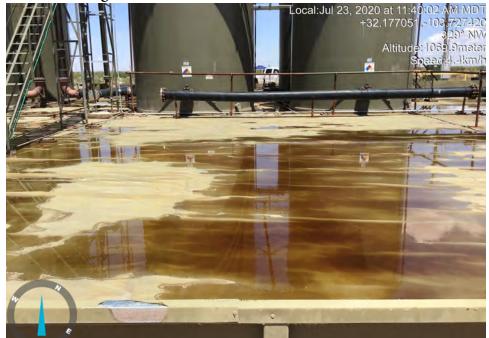
East side facing West inside



East side facing West inside



East side facing West inside



East side facing West inside



Northeast corner facing South inside



East side facing west inside



Northeast corner facing West inside



Northeast corner facing South outside



North side facing South inside



Northeast corner facing West inside



North side facing South inside



North side facing South inside



Northeast corner facing East, Sump with water



North side facing South inside



Northeast corner facing South outside



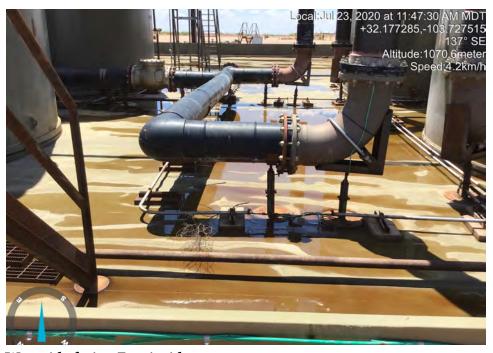
Northwest corner facing South inside



West side facing East inside



West side facing East inside



West side facing East inside



West side facing East inside



Southwest corner facing North inside



West side facing East inside



Southwest corner facing East inside



Southwest corner facing North outside



Southeast corner sump facing East (water)



Southwest corner facing east outside



West side inside (pump#1), patch unglued



East side, inside pump#3, liner patch unglued



**Inside center facing Southwest** 



**Inside center facing Northeast** 



East side, outside of liner (oil dump)



East side, outside of liner, oil stain (not liner leak), oil dump



Inside facing Southwest (chemical and water mix)



East side, outside of liner (oil dump)

Released to Imaging: 2/8/2023 8:22:56 AM

# Devon Energy – Cotton Draw Unit 181 SWD Excavation & Remediation









# Devon Energy – Cotton Draw Unit 181 SWD Excavation & Remediation









# Devon Energy – Cotton Draw Unit 181 SWD Excavation & Remediation











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

February 01, 2021

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

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

RE: Coftton Draw 181 SWD OrderNo.: 2101967

#### Dear Bob Allen:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/27/2021 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 **2101967** 

Date Reported: 2/1/2021

## Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Coftton Draw 181 SWD
 Collection Date: 1/25/2021 10:15:00 AM

 Lab ID:
 2101967-001
 Matrix: SOIL
 Received Date: 1/27/2021 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	120	60	mg/Kg	20	1/29/2021 7:12:25 PM	57808
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: mb
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	1/28/2021 10:46:12 AM	57769
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/28/2021 10:46:12 AM	57769
Surr: DNOP	127	30.4-154	%Rec	1	1/28/2021 10:46:12 AM	57769
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	1/29/2021 1:15:18 PM	57765
Surr: BFB	96.2	75.3-105	%Rec	1	1/29/2021 1:15:18 PM	57765
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	1/29/2021 1:15:18 PM	57765
Toluene	ND	0.047	mg/Kg	1	1/29/2021 1:15:18 PM	57765
Ethylbenzene	ND	0.047	mg/Kg	1	1/29/2021 1:15:18 PM	57765
Xylenes, Total	ND	0.094	mg/Kg	1	1/29/2021 1:15:18 PM	57765
Surr: 4-Bromofluorobenzene	99.2	80-120	%Rec	1	1/29/2021 1:15:18 PM	57765

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 12

Lab Order **2101967**Date Reported: **2/1/2021** 

## Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Coftton Draw 181 SWD
 Collection Date: 1/25/2021 10:30:00 AM

 Lab ID:
 2101967-002
 Matrix: SOIL
 Received Date: 1/27/2021 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	1/29/2021 8:14:27 PM	57808
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: mb
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	1/28/2021 11:57:29 AM	57769
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/28/2021 11:57:29 AM	57769
Surr: DNOP	142	30.4-154	%Rec	1	1/28/2021 11:57:29 AM	57769
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	1/29/2021 2:26:12 PM	57765
Surr: BFB	97.4	75.3-105	%Rec	1	1/29/2021 2:26:12 PM	57765
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	1/29/2021 2:26:12 PM	57765
Toluene	ND	0.048	mg/Kg	1	1/29/2021 2:26:12 PM	57765
Ethylbenzene	ND	0.048	mg/Kg	1	1/29/2021 2:26:12 PM	57765
Xylenes, Total	ND	0.096	mg/Kg	1	1/29/2021 2:26:12 PM	57765
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	1/29/2021 2:26:12 PM	57765

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 12

Lab Order 2101967

Date Reported: 2/1/2021

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Coftton Draw 181 SWD

**Lab ID:** 2101967-003

Co

Client Sample ID: SP-3 1ft Bottom

**Collection Date:** 1/25/2021 11:20:00 AM

Received Date: 1/27/2021 7:35:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	59	mg/Kg	20	1/29/2021 8:51:39 PM	57808
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: mb
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	1/28/2021 12:21:18 PM	57769
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/28/2021 12:21:18 PM	57769
Surr: DNOP	144	30.4-154	%Rec	1	1/28/2021 12:21:18 PM	57769
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	1/29/2021 3:37:29 PM	57765
Surr: BFB	97.3	75.3-105	%Rec	1	1/29/2021 3:37:29 PM	57765
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.023	mg/Kg	1	1/29/2021 3:37:29 PM	57765
Toluene	ND	0.047	mg/Kg	1	1/29/2021 3:37:29 PM	57765
Ethylbenzene	ND	0.047	mg/Kg	1	1/29/2021 3:37:29 PM	57765
Xylenes, Total	ND	0.094	mg/Kg	1	1/29/2021 3:37:29 PM	57765
Surr: 4-Bromofluorobenzene	99.5	80-120	%Rec	1	1/29/2021 3:37:29 PM	57765

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 **2101967** 

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 2/1/2021

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

**Project:** Coftton Draw 181 SWD Collection Date: 1/25/2021 1:40:00 PM

**Lab ID:** 2101967-004 **Matrix:** SOIL **Received Date:** 1/27/2021 7:35:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	59	mg/Kg	20	1/29/2021 9:04:04 PM	57808
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: mb
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	1/28/2021 12:45:06 PM	57769
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/28/2021 12:45:06 PM	57769
Surr: DNOP	145	30.4-154	%Rec	1	1/28/2021 12:45:06 PM	57769
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/29/2021 4:01:18 PM	57765
Surr: BFB	100	75.3-105	%Rec	1	1/29/2021 4:01:18 PM	57765
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.025	mg/Kg	1	1/29/2021 4:01:18 PM	57765
Toluene	ND	0.050	mg/Kg	1	1/29/2021 4:01:18 PM	57765
Ethylbenzene	ND	0.050	mg/Kg	1	1/29/2021 4:01:18 PM	57765
Xylenes, Total	ND	0.10	mg/Kg	1	1/29/2021 4:01:18 PM	57765
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	1/29/2021 4:01:18 PM	57765

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 **2101967** 

Date Reported: 2/1/2021

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Coftton Draw 181 SWD

**Lab ID:** 2101967-005

Matrix: SOIL

**Collection Date:** 1/25/2021 1:15:00 PM **Received Date:** 1/27/2021 7:35:00 AM

Client Sample ID: SP-5 North Wall

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	1/29/2021 9:16:29 PM	57808
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	: mb
Diesel Range Organics (DRO)	14	8.5	mg/Kg	1	1/28/2021 5:23:32 PM	57769
Motor Oil Range Organics (MRO)	ND	42	mg/Kg	1	1/28/2021 5:23:32 PM	57769
Surr: DNOP	151	30.4-154	%Rec	1	1/28/2021 5:23:32 PM	57769
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	1/29/2021 4:25:09 PM	57765
Surr: BFB	99.6	75.3-105	%Rec	1	1/29/2021 4:25:09 PM	57765
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.023	mg/Kg	1	1/29/2021 4:25:09 PM	57765
Toluene	ND	0.046	mg/Kg	1	1/29/2021 4:25:09 PM	57765
Ethylbenzene	ND	0.046	mg/Kg	1	1/29/2021 4:25:09 PM	57765
Xylenes, Total	ND	0.092	mg/Kg	1	1/29/2021 4:25:09 PM	57765
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	1/29/2021 4:25:09 PM	57765

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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**EPA METHOD 8021B: VOLATILES** 

Surr: 4-Bromofluorobenzene

Benzene

Toluene

Ethylbenzene

Xylenes, Total

## **Analytical Report**

Lab Order **2101967** 

Date Reported: 2/1/2021

Analyst: RAA

57765

57765

57765

57765

57765

1/29/2021 4:49:03 PM

## Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Coffton Draw 181 SWD
 Collection Date: 1/25/2021 2:05:00 PM

 Lab ID:
 2101967-006
 Matrix: SOIL
 Received Date: 1/27/2021 7:35:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch Analyses EPA METHOD 300.0: ANIONS** Analyst: VP Chloride ND 60 mg/Kg 20 1/29/2021 9:28:54 PM 57808 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.7 mg/Kg 1/28/2021 1:32:50 PM 57769 Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 1/28/2021 1:32:50 PM 57769 Surr: DNOP 159 30.4-154 S %Rec 1 1/28/2021 1:32:50 PM 57769 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: RAA 1/29/2021 4:49:03 PM Gasoline Range Organics (GRO) ND 57765 4.7 mg/Kg 1 Surr: BFB 97.8 %Rec 1/29/2021 4:49:03 PM 75.3-105

ND

ND

ND

ND

98.0

0.024

0.047

0.047

0.094

80-120

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

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 **2101967** 

Client Sample ID: SP-7 East Wall

Date Reported: 2/1/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

 Project:
 Coftton Draw 181 SWD
 Collection Date: 1/25/2021 11:00:00 AM

 Lab ID:
 2101967-007
 Matrix: SOIL
 Received Date: 1/27/2021 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	1/29/2021 9:41:19 PM	57808
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	: mb
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	1/28/2021 1:56:48 PM	57769
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/28/2021 1:56:48 PM	57769
Surr: DNOP	140	30.4-154	%Rec	1	1/28/2021 1:56:48 PM	57769
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	1/29/2021 5:12:56 PM	57765
Surr: BFB	99.9	75.3-105	%Rec	1	1/29/2021 5:12:56 PM	57765
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	1/29/2021 5:12:56 PM	57765
Toluene	ND	0.048	mg/Kg	1	1/29/2021 5:12:56 PM	57765
Ethylbenzene	ND	0.048	mg/Kg	1	1/29/2021 5:12:56 PM	57765
Xylenes, Total	ND	0.096	mg/Kg	1	1/29/2021 5:12:56 PM	57765
Surr: 4-Bromofluorobenzene	100	80-120	%Rec	1	1/29/2021 5:12:56 PM	57765

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 **2101967** 

#### Date Reported: 2/1/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: SP-8 North Wall

 Project:
 Coftton Draw 181 SWD
 Collection Date: 1/25/2021 11:55:00 AM

 Lab ID:
 2101967-008
 Matrix: SOIL
 Received Date: 1/27/2021 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	1/29/2021 9:53:43 PM	57808
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	:: mb
Diesel Range Organics (DRO)	ND	8.5	mg/Kg	1	1/28/2021 2:20:45 PM	57769
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	1/28/2021 2:20:45 PM	57769
Surr: DNOP	147	30.4-154	%Rec	1	1/28/2021 2:20:45 PM	57769
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	1/29/2021 7:35:47 PM	57765
Surr: BFB	99.7	75.3-105	%Rec	1	1/29/2021 7:35:47 PM	57765
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst	: RAA
Benzene	ND	0.023	mg/Kg	1	1/29/2021 7:35:47 PM	57765
Toluene	ND	0.047	mg/Kg	1	1/29/2021 7:35:47 PM	57765
Ethylbenzene	ND	0.047	mg/Kg	1	1/29/2021 7:35:47 PM	57765
Xylenes, Total	ND	0.094	mg/Kg	1	1/29/2021 7:35:47 PM	57765
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	1/29/2021 7:35:47 PM	57765

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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## **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2101967** 

01-Feb-21

Client: Safety & Environmental Solutions

**Project:** Coftton Draw 181 SWD

Sample ID: MB-57808 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 57808 RunNo: 74942

Prep Date: 1/29/2021 Analysis Date: 1/29/2021 SeqNo: 2645957 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-57808 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 57808 RunNo: 74942

Prep Date: 1/29/2021 Analysis Date: 1/29/2021 SeqNo: 2645958 Units: mg/Kg

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

Chloride 15 1.5 15.00 0 98.7 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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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## **OC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

2101967 01-Feb-21

WO#:

Client: Safety & Environmental Solutions

**Project:** Coftton Draw 181 SWD

Sample ID: MB-57769 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 57769 RunNo: 74917

Prep Date: 1/27/2021 Analysis Date: 1/28/2021 SeqNo: 2644531 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 13 10.00 132 30.4 154

Sample ID: LCS-57769 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 57769 RunNo: 74917

Prep Date: 1/27/2021 Analysis Date: 1/28/2021 SeqNo: 2644533 Units: mg/Kg

Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 68.9 67 50.00 133 141

 Surr: DNOP
 6.5
 5.000
 130
 30.4
 154

Sample ID: 2101967-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: SP-1 1ft Bottom Batch ID: 57769 RunNo: 74917

Prep Date: 1/27/2021 Analysis Date: 1/28/2021 SeqNo: 2644534 Units: mg/Kg

HighLimit Result PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 58 45.54 0 127 15 184

Surr: DNOP 5.8 4.554 128 30.4 154

Sample ID: 2101967-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: SP-1 1ft Bottom Batch ID: 57769 RunNo: 74917

Prep Date: 1/27/2021 Analysis Date: 1/28/2021 SeqNo: 2644535 Units: mg/Kg

%RPD Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit **RPDLimit** Qual Analyte Diesel Range Organics (DRO) 60 9.0 44.76 0 135 15 184 4.58 23.9 Surr: DNOP 4.476 6.1 136 30.4 154 0 0

#### Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

SampType: LCS

WO#: **2101967** 

01-Feb-21

Client: Safety & Environmental Solutions

**Project:** Coftton Draw 181 SWD

Sample ID: Ics-57765

		,,,,,	_						_	
Client ID: LCSS	Batch	n ID: <b>57</b>	765	F	lunNo: 7	4945				
Prep Date: 1/27/2021	Analysis D	ate: 1/	29/2021	8	SeqNo: 2	645737	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.9	80	120			
Surr: BFB	1100		1000		107	75.3	105			S
Sample ID: mb-57765	SampT	уре: М	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID: PBS	Batch	n ID: <b>57</b>	765	F	RunNo: 7	4945				
Prep Date: 1/27/2021	Analysis D	ate: 1/	29/2021	8	SeqNo: 2	645738	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		95.8	75.3	105			
Sample ID: 2101967-002ams	SampT	ype: MS	3	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: SP-2 1ft Bottom	Batch	n ID: <b>57</b>	765	F	tunNo: 7	4945				
Prep Date: 1/27/2021	Analysis D	ate: 1/	29/2021	S	SeqNo: 2	646037	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.32	0	105	61.3	114			
Gasoline Range Organics (GRO)			972.8		111	75.3	105			S

TestCode: EPA Method 8015D: Gasoline Range

Client ID: SP-2 1ft	Bottom	Batch ID	: 577	<b>'65</b>	R	unNo: <b>7</b> 4	4945				
Prep Date: 1/27/20	<b>)21</b> Ar	alysis Date	: 1/2	29/2021	S	eqNo: 20	646038	Units: mg/K	g		
Analyte	F	Result F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	(CDO)	24	4.0	24.00	0	101	61.3	114	4.39	20	
Gasoline Nange Organics	(GRO)	24	4.8	24.08	U	101	01.3	114	4.39	20	

Sample ID: Ics-57723	SampType: L	CS	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batch ID: 5	7723	F	RunNo: 7	4945				
Prep Date: 1/25/2021	Analysis Date:	/30/2021	8	SeqNo: 20	646074	Units: %Rec	:		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100	1000		107	75.3	105			S

Sample ID: mb-57723	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Rang	je	
Client ID: PBS	Batch ID: 57723	RunNo: <b>74945</b>			
Prep Date: 1/25/2021	Analysis Date: 1/30/2021	SeqNo: <b>2646078</b>	Units: %Rec		
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit	Qual
Surr: BFB	950 1000	94.6 75.3	105		

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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#: **2101967** 

01-Feb-21

Client: Safety & Environmental Solutions

**Project:** Coftton Draw 181 SWD

Sample ID: LCS-57765 Client ID: LCSS	·	Type: <b>LC</b>			tCode: El		8021B: Volat	iles			
Prep Date: 1/27/2021	Analysis D		29/2021	-	SeqNo: 2		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.97	0.025	1.000	0	96.9	80	120				
Toluene	0.99	0.050	1.000	0	98.8	80	120				
Ethylbenzene	0.98	0.050	1.000	0	98.0	80	120				
Xylenes, Total	2.9	0.10	3.000	0	97.6	80	120				
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120				

Sample ID: <b>mb-57765</b>	Samp1	Гуре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batc	h ID: <b>57</b>	765	F	RunNo: 7	4945				
Prep Date: 1/27/2021	Analysis [	Date: 1/	29/2021	9	SeqNo: 2	645743	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: 4-Bromofluorobenzene	0.99		1.000		99.2	80	120			

Sample ID: 2101967-001ams	Samp	Гуре: М\$	3	TestCode: EPA Method 8021B: Volatiles						
Client ID: SP-1 1ft Bottom	Batc	h ID: <b>57</b>	765	RunNo: <b>74945</b>						
Prep Date: 1/27/2021	Analysis [	Date: 1/	29/2021	1 SeqNo: <b>2646088</b> Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.024	0.9597	0	96.4	76.3	120			
Toluene	0.95	0.048	0.9597	0	98.7	78.5	120			
Ethylbenzene	0.96	0.048	0.9597	0	99.8	78.1	124			
Xylenes, Total	2.9	0.096	2.879	0	99.4	79.3	125			
Surr: 4-Bromofluorobenzene	0.98		0.9597		102	80	120			

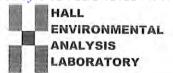
Sample ID: 2101967-001ams	d SampT	SampType: MSD TestCode: EPA Method 8021B: Volatiles								
Client ID: SP-1 1ft Bottom	Batch	Batch ID: <b>57765</b> RunNo: <b>74945</b>								
Prep Date: 1/27/2021	Analysis D	alysis Date: 1/29/2021 SeqNo: 2646089 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9756	0	93.0	76.3	120	1.99	20	
Toluene	0.93	0.049	0.9756	0	95.0	78.5	120	2.20	20	
Ethylbenzene	0.92	0.049	0.9756	0	94.5	78.1	124	3.78	20	
Xylenes, Total	2.8	0.098	2.927	0	94.7	79.3	125	3.19	20	
Surr: 4-Bromofluorobenzene	1.0		0.9756		102	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
- 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 12 of 12



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

Albuquerque, NM 87109 Sample Log-In Che TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Safety & Environmental S	Work Order Nun	nber: 210	1967		RcptNo: 1
Received By: Isaiah Ortiz	1/27/2021 7:35:00	AM		I.	04
Completed By: Isaiah Ortiz	1/27/2021 8:41:10	AM		I	OL
Reviewed By: 3R 127/21					
Chain of Custody					
1. Is Chain of Custody complete?		Yes	V	No 🗆	Not Present
2. How was the sample delivered?		Cou	rier		
Log In					
3. Was an attempt made to cool the samples?		Yes	V	No 🗆	NA 🗆
4. Were all samples received at a temperature	of >0° C to 6.0°C	Yes	•	No 🗆	NA 🗆
5. Sample(s) in proper container(s)?		Yes	~	No 🗆	I
6. Sufficient sample volume for indicated test(s	3)?	Yes	~	No 🗆	
7. Are samples (except VOA and ONG) proper	ly preserved?	Yes	<b>V</b>	No 🗌	
8. Was preservative added to bottles?		Yes		No 🗸	NA 🗆
9. Received at least 1 vial with headspace <1/4	" for AQ VOA?	Yes		No 🗌	NA <b>☑</b>
10. Were any sample containers received broke	en?	Yes		No 🗸	# of preserved
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	<b>V</b>	No 🗆	bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of	Custody?	Yes	<b>V</b>	No 🗌	Adjusted?
3. Is it clear what analyses were requested?		Yes	<b>V</b>	No 🗆	
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes	<b>V</b>	No 🗌	Checked by: SGC (   Z7   Z
Special Handling (if applicable)					
15. Was client notified of all discrepancies with	this order?	Yes		No 🗆	NA 🗹
Person Notified:	Date		-		
By Whom:	Via:	☐ eM	ail 🗌	Phone Fa	x In Person
Regarding:	-			14.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.	
Client Instructions:					
16. Additional remarks:					
	eal Intact   Seal No	Seal D	ate	Signed By	

ATORY ATORY OCD: 11/17/2022	:36:44 AM	Page 40 of 1
IALL ENVIRONMENTAI INALYSIS LABORATOR www.hallenvironmental.com ins NE - Albuquerque, NM 87109 15-3975 Fax 505-345-4107 Analysis Request	Total Coliform (Present/Absent)	
VIR IS L onment querqu x 505-	(AOV) 09S8 (AOV-im9S) 0\S	
	CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	
HALL ANAL www.hall kins NE - 345-3975	RCRA 8 Metals	
HALL ANAL www.ha Hawkins NE 505-345-3975	PAHs by 8310 or 82705IMS	
	8081 Pesticides/8082 PCB's EDB (Method 504.1)	
4901 Tel.	(ORM / ORO / DRO / MRO)	Remarks:
	BTEX / MTBE / TMB's (8021)	New York Control of the Control of t
Turn-Around Time:  Standard Project Name: Action 181 Such Project #: Project #:	Project Manager:  Sampler: Sampler:  On Ice: # of Coolers: Cooler Temp(including cF): 34.450  Container  Type and # Type  Type and # Type	1/21   700   005   005   006   005   006   005   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006   006
Turn-Around Ti	Sampler:  Sampler:  On Ice:  # of Coolers:  Cooler Temp(includ Type and # Type	Received by
Client: Select + En Chonworth  Client: Select + En Chonworth  Selection - Clerker  Mailing Address: 703 C. Clerker  Khohs N. M. 88246  Phone #: 575-397-0510	email or Fax#:  QA/QC Package:  Example Standard	125 1015 5 5 P 1 F 18 How 125 1015 5 5 P 1 F 18 How 125 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 How 125 1015 5 P 2 1 F 18 H



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

September 25, 2020

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

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

RE: Devon Cotton Draw 181 SWD OrderNo.: 2009B07

#### Dear Bob Allen:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/18/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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

# Analytical Report Lab Order 2009B07

Date Reported: 9/25/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 9/15/2020 9:55:00 AM

 Lab ID:
 2009B07-001
 Matrix: SOIL
 Received Date: 9/18/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	130	60	mg/Kg	20	9/25/2020 2:34:41 AM	55435
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/22/2020 6:20:39 PM	55318
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/22/2020 6:20:39 PM	55318
Surr: DNOP	144	30.4-154	%Rec	1	9/22/2020 6:20:39 PM	55318
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/23/2020 4:01:24 AM	55300
Surr: BFB	89.4	75.3-105	%Rec	1	9/23/2020 4:01:24 AM	55300
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	9/23/2020 4:01:24 AM	55300
Toluene	ND	0.048	mg/Kg	1	9/23/2020 4:01:24 AM	55300
Ethylbenzene	ND	0.048	mg/Kg	1	9/23/2020 4:01:24 AM	55300
Xylenes, Total	ND	0.096	mg/Kg	1	9/23/2020 4:01:24 AM	55300
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	9/23/2020 4:01:24 AM	55300

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

Qualifiers:

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

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

Page 1 of 6

# Analytical Report Lab Order 2009B07

Date Reported: 9/25/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 9/15/2020 11:30:00 AM

 Lab ID:
 2009B07-002
 Matrix: SOIL
 Received Date: 9/18/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	ND	60	mg/Kg	20	9/25/2020 2:47:06 AM	55435
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	9/22/2020 6:30:42 PM	55318
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/22/2020 6:30:42 PM	55318
Surr: DNOP	126	30.4-154	%Rec	1	9/22/2020 6:30:42 PM	55318
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/23/2020 4:24:48 AM	55300
Surr: BFB	87.4	75.3-105	%Rec	1	9/23/2020 4:24:48 AM	55300
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	9/23/2020 4:24:48 AM	55300
Toluene	ND	0.048	mg/Kg	1	9/23/2020 4:24:48 AM	55300
Ethylbenzene	ND	0.048	mg/Kg	1	9/23/2020 4:24:48 AM	55300
Xylenes, Total	ND	0.097	mg/Kg	1	9/23/2020 4:24:48 AM	55300
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	9/23/2020 4:24:48 AM	55300

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 6

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2009B07 25-Sep-20** 

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: MB-55435 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 55435 RunNo: 72148

Prep Date: 9/24/2020 Analysis Date: 9/24/2020 SeqNo: 2529091 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-55435 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 55435 RunNo: 72148

Prep Date: 9/24/2020 Analysis Date: 9/24/2020 SeqNo: 2529092 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

Page 3 of 6

**Client:** 

# Hall Environmental Analysis Laboratory, Inc.

Safety & Environmental Solutions

WO#: **2009B07** 

25-Sep-20

		/D							
Sample ID: LCS-55318	SampType: LCS	<u> </u>	Test	Code: <b>EF</b>	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch ID: 5531	18	R	unNo: <b>7</b> 2	2063				
Prep Date: 9/21/2020	Analysis Date: 9/2	2/2020	S	eqNo: 25	524682	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60 10	50.00	0	119	70	130			
Surr: DNOP	3.7	5.000		74.6	30.4	154			
Sample ID: LCS-55322	SampType: LCS	;	Test	Code: <b>EF</b>	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch ID: 5532	22	R	unNo: <b>7</b> 2	2063				
Prep Date: 9/21/2020	Analysis Date: 9/2	2/2020	S	eqNo: 25	524684	Units: %Red	;		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0	5.000		80.5	30.4	154			
Sample ID: LCS-55325	SampType: <b>LCS</b>		Test	Code: <b>EF</b>	PA Method	8015M/D: Die	esel Range	Organics	
Client ID: LCSS	Batch ID: 5532	25	R	unNo: <b>7</b> 2	2063				
Prep Date: 9/21/2020	Analysis Date: 9/2	3/2020	S	eqNo: 25	524685	Units: %Red	;		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6	5.000		92.7	30.4	154			
Sample ID: <b>MB-55318</b>	SampType: MBL	LK	Test	Code: EF	'A Wethod	OU I SIVI/D. DIE	sei Kaliye	Organics	
Sample ID: MB-55318 Client ID: PBS	SampType: MBL Batch ID: 5531			Code: EF unNo: <b>7</b> 2		OUTSIM/D. DIE	sei Kange	Organics	
·	. ,.	18	R		2063	Units: mg/K	·	Organics	
Client ID: PBS	Batch ID: 5534 Analysis Date: 9/2	18 2/2020	R	unNo: <b>7</b> 2 eqNo: <b>2</b> 5	2063		·	RPDLimit	Qual
Client ID: PBS Prep Date: 9/21/2020	Batch ID: 5534 Analysis Date: 9/2	18 2/2020	R S	unNo: <b>7</b> 2	2063 524687	Units: mg/K	g	Ū	Qual
Client ID: PBS Prep Date: 9/21/2020 Analyte	Batch ID: 553 <sup>2</sup> Analysis Date: 9/2: Result PQL	18 2/2020	R S	unNo: <b>7</b> 2	2063 524687	Units: mg/K	g	Ū	Qual
Client ID: PBS Prep Date: 9/21/2020 Analyte Diesel Range Organics (DRO)	Batch ID: 5531 Analysis Date: 9/22 Result PQL ND 10	18 2/2020	R S	unNo: <b>7</b> 2	2063 524687	Units: mg/K	g	Ū	Qual
Client ID: PBS Prep Date: 9/21/2020 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)	Batch ID: 5537 Analysis Date: 9/22 Result PQL ND 10 ND 50	18 2/2020 SPK value 10.00	R S SPK Ref Val	unNo: <b>72</b> eqNo: <b>25</b> %REC 72.3	2063 524687 LowLimit 30.4	Units: <b>mg/K</b> HighLimit	g %RPD	RPDLimit	Qual
Client ID: PBS Prep Date: 9/21/2020 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	Batch ID: 5537 Analysis Date: 9/22 Result PQL ND 10 ND 50 7.2	18 2/2020 SPK value 10.00	R S SPK Ref Val	unNo: <b>72</b> eqNo: <b>25</b> %REC 72.3	2063 524687 LowLimit 30.4	Units: mg/K HighLimit 154	g %RPD	RPDLimit	Qual
Client ID: PBS Prep Date: 9/21/2020 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP  Sample ID: MB-55322	Batch ID: 5537  Analysis Date: 9/2:  Result PQL  ND 10  ND 50  7.2  SampType: MBL	18 2/2020 SPK value 10.00	SPK Ref Val  Test	unNo: <b>72</b> eqNo: <b>25</b> %REC  72.3  Code: <b>EF</b>	2063 524687 LowLimit 30.4 PA Method 2063	Units: mg/K HighLimit 154	g %RPD	RPDLimit	Qual
Client ID: PBS Prep Date: 9/21/2020 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP  Sample ID: MB-55322 Client ID: PBS	Batch ID: 5537  Analysis Date: 9/2:  Result PQL  ND 10  ND 50  7.2  SampType: MBL  Batch ID: 5532  Analysis Date: 9/2:	18 2/2020 SPK value 10.00 LK 22 2/2020	SPK Ref Val  Test	runNo: <b>72</b> eqNo: <b>25</b> %REC 72.3 Code: <b>EF</b> unNo: <b>72</b>	2063 524687 LowLimit 30.4 PA Method 2063	Units: mg/K HighLimit 154 8015M/D: Die	g %RPD	RPDLimit	Qual Qual
Client ID: PBS Prep Date: 9/21/2020 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP  Sample ID: MB-55322 Client ID: PBS Prep Date: 9/21/2020	Batch ID: 5537  Analysis Date: 9/2:  Result PQL  ND 10  ND 50  7.2  SampType: MBL  Batch ID: 5532  Analysis Date: 9/2:	18 2/2020 SPK value 10.00 LK 22 2/2020	SPK Ref Val  Test R S	vunNo: 72 eqNo: 25 %REC 72.3 Code: EF unNo: 72 eqNo: 25	2063 524687 LowLimit 30.4 PA Method 2063 524688	Units: mg/K HighLimit  154  8015M/D: Die Units: %Rec	g %RPD **Sel Range	RPDLimit  e Organics	
Client ID: PBS Prep Date: 9/21/2020 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP  Sample ID: MB-55322 Client ID: PBS Prep Date: 9/21/2020 Analyte	Batch ID: 5537  Analysis Date: 9/27  Result PQL  ND 10  ND 50  7.2  SampType: MBL  Batch ID: 5537  Analysis Date: 9/27  Result PQL	18 2/2020 SPK value 10.00 LK 22 2/2020 SPK value 10.00	SPK Ref Val  Test R S SPK Ref Val	runNo: <b>72</b> reqNo: <b>25</b> %REC  72.3 Code: <b>EF</b> runNo: <b>72</b> reqNo: <b>25</b> %REC 86.2	2063 524687 LowLimit 30.4 2063 524688 LowLimit 30.4	Units: mg/K HighLimit  154  8015M/D: Die Units: %Rec HighLimit	g %RPD  esel Range  %RPD	RPDLimit  Organics  RPDLimit	

#### Qualifiers:

Analyte

Surr: DNOP

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

Prep Date: 9/21/2020

H Holding times for preparation or analysis exceeded

Analysis Date: 9/22/2020

Result

9.1

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

B Analyte detected in the associated Method Blank

90.9

SeqNo: 2524689

30.4

Units: **%Rec**HighLimit

154

%RPD

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

SPK value SPK Ref Val %REC LowLimit

10.00

RL Reporting Limit

Page 4 of 6

**RPDLimit** 

Qual

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2009B07 25-Sep-20** 

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: mb-55300 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 55300 RunNo: 72044

Prep Date: 9/21/2020 Analysis Date: 9/23/2020 SeqNo: 2523843 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 850 1000 84.9 75.3 105

Sample ID: Ics-55300 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 55300 RunNo: 72044

960

Prep Date: 9/21/2020 Analysis Date: 9/22/2020 SeqNo: 2523844 Units: mg/Kg

1000

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 23 5.0 25.00 0 90.4 72.5 106

96.0

75.3

105

#### 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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 5 of 6

Surr: 4-Bromofluorobenzene

# Hall Environmental Analysis Laboratory, Inc.

1.0

WO#: **2009B07** 

25-Sep-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: mb-55300 SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBS Client ID: Batch ID: 55300 RunNo: 72044 Prep Date: 9/21/2020 Analysis Date: 9/23/2020 SeqNo: 2523891 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Benzene ND 0.025 Toluene ND 0.050 ND 0.050 Ethylbenzene Xylenes, Total ND 0.10

102

80

120

Sample ID: LCS-55300 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 55300 RunNo: 72044 Prep Date: Analysis Date: 9/22/2020 SeqNo: 2523892 9/21/2020 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.025 1.000 0 89.2 80 120 0.89 Benzene Toluene 0.92 0.050 1.000 0 91.6 80 120 0.050 0 92.8 80 120 Ethylbenzene 0.93 1.000 2.8 0.10 3.000 0 92.9 80 120 Xylenes, Total Surr: 4-Bromofluorobenzene 1.0 1.000 101 80 120

1.000

#### Qualifiers:

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

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

Page 6 of 6



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: 200	9B07			RcptNo: 1	
Received By:	Cheyenne Cason	9/18/2020 8:00:00	AM					
Completed By:	Juan Rojas	9/18/2020 10:19:04	AM		flower	39		
Reviewed By:	em 9/18/20	)						
Chain of Cus	tody							
1. Is Chain of Co	ustody complete?		Yes	<b>V</b>	No		Not Present	
2. How was the	sample delivered?		Cou	rier				
Log In								
3. Was an attern	npt made to cool the samples	?	Yes	<b>V</b>	No		NA 🗆	
4. Were all samp	ples received at a temperatur	e of >0° C to 6.0°C	Yes	<b>V</b>	No		NA 🗆	
5. Sample(s) in p	proper container(s)?		Yes	V	No			
6, Sufficient sam	ple volume for indicated test	(s)?	Yes	<b>V</b>	No [			
7. Are samples (	except VOA and ONG) prope	rly preserved?	Yes	<b>V</b>	No [			
8. Was preserva	tive added to bottles?		Yes		No [	<b>V</b>	NA 🗆	
9. Received at le	east 1 vial with headspace <1/	4" for AQ VOA?	Yes		No [		NA 🗹	
10. Were any san	nple containers received brok	en?	Yes		No	~	# of preserved	
The state of the s	ork match bottle labels? ancies on chain of custody)		Yes	<b>V</b>	No [		bottles checked for pH: <pre></pre>	ed)
12. Are matrices of	correctly identified on Chain o	f Custody?	Yes	<b>V</b>	No [		Adjusted?	
13. Is it clear what	t analyses were requested?		Yes	~	No [		/ pillo	1
	ng times able to be met? ustomer for authorization.)		Yes	<b>V</b>	No [		Checked by: Circ 41/8/	0
	ing (if applicable)							
	tified of all discrepancies with	this order?	Yes		No		NA 🗹	
Person	Notified:	Date						
By Who	om:	Via:	☐ eMa	ail 🗌	Phone	Fax	☐ In Person	
Regardi	ing:							
Client Ir	nstructions:							
16. Additional rer	marks:							
17. Cooler Inform	mation							
Cooler No		Seal Intact   Seal No	Seal D	ate	Signed B	у		
1	5.0 Good							

Received by OCD: 11/17/2022	9:36:44 AM	Page 49 of 104
HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	### TOPH:8015D(GRO / DRO / MRO)  ### Solution   Particides/8082 PCB's    ### PARts by #310 or #\$270SIMS    ### RCRA 8 Metals    ### CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>    ### Solution (Present/Absent)    ### Total Coliform (Present/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Absent/Ab	Time: Relinquished by:  Received by: Via: Date Time Remarks:    MMMMMMM   Miss   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300   300
	(FINB's (8021)	Rem
Turn-Around Time: 5 Day  Er Standard   Rush Project Name: Device   Swidth	Project Manager:    Allen   Sale	Received by: Via: Date Time   M/7/30 1300   Received by: Via: Date Time   M/7/30 1300   Received by: Via: Office of the accredited laboratories. This serves as notice of the
Chain-of-Custody Record  E. Safety + Grubbangery  Solvetions  g Address: 703 C Churton  Columbia  Ebbs A. W. 88240  e#: \$75-397-0510	Chevel 4 (Full Validation)     Az Compliance   Other     Sample Name     A H- 3   Fr	Relinquished by: Relinquished by: Relinquished by:
Chain-Client: Chain-Client: Mailing Address: S/8/5053	aA/QC Package: □Acreditation: □ NELAC □ EDD (Type) □ EDD (Type) □ (1/5)	Date: Time: Date: Time:



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

August 05, 2020

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

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

RE: Devon Cotton Draw 181 SWD OrderNo.: 2007E37

#### Dear Bob Allen:

Hall Environmental Analysis Laboratory received 33 sample(s) on 7/29/2020 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 **2007E37** 

Date Reported: 8/5/2020

7/31/2020 4:33:24 AM

54042

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-1 H-North

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/23/2020 11:55:00 AM

 Lab ID:
 2007E37-001
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CJS Chloride 200 60 mg/Kg 20 8/3/2020 4:26:15 PM 54133 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: DJF Gasoline Range Organics (GRO) ND 4.8 mg/Kg 7/31/2020 4:33:24 AM 54042 Surr: BFB 100 70-130 %Rec 1 7/31/2020 4:33:24 AM 54042 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: CLP Diesel Range Organics (DRO) ND 9.4 mg/Kg 8/3/2020 4:53:43 PM 54043 Motor Oil Range Organics (MRO) 85 1 8/3/2020 4:53:43 PM 54043 47 mg/Kg Surr: DNOP 117 30.4-154 %Rec 8/3/2020 4:53:43 PM 54043 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF ND 7/31/2020 4:33:24 AM 54042 Benzene 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 7/31/2020 4:33:24 AM 54042 Ethylbenzene ND 0.048 mg/Kg 1 7/31/2020 4:33:24 AM 54042 Xylenes, Total ND 0.095 mg/Kg 7/31/2020 4:33:24 AM 54042 Surr: 1,2-Dichloroethane-d4 106 70-130 %Rec 1 7/31/2020 4:33:24 AM 54042 Surr: 4-Bromofluorobenzene 101 70-130 %Rec 1 7/31/2020 4:33:24 AM 54042 Surr: Dibromofluoromethane 111 70-130 %Rec 1 7/31/2020 4:33:24 AM 54042

97.4

70-130

%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

Page 1 of 43

Surr: Toluene-d8

Lab Order 2007E37

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/23/2020 12:40:00 PM

 Lab ID:
 2007E37-002
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	8/3/2020 3:26:27 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	7/31/2020 9:55:39 AM	54047
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/31/2020 9:55:39 AM	54047
Surr: DNOP	103	30.4-154	%Rec	1	7/31/2020 9:55:39 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/31/2020 8:41:20 PM	54044
Surr: BFB	96.3	75.3-105	%Rec	1	7/31/2020 8:41:20 PM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	7/31/2020 8:41:20 PM	54044
Toluene	ND	0.047	mg/Kg	1	7/31/2020 8:41:20 PM	54044
Ethylbenzene	ND	0.047	mg/Kg	1	7/31/2020 8:41:20 PM	54044
Xylenes, Total	ND	0.094	mg/Kg	1	7/31/2020 8:41:20 PM	54044
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	7/31/2020 8:41:20 PM	54044

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

Qualifiers:

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

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

Page 2 of 43

Lab Order **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

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

**Project:** Devon Cotton Draw 181 SWD **Collection Date:** 7/23/2020 1:25:00 PM

**Lab ID:** 2007E37-003 **Matrix:** SOIL **Received Date:** 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	CJS
Chloride	340	60		mg/Kg	20	8/3/2020 4:28:29 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: CLP
Diesel Range Organics (DRO)	2600	47		mg/Kg	5	7/31/2020 10:25:54 AM	54047
Motor Oil Range Organics (MRO)	2500	230		mg/Kg	5	7/31/2020 10:25:54 AM	54047
Surr: DNOP	309	30.4-154	S	%Rec	5	7/31/2020 10:25:54 AM	54047
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/31/2020 9:51:32 PM	54044
Surr: BFB	94.1	75.3-105		%Rec	1	7/31/2020 9:51:32 PM	54044
EPA METHOD 8021B: VOLATILES						Analyst	: RAA
Benzene	ND	0.024		mg/Kg	1	7/31/2020 9:51:32 PM	54044
Toluene	ND	0.048		mg/Kg	1	7/31/2020 9:51:32 PM	54044
Ethylbenzene	ND	0.048		mg/Kg	1	7/31/2020 9:51:32 PM	54044
Xylenes, Total	ND	0.096		mg/Kg	1	7/31/2020 9:51:32 PM	54044
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	7/31/2020 9:51:32 PM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/23/2020 2:15:00 PM

 Lab ID:
 2007E37-004
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: CJS
Chloride	ND	60	mg/Kg	20	8/3/2020 5:05:44 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/31/2020 10:35:59 AM	54047
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/31/2020 10:35:59 AM	54047
Surr: DNOP	121	30.4-154	%Rec	1	7/31/2020 10:35:59 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	7/31/2020 11:01:43 PM	54044
Surr: BFB	96.7	75.3-105	%Rec	1	7/31/2020 11:01:43 PM	54044
EPA METHOD 8021B: VOLATILES					Analyst	:: RAA
Benzene	ND	0.023	mg/Kg	1	7/31/2020 11:01:43 PM	54044
Toluene	ND	0.046	mg/Kg	1	7/31/2020 11:01:43 PM	54044
Ethylbenzene	ND	0.046	mg/Kg	1	7/31/2020 11:01:43 PM	54044
Xylenes, Total	ND	0.092	mg/Kg	1	7/31/2020 11:01:43 PM	54044
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	7/31/2020 11:01:43 PM	54044

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 43

Lab Order **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 9:15:00 AM

 Lab ID:
 2007E37-005
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	68	60	mg/Kg	20	8/3/2020 5:18:09 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	7/31/2020 10:46:03 AM	54047
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/31/2020 10:46:03 AM	54047
Surr: DNOP	141	30.4-154	%Rec	1	7/31/2020 10:46:03 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/31/2020 11:25:05 PM	54044
Surr: BFB	94.8	75.3-105	%Rec	1	7/31/2020 11:25:05 PM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	7/31/2020 11:25:05 PM	54044
Toluene	ND	0.048	mg/Kg	1	7/31/2020 11:25:05 PM	54044
Ethylbenzene	ND	0.048	mg/Kg	1	7/31/2020 11:25:05 PM	54044
Xylenes, Total	ND	0.096	mg/Kg	1	7/31/2020 11:25:05 PM	54044
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	7/31/2020 11:25:05 PM	54044

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

Qualifiers:

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

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

Page 5 of 43

Lab Order **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 9:35:00 AM

 Lab ID:
 2007E37-006
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	67	60	mg/Kg	20	8/3/2020 5:30:34 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	7/31/2020 10:56:02 AM	54047
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/31/2020 10:56:02 AM	54047
Surr: DNOP	109	30.4-154	%Rec	1	7/31/2020 10:56:02 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/31/2020 11:48:31 PM	54044
Surr: BFB	95.9	75.3-105	%Rec	1	7/31/2020 11:48:31 PM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	7/31/2020 11:48:31 PM	54044
Toluene	ND	0.048	mg/Kg	1	7/31/2020 11:48:31 PM	54044
Ethylbenzene	ND	0.048	mg/Kg	1	7/31/2020 11:48:31 PM	54044
Xylenes, Total	ND	0.096	mg/Kg	1	7/31/2020 11:48:31 PM	54044
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	7/31/2020 11:48:31 PM	54044

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

Qualifiers:

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

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

Page 6 of 43

Lab Order **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-7 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 9:55:00 AM

 Lab ID:
 2007E37-007
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	310	60	mg/Kg	20	8/3/2020 5:42:58 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	7/31/2020 11:06:03 AM	54047
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/31/2020 11:06:03 AM	54047
Surr: DNOP	112	30.4-154	%Rec	1	7/31/2020 11:06:03 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/1/2020 12:11:58 AM	54044
Surr: BFB	97.6	75.3-105	%Rec	1	8/1/2020 12:11:58 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	8/1/2020 12:11:58 AM	54044
Toluene	ND	0.047	mg/Kg	1	8/1/2020 12:11:58 AM	54044
Ethylbenzene	ND	0.047	mg/Kg	1	8/1/2020 12:11:58 AM	54044
Xylenes, Total	ND	0.095	mg/Kg	1	8/1/2020 12:11:58 AM	54044
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	8/1/2020 12:11:58 AM	54044

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 2007E37

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-8 H-South

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 10:10:00 AM

 Lab ID:
 2007E37-008
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	8/3/2020 5:55:23 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/31/2020 11:16:06 AM	54047
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/31/2020 11:16:06 AM	54047
Surr: DNOP	127	30.4-154	%Rec	1	7/31/2020 11:16:06 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/1/2020 12:35:15 AM	54044
Surr: BFB	97.6	75.3-105	%Rec	1	8/1/2020 12:35:15 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.023	mg/Kg	1	8/1/2020 12:35:15 AM	54044
Toluene	ND	0.047	mg/Kg	1	8/1/2020 12:35:15 AM	54044
Ethylbenzene	ND	0.047	mg/Kg	1	8/1/2020 12:35:15 AM	54044
Xylenes, Total	ND	0.093	mg/Kg	1	8/1/2020 12:35:15 AM	54044
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/1/2020 12:35:15 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-9 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 10:25:00 AM

 Lab ID:
 2007E37-009
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	8/3/2020 6:32:38 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/31/2020 11:26:12 AM	54047
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/31/2020 11:26:12 AM	54047
Surr: DNOP	102	30.4-154	%Rec	1	7/31/2020 11:26:12 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/1/2020 12:58:36 AM	54044
Surr: BFB	96.4	75.3-105	%Rec	1	8/1/2020 12:58:36 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.025	mg/Kg	1	8/1/2020 12:58:36 AM	54044
Toluene	ND	0.049	mg/Kg	1	8/1/2020 12:58:36 AM	54044
Ethylbenzene	ND	0.049	mg/Kg	1	8/1/2020 12:58:36 AM	54044
Xylenes, Total	ND	0.099	mg/Kg	1	8/1/2020 12:58:36 AM	54044
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	8/1/2020 12:58:36 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

**Project:** Devon Cotton Draw 181 SWD

**Lab ID:** 2007E37-010

Matrix: SOIL

**Collection Date:** 7/24/2020 10:40:00 AM **Received Date:** 7/29/2020 9:30:00 AM

Client Sample ID: AH-10 H-Southeast

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	8/3/2020 6:45:02 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/31/2020 11:36:17 AM	54047
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/31/2020 11:36:17 AM	54047
Surr: DNOP	95.0	30.4-154	%Rec	1	7/31/2020 11:36:17 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/1/2020 1:21:54 AM	54044
Surr: BFB	98.8	75.3-105	%Rec	1	8/1/2020 1:21:54 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.023	mg/Kg	1	8/1/2020 1:21:54 AM	54044
Toluene	ND	0.047	mg/Kg	1	8/1/2020 1:21:54 AM	54044
Ethylbenzene	ND	0.047	mg/Kg	1	8/1/2020 1:21:54 AM	54044
Xylenes, Total	ND	0.093	mg/Kg	1	8/1/2020 1:21:54 AM	54044
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	8/1/2020 1:21:54 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 11:00:00 AM

 Lab ID:
 2007E37-011
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	8/3/2020 6:57:26 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/31/2020 11:46:16 AM	54047
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/31/2020 11:46:16 AM	54047
Surr: DNOP	96.2	30.4-154	%Rec	1	7/31/2020 11:46:16 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/1/2020 1:45:21 AM	54044
Surr: BFB	94.3	75.3-105	%Rec	1	8/1/2020 1:45:21 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.023	mg/Kg	1	8/1/2020 1:45:21 AM	54044
Toluene	ND	0.046	mg/Kg	1	8/1/2020 1:45:21 AM	54044
Ethylbenzene	ND	0.046	mg/Kg	1	8/1/2020 1:45:21 AM	54044
Xylenes, Total	ND	0.092	mg/Kg	1	8/1/2020 1:45:21 AM	54044
Surr: 4-Bromofluorobenzene	100	80-120	%Rec	1	8/1/2020 1:45:21 AM	54044

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 2007E37

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions Client Sample ID: AH-12 Surface

**Project:** Devon Cotton Draw 181 SWD Collection Date: 7/24/2020 11:20:00 AM

2007E37-012 Lab ID: Matrix: SOIL Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	230	60	mg/Kg	20	8/3/2020 7:09:50 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	7/31/2020 11:56:17 AM	54047
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/31/2020 11:56:17 AM	54047
Surr: DNOP	106	30.4-154	%Rec	1	7/31/2020 11:56:17 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/1/2020 2:55:50 AM	54044
Surr: BFB	97.0	75.3-105	%Rec	1	8/1/2020 2:55:50 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	8/1/2020 2:55:50 AM	54044
Toluene	ND	0.049	mg/Kg	1	8/1/2020 2:55:50 AM	54044
Ethylbenzene	ND	0.049	mg/Kg	1	8/1/2020 2:55:50 AM	54044
Xylenes, Total	ND	0.098	mg/Kg	1	8/1/2020 2:55:50 AM	54044
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/1/2020 2:55:50 AM	54044

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
- % Recovery outside of range due to dilution or matrix

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

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Lab Order **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-13 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 11:40:00 AM

 Lab ID:
 2007E37-013
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	:: CJS
Chloride	120	60	mg/Kg	20	8/3/2020 7:22:14 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	:: CLP
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	7/31/2020 12:06:15 PM	I 54047
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/31/2020 12:06:15 PM	54047
Surr: DNOP	106	30.4-154	%Rec	1	7/31/2020 12:06:15 PM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/1/2020 3:19:12 AM	54044
Surr: BFB	98.0	75.3-105	%Rec	1	8/1/2020 3:19:12 AM	54044
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst	:: RAA
Benzene	ND	0.024	mg/Kg	1	8/1/2020 3:19:12 AM	54044
Toluene	ND	0.048	mg/Kg	1	8/1/2020 3:19:12 AM	54044
Ethylbenzene	ND	0.048	mg/Kg	1	8/1/2020 3:19:12 AM	54044
Xylenes, Total	ND	0.097	mg/Kg	1	8/1/2020 3:19:12 AM	54044
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/1/2020 3:19:12 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-14 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 12:00:00 PM

 Lab ID:
 2007E37-014
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	8/3/2020 7:34:39 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/31/2020 12:16:16 PM	54047
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/31/2020 12:16:16 PM	54047
Surr: DNOP	107	30.4-154	%Rec	1	7/31/2020 12:16:16 PM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/1/2020 3:42:34 AM	54044
Surr: BFB	99.5	75.3-105	%Rec	1	8/1/2020 3:42:34 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	8/1/2020 3:42:34 AM	54044
Toluene	ND	0.049	mg/Kg	1	8/1/2020 3:42:34 AM	54044
Ethylbenzene	ND	0.049	mg/Kg	1	8/1/2020 3:42:34 AM	54044
Xylenes, Total	ND	0.097	mg/Kg	1	8/1/2020 3:42:34 AM	54044
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	8/1/2020 3:42:34 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-15 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 12:20:00 PM

 Lab ID:
 2007E37-015
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	67	60	mg/Kg	20	8/3/2020 7:47:04 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/31/2020 12:26:17 PM	54047
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/31/2020 12:26:17 PM	54047
Surr: DNOP	109	30.4-154	%Rec	1	7/31/2020 12:26:17 PM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/1/2020 4:05:56 AM	54044
Surr: BFB	98.1	75.3-105	%Rec	1	8/1/2020 4:05:56 AM	54044
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	8/1/2020 4:05:56 AM	54044
Toluene	ND	0.048	mg/Kg	1	8/1/2020 4:05:56 AM	54044
Ethylbenzene	ND	0.048	mg/Kg	1	8/1/2020 4:05:56 AM	54044
Xylenes, Total	ND	0.096	mg/Kg	1	8/1/2020 4:05:56 AM	54044
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	8/1/2020 4:05:56 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 12:50:00 PM

 Lab ID:
 2007E37-016
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	200	60	mg/Kg	20	8/3/2020 7:59:29 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/31/2020 12:36:18 PM	54047
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/31/2020 12:36:18 PM	54047
Surr: DNOP	102	30.4-154	%Rec	1	7/31/2020 12:36:18 PM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/1/2020 4:29:30 AM	54044
Surr: BFB	98.6	75.3-105	%Rec	1	8/1/2020 4:29:30 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	8/1/2020 4:29:30 AM	54044
Toluene	ND	0.048	mg/Kg	1	8/1/2020 4:29:30 AM	54044
Ethylbenzene	ND	0.048	mg/Kg	1	8/1/2020 4:29:30 AM	54044
Xylenes, Total	ND	0.095	mg/Kg	1	8/1/2020 4:29:30 AM	54044
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	1	8/1/2020 4:29:30 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-17 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 1:10:00 PM

 Lab ID:
 2007E37-017
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	200	59	mg/Kg	20	8/3/2020 8:11:53 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/31/2020 12:46:18 PM	54047
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/31/2020 12:46:18 PM	54047
Surr: DNOP	105	30.4-154	%Rec	1	7/31/2020 12:46:18 PM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/1/2020 4:53:01 AM	54044
Surr: BFB	95.9	75.3-105	%Rec	1	8/1/2020 4:53:01 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	8/1/2020 4:53:01 AM	54044
Toluene	ND	0.048	mg/Kg	1	8/1/2020 4:53:01 AM	54044
Ethylbenzene	ND	0.048	mg/Kg	1	8/1/2020 4:53:01 AM	54044
Xylenes, Total	ND	0.096	mg/Kg	1	8/1/2020 4:53:01 AM	54044
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	8/1/2020 4:53:01 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 1:30:00 PM

 Lab ID:
 2007E37-018
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	8/3/2020 8:24:17 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/31/2020 12:56:23 PM	54047
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/31/2020 12:56:23 PM	54047
Surr: DNOP	98.8	30.4-154	%Rec	1	7/31/2020 12:56:23 PM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/1/2020 5:16:37 AM	54044
Surr: BFB	96.4	75.3-105	%Rec	1	8/1/2020 5:16:37 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.025	mg/Kg	1	8/1/2020 5:16:37 AM	54044
Toluene	ND	0.049	mg/Kg	1	8/1/2020 5:16:37 AM	54044
Ethylbenzene	ND	0.049	mg/Kg	1	8/1/2020 5:16:37 AM	54044
Xylenes, Total	ND	0.099	mg/Kg	1	8/1/2020 5:16:37 AM	54044
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	8/1/2020 5:16:37 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 1:55:00 PM

 Lab ID:
 2007E37-019
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CJS
Chloride	ND	59	mg/Kg	20	8/3/2020 9:01:30 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/31/2020 1:06:28 PM	54047
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/31/2020 1:06:28 PM	54047
Surr: DNOP	94.6	30.4-154	%Rec	1	7/31/2020 1:06:28 PM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/1/2020 5:40:18 AM	54044
Surr: BFB	99.1	75.3-105	%Rec	1	8/1/2020 5:40:18 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	8/1/2020 5:40:18 AM	54044
Toluene	ND	0.048	mg/Kg	1	8/1/2020 5:40:18 AM	54044
Ethylbenzene	ND	0.048	mg/Kg	1	8/1/2020 5:40:18 AM	54044
Xylenes, Total	ND	0.097	mg/Kg	1	8/1/2020 5:40:18 AM	54044
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	8/1/2020 5:40:18 AM	54044

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 **2007E37** 

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-22 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/24/2020 2:20:00 PM

 Lab ID:
 2007E37-020
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	ND	60	mg/Kg	20	8/3/2020 9:13:55 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/31/2020 1:16:34 PM	54047
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/31/2020 1:16:34 PM	54047
Surr: DNOP	108	30.4-154	%Rec	1	7/31/2020 1:16:34 PM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/1/2020 6:03:47 AM	54044
Surr: BFB	100	75.3-105	%Rec	1	8/1/2020 6:03:47 AM	54044
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	8/1/2020 6:03:47 AM	54044
Toluene	ND	0.048	mg/Kg	1	8/1/2020 6:03:47 AM	54044
Ethylbenzene	ND	0.048	mg/Kg	1	8/1/2020 6:03:47 AM	54044
Xylenes, Total	ND	0.097	mg/Kg	1	8/1/2020 6:03:47 AM	54044
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	8/1/2020 6:03:47 AM	54044

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 2007E37

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-21 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/27/2020 9:00:00 AM

 Lab ID:
 2007E37-021
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	80	60	mg/Kg	20	8/3/2020 9:26:20 PM	54130
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	8/4/2020 11:47:47 AM	54047
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/4/2020 11:47:47 AM	54047
Surr: DNOP	103	30.4-154	%Rec	1	8/4/2020 11:47:47 AM	54047
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/1/2020 6:27:25 AM	54044
Surr: BFB	96.9	75.3-105	%Rec	1	8/1/2020 6:27:25 AM	54044
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.023	mg/Kg	1	8/1/2020 6:27:25 AM	54044
Toluene	ND	0.047	mg/Kg	1	8/1/2020 6:27:25 AM	54044
Ethylbenzene	ND	0.047	mg/Kg	1	8/1/2020 6:27:25 AM	54044
Xylenes, Total	ND	0.094	mg/Kg	1	8/1/2020 6:27:25 AM	54044
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	8/1/2020 6:27:25 AM	54044

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 2007E37

Date Reported: 8/5/2020

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-24 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/27/2020 9:25:00 AM

 Lab ID:
 2007E37-022
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	430	60	mg/Kg	20	8/3/2020 5:03:30 PM	54133
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/31/2020 5:01:50 AM	54045
Surr: BFB	95.8	70-130	%Rec	1	7/31/2020 5:01:50 AM	54045
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/31/2020 4:45:05 PM	54051
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/31/2020 4:45:05 PM	54051
Surr: DNOP	109	30.4-154	%Rec	1	7/31/2020 4:45:05 PM	54051
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	: DJF
Benzene	ND	0.025	mg/Kg	1	7/31/2020 5:01:50 AM	54045
Toluene	ND	0.049	mg/Kg	1	7/31/2020 5:01:50 AM	54045
Ethylbenzene	ND	0.049	mg/Kg	1	7/31/2020 5:01:50 AM	54045
Xylenes, Total	ND	0.099	mg/Kg	1	7/31/2020 5:01:50 AM	54045
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	7/31/2020 5:01:50 AM	54045
Surr: 4-Bromofluorobenzene	96.9	70-130	%Rec	1	7/31/2020 5:01:50 AM	54045
Surr: Dibromofluoromethane	105	70-130	%Rec	1	7/31/2020 5:01:50 AM	54045
Surr: Toluene-d8	98.5	70-130	%Rec	1	7/31/2020 5:01:50 AM	54045

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 2007E37

Date Reported: 8/5/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-24 1ft

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/27/2020 9:50:00 AM

 Lab ID:
 2007E37-023
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: CJS
Chloride	79	60	mg/Kg	20	8/3/2020 5:40:44 PM	54133
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/31/2020 6:27:34 AM	54045
Surr: BFB	103	70-130	%Rec	1	7/31/2020 6:27:34 AM	54045
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	7/31/2020 4:55:26 PM	54051
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/31/2020 4:55:26 PM	54051
Surr: DNOP	123	30.4-154	%Rec	1	7/31/2020 4:55:26 PM	54051
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	: DJF
Benzene	ND	0.024	mg/Kg	1	7/31/2020 6:27:34 AM	54045
Toluene	ND	0.049	mg/Kg	1	7/31/2020 6:27:34 AM	54045
Ethylbenzene	ND	0.049	mg/Kg	1	7/31/2020 6:27:34 AM	54045
Xylenes, Total	ND	0.098	mg/Kg	1	7/31/2020 6:27:34 AM	54045
Surr: 1,2-Dichloroethane-d4	98.2	70-130	%Rec	1	7/31/2020 6:27:34 AM	54045
Surr: 4-Bromofluorobenzene	99.4	70-130	%Rec	1	7/31/2020 6:27:34 AM	54045
Surr: Dibromofluoromethane	107	70-130	%Rec	1	7/31/2020 6:27:34 AM	54045
Surr: Toluene-d8	98.1	70-130	%Rec	1	7/31/2020 6:27:34 AM	54045

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 2007E37

Date Reported: 8/5/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-23 H-East

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/27/2020 10:15:00 AM

 Lab ID:
 2007E37-024
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride 180 60 mg/Kg 20 8/3/2020 8:51:50 PM 54139 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: DJF Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 8/2/2020 2:50:24 AM 54045 Surr: BFB 101 70-130 %Rec 1 8/2/2020 2:50:24 AM 54045 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: CLP Diesel Range Organics (DRO) ND 9.6 mg/Kg 7/31/2020 5:05:49 PM 54051 Motor Oil Range Organics (MRO) ND 1 7/31/2020 5:05:49 PM 54051 48 mg/Kg Surr: DNOP 104 30.4-154 %Rec 7/31/2020 5:05:49 PM 54051 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF ND 7/31/2020 1:45:35 PM 54045 Benzene 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 7/31/2020 1:45:35 PM 54045 Ethylbenzene ND 0.049 mg/Kg 1 7/31/2020 1:45:35 PM 54045 Xylenes, Total ND 0.097 mg/Kg 7/31/2020 1:45:35 PM 54045 Surr: 1,2-Dichloroethane-d4 102 70-130 %Rec 1 7/31/2020 1:45:35 PM 54045 Surr: 4-Bromofluorobenzene 94.0 70-130 %Rec 1 7/31/2020 1:45:35 PM 54045 101 Surr: Dibromofluoromethane 70-130 %Rec 1 7/31/2020 1:45:35 PM 54045 Surr: Toluene-d8 102 70-130 %Rec 7/31/2020 1:45:35 PM 54045

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 **2007E37** 

Date Reported: 8/5/2020

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions **Project:** Devon Cotton Draw 181 SWD

**Lab ID:** 2007E37-025

Matrix: SOIL

**Collection Date:** 7/27/2020 10:50:00 AM **Received Date:** 7/29/2020 9:30:00 AM

Client Sample ID: AH-25 H-Northeast

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	220	60	mg/Kg	20	8/3/2020 9:28:53 PM	54139
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/31/2020 2:14:17 PM	54045
Surr: BFB	97.2	70-130	%Rec	1	7/31/2020 2:14:17 PM	54045
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/31/2020 5:16:15 PM	54051
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/31/2020 5:16:15 PM	54051
Surr: DNOP	70.5	30.4-154	%Rec	1	7/31/2020 5:16:15 PM	54051
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>	•				Analyst	: DJF
Benzene	ND	0.023	mg/Kg	1	7/31/2020 2:14:17 PM	54045
Toluene	ND	0.047	mg/Kg	1	7/31/2020 2:14:17 PM	54045
Ethylbenzene	ND	0.047	mg/Kg	1	7/31/2020 2:14:17 PM	54045
Xylenes, Total	ND	0.093	mg/Kg	1	7/31/2020 2:14:17 PM	54045
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	7/31/2020 2:14:17 PM	54045
Surr: 4-Bromofluorobenzene	94.4	70-130	%Rec	1	7/31/2020 2:14:17 PM	54045
Surr: Dibromofluoromethane	107	70-130	%Rec	1	7/31/2020 2:14:17 PM	54045
Surr: Toluene-d8	99.8	70-130	%Rec	1	7/31/2020 2:14:17 PM	54045

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 **2007E37** 

Date Reported: 8/5/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-26 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/27/2020 11:15:00 AM

 Lab ID:
 2007E37-026
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride 220 60 mg/Kg 20 8/3/2020 9:41:13 PM 54139 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: DJF Gasoline Range Organics (GRO) ND 5.0 mg/Kg 7/31/2020 2:42:55 PM 54045 Surr: BFB 7/31/2020 2:42:55 PM 99.1 70-130 %Rec 1 54045 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: CLP Diesel Range Organics (DRO) ND 9.7 mg/Kg 7/31/2020 5:26:47 PM 54051 Motor Oil Range Organics (MRO) ND 7/31/2020 5:26:47 PM 54051 48 mg/Kg 1 Surr: DNOP 84.2 30.4-154 %Rec 7/31/2020 5:26:47 PM 54051 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF 7/31/2020 2:42:55 PM ND 54045 Benzene 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 7/31/2020 2:42:55 PM 54045 Ethylbenzene ND 0.050 mg/Kg 1 7/31/2020 2:42:55 PM 54045 Xylenes, Total ND 0.099 mg/Kg 7/31/2020 2:42:55 PM 54045 Surr: 1,2-Dichloroethane-d4 97.6 70-130 %Rec 1 7/31/2020 2:42:55 PM 54045 Surr: 4-Bromofluorobenzene 96.2 70-130 %Rec 1 7/31/2020 2:42:55 PM 54045 Surr: Dibromofluoromethane 109 70-130 %Rec 1 7/31/2020 2:42:55 PM 54045 Surr: Toluene-d8 101 70-130 %Rec 7/31/2020 2:42:55 PM 54045

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 **2007E37** 

Date Reported: 8/5/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-27 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/27/2020 11:45:00 AM

 Lab ID:
 2007E37-027
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	8/3/2020 10:18:14 PM	54139
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: DJF
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/31/2020 3:11:39 PM	54045
Surr: BFB	101	70-130	%Rec	1	7/31/2020 3:11:39 PM	54045
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/31/2020 5:37:24 PM	54051
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/31/2020 5:37:24 PM	54051
Surr: DNOP	49.3	30.4-154	%Rec	1	7/31/2020 5:37:24 PM	54051
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	: DJF
Benzene	ND	0.025	mg/Kg	1	7/31/2020 3:11:39 PM	54045
Toluene	ND	0.050	mg/Kg	1	7/31/2020 3:11:39 PM	54045
Ethylbenzene	ND	0.050	mg/Kg	1	7/31/2020 3:11:39 PM	54045
Xylenes, Total	ND	0.099	mg/Kg	1	7/31/2020 3:11:39 PM	54045
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	7/31/2020 3:11:39 PM	54045
Surr: 4-Bromofluorobenzene	97.5	70-130	%Rec	1	7/31/2020 3:11:39 PM	54045
Surr: Dibromofluoromethane	108	70-130	%Rec	1	7/31/2020 3:11:39 PM	54045
Surr: Toluene-d8	101	70-130	%Rec	1	7/31/2020 3:11:39 PM	54045

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 2007E37

Date Reported: 8/5/2020

7/31/2020 3:40:18 PM

54045

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-28 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/27/2020 12:05:00 PM

 Lab ID:
 2007E37-028
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride ND 60 mg/Kg 20 8/3/2020 10:30:35 PM 54139 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: **DJF** Gasoline Range Organics (GRO) ND 5.0 mg/Kg 7/31/2020 3:40:18 PM Surr: BFB 7/31/2020 3:40:18 PM 54045 103 70-130 %Rec 1 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: CLP Diesel Range Organics (DRO) ND 9.4 mg/Kg 7/31/2020 5:48:03 PM 54051 Motor Oil Range Organics (MRO) ND 1 7/31/2020 5:48:03 PM 54051 47 mg/Kg Surr: DNOP 60.7 30.4-154 %Rec 7/31/2020 5:48:03 PM 54051 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF ND 7/31/2020 3:40:18 PM 54045 Benzene 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 7/31/2020 3:40:18 PM 54045 Ethylbenzene ND 0.050 mg/Kg 1 7/31/2020 3:40:18 PM 54045 Xylenes, Total ND 0.099 mg/Kg 7/31/2020 3:40:18 PM 54045 Surr: 1,2-Dichloroethane-d4 102 70-130 %Rec 1 7/31/2020 3:40:18 PM 54045 Surr: 4-Bromofluorobenzene 100 70-130 %Rec 1 7/31/2020 3:40:18 PM 54045 Surr: Dibromofluoromethane 106 70-130 %Rec 1 7/31/2020 3:40:18 PM 54045

97.9

70-130

%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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Surr: Toluene-d8

Lab Order **2007E37** 

Date Reported: 8/5/2020

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 181 SWD

**Lab ID:** 2007E37-029

Matrix: SOIL

Collection Date: 7/27/2020 12:20:00 PM Received Date: 7/29/2020 9:30:00 AM

Client Sample ID: AH-29 H-North

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	59	mg/Kg	20	8/3/2020 10:42:56 PM	54139
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/31/2020 4:08:57 PM	54045
Surr: BFB	99.1	70-130	%Rec	1	7/31/2020 4:08:57 PM	54045
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/31/2020 5:58:41 PM	54051
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/31/2020 5:58:41 PM	54051
Surr: DNOP	64.9	30.4-154	%Rec	1	7/31/2020 5:58:41 PM	54051
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	DJF
Benzene	ND	0.025	mg/Kg	1	7/31/2020 4:08:57 PM	54045
Toluene	ND	0.049	mg/Kg	1	7/31/2020 4:08:57 PM	54045
Ethylbenzene	ND	0.049	mg/Kg	1	7/31/2020 4:08:57 PM	54045
Xylenes, Total	ND	0.099	mg/Kg	1	7/31/2020 4:08:57 PM	54045
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	7/31/2020 4:08:57 PM	54045
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	7/31/2020 4:08:57 PM	54045
Surr: Dibromofluoromethane	107	70-130	%Rec	1	7/31/2020 4:08:57 PM	54045
Surr: Toluene-d8	101	70-130	%Rec	1	7/31/2020 4:08:57 PM	54045

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 **2007E37** 

Date Reported: 8/5/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-30 Surface

 Project:
 Devon Cotton Draw 181 SWD
 Collection Date: 7/27/2020 12:50:00 PM

 Lab ID:
 2007E37-030
 Matrix: SOIL
 Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	8/3/2020 10:55:17 PM	54139
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/31/2020 4:37:36 PM	54045
Surr: BFB	94.3	70-130	%Rec	1	7/31/2020 4:37:36 PM	54045
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/31/2020 6:09:15 PM	54051
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/31/2020 6:09:15 PM	54051
Surr: DNOP	98.6	30.4-154	%Rec	1	7/31/2020 6:09:15 PM	54051
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	: DJF
Benzene	ND	0.025	mg/Kg	1	7/31/2020 4:37:36 PM	54045
Toluene	ND	0.049	mg/Kg	1	7/31/2020 4:37:36 PM	54045
Ethylbenzene	ND	0.049	mg/Kg	1	7/31/2020 4:37:36 PM	54045
Xylenes, Total	ND	0.099	mg/Kg	1	7/31/2020 4:37:36 PM	54045
Surr: 1,2-Dichloroethane-d4	98.7	70-130	%Rec	1	7/31/2020 4:37:36 PM	54045
Surr: 4-Bromofluorobenzene	95.1	70-130	%Rec	1	7/31/2020 4:37:36 PM	54045
Surr: Dibromofluoromethane	101	70-130	%Rec	1	7/31/2020 4:37:36 PM	54045
Surr: Toluene-d8	98.0	70-130	%Rec	1	7/31/2020 4:37:36 PM	54045

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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2007E37-031

Lab ID:

#### **Analytical Report**

Lab Order **2007E37** 

Received Date: 7/29/2020 9:30:00 AM

Date Reported: 8/5/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-31 Surface

Matrix: SOIL

**Project:** Devon Cotton Draw 181 SWD Collection Date: 7/27/2020 1:20:00 PM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses Analyst: CAS **EPA METHOD 300.0: ANIONS** Chloride ND 60 mg/Kg 20 8/3/2020 11:07:37 PM 54139 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: **DJF** Gasoline Range Organics (GRO) ND 4.9 mg/Kg 7/31/2020 5:06:15 PM Surr: BFB 7/31/2020 5:06:15 PM 54045 104 70-130 %Rec 1 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: CLP Diesel Range Organics (DRO) ND 9.8 mg/Kg 7/31/2020 6:19:51 PM 54051 Motor Oil Range Organics (MRO) ND 7/31/2020 6:19:51 PM 54051 49 mg/Kg 1 Surr: DNOP 88.9 30.4-154 %Rec 7/31/2020 6:19:51 PM 54051 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF ND 7/31/2020 5:06:15 PM 54045 Benzene 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 7/31/2020 5:06:15 PM 54045 Ethylbenzene ND 0.049 mg/Kg 1 7/31/2020 5:06:15 PM 54045 Xylenes, Total ND 0.098 mg/Kg 7/31/2020 5:06:15 PM 54045 Surr: 1,2-Dichloroethane-d4 103 70-130 %Rec 1 7/31/2020 5:06:15 PM 54045 Surr: 4-Bromofluorobenzene 97.0 70-130 %Rec 1 7/31/2020 5:06:15 PM 54045 Surr: Dibromofluoromethane 107 70-130 %Rec 1 7/31/2020 5:06:15 PM 54045 Surr: Toluene-d8 104 70-130 %Rec 7/31/2020 5:06:15 PM 54045

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 2007E37

Date Reported: 8/5/2020

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

**Project:** Devon Cotton Draw 181 SWD

2007E37-032 Lab ID:

Client Sample ID: AH-32 Surface

**Collection Date:** 7/27/2020 1:50:00 PM

Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	290	60	mg/Kg	20	8/3/2020 11:19:57 PM	54139
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/31/2020 5:35:00 PM	54045
Surr: BFB	102	70-130	%Rec	1	7/31/2020 5:35:00 PM	54045
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/31/2020 6:30:17 PM	54051
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/31/2020 6:30:17 PM	54051
Surr: DNOP	120	30.4-154	%Rec	1	7/31/2020 6:30:17 PM	54051
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	: DJF
Benzene	ND	0.024	mg/Kg	1	7/31/2020 5:35:00 PM	54045
Toluene	ND	0.049	mg/Kg	1	7/31/2020 5:35:00 PM	54045
Ethylbenzene	ND	0.049	mg/Kg	1	7/31/2020 5:35:00 PM	54045
Xylenes, Total	ND	0.098	mg/Kg	1	7/31/2020 5:35:00 PM	54045
Surr: 1,2-Dichloroethane-d4	99.4	70-130	%Rec	1	7/31/2020 5:35:00 PM	54045
Surr: 4-Bromofluorobenzene	98.5	70-130	%Rec	1	7/31/2020 5:35:00 PM	54045
Surr: Dibromofluoromethane	106	70-130	%Rec	1	7/31/2020 5:35:00 PM	54045
Surr: Toluene-d8	101	70-130	%Rec	1	7/31/2020 5:35:00 PM	54045

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
- % Recovery outside of range due to dilution or matrix

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

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Lab Order **2007E37** 

Date Reported: 8/5/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions Client Sample ID: AH-33 Surface

**Project:** Devon Cotton Draw 181 SWD **Collection Date:** 7/27/2020 2:10:00 PM

**Lab ID:** 2007E37-033 **Matrix:** SOIL **Received Date:** 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	8/3/2020 11:32:17 PM	54139
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/31/2020 6:03:42 PM	54045
Surr: BFB	96.1	70-130	%Rec	1	7/31/2020 6:03:42 PM	54045
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/31/2020 6:40:36 PM	54051
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/31/2020 6:40:36 PM	54051
Surr: DNOP	80.3	30.4-154	%Rec	1	7/31/2020 6:40:36 PM	54051
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	: DJF
Benzene	ND	0.024	mg/Kg	1	7/31/2020 6:03:42 PM	54045
Toluene	ND	0.049	mg/Kg	1	7/31/2020 6:03:42 PM	54045
Ethylbenzene	ND	0.049	mg/Kg	1	7/31/2020 6:03:42 PM	54045
Xylenes, Total	ND	0.098	mg/Kg	1	7/31/2020 6:03:42 PM	54045
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	7/31/2020 6:03:42 PM	54045
Surr: 4-Bromofluorobenzene	98.7	70-130	%Rec	1	7/31/2020 6:03:42 PM	54045
Surr: Dibromofluoromethane	107	70-130	%Rec	1	7/31/2020 6:03:42 PM	54045
Surr: Toluene-d8	98.3	70-130	%Rec	1	7/31/2020 6:03:42 PM	54045

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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### Hall Environmental Analysis Laboratory, Inc.

WO#: **2007E37** 

05-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: MB-54130 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 54130 RunNo: 70807

Prep Date: 8/3/2020 Analysis Date: 8/3/2020 SeqNo: 2464841 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-54130 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 54130 RunNo: 70807

Prep Date: 8/3/2020 Analysis Date: 8/3/2020 SeqNo: 2464842 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.0 90 110

Sample ID: MB-54139 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 54139 RunNo: 70812

Prep Date: 8/3/2020 Analysis Date: 8/3/2020 SeqNo: 2465249 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-54139 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 54139 RunNo: 70812

Prep Date: 8/3/2020 Analysis Date: 8/3/2020 SeqNo: 2465250 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.0 90 110

Sample ID: MB-54133 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **54133** RunNo: **70785** 

Prep Date: 8/3/2020 Analysis Date: 8/3/2020 SeqNo: 2465333 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-54133 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 54133 RunNo: 70785

Prep Date: 8/3/2020 Analysis Date: 8/3/2020 SeqNo: 2465334 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 91.4 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#: **2007E37** *05-Aug-20* 

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: LCS-54043	SampType: LCS TestCode: EPA Method 8						sel Range	e Organics	
Client ID: LCSS	Batch ID: 54	043	F	RunNo: 70	0757				
Prep Date: 7/29/2020	Analysis Date: 7	/30/2020	S	SeqNo: 24	462544	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43 10		0	86.1	70	130			
Surr: DNOP	4.0	5.000		79.6	30.4	154			
Sample ID: <b>MB-54043</b>	SampType: <b>M</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 54	043	F	RunNo: 70	0757				
Prep Date: 7/29/2020	Analysis Date: 7	/30/2020	S	SeqNo: 24	462545	Units: mg/K	g		
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	11	10.00		114	30.4	154			
Sample ID: MB-54047	SampType: M	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 54	047	F	RunNo: <b>7</b> 0	0804				
Prep Date: 7/29/2020	Analysis Date: 7	/31/2020	8	SeqNo: 24	464707	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10								
Motor Oil Range Organics (MRO)	ND 50								
Surr: DNOP	9.9	10.00		99.4	30.4	154			
Sample ID: MB-54051	SampType: <b>M</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID: PBS	Batch ID: 54	051	F	RunNo: 70	0804				
Prep Date: 7/29/2020	Analysis Date: 7	/31/2020	S	SeqNo: 24	464708	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10								
Motor Oil Range Organics (MRO)	ND 50								
Surr: DNOP	12	10.00		124	30.4	154			

#### Qualifiers:

Analyte

Surr: DNOP

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

Sample ID: LCS-54047

Prep Date: 7/29/2020

Diesel Range Organics (DRO)

Client ID: LCSS

SampType: LCS

Batch ID: 54047

Analysis Date: 7/31/2020

PQL

10

50.00

5.000

Result

51

4.8

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

RunNo: 70804

102

95.1

SeqNo: 2464709

TestCode: EPA Method 8015M/D: Diesel Range Organics

Units: mg/Kg

130

154

%RPD

HighLimit

70

30.4

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

SPK value SPK Ref Val %REC LowLimit

RL Reporting Limit

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**RPDLimit** 

Qual

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2007E37** 

05-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: <b>LCS-54051</b>	SampT	ype: <b>LC</b>	S	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch	ID: <b>54</b> 0	051	R	0804						
Prep Date: 7/29/2020	Analysis D	ate: <b>7/</b>	31/2020	S	SeqNo: 2	464710	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	58	10	50.00	0	116	70	130				
Surr: DNOP	5.7		5.000		115	30.4	154				

Sample ID: 2007E37-002AMS	SampT	ype: <b>MS</b>	3	Tes	tCode: El	de: EPA Method 8015M/D: Diesel Range Organics						
Client ID: AH-2 Surface	Batch	ID: <b>54</b> 0	047	RunNo: <b>70804</b>								
Prep Date: 7/29/2020	Analysis D	ate: <b>7/</b>	31/2020	S	SeqNo: 24	464755	Units: mg/K	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	45	9.4	47.17	0	96.1	47.4	136					
Surr: DNOP	4.6		4.717		97.6	30.4	154					

Sample ID: 2007E37-002AMSE	SampTy	/pe: <b>MS</b>	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: AH-2 Surface	Batch	ID: <b>54</b> 0	047	R	tunNo: 70	0804				
Prep Date: 7/29/2020	Analysis Da	ate: <b>7/</b>	31/2020	SeqNo: 2464758 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.1	45.66	0	110	47.4	136	10.6	43.4	
Surr: DNOP	5.7		4.566		125	30.4	154	0	0	

#### Qualifiers:

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

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

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **2007E37** *05-Aug-20* 

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: 2007e37-002ams	SampT	ype: <b>MS</b>	3	Tes	TestCode: EPA Method 8015D: Gasoline Range					
Client ID: AH-2 Surface	Batch	1D: <b>54</b> 0	<b>54044</b> RunNo: <b>70754</b>							
Prep Date: 7/29/2020	Analysis D	ate: <b>7/</b>	31/2020	S	462779	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.58	0	89.0	61.3	114			
Surr: BFB	1100		983.3		109	75.3	105			S

Sample ID: 2007e37-002amsd	SampT	уре: <b>М</b> S	SD	Test	Code: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: AH-2 Surface	Batch	ID: <b>54</b> 0	044	R	unNo: <b>7</b> 0	0754				
Prep Date: 7/29/2020	Analysis D	ate: <b>7/</b>	31/2020	S	eqNo: 2	462780	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.8	24.15	0	82.2	61.3	114	9.69	20	
Surr: BFB	1000		966.2		108	75.3	105	0	0	S

Sample ID: Ics-54044	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batch	ID: <b>54</b> 0	044	R	RunNo: 7	0754				
Prep Date: 7/29/2020	Analysis D	ate: <b>7/</b>	31/2020	S	SeqNo: 2	462804	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.8	72.5	106			
Surr: BFB	1100		1000		105	75.3	105			S

Sample ID: <b>mb-54044</b>	SampT	ype: ME	BLK	Test	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch	n ID: <b>54</b>	044	R	RunNo: 7	0754				
Prep Date: <b>7/29/2020</b>	Analysis D	ate: <b>7/</b>	31/2020	S	SeqNo: 2	462805	Units: mg/K	ίg		
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		99.9	75.3	105			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical 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#: **2007E37** 

05-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: 2007e37-003ams	SampT	Гуре: МЅ	3	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: AH-3 H-West	Batcl	h ID: <b>54</b> 0	044	F	RunNo: <b>7</b>	0754				
Prep Date: 7/29/2020	Analysis D	Date: <b>7/</b>	31/2020	8	SeqNo: 2	462879	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.024	0.9728	0	97.2	76.3	120			
Toluene	0.99	0.049	0.9728	0.01032	101	78.5	120			
Ethylbenzene	1.0	0.049	0.9728	0	103	78.1	124			
Xylenes, Total	3.0	0.097	2.918	0	104	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9728		106	80	120			

Sample ID: 2007e37-003amsd	SampT	ype: MS	SD .	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: AH-3 H-West	Batch	ID: <b>540</b>	044	F	RunNo: 7	0754				
Prep Date: 7/29/2020	Analysis D	ate: <b>7/</b> 3	31/2020	S	SeqNo: 2	462880	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.024	0.9756	0	95.6	76.3	120	1.29	20	
Toluene	0.98	0.049	0.9756	0.01032	99.2	78.5	120	1.23	20	
Ethylbenzene	1.0	0.049	0.9756	0	103	78.1	124	0.552	20	
Xylenes, Total	3.0	0.098	2.927	0	104	79.3	125	0.427	20	
Surr: 4-Bromofluorobenzene	1.0		0.9756		104	80	120	0	0	

Sample ID: LCS-54044	SampT	ype: <b>LC</b>	s	Tes	tCode: El	iles				
Client ID: LCSS	Batch	h ID: <b>54</b> 0	044	F	RunNo: 7	0754				
Prep Date: 7/29/2020	Analysis D	Date: <b>7/</b>	31/2020	S	SeqNo: 2	462903	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.4	80	120			
Toluene	0.91	0.050	1.000	0	91.2	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.4	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID: <b>mb-54044</b>	SampT	уре: МЕ	BLK	Tes	tCode: El	iles				
Client ID: PBS	Batch	n ID: <b>54</b> 0	044	F	RunNo: 7	0754				
Prep Date: 7/29/2020	Analysis D	oate: 7/	31/2020	S	SeqNo: 2	462904	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: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical 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#: **2007E37** 

05-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: <b>mb-54042</b>	SampT	Гуре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Batcl	h ID: <b>54</b> 0	042	F	RunNo: 7	0747				
Prep Date: 7/29/2020	Analysis D	Date: <b>7/</b>	30/2020	9	SeqNo: 2	462167	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		99.0	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.48		0.5000		96.4	70	130			

Sample ID: Ics-54042	Samp	Гуре: <b>LC</b>	S4	Tes	tCode: El	PA Method	8260B: Volat	tiles Short	List	
Client ID: BatchQC	Batc	h ID: <b>54</b> 0	042	F	RunNo: 7	0747				
Prep Date: 7/29/2020	Analysis [	Date: <b>7/</b>	30/2020	S	SeqNo: 2	462168	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.5	80	120			
Toluene	0.99	0.050	1.000	0	99.1	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.8	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.48		0.5000		95.6	70	130			

Sample ID: mb-54045	SampT	ype: ME	BLK	Tes	tCode: <b>El</b>	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Batch	1D: <b>54</b> 0	045	F	tunNo: <b>7</b> 0	0747				
Prep Date: 7/29/2020	Analysis D	ate: <b>7/</b>	31/2020	8	SeqNo: 24	462218	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		99.4	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	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
- 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#: **2007E37** 

05-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: Ics-54045 Client ID: BatchQC Prep Date: 7/29/2020	•	Гуре: <b>LC</b> h ID: <b>54</b> 0 Date: <b>7/</b> 3		F	tCode: El RunNo: 76 SeqNo: 2	0747	d 8260B: Volatiles Short List  Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.97	0.025	1.000	0	97.4	80	120				
Toluene	0.99	0.050	1.000	0	98.9	80	120				
Ethylbenzene	1.0	0.050	1.000	0	101	80	120				
Xylenes, Total	3.2	0.10	3.000	0	107	80	120				
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		105	70	130				
Surr: 4-Bromofluorobenzene	0.51		0.5000		103	70	130				
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130				
Surr: Toluene-d8	0.49		0.5000		98.4	70	130				

Sample ID: 2007e37-022ams	Samp <sup>-</sup>	Гуре: М	64	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: AH-24 Surface	Batc	h ID: <b>54</b> 0	045	F	RunNo: <b>7</b>	0747				
Prep Date: 7/29/2020	Analysis [	Date: <b>7/</b>	31/2020	9	SeqNo: 2	462221	Units: mg/h	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	0.9872	0	101	71.1	115			
Toluene	1.0	0.049	0.9872	0	103	79.6	132			
Ethylbenzene	1.1	0.049	0.9872	0	106	83.8	134			
Xylenes, Total	3.3	0.099	2.962	0	111	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.48		0.4936		96.8	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.4936		97.0	70	130			
Surr: Dibromofluoromethane	0.53		0.4936		108	70	130			
Surr: Toluene-d8	0.49		0.4936		98.8	70	130			

Sample ID: 2007e37-022amsd	I SampT	уре: МS	D4	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: AH-24 Surface	Batcl	n ID: <b>54</b> 0	045	F	RunNo: 7	0747				
Prep Date: 7/29/2020	Analysis D	Date: <b>7/</b> 3	31/2020	S	SeqNo: 2	462222	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.024	0.9497	0	99.6	71.1	115	4.82	20	
Toluene	1.0	0.047	0.9497	0	109	79.6	132	1.94	20	
Ethylbenzene	1.1	0.047	0.9497	0	111	83.8	134	0.766	20	
Xylenes, Total	3.4	0.095	2.849	0	118	82.4	132	2.81	20	
Surr: 1,2-Dichloroethane-d4	0.48		0.4748		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.48		0.4748		101	70	130	0	0	
Surr: Dibromofluoromethane	0.50		0.4748		105	70	130	0	0	
Surr: Toluene-d8	0.45		0.4748		95.3	70	130	0	0	

#### Qualifiers:

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

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

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### Hall Environmental Analysis Laboratory, Inc.

Result

0.52

0.51

0.55

0.50

WO#: **2007E37 05-Aug-20** 

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: mb-54070	SampType: <b>M</b>	IBLK	TestCo	de: <b>EP</b>	A Method	8260B: Volati	les Short	List	
Client ID: PBS	Batch ID: 54	4070	Run	No: <b>70</b>	769				
Prep Date: 7/30/2020	Analysis Date: 7	7/31/2020	Seq	No: <b>24</b> 0	62806	Units: %Rec			
Analyte	Result PQL	SPK value	SPK Ref Val %	REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.50	0.5000		99.5	70	130			
Surr: 4-Bromofluorobenzene	0.49	0.5000		97.8	70	130			
Surr: Dibromofluoromethane	0.54	0.5000		107	70	130			
Surr: Toluene-d8	0.52	0.5000		104	70	130			
Sample ID: Ics-54070	SampType: L	CS4	TestCo	de: <b>EP</b>	A Method	8260B: Volati	les Short	List	
Client ID: BatchQC	Batch ID: 54	4070	Run	No: <b>70</b>	769				
Prep Date: 7/30/2020	Analysis Date: 7	7/31/2020	Seq	No: <b>24</b> 0	62807	Units: %Rec			
Analyte	Result PQL	SPK value	SPK Ref Val %	REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.49	0.5000		97.0	70	130			
Surr: 4-Bromofluorobenzene	0.48	0.5000		95.1	70	130			
Surr: Dibromofluoromethane	0.52	0.5000		104	70	130			
Surr: Toluene-d8	0.49	0.5000		97.3	70	130			
									-
Sample ID: mb1	SampType: M	IBLK	TestCo	de: <b>EP</b>	A Method	8260B: Volati	les Short	List	
Sample ID: mb1 Client ID: PBS	SampType: M Batch ID: S			de: <b>EP</b> No: <b>70</b>		8260B: Volati	les Short	List	

Sample ID: 100ng Ics	SampT	ype: <b>LC</b>	:S4	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: BatchQC	Batch	n ID: <b>S7</b>	0775	F	RunNo: 70	0775				
Prep Date:	Analysis D	oate: 8/	1/2020	S	SeqNo: 24	463033	Units: %Red	;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			

%REC

104

102

110

100

LowLimit

70

70

70

70

HighLimit

130

130

130

130

SPK value SPK Ref Val

0.5000

0.5000

0.5000

0.5000

#### Qualifiers:

Analyte

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

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

**RPDLimit** 

Qual

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2007E37** *05-Aug-20* 

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 181 SWD

Sample ID: mb-54042 SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: PBS Batch ID: 54042 RunNo: 70747

Prep Date: 7/29/2020 Analysis Date: 7/30/2020 SeqNo: 2462229 Units: mg/Kg

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

Gasoline Range Organics (GRO) ND 5.0

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 480 500.0 96.1 70 130

Sample ID: Ics-54042 SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: LCSS Batch ID: 54042 RunNo: 70747

Prep Date: 7/29/2020 Analysis Date: 7/30/2020 SeqNo: 2462230 Units: mg/Kg

HighLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 24 5.0 25.00 O 96.3 70 130 Surr: BFB 510 500.0 102 70 130

Sample ID: mb-54045 SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range
Client ID: PBS Batch ID: 54045 RunNo: 70747

Prep Date: 7/29/2020 Analysis Date: 7/31/2020 SeqNo: 2462278 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: BFR 510 500 0 101 70 130

 Surr: BFB
 510
 500.0
 101
 70
 130

Sample ID: Ics-54045 SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range
Client ID: LCSS Batch ID: 54045 RunNo: 70747

Prep Date: 7/29/2020 Analysis Date: 7/31/2020 SeqNo: 2462279 Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 24 5.0 97.0 70 25.00 130

Surr: BFB 520 500.0 105 70 130

Sample ID: 2007e37-023ams SampType: MS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: AH-24 1ft Batch ID: 54045 RunNo: 70747

Prep Date: 7/29/2020 Analysis Date: 7/31/2020 SeqNo: 2462282 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 22 4.8 0 49.2 24.25 92.0 122 Surr: BFB 490 485.0 101 70 130

Sample ID: 2007e37-023amsd SampType: MSD TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: AH-24 1ft Batch ID: 54045 RunNo: 70747

Prep Date: 7/29/2020 Analysis Date: 7/31/2020 SeqNo: 2462283 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 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.

Result

500

WO#: **2007E37** 

05-Aug-20

Client:	Safety & Environmental Solutions
Project:	Devon Cotton Draw 181 SWD

Project: Devon	Cotton Draw 181 S	WD							
Sample ID: 2007e37-023am	sd SampType: M	SD	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: AH-24 1ft	Batch ID: 54	045	F	RunNo: <b>7</b>	0747				
Prep Date: 7/29/2020	Analysis Date: 7	/31/2020	5	SeqNo: 2	462283	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23 5.0		0	92.7	49.2	122	3.39	20	
Surr: BFB	500	498.0		101	70	130	0	0	
Sample ID: <b>mb-54070</b>	SampType: M	BLK	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch ID: 54	070	F	RunNo: 7	0769				
Prep Date: 7/30/2020	Analysis Date: 7	/31/2020	9	SeqNo: 2	462847	Units: %Re	С		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	520	500.0		103	70	130			
Sample ID: Ics-54070	SampType: <b>L</b> (	cs	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: LCSS	Batch ID: 54	070	F	RunNo: <b>7</b>	0769				
Prep Date: 7/30/2020	Analysis Date: 7	/31/2020	5	SeqNo: 2	462848	Units: %Re	С		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	520	500.0		103	70	130			
Sample ID: mb1	SampType: <b>M</b>	BLK	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch ID: G	70775	F	RunNo: 7	0775				
Prep Date:	Analysis Date: 8	/1/2020	\$	SeqNo: 2	463070	Units: %Re	С		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	510	500.0		103	70	130			
Sample ID: 2.5ug gro Ics	SampType: <b>L</b> (	cs	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: LCSS	Batch ID: G	70775	F	RunNo: <b>7</b>	0775				
Prep Date:	Analysis Date: 8	/1/2020	5	SeqNo: 2	463071	Units: %Re	С		

#### Qualifiers:

Analyte

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

99.7

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

SPK value SPK Ref Val %REC LowLimit

500.0

RL Reporting Limit

Page 43 of 43

%RPD

HighLimit

70

**RPDLimit** 

Qual



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	nber: 2007E37		RcptNo:	1
Received By:	Cheyenne Cason	7/29/2020 9:30:00	AM			
Completed By:	Juan Rojas	7/29/2020 9;55:50	AM	Hansy		
Reviewed By:	AR	7/29/20				
Chain of Cus	stody					
1. Is Chain of C	ustody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the	sample delivered?		<u>Courier</u>			
<u>Log In</u>			_		_	
<ol><li>Was an attern</li></ol>	npt made to cool the sample	s?	Yes 🗸	No 🗌	na 🗌	
4. Were all samp	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 sam	ple volume for indicated tes	t(s)?	Yes 🗹	No 🗌		
7. Are samples (	except VOA and ONG) prop	erly preserved?	Yes 🗹	No 🗌		
8. Was preserva	tive added to bottles?		Yes 🗌	No 🗹	NA $\square$	
9. Received at le	ast 1 vial with headspace <	!/4" for AQ VOA?	Yes 🗌	No 🗌	NA 🗹	
10. Were any san	nple containers received bro	ken?	Yes 🗆	No ₩	# of preserved	
	ork match bottle labels?		Yes 🗹	No 🗆	bottles checked for pH:	
	nncies on chain of custody)					2 unless noted)
	correctly identified on Chain	of Custody?	Yes 🗹	No 🗀	Adjusted?	<del></del> -
	analyses were requested?		Yes 🗹	No 📙		11-1
	ng times able to be met? ustomer for authorization.)		Yes 🗹	No 📙	Checked by:	7 + 29,
Special Handli	ing (if applicable)					
15. Was client not	tified of all discrepancies wit	h this order?	Yes 🗌	No 🗌	NA 🗹	
Person I	Notified:	Date				
By Who	m:	Via:	eMail F	Phone  Fax	In Person	
Regardii	ng:					
Client In	structions:			etereenun	· · · · · · · · · · · · · · · · · · ·	
16. Additional ren	narks:		<u> </u>			
17. <u>Cooler Inforr</u>		The state of the s				
Coaler No		Seal Intact   Seal No	Seal Date	Signed By		
2	3.9 Good 2.3 Good					
3	4.9 Good					

Client: State of Custody Record	Turn-Around Time:	den		HAL	4 5	ENVIRONMEN		RONMEN.	MEN.	<u> </u>	•	Received by
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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	bcontracted to other accredited laboratories	This serves as notice of this	possibility. Any e	sub-contrac	ed data wi	be clear	y notated	on the ar	nalytical re	eport.		104

Received by OCD: 11/17/2	9:36:44 AM						Page 96 of 104
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Incident ID	NAB1530234949
District RP	
Facility ID	
Application ID	

## Closure

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

A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODG	C District office must be notified 2 days prior to final sampling)
☐ Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and replace to the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the coaccordance with 19.15.29.13 NMAC including notification with 19.15.29.13	ntions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.
Printed Name: Dale Woodall	Title: Env. Professional
Signature: Dals Woodall	Date: <u>11/17/2022</u>
email: <u>dale.woodall@dvn.com</u>	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:	Date:
Printed Name:	Title:

Page 99 of 104

Incident ID	NAB1626756642
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.

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Signature: Dals Woodall	Date:11/17/2022
email: <u>dale.woodall@dvn.com</u>	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:	Date:
Printed Name:	Title:

Page 100 of 104

Incident ID	NOY1701331626
District RP	
Facility ID	
Application ID	

## Closure

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

A scaled site and sampling diagram as described in 19.15.29.	11 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate OD	C District office must be notified 2 days prior to final sampling)
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Printed Name: Dale Woodall	Title: Env. Professional
Signature: Dals Woodall	Date:11/17/2022
email: dale.woodall@dvn.com	Telephone:
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 for regulations.
Closure Approved by:	Date:
Printed Name:	Title:

Page 101 of 104

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Incident ID	NAB1726355760
District RP	
Facility ID	
Application ID	

## Closure

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Printed Name: Dale Woodall	Title: Env. Professional
Signature: Dals Woodall	Date:11/17/2022
email: dale.woodall@dvn.com	Telephone:
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 for regulations.
Closure Approved by:	Date:
Printed Name:	Title:

Page 102 of 104

Incident ID	NRM2003439614
District RP	
Facility ID	
Application ID	

## Closure

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A scaled site and sampling diagram as described in 19.15.29.	11 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate OD	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
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Printed Name: Dale Woodall	Title: Env. Professional
Signature: Dals Woodall	Date:11/17/2022
email: dale.woodall@dvn.com	Telephone:
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 for regulations.
Closure Approved by:	Date:
Printed Name:	Title:

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Incident ID	NRM2008733329
District RP	
Facility ID	
Application ID	

## Closure

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

A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODG	C District office must be notified 2 days prior to final sampling)
☐ Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and replace to the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the coaccordance with 19.15.29.13 NMAC including notification with 19.15.29.13	ntions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.
Printed Name: Dale Woodall	Title: Env. Professional
Signature: Dals Woodall	Date: <u>11/17/2022</u>
email: <u>dale.woodall@dvn.com</u>	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:	Date:
Printed Name:	Title:

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 159662

#### **CONDITIONS**

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
	Action Number:
Oklahoma City, OK 73102	159662
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By		Condition Date
amaxwell	None	2/8/2023