Page 6

Oil Conservation Division

Incident ID	NAB1911936996
District RP	
Facility ID	
Application ID	

Page 1 of 69

# 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.

<b><u>Closure Report Attachment Checklist</u>:</b> Each of the following	items must be included in the closure report.
$\Box$ 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)	s 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	
and regulations all operators are required to report and/or file certar may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regul restore, reclaim, and re-vegetate the impacted surface area to the co accordance with 19.15.29.13 NMAC including notification to the C	ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in
Signature: Dale Woodall	Date: <u>11/9/2022</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 6

Oil Conservation Division

	Page 2 of	69
Incident ID	NAB19122032237	
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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Printed Name: Dale Woodall	Title: Env. Professional
Signature: Dale Woodall	Date: <u>11/9/2022</u>
email: <u>dale.woodall@dvn.com</u>	Telephone:575-748-1838
OCD Only	
Received by: Robert Hamlet	Date: <u>1/26/2023</u>
	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: <u>Robert Hamlet</u>	Date: <u>1/26/2023</u>
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced

# Devon Energy Production Company Cotton Draw Unit #221H

# Closure Report U/L N, Section 1, T25S, R31E Eddy County, New Mexico NAB1911936996 NAB1912032237

July 22, 2021



Prepared for:

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

By:

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

#### **Company Contacts**

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

#### Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was engaged by Devon Energy to perform a site assessment at the Cotton Draw Unit #221H location concerning two separate incidents in which produced water was released onto the well pad. This site is situated in Eddy County, Section 2, Township 24S, and Range 29E.

SESI personnel performed an assessment of the site in February of 2020 based on generator knowledge of the leak locations. With the amount of overlap of both of these releases, it was determined to approach them as a single release, and remediate the location to the extent possible to satisfy the closure of both incident numbers. SESI personnel mapped the leaks and performed delineations.

#### Surface and Ground Water

Based on the NMOCD Oil and Gas map included in this report, surface water is not present within 1,000 feet of this release. The New Mexico Office of the State Engineer records indicates the average depth to groundwater for the area to be approximately 350' bgs; This is evidenced by C-03830-POD1 drilled in 2015 and C-02245 drilled in 1992. A map of these locations is provided.

#### Characterization

#### NAB1912032237

According to the C-141, the release was discovered on 11/20/2018 when abnormally high production volumes by the well flooded the gas scrubber, and the drain separator could not keep up, therefore causing a release of 5.2 bbls of produced water. Two barrels of fluid were recovered via vacuum truck.

#### NAB1911936996

According to the C-141, a temporary 3 phase separator swamped out and sent a mix of water/oil paraffin to the scrubber. The release was discovered on 1/2/2019, with an estimated volume of release containing 20 bbls of oil, and 17 bbls of produced water. 15 bbls of oil and 10 bbls of produced water were recovered on the location via vacuum truck.

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

Devon Energy CDU #221H Soil Sample Results: Cardinal Environmental Laboratories 2/27/20									
SAMPLE ID	Chloride	GRO	DRO	EXT	Benzene	Toluene	Ethyl	Total	Total
				DRO			benzene	Xylenes	BTEX
AH1 @ SURFACE	20000	399	17400	4130	<0.050	0.062	<0.050	6.9	6.96
AH2 @ SURFACE	23200	819	18400	4100	<0.050	0.483	0.970	17.2	18.6
AH3 @ SURFACE	9060	18.2	2140	598	<0.050	<0.050	<0.050	0.345	0.345
AH4 @ SURFACE	32	<10.0	83.1	43.9	<0.050	<0.050	<0.050	<0.150	<0.300

Devon Energy CDU #221H Soil Sample Results: Hall Environmental Laboratories 3/24/20 for Vertical Extent									
SAMPLE ID	Chloride	GRO	DRO	EXT DRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	
SP-1 BTM @ 1.5'	140	ND	ND	ND	ND	ND	ND	ND	
SP-2 BTM @ 1.5'	84	ND	83	ND	ND	ND	ND	ND	
SP-3 W Wall	110	ND	ND	ND	ND	ND	ND	ND	
SP-4 N Wall	100	ND	ND	ND	ND	ND	ND	ND	
SP-5 E Wall	61	ND	ND	ND	ND	ND	ND	ND	
SP-6 BTM @ 1'	580	ND	79	81	ND	ND	ND	ND	
SP-7 BTM @ 1'	840	ND	69	79	ND	ND	ND	ND	
SP-8 S Wall	1200	ND	52	59	ND	ND	ND	ND	
SP-9 SURFACE	66	ND	71	55	ND	ND	ND	ND	

#### Remediation

Based on the results of the delineation, SESI, determined the best course of action is to excavate the contaminated soil to a depth of 1 to 1.5 feet as practicable. Beginning in March of 2020, the contaminated material was excavated and removed. The removed material was sent to an approved NMOCD waste facility for disposal. A sampling event was conducted to ensure vertical extent had been found. The table above indicated there were a handful of areas that required more work. SESI and contractors returned to the site to dig an additional 3" in and around the areas that encompassed the "hot spots" indicated by the sampling in March.

Once the additional excavation had been completed and field testing indicated clean soil, samples were obtained and sent to Hall Environmental Labs for analysis and confirmation that the vertical and horizontal extents had been reached. These additional sampling events that occurred in May of 2020 are displayed in the tables below.

Devon Energy CDU # 221H Soil Sample Results: Hall Environmental Laboratories 5/15/20 – Vertical Extent									
SAMPLE ID	Chloride	GRO	DRO	EXT	Benzene	Toluene	Ethyl benzene	Total Xylenes	
AH-10 SURFACE N WALL	4800	ND	270	DRO 150	ND	ND	ND	ND	
AH-10 @ 1' N WALL	240	ND	ND	ND	ND	ND	ND	ND	
AH-11 SUFACE N WALL	4300	ND	370	230	ND	ND	ND	ND	
AH-11 @1' N WALL	ND	ND	ND	ND	ND	ND	ND	ND	
AH-12 SURFACE E WALL	4300	ND	490	320	ND	ND	ND	ND	
AH-12 @ 1' E WALL	ND	ND	ND	ND	ND	ND	ND	ND	
AH-13 SURFACE S WALL	310	ND	ND	ND	ND	ND	ND	ND	
AH-13 @ 1' S WALL	240	ND	ND	ND	ND	ND	ND	ND	
AH-14 SURFACE S WALL	290	ND	ND	ND	ND	ND	ND	ND	
AH-14 @ 1' S WALL	ND	ND	ND	ND	ND	ND	ND	ND	
AH-15 SURFACE W WALL	280	ND	ND	ND	ND	ND	ND	ND	
AH-15 @ 1' W WALL	230	ND	ND	ND	ND	ND	ND	ND	
Devon Energy CDU # 221H Soil Sample Results: Hall Environmental Laboratories 5/28/20 – Horizontal Extent									
AH-16 N SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	
AH-17 S SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	
AH-18 E SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	
AH-19 W SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	

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

#### **Closure Request**

Based on the confirmation and horizontal sample results, SESI believes the release areas 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 **NAB1911936996** and **NAB1912032237**. 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 Laboratory Analysis C-141, pages 3-6 Received by OCD: 11/9/2022 9:02:46 AM

## **Devon Energy**

CDU 221H ULN-Sec1-T25S-R31E NAB1911936996 NAB1912032237

#### Legend

Sampling - 3/24/20 Horiz Extent - 5/28/20 0 Initial Sampling - 2/27/20 Spill Area 0 Vert Extent - 5/15/20

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AH16 N @ Surface SP4 NeWall SP3 Wowall SP2 BTM @ 1.5' AH19 W @ Surface SP9 BTM @ Surface P7 BTM @ 1' SP8 S Wall AH13 S Wall @ 1' AH14 S Wall @ 1

AH17 S @ Surface

AN

Received by OCD: 11/9/2022 9:02:46 AM Page 8 of 69 Legend **Devon Energy** Sampling - 3/24/20 CDU 221H Horiz Extent - 5/28/20 UL N - Sec 1 - T25S - R31E NAB1911936996 Initial Sampling - 2/27/20 NAB1912032237 Spill Area AH16 N @ Surface Vert Extent - 5/15/20 ο AH11-N-Wal @ 1' SP4 N Wall 🥯 SP2 BTM @ 1.5' AH10 N Wall @ 1' AH12 E Wall @ 1' SP3 W Wall SP1\_BTM @ 1.5 AH19 W @Surface AH15 W Wall @ 1AH2 Surface AH18 E @ Surface SP7 BTM @ 1' SP9 BTM @ Surface AH3 Surface 🛇 SP8 Sawall AH13 S Wall @ 1 SP6 BTM @ 1' SP5 E Wall AH14 S Wall @ 1' AH4 Surface AH17 S @ Surface

Google Earth

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50 ft

USGS Home Contact USGS Search USGS

Science for a changing world

National Water Information System: Web Interface

**USGS** Water Resources

 Data Category:
 Geographic Area:

 Groundwater
 ▼
 New Mexico
 ▼
 GO

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• Introducing The Next Generation of USGS Water Data for the Nation

• Full News 🔝

Groundwater levels for New Mexico

Click to hide state-specific text

#### Search Results -- 1 sites found

Agency code = usgs site\_no list = • 320932103443801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

#### USGS 320932103443801 25S.31E.02.23441

Eddy County, New Mexico Latitude 32°09'37.4", Longitude 103°44'29.6" NAD83 Land-surface elevation 3,460.00 feet above NGVD29 The depth of the well is 1,016 feet below land surface. This well is completed in the Rustler Formation (312RSLR) local aquifer.

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Measuring agency	? Source o measure
1966-08-18		D	400.00			2	2	L	I	
1976-01-28		D	390.27				2	L	I	

#### Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	А	Approved for publication Processing and review completed.

<u>Questions about sites/data?</u> Feedback on this web site Plug-Ins

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U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for New Mexico: Water Levels

USA.gov

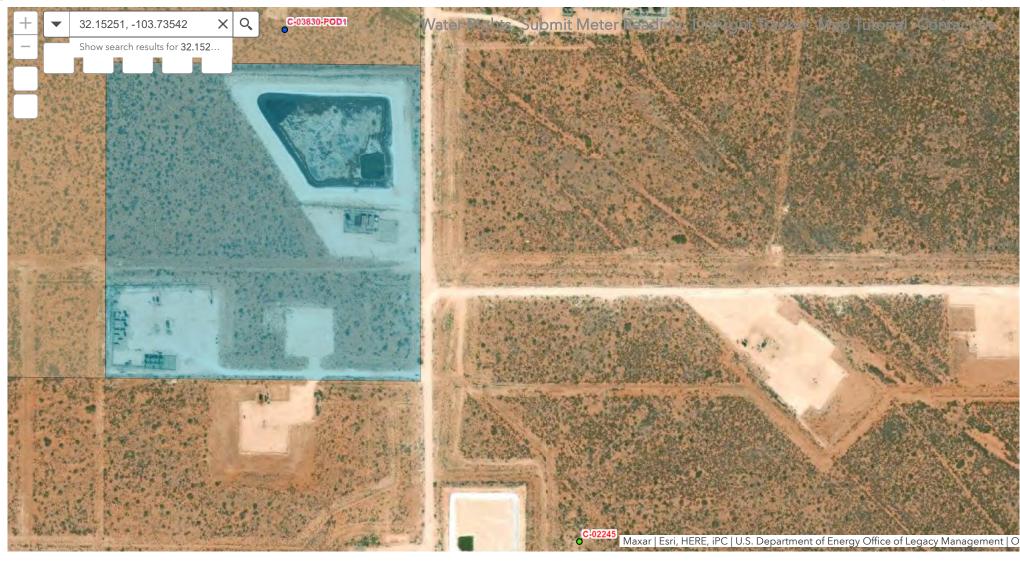
Title: Groundwater for New Mexico: Water Levels URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

FOIA

Privacy

Page Contact Information: <u>New Mexico Water Data Maintainer</u> Page Last Modified: 2020-03-09 15:11:52 EDT 0.23 0.21 nadww02 **Received by OCD: 1179/2022 9:02:46** AM<sup>ersion</sup> visible at 1:18,000 with 1,000 features per view

#### Page 11 of 69



1:4513

300ft -103.731 32.156 Degrees Released to Imaging: 1/26/2023 8:05:38 AM



March 04, 2020

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: CDU 221H

Enclosed are the results of analyses for samples received by the laboratory on 02/28/20 9:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



Safety & Environmental Solutions Bob Allen 703 East Clinton Hobbs NM, 88240 Fax To: (575) 393-4388

Received:	02/28/2020	Sampling Date:	02/27/2020
Reported:	03/04/2020	Sampling Type:	Soil
Project Name:	CDU 221H	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 019	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY		

#### Sample ID: AH #1 SURFACE (H000647-01)

BTEX 8021B	mg	/kg	Analyze	d By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/03/2020	ND	1.98	99.2	2.00	0.163		
Toluene*	0.062	0.050	03/03/2020	ND	2.00	99.8	2.00	0.270		
Ethylbenzene*	<0.050	0.050	03/03/2020	ND	2.00	100	2.00	0.666		
Total Xylenes*	6.90	0.150	03/03/2020	ND	5.86	97.7	6.00	0.618		
Total BTEX	6.96	0.300	03/03/2020	ND						
Surrogate: 4-Bromofluorobenzene (PID	171	% 73.3-12	9							
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	20000	16.0	03/02/2020	ND	400	100	400	3.92		
TPH 8015M	mg	/kg	Analyze	d By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	399	100	03/03/2020	ND	187	93.5	200	0.778		
DRO >C10-C28*	17400	100	03/03/2020	ND	182	90.9	200	1.46		
EXT DRO >C28-C36	4130	100	03/03/2020	ND						
Surrogate: 1-Chlorooctane	213	% 44.3-14	4							
Surrogate: 1-Chlorooctadecane	722	% 42.2-15	6							

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Safety & Environmental Solutions Bob Allen 703 East Clinton Hobbs NM, 88240 Fax To: (575) 393-4388

Received:	02/28/2020	Sampling Date:	02/27/2020
Reported:	03/04/2020	Sampling Type:	Soil
Project Name:	CDU 221H	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 019	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY		

#### Sample ID: AH #2 SURFACE (H000647-02)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/03/2020	ND	1.98	99.2	2.00	0.163	
Toluene*	0.483	0.050	03/03/2020	ND	2.00	99.8	2.00	0.270	
Ethylbenzene*	0.970	0.050	03/03/2020	ND	2.00	100	2.00	0.666	
Total Xylenes*	17.2	0.150	03/03/2020	ND	5.86	97.7	6.00	0.618	
Total BTEX	18.6	0.300	03/03/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	134 9	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	23200	16.0	03/02/2020	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	819	100	03/03/2020	ND	187	93.5	200	0.778	
DRO >C10-C28*	18400	100	03/03/2020	ND	182	90.9	200	1.46	
EXT DRO >C28-C36	4100	100	03/03/2020	ND					
Surrogate: 1-Chlorooctane	275 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	744 9	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Safety & Environmental Solutions Bob Allen 703 East Clinton Hobbs NM, 88240 Fax To: (575) 393-4388

Received:	02/28/2020	Sampling Date:	02/27/2020
Reported:	03/04/2020	Sampling Type:	Soil
Project Name:	CDU 221H	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 019	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY		

#### Sample ID: AH #3 SURFACE (H000647-03)

BTEX 8021B	mg/	′kg	Analyze	zed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/02/2020	ND	1.98	99.2	2.00	0.163		
Toluene*	<0.050	0.050	03/02/2020	ND	2.00	99.8	2.00	0.270		
Ethylbenzene*	<0.050	0.050	03/02/2020	ND	2.00	100	2.00	0.666		
Total Xylenes*	0.345	0.150	03/02/2020	ND	5.86	97.7	6.00	0.618		
Total BTEX	0.345	0.300	03/02/2020	ND						
Surrogate: 4-Bromofluorobenzene (PID	130 \$	% 73.3-12	9							
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9060	16.0	03/02/2020	ND	400	100	400	3.92		
TPH 8015M	mg/	′kg	Analyze	d By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	18.2	10.0	03/02/2020	ND	187	93.5	200	0.778		
DRO >C10-C28*	2140	10.0	03/02/2020	ND	182	90.9	200	1.46		
EXT DRO >C28-C36	598	10.0	03/02/2020	ND						
Surrogate: 1-Chlorooctane	93.7	% 44.3-14	4							
Surrogate: 1-Chlorooctadecane	157 9	% 42.2-15	6							

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Safety & Environmental Solutions Bob Allen 703 East Clinton Hobbs NM, 88240 Fax To: (575) 393-4388

Received:	02/28/2020	Sampling Date:	02/27/2020
Reported:	03/04/2020	Sampling Type:	Soil
Project Name:	CDU 221H	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 019	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY		

#### Sample ID: AH #4 SURFACE (H000647-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/02/2020	ND	1.98	99.2	2.00	0.163	
Toluene*	<0.050	0.050	03/02/2020	ND	2.00	99.8	2.00	0.270	
Ethylbenzene*	<0.050	0.050	03/02/2020	ND	2.00	100	2.00	0.666	
Total Xylenes*	<0.150	0.150	03/02/2020	ND	5.86	97.7	6.00	0.618	
Total BTEX	<0.300	0.300	03/02/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/02/2020	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/02/2020	ND	187	93.5	200	0.778	
DRO >C10-C28*	83.1	10.0	03/02/2020	ND	182	90.9	200	1.46	
EXT DRO >C28-C36	43.9	10.0	03/02/2020	ND					
Surrogate: 1-Chlorooctane	89.4	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	100 9	6 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report
ND RPD **	Analyte NOT DETECTED at or above the reporting limit Relative Percent Difference Samples not received at proper temperature of 6°C or below. Insufficient time to reach temperature. Chloride by SM4500Cl-B does not require samples be received at or below 6°C

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 18 of 69 Laboratories

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

4

# 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name: Project Manager:	Per: Safety and Environmental Solutions Per: Bob Allen Per: East Clinical DO Box 4642	Solutions	<b>B/LL TO</b> P.O. #:		ANALYSIS REQUEST	
city: Ho	Hobbs State: NM	Zip: 88240				
Phone #: 575	7-0510 F	w.	Address:			
Project #: ももいー	J- 20-019 Project Owner:	er:	City:			
Project Name: ('\u	2214		State: Zip:	/		
Project Location:			#	de,		
Sampler Name:	BoliArla		Fax #:	n O e	_	
FOR LAB USE ONLY			PRESERV. SAMPLING			
Lab I.D. Hacole47	Sample I.D.	(G)RAB OR (C) # CONTAINERS GROUNDWATE WASTEWATER SOIL OIL SLUDGE	OTHER : ACID/BASE: ICE / COOL OTHER :	BTEY 8015. Cholor		
2	Sur			1145		•
<sup>w</sup>	H #3 Surfacy	× ×		205		
4	AH = 44 Surface	X, /		1:10 / / ~		
PLEASE NOTE: Liability and analyses, All claims including service. In no event shall Car affiliates or successors arising	PLEASE NOTE: Libility and Damages. Cardina's liability and client's exclusive remedy for any daim arising whether based in contract or tent, shall be finited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in withing and received by Cardinal within 30 days after completion of the applical service. In no event shall Cardinal be fable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incured by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services breaunder by Gardinal vegative South claim is based upon any of the above stated masons or chowske	any claim atking whether based in contract or tort, shall be finited to the amount paid by the client for the a deemed waived unless made in writing and received by Cardinal within 30 days after completion of the my without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiat "without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiat Gardinal/regardless of whether such claim is based upon any of the above stated reasons or otherwise.	or tort, shall be limited to the amount paid received by Cardinal within 30 days after oss of use, or loss of profits incurred by cE s based upon any of the above stated rea	by the client for the completion of the applicable ent, its subsidiaries, ons or otherwise		
Relinguished By:	Time: 25-20		(S'E	Phone Result:  Ves Sho Fax Result:  Yes X.No REMARKS:	vo Add'l Phone #: vo Add'l Fax #:	
Relinquished By:	nan	Received By:	aldakyd	~		
Delivered By: Sampler - UPS -	(Cirricle Onle) Bus - Other: 1/17	-os	on CHECKED BY: (Initials)			-
Sampler - Oro -	CIAT Jaino - Sng	A.J. HYES TYES	1			



May 26, 2020

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

RE: Devon Cotton Draw 221H

OrderNo.: 2005796

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 12 sample(s) on 5/19/2020 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Lab ID:

Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

2005796-001

Devon Cotton Draw 221H

 Client Sample ID: AH-10 Surface North Wall

 Collection Date: 5/15/2020 9:30:00 AM

 Matrix:
 SOIL
 Received Date: 5/19/2020 9:30:00 AM

 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	4800	150	mg/Kg	50	5/23/2020 11:29:56 PM	52665
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/20/2020 11:42:33 PM	52570
Surr: BFB	95.7	70-130	%Rec	1	5/20/2020 11:42:33 PM	52570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	BRM
Diesel Range Organics (DRO)	270	9.5	mg/Kg	1	5/22/2020 4:56:57 AM	52589
Motor Oil Range Organics (MRO)	150	47	mg/Kg	1	5/22/2020 4:56:57 AM	52589
Surr: DNOP	70.6	55.1-146	%Rec	1	5/22/2020 4:56:57 AM	52589
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	JMR
Benzene	ND	0.024	mg/Kg	1	5/20/2020 11:42:33 PM	52570
Toluene	ND	0.048	mg/Kg	1	5/20/2020 11:42:33 PM	52570
Ethylbenzene	ND	0.048	mg/Kg	1	5/20/2020 11:42:33 PM	52570
Xylenes, Total	ND	0.095	mg/Kg	1	5/20/2020 11:42:33 PM	52570
Surr: 1,2-Dichloroethane-d4	85.4	70-130	%Rec	1	5/20/2020 11:42:33 PM	52570
Surr: 4-Bromofluorobenzene	88.1	70-130	%Rec	1	5/20/2020 11:42:33 PM	52570
Surr: Dibromofluoromethane	105	70-130	%Rec	1	5/20/2020 11:42:33 PM	52570
Surr: Toluene-d8	97.1	70-130	%Rec	1	5/20/2020 11:42:33 PM	52570

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 16

Lab ID:

Analyses

Chloride

**Analytical Report** Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions Client Sample ID: AH-10 1 ft North Wall Devon Cotton Draw 221H Collection Date: 5/15/2020 9:40:00 AM 2005796-002 Matrix: SOIL Received Date: 5/19/2020 9:30:00 AM Result **RL** Oual Units **DF** Date Analyzed Batch Analyst: MRA **EPA METHOD 300.0: ANIONS** 240 59 mg/Kg 20 5/23/2020 1:46:39 PM 52665 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR mg/Kg Gasoline Range Organics (GRO) ND 4.8 1 5/21/2020 2:35:28 AM 52570 Surr: BFB 95.7 70-130 %Rec 1 5/21/2020 2:35:28 AM 52570 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM **Diesel Range Organics (DRO)** ND 9.0 mg/Kg 1 5/22/2020 5:20:50 AM 52589 ND Motor Oil Range Organics (MRO) mg/Kg 1 5/22/2020 5:20:50 AM 52589 45 Surr: DNOP 107 55.1-146 %Rec 5/22/2020 5:20:50 AM 52589 1

EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	JMR
Benzene	ND	0.024	mg/Kg	1	5/21/2020 2:35:28 AM	52570
Toluene	ND	0.048	mg/Kg	1	5/21/2020 2:35:28 AM	52570
Ethylbenzene	ND	0.048	mg/Kg	1	5/21/2020 2:35:28 AM	52570
Xylenes, Total	ND	0.096	mg/Kg	1	5/21/2020 2:35:28 AM	52570
Surr: 1,2-Dichloroethane-d4	85.6	70-130	%Rec	1	5/21/2020 2:35:28 AM	52570
Surr: 4-Bromofluorobenzene	90.9	70-130	%Rec	1	5/21/2020 2:35:28 AM	52570
Surr: Dibromofluoromethane	104	70-130	%Rec	1	5/21/2020 2:35:28 AM	52570
Surr: Toluene-d8	93.9	70-130	%Rec	1	5/21/2020 2:35:28 AM	52570

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
- Н 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 S

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

Page 2 of 16

Lab ID:

Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

2005796-003

Devon Cotton Draw 221H

 Client Sample ID: AH-11 Surface North Wall

 Collection Date: 5/15/2020 9:50:00 AM

 Matrix: SOIL
 Received Date: 5/19/2020 9:30:00 AM

 Result
 RL Qual Units DF Date Analyzed
 Batch

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	4300	150	mg/Kg	50	5/23/2020 11:42:20 PM	52665
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst	: JMR
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/21/2020 3:04:23 AM	52570
Surr: BFB	94.6	70-130	%Rec	1	5/21/2020 3:04:23 AM	52570
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	370	9.3	mg/Kg	1	5/22/2020 5:44:52 AM	52589
Motor Oil Range Organics (MRO)	230	46	mg/Kg	1	5/22/2020 5:44:52 AM	52589
Surr: DNOP	82.6	55.1-146	%Rec	1	5/22/2020 5:44:52 AM	52589
EPA METHOD 8260B: VOLATILES SHORT LIS	т				Analyst	: JMR
Benzene	ND	0.023	mg/Kg	1	5/21/2020 3:04:23 AM	52570
Toluene	ND	0.046	mg/Kg	1	5/21/2020 3:04:23 AM	52570
Ethylbenzene	ND	0.046	mg/Kg	1	5/21/2020 3:04:23 AM	52570
Xylenes, Total	ND	0.092	mg/Kg	1	5/21/2020 3:04:23 AM	52570
Surr: 1,2-Dichloroethane-d4	86.5	70-130	%Rec	1	5/21/2020 3:04:23 AM	52570
Surr: 4-Bromofluorobenzene	85.0	70-130	%Rec	1	5/21/2020 3:04:23 AM	52570
Surr: Dibromofluoromethane	107	70-130	%Rec	1	5/21/2020 3:04:23 AM	52570
Surr: Toluene-d8	94.4	70-130	%Rec	1	5/21/2020 3:04:23 AM	52570

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

Qualifiers:

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

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

Page 3 of 16

Lab ID:

Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

2005796-004

Devon Cotton Draw 221H

Client Sample ID: AH-11 1 ft North Wall Collection Date: 5/15/2020 10:00:00 AM Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	5/23/2020 2:11:28 PM	52665
EPA METHOD 8015D MOD: GASOLINE RANG	θE				Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/21/2020 3:33:11 AM	52570
Surr: BFB	94.4	70-130	%Rec	1	5/21/2020 3:33:11 AM	52570
EPA METHOD 8015M/D: DIESEL RANGE ORC	GANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	5/22/2020 6:08:48 AM	52589
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/22/2020 6:08:48 AM	52589
Surr: DNOP	101	55.1-146	%Rec	1	5/22/2020 6:08:48 AM	52589
EPA METHOD 8260B: VOLATILES SHORT LI	ST				Analyst	: JMR
Benzene	ND	0.023	mg/Kg	1	5/21/2020 3:33:11 AM	52570
Toluene	ND	0.046	mg/Kg	1	5/21/2020 3:33:11 AM	52570
Ethylbenzene	ND	0.046	mg/Kg	1	5/21/2020 3:33:11 AM	52570
Xylenes, Total	ND	0.093	mg/Kg	1	5/21/2020 3:33:11 AM	52570
Surr: 1,2-Dichloroethane-d4	85.8	70-130	%Rec	1	5/21/2020 3:33:11 AM	52570
Surr: 4-Bromofluorobenzene	90.5	70-130	%Rec	1	5/21/2020 3:33:11 AM	52570
Surr: Dibromofluoromethane	105	70-130	%Rec	1	5/21/2020 3:33:11 AM	52570
Surr: Toluene-d8	95.5	70-130	%Rec	1	5/21/2020 3:33:11 AM	52570

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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Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions Client Sample ID: AH-12 Surface East Wall **Project:** Devon Cotton Draw 221H Collection Date: 5/15/2020 10:10:00 AM Lab ID: 2005796-005 Matrix: SOIL Received Date: 5/19/2020 9:30:00 AM Result **RL** Oual Units **DF** Date Analyzed Batch Analyses Analyst: MRA **EPA METHOD 300.0: ANIONS** Chloride 4300 150 mg/Kg 50 5/23/2020 11:54:45 PM 52665 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 5/21/2020 4:01:58 AM 52570 Surr: BFB 96.3 70-130 %Rec 1 5/21/2020 4:01:58 AM 52570 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM **Diesel Range Organics (DRO)** 490 10 mg/Kg 1 5/22/2020 6:32:58 AM 52589 Motor Oil Range Organics (MRO) 320 50 1 52589 mg/Kg 5/22/2020 6:32:58 AM Surr: DNOP 100 55.1-146 %Rec 5/22/2020 6:32:58 AM 52589 1 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR ND 5/21/2020 4:01:58 AM Benzene 0.024 mg/Kg 52570 1 Toluene ND 0.047 mg/Kg 1 5/21/2020 4:01:58 AM 52570 Ethylbenzene ND 0.047 mg/Kg 1 5/21/2020 4:01:58 AM 52570 Xylenes, Total ND 0.095 mg/Kg 5/21/2020 4:01:58 AM 52570 1 Surr: 1,2-Dichloroethane-d4 84.9 70-130 %Rec 1 5/21/2020 4:01:58 AM 52570

87.3

104

95.4

70-130

70-130

70-130

%Rec

%Rec

%Rec

1

1

1

5/21/2020 4:01:58 AM

5/21/2020 4:01:58 AM

5/21/2020 4:01:58 AM

52570

52570

52570

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 16

Lab ID:

Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

2005796-006

Devon Cotton Draw 221H

Client Sample ID: AH-12 1ft East Wall Collection Date: 5/15/2020 10:20:00 AM Received Date: 5/19/2020 9:30:00 AM

Result	RL	Qual Units	DF	Date Analyzed	Batch
				Analyst	MRA
ND	59	mg/Kg	20	5/23/2020 2:36:18 PM	52665
				Analyst	: JMR
ND	4.8	mg/Kg	1	5/21/2020 4:30:32 AM	52570
97.3	70-130	%Rec	1	5/21/2020 4:30:32 AM	52570
NICS				Analyst	BRM
ND	9.6	mg/Kg	1	5/22/2020 6:56:55 AM	52589
ND	48	mg/Kg	1	5/22/2020 6:56:55 AM	52589
92.5	55.1-146	%Rec	1	5/22/2020 6:56:55 AM	52589
-				Analyst	: JMR
ND	0.024	mg/Kg	1	5/21/2020 4:30:32 AM	52570
ND	0.048	mg/Kg	1	5/21/2020 4:30:32 AM	52570
ND	0.048	mg/Kg	1	5/21/2020 4:30:32 AM	52570
ND	0.096	mg/Kg	1	5/21/2020 4:30:32 AM	52570
88.1	70-130	%Rec	1	5/21/2020 4:30:32 AM	52570
91.7	70-130	%Rec	1	5/21/2020 4:30:32 AM	52570
102	70-130	%Rec	1	5/21/2020 4:30:32 AM	52570
94.4	70-130	%Rec	1	5/21/2020 4:30:32 AM	52570
	ND 97.3 NICS ND 92.5 - ND ND ND ND ND 88.1 91.7 102	ND 59 ND 4.8 97.3 70-130 ND 9.6 ND 48 92.5 55.1-146 - ND 0.024 ND 0.048 ND 0.048 ND 0.048 ND 0.048 ND 0.096 88.1 70-130 91.7 70-130 102 70-130	ND         59         mg/Kg           ND         4.8         mg/Kg           97.3         70-130         %Rec           ND         9.6         mg/Kg           ND         48         mg/Kg           92.5         55.1-146         %Rec           ND         0.024         mg/Kg           ND         0.048         mg/Kg           ND         0.048         mg/Kg           ND         0.096         mg/Kg           ND         0.88.1         70-130 <t< td=""><td>ND         59         mg/Kg         20           ND         4.8         mg/Kg         1           97.3         70-130         %Rec         1           ND         9.6         mg/Kg         1           ND         9.6         mg/Kg         1           ND         48         mg/Kg         1           92.5         55.1-146         %Rec         1           ND         0.024         mg/Kg         1           ND         0.048         mg/Kg         1           ND         0.048         mg/Kg         1           ND         0.096         mg/Kg         1           ND         0.096         mg/Kg         1           ND         0.096         mg/Kg         1           ND         0.096         mg/Kg         1           91.7         70-130         %Rec         1           102         70-130         %Rec         1</td><td>ND         59         mg/Kg         20         5/23/2020 2:36:18 PM           ND         59         mg/Kg         20         5/23/2020 2:36:18 PM           ND         4.8         mg/Kg         1         5/21/2020 4:30:32 AM           97.3         70-130         %Rec         1         5/21/2020 4:30:32 AM           ND         4.8         mg/Kg         1         5/21/2020 4:30:32 AM           NNCS         Analyst           ND         9.6         mg/Kg         1         5/22/2020 6:56:55 AM           ND         48         mg/Kg         1         5/22/2020 6:56:55 AM           92.5         55.1-146         %Rec         1         5/22/2020 6:56:55 AM           92.5         55.1-146         %Rec         1         5/21/2020 4:30:32 AM           ND         0.024         mg/Kg         1         5/21/2020 4:30:32 AM           ND         0.048         mg/Kg         1         5/21/2020 4:30:32 AM           ND         0.048         mg/Kg         1         5/21/2020 4:30:32 AM           ND         0.096         mg/Kg         1         5/21/2020 4:30:32 AM           ND         0.096         mg/Kg         1         5/21/2020 4:30:32 AM</td></t<>	ND         59         mg/Kg         20           ND         4.8         mg/Kg         1           97.3         70-130         %Rec         1           ND         9.6         mg/Kg         1           ND         9.6         mg/Kg         1           ND         48         mg/Kg         1           92.5         55.1-146         %Rec         1           ND         0.024         mg/Kg         1           ND         0.048         mg/Kg         1           ND         0.048         mg/Kg         1           ND         0.096         mg/Kg         1           ND         0.096         mg/Kg         1           ND         0.096         mg/Kg         1           ND         0.096         mg/Kg         1           91.7         70-130         %Rec         1           102         70-130         %Rec         1	ND         59         mg/Kg         20         5/23/2020 2:36:18 PM           ND         59         mg/Kg         20         5/23/2020 2:36:18 PM           ND         4.8         mg/Kg         1         5/21/2020 4:30:32 AM           97.3         70-130         %Rec         1         5/21/2020 4:30:32 AM           ND         4.8         mg/Kg         1         5/21/2020 4:30:32 AM           NNCS         Analyst           ND         9.6         mg/Kg         1         5/22/2020 6:56:55 AM           ND         48         mg/Kg         1         5/22/2020 6:56:55 AM           92.5         55.1-146         %Rec         1         5/22/2020 6:56:55 AM           92.5         55.1-146         %Rec         1         5/21/2020 4:30:32 AM           ND         0.024         mg/Kg         1         5/21/2020 4:30:32 AM           ND         0.048         mg/Kg         1         5/21/2020 4:30:32 AM           ND         0.048         mg/Kg         1         5/21/2020 4:30:32 AM           ND         0.096         mg/Kg         1         5/21/2020 4:30:32 AM           ND         0.096         mg/Kg         1         5/21/2020 4:30:32 AM

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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Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT:	Safety & Environmental Solution	ons	Cl	ient Sample II	): Ał	I-13 Surface South Wa	.11
Project:	Devon Cotton Draw 221H		(	Collection Dat	e: 5/1	5/2020 10:40:00 AM	
Lab ID:	2005796-007	Matrix: SOIL		<b>Received Dat</b>	e: 5/1	9/2020 9:30:00 AM	
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS					Analyst	MRA
Chloride		310	60	mg/Kg	20	5/23/2020 2:48:43 PM	52665
EPA MET	HOD 8015D MOD: GASOLINE I	RANGE				Analyst	: JMR
Gasoline	Range Organics (GRO)	ND	4.8	mg/Kg	1	5/21/2020 4:59:06 AM	52570
Surr: B	FB	94.1	70-130	%Rec	1	5/21/2020 4:59:06 AM	52570
EPA MET	HOD 8015M/D: DIESEL RANGE	E ORGANICS				Analyst	BRM
Diesel Ra	ange Organics (DRO)	ND	10	mg/Kg	1	5/22/2020 7:21:00 AM	52589
Motor Oil	Range Organics (MRO)	ND	50	mg/Kg	1	5/22/2020 7:21:00 AM	52589
Surr: D	NOP	66.7	55.1-146	%Rec	1	5/22/2020 7:21:00 AM	52589
EPA MET	HOD 8260B: VOLATILES SHO	RT LIST				Analyst	: JMR
Benzene		ND	0.024	mg/Kg	1	5/21/2020 4:59:06 AM	52570
Toluene		ND	0.048	mg/Kg	1	5/21/2020 4:59:06 AM	52570
Ethylbenz	zene	ND	0.048	mg/Kg	1	5/21/2020 4:59:06 AM	52570
Xylenes,	Total	ND	0.096	mg/Kg	1	5/21/2020 4:59:06 AM	52570
Surr: 1	,2-Dichloroethane-d4	84.2	70-130	%Rec	1	5/21/2020 4:59:06 AM	52570
Surr: 4	-Bromofluorobenzene	88.7	70-130	%Rec	1	5/21/2020 4:59:06 AM	52570
Surr: D	Dibromofluoromethane	101	70-130	%Rec	1	5/21/2020 4:59:06 AM	52570
Surr: T	oluene-d8	93.5	70-130	%Rec	1	5/21/2020 4:59:06 AM	52570

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 ID:

Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

2005796-008

Devon Cotton Draw 221H

Client Sample ID: AH-13 1 ft South Wall Collection Date: 5/15/2020 10:50:00 AM Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	240	60	mg/Kg	20	5/23/2020 3:01:07 PM	52665
EPA METHOD 8015D MOD: GASOLINE RANGE	i i				Analyst	JMR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/21/2020 5:27:46 AM	52570
Surr: BFB	96.9	70-130	%Rec	1	5/21/2020 5:27:46 AM	52570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	5/22/2020 7:44:54 AM	52589
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	5/22/2020 7:44:54 AM	52589
Surr: DNOP	106	55.1-146	%Rec	1	5/22/2020 7:44:54 AM	52589
EPA METHOD 8260B: VOLATILES SHORT LIST	г				Analyst	: JMR
Benzene	ND	0.025	mg/Kg	1	5/21/2020 5:27:46 AM	52570
Toluene	ND	0.050	mg/Kg	1	5/21/2020 5:27:46 AM	52570
Ethylbenzene	ND	0.050	mg/Kg	1	5/21/2020 5:27:46 AM	52570
Xylenes, Total	ND	0.10	mg/Kg	1	5/21/2020 5:27:46 AM	52570
Surr: 1,2-Dichloroethane-d4	85.4	70-130	%Rec	1	5/21/2020 5:27:46 AM	52570
Surr: 4-Bromofluorobenzene	91.7	70-130	%Rec	1	5/21/2020 5:27:46 AM	52570
Surr: Dibromofluoromethane	104	70-130	%Rec	1	5/21/2020 5:27:46 AM	52570
Surr: Toluene-d8	96.2	70-130	%Rec	1	5/21/2020 5:27:46 AM	52570

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 ID:

Analyses

**Analytical Report** Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions Client Sample ID: AH-14 Surface South Wall Devon Cotton Draw 221H Collection Date: 5/15/2020 11:00:00 AM 2005796-009 Matrix: SOIL Received Date: 5/19/2020 9:30:00 AM Result **RL** Oual Units **DF** Date Analyzed Batch Analyst: MRA **EPA METHOD 300.0: ANIONS** 52665 ~~~ ~~ .... E/22/2020 2:20:21 DM 20 0

Chloride	290	60	mg/Kg	20	5/23/2020 3:38:21 PM	52665
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/21/2020 5:56:20 AM	52570
Surr: BFB	94.5	70-130	%Rec	1	5/21/2020 5:56:20 AM	52570
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	lics				Analyst	BRM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/22/2020 8:08:56 AM	52589
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	5/22/2020 8:08:56 AM	52589
Surr: DNOP	71.6	55.1-146	%Rec	1	5/22/2020 8:08:56 AM	52589
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	JMR
EPA METHOD 8260B: VOLATILES SHORT LIST Benzene	ND	0.024	mg/Kg	1	Analyst: 5/21/2020 5:56:20 AM	<b>JMR</b> 52570
	ND ND	0.024 0.047	mg/Kg mg/Kg	1 1		
Benzene			0 0	1 1 1	5/21/2020 5:56:20 AM	52570
Benzene Toluene	ND	0.047	mg/Kg	•	5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM	52570 52570
Benzene Toluene Ethylbenzene	ND ND	0.047 0.047	mg/Kg mg/Kg	•	5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM	52570 52570 52570
Benzene Toluene Ethylbenzene Xylenes, Total	ND ND ND	0.047 0.047 0.095	mg/Kg mg/Kg mg/Kg	1 1	5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM	52570 52570 52570 52570
Benzene Toluene Ethylbenzene Xylenes, Total Surr: 1,2-Dichloroethane-d4	ND ND ND 84.9	0.047 0.047 0.095 70-130	mg/Kg mg/Kg mg/Kg %Rec	1 1 1	5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM 5/21/2020 5:56:20 AM	52570 52570 52570 52570 52570

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

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

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Lab ID:

Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

2005796-010

Devon Cotton Draw 221H

Client Sample ID: AH-14 1 ft South Wall Collection Date: 5/15/2020 11:10:00 AM Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	5/23/2020 3:50:45 PM	52665
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/21/2020 6:24:46 AM	52570
Surr: BFB	94.3	70-130	%Rec	1	5/21/2020 6:24:46 AM	52570
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	5/22/2020 8:32:51 AM	52589
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	5/22/2020 8:32:51 AM	52589
Surr: DNOP	95.3	55.1-146	%Rec	1	5/22/2020 8:32:51 AM	52589
EPA METHOD 8260B: VOLATILES SHORT LIS	т				Analyst	: JMR
Benzene	ND	0.024	mg/Kg	1	5/21/2020 6:24:46 AM	52570
Toluene	ND	0.048	mg/Kg	1	5/21/2020 6:24:46 AM	52570
Ethylbenzene	ND	0.048	mg/Kg	1	5/21/2020 6:24:46 AM	52570
Xylenes, Total	ND	0.096	mg/Kg	1	5/21/2020 6:24:46 AM	52570
Surr: 1,2-Dichloroethane-d4	86.3	70-130	%Rec	1	5/21/2020 6:24:46 AM	52570
Surr: 4-Bromofluorobenzene	90.5	70-130	%Rec	1	5/21/2020 6:24:46 AM	52570
Surr: Dibromofluoromethane	102	70-130	%Rec	1	5/21/2020 6:24:46 AM	52570
Surr: Toluene-d8	93.9	70-130	%Rec	1	5/21/2020 6:24:46 AM	52570

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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Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

5/21/2020 6:53:24 AM

52570

52570

52570

52570

52570

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions Client Sample ID: AH-15 Surface West Wall **Project:** Devon Cotton Draw 221H Collection Date: 5/15/2020 11:20:00 AM Lab ID: 2005796-011 Matrix: SOIL Received Date: 5/19/2020 9:30:00 AM Result **RL** Oual Units **DF** Date Analyzed Batch Analyses **EPA METHOD 300.0: ANIONS** Analyst: MRA Chloride 280 60 mg/Kg 20 5/23/2020 4:03:09 PM 52665 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 5/21/2020 6:53:24 AM 52570 Surr: BFB 98.0 70-130 %Rec 1 5/21/2020 6:53:24 AM 52570 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM **Diesel Range Organics (DRO)** ND 9.3 mg/Kg 1 5/22/2020 8:56:57 AM 52589 Motor Oil Range Organics (MRO) ND mg/Kg 1 52589 47 5/22/2020 8:56:57 AM Surr: DNOP 50.8 55.1-146 S %Rec 5/22/2020 8:56:57 AM 52589 1 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR ND 5/21/2020 6:53:24 AM Benzene 0.023 mg/Kg 52570 1 Toluene ND 0.047 mg/Kg 1 5/21/2020 6:53:24 AM 52570 Ethylbenzene ND 0.047 mg/Kg 1 5/21/2020 6:53:24 AM 52570

ND

88.7

90.9

105

95.9

0.093

70-130

70-130

70-130

70-130

mg/Kg

%Rec

%Rec

%Rec

%Rec

1

1

1

1

1

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

Qualifiers:

Xylenes, Total

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

- \* 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
- P Sample pH Not In RL Reporting Limit

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Lab ID:

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Analytical Report Lab Order 2005796

Date Reported: 5/26/2020

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Safety & Environmental Solutions

2005796-012

Devon Cotton Draw 221H

 Client Sample ID: AH-15 1 ft West Wall

 Collection Date: 5/15/2020 11:35:00 AM

 Matrix: SOIL
 Received Date: 5/19/2020 9:30:00 AM

 Barrit
 DL Outed Units
 DE Date Analyzed

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	t: MRA
Chloride	230	60	mg/Kg	20	5/23/2020 4:15:33 PM	52665
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst	t: JMR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/21/2020 7:22:05 AM	52570
Surr: BFB	95.3	70-130	%Rec	1	5/21/2020 7:22:05 AM	52570
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	t: BRM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	5/22/2020 9:21:00 AM	52589
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/22/2020 9:21:00 AM	52589
Surr: DNOP	89.0	55.1-146	%Rec	1	5/22/2020 9:21:00 AM	52589
EPA METHOD 8260B: VOLATILES SHORT LIS	т				Analyst	t: JMR
Benzene	ND	0.024	mg/Kg	1	5/21/2020 7:22:05 AM	52570
Toluene	ND	0.048	mg/Kg	1	5/21/2020 7:22:05 AM	52570
Ethylbenzene	ND	0.048	mg/Kg	1	5/21/2020 7:22:05 AM	52570
Xylenes, Total	ND	0.096	mg/Kg	1	5/21/2020 7:22:05 AM	52570
Surr: 1,2-Dichloroethane-d4	85.3	70-130	%Rec	1	5/21/2020 7:22:05 AM	52570
Surr: 4-Bromofluorobenzene	90.7	70-130	%Rec	1	5/21/2020 7:22:05 AM	52570
Surr: Dibromofluoromethane	99.8	70-130	%Rec	1	5/21/2020 7:22:05 AM	52570
Surr: Toluene-d8	94.2	70-130	%Rec	1	5/21/2020 7:22:05 AM	52570

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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5	& Environmental Solutions Cotton Draw 221H		
Sample ID: MB-52665	SampType: mblk	TestCode: EPA Method 300.0: Anions	
Client ID: PBS	Batch ID: 52665	RunNo: 69127	
Prep Date: 5/23/2020	Analysis Date: 5/23/2020	SeqNo: 2395485 Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5		
Sample ID: LCS-52665	SampType: Ics	TestCode: EPA Method 300.0: Anions	
Client ID: LCSS	Batch ID: 52665	RunNo: 69127	
Prep Date: 5/23/2020	Analysis Date: 5/23/2020	SeqNo: 2395486 Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD	RPDLimit Qual
Chloride	14 1.5 15.00	0 93.1 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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2005796

26-May-20

WO#:

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Sa	fety & Environm	ental So	olutions							
Project: De	von Cotton Drav	w 221H								
Sample ID: LCS-52589	Samp	Type: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batc	h ID: 52	589	F	RunNo: 6	9011				
Prep Date: 5/20/2020	Analysis I	Date: 5/	22/2020	S	SeqNo: 2	392465	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO	) 57	10	50.00	0	114	70	130			
Surr: DNOP	5.2		5.000		104	55.1	146			
Sample ID: MB-52589	Samp	Type: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batc	h ID: 52	589	F	RunNo: 6	9011				
Prep Date: 5/20/2020	Analysis I	Date: 5/	22/2020	5	SeqNo: 2	392471	Units: <b>mg/k</b>	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO	) ND	10								
Motor Oil Range Organics (M	RO) ND	50								
Surr: DNOP	12		10.00		122	55.1	146			

Qualifiers:

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

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

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2005796

26-May-20

WO#:

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

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WO#:	2005796

26-May-20

/ & Environm	ental Sc	lutions										
1 Cotton Draw	v 221H											
Sample ID: mb-52570 SampType: MBLK				TestCode: EPA Method 8260B: Volatiles Short List								
Batc	Batch ID: 52570			RunNo: <b>69064</b>								
Analysis E	Date: 5/	20/2020	S	SeqNo: 2391817		Units: mg/K	g					
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
ND	0.025											
ND	0.050											
ND	0.050											
ND	0.10											
0.44		0.5000		88.0	70	130						
0.46		0.5000		92.4	70	130						
0.51		0.5000		103	70	130						
0.48		0.5000		95.1	70	130						
SampT	Гуре: <b>LC</b>	S4	Tes	Code: El	PA Method	8260B: Volat	iles Short	List				
•	Гуре: <b>LC</b> h ID: <b>52</b>			Code: El		8260B: Volat	iles Short	List				
•	h ID: 52	570	F		9064	8260B: Volat Units: mg/K		List				
Batcl	h ID: 52	570 20/2020	F	unNo: 6	9064			<b>List</b> RPDLimit	Qual			
Batcl Analysis D	h ID: <b>52</b> Date: <b>5/</b>	570 20/2020	F S	unNo: <b>6</b> 9 GeqNo: <b>2</b> 3	9064 391818	Units: mg/K	g		Qual			
Batcl Analysis D Result	h ID: <b>52</b> Date: <b>5/</b> PQL	570 20/2020 SPK value	R S SPK Ref Val	unNo: 69 6eqNo: 23 %REC	9064 391818 LowLimit	Units: <b>mg/K</b> HighLimit	g		Qual			
Batcl Analysis D Result 1.1	h ID: <b>52</b> Date: <b>5/</b> PQL 0.025	570 20/2020 SPK value 1.000	F S SPK Ref Val 0	unNo: 69 6eqNo: 23 %REC 107	<b>2064</b> <b>391818</b> LowLimit 80	Units: <b>mg/K</b> HighLimit 120	g		Qual			
Batcl Analysis E Result 1.1 1.0	h ID: <b>52</b> Date: <b>5/</b> PQL 0.025 0.050	570 20/2020 SPK value 1.000 1.000	F S SPK Ref Val 0 0	anNo: 69 aqNo: 23 <u>%REC</u> 107 102	<b>391818</b> LowLimit 80 80	Units: <b>mg/K</b> HighLimit 120 120	g		Qual			
Batcl Analysis E Result 1.1 1.0 1.1	h ID: <b>52</b> Date: <b>5</b> / PQL 0.025 0.050 0.050	570 20/2020 SPK value 1.000 1.000 1.000	F S SPK Ref Val 0 0 0	unNo: 69 aeqNo: 23 <u>%REC</u> 107 102 109	<b>2064</b> <b>391818</b> LowLimit 80 80 80 80	Units: <b>mg/K</b> HighLimit 120 120 120	g		Qual			
Batcl Analysis E Result 1.1 1.0 1.1 3.2	h ID: <b>52</b> Date: <b>5</b> / PQL 0.025 0.050 0.050	570 20/2020 SPK value 1.000 1.000 3.000	F S SPK Ref Val 0 0 0	eqNo: 69 69 60 707 107 102 109 107	2064 391818 LowLimit 80 80 80 80	Units: <b>mg/K</b> HighLimit 120 120 120 120	g		Qual			
Batcl Analysis E Result 1.1 1.0 1.1 3.2 0.44	h ID: <b>52</b> Date: <b>5</b> / PQL 0.025 0.050 0.050	570 20/2020 SPK value 1.000 1.000 1.000 3.000 0.5000	F S SPK Ref Val 0 0 0	eunNo: 69 6900: 23 707 107 102 109 107 87.3	2064 391818 LowLimit 80 80 80 80 80 70	Units: <b>mg/K</b> HighLimit 120 120 120 120 130	g		Qual			
	n Cotton Drav Samp Batc Analysis I Result ND ND ND 0.44 0.46 0.51	A Cotton Draw 221H SampType: ME Batch ID: 52 Analysis Date: 5/ Result PQL ND 0.025 ND 0.050 ND 0.050 ND 0.10 0.44 0.46 0.51	SampType: MBLK           Batch ID: 52570           Analysis Date: 5/20/2020           Result         PQL         SPK value           ND         0.025         ND         0.050           ND         0.050         VD         0.050           ND         0.010         0.044         0.5000           0.44         0.5000         0.5000         0.5000           0.51         0.5000         0.5000         0.5000	A Cotton Draw 221H           SampType: MBLK         Test           Batch ID:         52570         R           Analysis Date:         5/20/2020         S           Result         PQL         SPK value         SPK Ref Val           ND         0.025         S         S           ND         0.050         S         S           ND         0.050         S         S           ND         0.050         S         S           0.44         0.5000         0.46         0.5000           0.51         0.5000         S	A Cotton Draw 221H           SampType: MBLK         TestCode: EF           Batch ID:         52570         RunNo: 63           Analysis Date:         5/20/2020         SeqNo: 23           Result         PQL         SPK value         SPK Ref Val         % REC           ND         0.025         ND         0.050         88.0           ND         0.10         92.4         0.5000         103	A Cotton Draw 221H         SampType: MBLK       TestCode: EPA Method         Batch ID:       52570       RunNo: 69064         Analysis Date:       5/20/2020       SeqNo: 2391817         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit         ND       0.025       0.050       0.050       0.050       0.050       0.044       0.5000       88.0       70         0.44       0.5000       88.0       70       0.46       0.5000       92.4       70         0.51       0.5000       103       70	A Cotton Draw 221H         TestCode: EPA Method 8260B: Volat         Batch ID:       52570       RunNo:       69064         Analysis Date:       5/20/2020       SeqNo:       2391817       Units:       mg/K         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit         ND       0.025       ND       0.050       ND       0.10       70       130         0.44       0.5000       88.0       70       130       130       130         0.46       0.5000       103       70       130	A Cotton Draw 221H         TestCode: EPA Method 8260B: Volatiles Short         Batch ID:       52570       RunNo:       69064         Analysis Date:       5/20/2020       SeqNo:       2391817       Units:       mg/Kg         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD         ND       0.025       ND       0.050       ND       0.10       ND       0.10         ND       0.10       88.0       70       130       130       130         0.46       0.5000       92.4       70       130       130         0.51       0.5000       103       70       130	A Cotton Draw 221H         TestCode: EPA Method 8260B: Volatiles Short List         Batch ID: 52570       RunNo: 69064         Analysis Date: 5/20/2020       SeqNo: 2391817       Units: mg/Kg         Result       PQL       SPK value       SPK Ref Val       % REC       LowLimit       HighLimit       % RPD RPDLimit         ND       0.025       K			

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.

5	z Environm Cotton Drav		olutions								
Sample ID: mb-52570 SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 52570			RunNo: 69064							
Prep Date: 5/19/2020	Analysis Date: 5/20/2020			SeqNo: 2391843			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	480		500.0		96.1	70	130				
Sample ID: Ics-52570	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline I	Range		
Client ID: LCSS	Batch ID: 52570			RunNo: 69064							
Prep Date: 5/19/2020	Analysis D	Date: 5/	20/2020	SeqNo: 2391844			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	80.8	70	130				
Surr: BFB	480		500.0		96.2	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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2005796

26-May-20

WO#:

ANALYSIS			TEL: 50	Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com				Sample Log-In Check List			
Client Name	Safety En	v Solutions	Work Ord	er Number: 2	005796			RcptNo: 1			
Received B	/: Isaiah Or	rtiz	5/19/2020 9	:30:00 AM		ŢŢ	E-, (	0×			
Completed E Reviewed By	Ib	rtiz	5/19/2020 9 5/19/10	:57:04 AM		11	5-0	24			
<u>Chain of C</u>	ustody										
1. Is Chain o	of Custody comp	plete?		1	'es 🔽	N	o 🗌	Not Present			
2. How was	the sample deli	vered?		<u>(</u>	ourier						
Log In 3. Was an a	tempt made to	cool the sample	es?	Y	es 🔽	N	•				
4. Were all s	amples receive	d at a temperati	ure of >0° C to 6.	0°C \	es 🔽	N	•				
	in proper conta				es 🔽		•				
		for indicated tes			es 🗹	N	_				
	rvative added to		perly preserved?		es 🔽	N					
o. was prese	Ivalive added (	o bottles?		1	es 🗌	140					
9. Received a	it least 1 vial wi	th headspace <	1/4" for AQ VOA?	y Y	es 🗌	N		NA 🗹			
10. Were any	sample contain	ers received bro	oken?	Y	es 🗆	N	• 🔽	# of preserved			
	rwork match bo epancies on ch			Y	es 🔽	N	•	bottles checked for pH: (<2 or >12 unless noted)			
2. Are matrice	es correctly ider	ntified on Chain	of Custody?	Y	es 🗸	No		Adjusted?			
3. Is it clear v	/hat analyses w	vere requested?		Y	es 🗸	N					
	olding times abl y customer for a			Y	es 🗸	No		Checked by: Em 5/19/20			
Special Har	dling (if ap)	plicable)									
15. Was clien	notified of all d	liscrepancies wi	th this order?	Y	es 🗌	N	•	NA 🗹			
Pers	on Notified:	1		Date:							
By V	Vhom:			Via:	eMail	Phone [	Fax	In Person			
	arding: nt Instructions:	-									
16. Additiona											
17. <u>Cooler In</u>											
Cooler 1	No Temp °C 1.0	and the second distance in the second second	Seal Intact Se Not Present	al No Sea	l Date	Signe	d By				

Page 1 of 1

Received by OCD: 11/9/2022 S	:02:46 AM	Page 37 of
HALL ENVIRONMENTAL ANALYSIS LABORATOR www.hallenvironmental.com kins NE - Albuquerque, NM 87109 345-3975 Fax 505-345-4107 Analysis Request	8260 (VOA) 8270 (Semi-VOA) Total Coliform (Present/Absent) CULA-ALA	II General
HALL E ANALY www.hallen 4901 Hawkins NE - Al Tel. 505-345-3975 Anal	EDB (Method 504.1) PAHs by 8310 or 8270SIMS RCRA 8 Metals Cl, F, Br, NO₃, NO₂, PO₄, SO₄	in the sect Bin th
4901 H	BTEX / MTBE / TMB's (8021) TPH:8015D(GRO / DRO / MRO) 8081 Pesticides/8082 PCB's	Remarks:
Sday Turn Rush Uon Uon 221 H	Sab Ino Colert 10 (°C ZOOS796	-001 -002 -005 -005 -006 -006 -006 -006 -006 -006
D D D D D D	Iger:	Via:
Turn-Around Time:	Project Manager	Received by
Chain-of-Custody Record : Sylety + 6nu manymed Solution g Adress: 703 & Climton 46 bbs Nill 88240 e#: 575-397-0570		$\begin{array}{c c c c c c c c c c c c c c c c c c c $
in-of-Cu Jut t 61 Solut Solut Solut	□ Az Con □ Other Matrix	ABON AND AND AND AND AND AND AND AND AND AN
Client: Chain- Client: Client: Mailing Address:	email or Fax#: QA/QC Package: Accreditation: DELAC CType)	53/15 8930 0646 0646 000 000 000 000 000



March 31, 2020

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

RE: Cotton Draw 221 Devon

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

Hall Environmental Analysis Laboratory

OrderNo.: 2003B53

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/25/2020 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Lab ID:

**CLIENT:** Safety Environmental Services

2003B53-001

Cotton Draw 221 Devon

Analytical Report Lab Order 2003B53

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2020

Client Sample ID: SP-1 Bottom 1.5' Collection Date: 3/23/2020 2:15:00 PM Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	140	59		mg/Kg	20	3/29/2020 7:43:59 PM	51389
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/29/2020 11:24:16 PM	51354
Surr: BFB	98.8	70-130		%Rec	1	3/29/2020 11:24:16 PM	51354
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst	CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/27/2020 9:47:40 AM	51355
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/27/2020 9:47:40 AM	51355
Surr: DNOP	101	55.1-146		%Rec	1	3/27/2020 9:47:40 AM	51355
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst	JMR
Benzene	ND	0.024		mg/Kg	1	3/29/2020 11:24:16 PM	51354
Toluene	ND	0.048		mg/Kg	1	3/29/2020 11:24:16 PM	51354
Ethylbenzene	ND	0.048		mg/Kg	1	3/29/2020 11:24:16 PM	51354
Xylenes, Total	ND	0.097		mg/Kg	1	3/29/2020 11:24:16 PM	51354
Surr: 1,2-Dichloroethane-d4	82.1	70-130		%Rec	1	3/29/2020 11:24:16 PM	51354
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	3/29/2020 11:24:16 PM	51354
Surr: Dibromofluoromethane	101	70-130		%Rec	1	3/29/2020 11:24:16 PM	51354
Surr: Toluene-d8	106	70-130		%Rec	1	3/29/2020 11:24:16 PM	51354

Matrix: SOIL

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

Qualifiers:

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

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

Page 1 of 14

Lab ID:

**CLIENT:** Safety Environmental Services

2003B53-002

Cotton Draw 221 Devon

Analytical Report Lab Order 2003B53

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2020

Client Sample ID: SP-2 BottoM 1.5' Collection Date: 3/23/2020 2:35:00 PM Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	84	60		mg/Kg	20	3/29/2020 8:21:13 PM	51389
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/30/2020 12:50:21 AM	51354
Surr: BFB	95.5	70-130		%Rec	1	3/30/2020 12:50:21 AM	51354
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst	CLP
Diesel Range Organics (DRO)	83	9.4		mg/Kg	1	3/27/2020 10:59:42 AM	51355
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/27/2020 10:59:42 AM	51355
Surr: DNOP	94.8	55.1-146		%Rec	1	3/27/2020 10:59:42 AM	51355
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst	: JMR
Benzene	ND	0.024		mg/Kg	1	3/30/2020 12:50:21 AM	51354
Toluene	ND	0.049		mg/Kg	1	3/30/2020 12:50:21 AM	51354
Ethylbenzene	ND	0.049		mg/Kg	1	3/30/2020 12:50:21 AM	51354
Xylenes, Total	ND	0.097		mg/Kg	1	3/30/2020 12:50:21 AM	51354
Surr: 1,2-Dichloroethane-d4	80.3	70-130		%Rec	1	3/30/2020 12:50:21 AM	51354
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	3/30/2020 12:50:21 AM	51354
Surr: Dibromofluoromethane	100	70-130		%Rec	1	3/30/2020 12:50:21 AM	51354
Surr: Toluene-d8	102	70-130		%Rec	1	3/30/2020 12:50:21 AM	51354

Matrix: SOIL

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

Qualifiers:

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

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

Page 2 of 14

Lab ID:

**CLIENT:** Safety Environmental Services

2003B53-003

Cotton Draw 221 Devon

Analytical Report Lab Order 2003B53

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2020

Client Sample ID: SP-3 West Wall Collection Date: 3/23/2020 2:55:00 PM Received Date: 3/25/2020 8:30:00 AM

	IA. DOIL	<b>Accelved Date:</b> 5/25/2020 0.50.00 7401					
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	110	59	mg/Kg	20	3/29/2020 8:33:38 PM	51389	
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: JMR	
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	3/30/2020 2:16:29 AM	51354	
Surr: BFB	98.9	70-130	%Rec	1	3/30/2020 2:16:29 AM	51354	
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	: CLP	
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	3/27/2020 11:23:36 AM	51355	
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/27/2020 11:23:36 AM	51355	
Surr: DNOP	101	55.1-146	%Rec	1	3/27/2020 11:23:36 AM	51355	
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	: JMR	
Benzene	ND	0.023	mg/Kg	1	3/30/2020 2:16:29 AM	51354	
Toluene	ND	0.046	mg/Kg	1	3/30/2020 2:16:29 AM	51354	
Ethylbenzene	ND	0.046	mg/Kg	1	3/30/2020 2:16:29 AM	51354	
Xylenes, Total	ND	0.092	mg/Kg	1	3/30/2020 2:16:29 AM	51354	
Surr: 1,2-Dichloroethane-d4	70.7	70-130	%Rec	1	3/30/2020 2:16:29 AM	51354	
Surr: 4-Bromofluorobenzene	97.4	70-130	%Rec	1	3/30/2020 2:16:29 AM	51354	
Surr: Dibromofluoromethane	103	70-130	%Rec	1	3/30/2020 2:16:29 AM	51354	
Surr: Toluene-d8	106	70-130	%Rec	1	3/30/2020 2:16:29 AM	51354	

Matrix: SOIL

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

Qualifiers:

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

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

Page 3 of 14

Lab ID:

**CLIENT:** Safety Environmental Services

2003B53-004

Cotton Draw 221 Devon

Analytical Report Lab Order 2003B53

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2020

Client Sample ID: SP-4 North Wall Collection Date: 3/24/2020 8:40:00 AM Received Date: 3/25/2020 8:30:00 AM

	III JOIL		<b>Received Date:</b> 5/25/2020 0.50.00 7110				
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	MRA	
Chloride	100	60	mg/Kg	20	3/29/2020 8:46:03 PM	51389	
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: JMR	
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/30/2020 2:45:10 AM	51354	
Surr: BFB	100	70-130	%Rec	1	3/30/2020 2:45:10 AM	51354	
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	: CLP	
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	3/27/2020 11:47:33 AM	51355	
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	3/27/2020 11:47:33 AM	51355	
Surr: DNOP	100	55.1-146	%Rec	1	3/27/2020 11:47:33 AM	51355	
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	: JMR	
Benzene	ND	0.025	mg/Kg	1	3/30/2020 2:45:10 AM	51354	
Toluene	ND	0.050	mg/Kg	1	3/30/2020 2:45:10 AM	51354	
Ethylbenzene	ND	0.050	mg/Kg	1	3/30/2020 2:45:10 AM	51354	
Xylenes, Total	ND	0.10	mg/Kg	1	3/30/2020 2:45:10 AM	51354	
Surr: 1,2-Dichloroethane-d4	76.5	70-130	%Rec	1	3/30/2020 2:45:10 AM	51354	
Surr: 4-Bromofluorobenzene	95.2	70-130	%Rec	1	3/30/2020 2:45:10 AM	51354	
Surr: Dibromofluoromethane	99.3	70-130	%Rec	1	3/30/2020 2:45:10 AM	51354	
Surr: Toluene-d8	105	70-130	%Rec	1	3/30/2020 2:45:10 AM	51354	

Matrix: SOIL

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

Qualifiers:

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

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

Page 4 of 14

Lab ID:

**CLIENT:** Safety Environmental Services

2003B53-005

Cotton Draw 221 Devon

Analytical Report Lab Order 2003B53

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2020

Client Sample ID: SP-5 East Wall Collection Date: 3/24/2020 8:45:00 AM Received Date: 3/25/2020 8:30:00 AM

Analyzed	Batch
Analyst:	MRA
2020 8:58:27 PM	51389
Analyst:	JMR
2020 3:13:50 AM	51354
2020 3:13:50 AM	51354
Analyst:	CLP
2020 12:11:31 PM	51355
2020 12:11:31 PM	51355
2020 12:11:31 PM	51355
Analyst:	JMR
2020 3:13:50 AM	51354

Matrix: SOIL

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

Qualifiers:

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

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

Page 5 of 14

Lab ID:

**CLIENT:** Safety Environmental Services

2003B53-006

Cotton Draw 221 Devon

Analytical Report Lab Order 2003B53

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2020

Client Sample ID: SP-6 Bottom 1' Collection Date: 3/24/2020 8:55:00 AM Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	580	60	mg/Kg	20	3/29/2020 9:35:40 PM	51389
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst	: JMR
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	3/30/2020 3:42:28 AM	51354
Surr: BFB	94.9	70-130	%Rec	1	3/30/2020 3:42:28 AM	51354
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst	CLP
Diesel Range Organics (DRO)	79	9.9	mg/Kg	1	3/27/2020 12:35:32 PM	51355
Motor Oil Range Organics (MRO)	81	50	mg/Kg	1	3/27/2020 12:35:32 PM	51355
Surr: DNOP	91.1	55.1-146	%Rec	1	3/27/2020 12:35:32 PM	51355
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst	: JMR
Benzene	ND	0.024	mg/Kg	1	3/30/2020 3:42:28 AM	51354
Toluene	ND	0.047	mg/Kg	1	3/30/2020 3:42:28 AM	51354
Ethylbenzene	ND	0.047	mg/Kg	1	3/30/2020 3:42:28 AM	51354
Xylenes, Total	ND	0.095	mg/Kg	1	3/30/2020 3:42:28 AM	51354
Surr: 1,2-Dichloroethane-d4	76.8	70-130	%Rec	1	3/30/2020 3:42:28 AM	51354
Surr: 4-Bromofluorobenzene	95.1	70-130	%Rec	1	3/30/2020 3:42:28 AM	51354
Surr: Dibromofluoromethane	97.0	70-130	%Rec	1	3/30/2020 3:42:28 AM	51354
Surr: Toluene-d8	104	70-130	%Rec	1	3/30/2020 3:42:28 AM	51354

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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**CLIENT:** Safety Environmental Services

Cotton Draw 221 Devon

Analytical Report Lab Order 2003B53

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2020

Client Sample ID: SP-7 Bottom 1' Collection Date: 3/24/2020 9:10:00 AM Received Date: 3/25/2020 8:30:00 AM

Lab ID: 2003B53-007	Matrix: SOIL Received Date: 3/2			25/2020 8:30:00 AM		
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	840	60	mg/Kg	20	3/29/2020 9:48:04 PM	51389
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	3/30/2020 4:11:06 AM	51354
Surr: BFB	94.9	70-130	%Rec	1	3/30/2020 4:11:06 AM	51354
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst	CLP
Diesel Range Organics (DRO)	69	9.6	mg/Kg	1	3/27/2020 12:59:33 PM	51355
Motor Oil Range Organics (MRO)	79	48	mg/Kg	1	3/27/2020 12:59:33 PM	51355
Surr: DNOP	96.0	55.1-146	%Rec	1	3/27/2020 12:59:33 PM	51355
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	: JMR
Benzene	ND	0.023	mg/Kg	1	3/30/2020 4:11:06 AM	51354
Toluene	ND	0.046	mg/Kg	1	3/30/2020 4:11:06 AM	51354
Ethylbenzene	ND	0.046	mg/Kg	1	3/30/2020 4:11:06 AM	51354
Xylenes, Total	ND	0.093	mg/Kg	1	3/30/2020 4:11:06 AM	51354
Surr: 1,2-Dichloroethane-d4	79.9	70-130	%Rec	1	3/30/2020 4:11:06 AM	51354
Surr: 4-Bromofluorobenzene	94.7	70-130	%Rec	1	3/30/2020 4:11:06 AM	51354
Surr: Dibromofluoromethane	96.6	70-130	%Rec	1	3/30/2020 4:11:06 AM	51354
Surr: Toluene-d8	99.5	70-130	%Rec	1	3/30/2020 4:11:06 AM	51354

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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**CLIENT:** Safety Environmental Services

Cotton Draw 221 Devon

Analytical Report Lab Order 2003B53

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2020

Client Sample ID: SP-8 South Wall Collection Date: 3/24/2020 9:30:00 AM Received Date: 3/25/2020 8:30:00 AM

Lab ID: 2003B53-008	Matrix: SOIL	Received Date: 3/25/2020 8:30:00 AM			25/2020 8:30:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	1200	60	mg/Kg	20	3/29/2020 10:00:29 PM	51389
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	3/30/2020 4:39:42 AM	51354
Surr: BFB	101	70-130	%Rec	1	3/30/2020 4:39:42 AM	51354
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst	CLP
Diesel Range Organics (DRO)	52	9.9	mg/Kg	1	3/27/2020 1:23:38 PM	51355
Motor Oil Range Organics (MRO)	59	49	mg/Kg	1	3/27/2020 1:23:38 PM	51355
Surr: DNOP	97.1	55.1-146	%Rec	1	3/27/2020 1:23:38 PM	51355
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst	JMR
Benzene	ND	0.023	mg/Kg	1	3/30/2020 4:39:42 AM	51354
Toluene	ND	0.046	mg/Kg	1	3/30/2020 4:39:42 AM	51354
Ethylbenzene	ND	0.046	mg/Kg	1	3/30/2020 4:39:42 AM	51354
Xylenes, Total	ND	0.092	mg/Kg	1	3/30/2020 4:39:42 AM	51354
Surr: 1,2-Dichloroethane-d4	70.2	70-130	%Rec	1	3/30/2020 4:39:42 AM	51354
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	3/30/2020 4:39:42 AM	51354
Surr: Dibromofluoromethane	103	70-130	%Rec	1	3/30/2020 4:39:42 AM	51354
Surr: Toluene-d8	105	70-130	%Rec	1	3/30/2020 4:39:42 AM	51354

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 ID:

**CLIENT:** Safety Environmental Services

2003B53-009

Cotton Draw 221 Devon

Analytical Report Lab Order 2003B53

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/31/2020

Client Sample ID: SP-9 Surface Collection Date: 3/24/2020 10:00:00 AM Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analyst	MRA			
Chloride	66	60	mg/Kg	20	3/29/2020 10:12:54 PM	51389			
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	JMR			
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	3/30/2020 12:45:17 PM	51354			
Surr: BFB	92.8	70-130	%Rec	1	3/30/2020 12:45:17 PM	51354			
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP			
Diesel Range Organics (DRO)	71	9.6	mg/Kg	1	3/27/2020 1:47:43 PM	51355			
Motor Oil Range Organics (MRO)	55	48	mg/Kg	1	3/27/2020 1:47:43 PM	51355			
Surr: DNOP	98.2	55.1-146	%Rec	1	3/27/2020 1:47:43 PM	51355			
EPA METHOD 8260B: VOLATILES SHORT LIST	Г				Analyst	JMR			
Benzene	ND	0.023	mg/Kg	1	3/30/2020 12:45:17 PM	51354			
Toluene	ND	0.046	mg/Kg	1	3/30/2020 12:45:17 PM	51354			
Ethylbenzene	ND	0.046	mg/Kg	1	3/30/2020 12:45:17 PM	51354			
Xylenes, Total	ND	0.092	mg/Kg	1	3/30/2020 12:45:17 PM	51354			
Surr: 1,2-Dichloroethane-d4	88.3	70-130	%Rec	1	3/30/2020 12:45:17 PM	51354			
Surr: 4-Bromofluorobenzene	98.5	70-130	%Rec	1	3/30/2020 12:45:17 PM	51354			
Surr: Dibromofluoromethane	90.9	70-130	%Rec	1	3/30/2020 12:45:17 PM	51354			
Surr: Toluene-d8	109	70-130	%Rec	1	3/30/2020 12:45:17 PM	51354			

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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	ety Environmental Services ton Draw 221 Devon			
Sample ID: MB-51389	SampType: <b>mblk</b>	TestCode: EPA Method	1 300.0: Anions	
Client ID: PBS	Batch ID: 51389	RunNo: 67692		
Prep Date: 3/29/2020	Analysis Date: 3/29/2020	SeqNo: 2337033	Units: <b>mg/Kg</b>	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID: LCS-51389	SampType: Ics	TestCode: EPA Method	1 300.0: Anions	
Client ID: LCSS	Batch ID: 51389	RunNo: 67692		
Prep Date: 3/29/2020	Analysis Date: 3/29/2020	SeqNo: 2337034	Units: <b>mg/Kg</b>	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	15 1.5 15.00	0 96.9 90	110	

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2003B53 31-Mar-20

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

WO#:	2003B53

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	ety Environmental S con Draw 221 Devo									
Sample ID: MB-51355	SampType	: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID	51355	F	unNo: 67623	3					
Prep Date: 3/26/2020	Analysis Date	3/27/2020	S	eqNo: 23343	371	Units: <b>mg/K</b> g	g			
Analyte	Result P	QL SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MR	O) ND	50								
Surr: DNOP	9.4	10.00		93.5	55.1	146				
Sample ID: LCS-51355	SampType	e: LCS	Tes	tCode: EPA N	Method 8	8015M/D: Die	sel Range	e Organics		
Client ID: LCSS	Batch ID	51355	F	anNo: 67623	3					
Prep Date: 3/26/2020	Analysis Date	3/27/2020	5	eqNo: 23343	372	Units: <b>mg/K</b>	g			
Analyte	Result P	QL SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	46	10 50.00	0	92.2	70	130				
Surr: DNOP	4.5	5.000		90.6	55.1	146				
Sample ID: 2003B53-00	IAMS SampType	: MS	Tes	tCode: EPA N	Method 8	8015M/D: Die	sel Range	e Organics		
Client ID: SP-1 Botton	1.5' Batch ID	51355	F	unNo: 67623	3					
Prep Date: 3/26/2020	Analysis Date	3/27/2020	S	eqNo: 23343	374	Units: <b>mg/K</b> g	g			
Analyte	Result P	QL SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	41	9.1 45.58	0	90.2	47.4	136				
Surr: DNOP	4.1	4.558		90.1	55.1	146				
Sample ID: 2003B53-00	IAMSD SampType	: MSD	Tes	tCode: EPA N	Method 8	8015M/D: Die	sel Range	e Organics		
Client ID: SP-1 Botton	1.5' Batch ID	51355	F	unNo: 67623	3					
Prep Date: 3/26/2020	Analysis Date	3/27/2020	S	eqNo: 23349	998	Units: <b>mg/K</b>	g			
Analyte	Result P	QL SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	45	9.2 46.08	0	97.8	47.4	136	9.20	43.4		
Surr: DNOP	4.6	4.608		99.1	55.1	146	0	0		

#### Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical 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#:	2003B53

31-Mar-20

Client: Safety Env Project: Cotton Dra			ces							
Sample ID: 2003b53-001ams	SampT	Гуре: МS	;	Tes	tCode: EF	PA Method	8260B: Volat	iles Short	List	
Client ID: SP-1 Bottom 1.5'	Batcl	h ID: 513	354	R	RunNo: 67682					
Prep Date: 3/26/2020	Analysis D	Date: <b>3/</b>	29/2020	S	eqNo: 2	336683	Units: mg/K	a		
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.024	0.9425		88.8	20wEinnt 70	130	70111 D		Quai
Toluene	0.99	0.047	0.9425	0	105	70	130			
Ethylbenzene	1.0	0.047	0.9425	0	108	70	130			
Xylenes, Total	3.1	0.094	2.828	0	110	70	130			
Surr: 1,2-Dichloroethane-d4	0.39	0.004	0.4713	Ŭ	81.9	70	130			
Surr: 4-Bromofluorobenzene	0.33		0.4713		101	70	130			
Surr: Dibromofluoromethane	0.47		0.4713		101	70	130			
Surr: Toluene-d8	0.47		0.4713		100	70 70	130			
	0.51		0.4713		108	70	130			
Sample ID: 2003b53-001amsd	SampT	Гуре: <b>МS</b>	D	Test	tCode: EF	PA Method	8260B: Volat	iles Short	List	
Client ID: SP-1 Bottom 1.5'	Batcl	h ID: 513	354	R	RunNo: 67682					
Prep Date:         3/26/2020         Analysis Date:         3/30/2020         SeqNo:         2336684         Units:         mg/Kg										
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	0.9950	0	81.6	70	130	3.00	20	
Toluene	1.0	0.050	0.9950	0	102	70	130	2.21	20	
Ethylbenzene	1.0	0.050	0.9950	0	106	70	130	3.24	0	
Xylenes, Total	3.2	0.10	2.985	0	108	70	130	3.14	0	
Surr: 1,2-Dichloroethane-d4	0.40		0.4975		80.2	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.50		0.4975		101	70	130	0	0	
Surr: Dibromofluoromethane	0.49		0.4975		97.9	70	130	0	0	
Surr: Toluene-d8	0.53		0.4975		106	70	130	0	0	
Sample ID: Ics-51354	SampT	Гуре: <b>LC</b>	S	Tes	tCode: EF	PA Method	8260B: Volat	iles Short	List	
Client ID: LCSS	Batcl	h ID: 513	354	R	unNo: 67	7682				
Prep Date: 3/26/2020	Analysis E	Date: 3/2	29/2020	S	eqNo: 23	336709	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.3	70	130			
Toluene	1.0	0.050	1.000	0	101	70	130			
Ethylbenzene	1.1	0.050	1.000	0	107	70	130			
Xylenes, Total	3.1	0.10	3.000	0	104	70	130			
	0.38		0.5000		76.1	70	130			
Surr: 1,2-Dichloroethane-d4					-					
			0.5000		99.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.50 0.52		0.5000 0.5000		99.6 103	70 70	130 130			

#### 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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<b>C</b>		ntal Analysis Laborator	wo#:	2003B53 31-Mar-20
Client: Project:	•	PEnvironmental Services n Draw 221 Devon		
Sample ID: m	b-51354	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List	
Client ID: PI	BS	Batch ID: 51354	RunNo: 67682	
Prep Date: 3	/26/2020	Analysis Date: 3/29/2020	SeqNo: 2336710 Units: ma/Ka	

Prep Date: 3/26/2020	Analysis L	Date: 3/	29/2020	3	seqino: 2	336710	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	0.42		0.5000		83.6	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.5	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

**Qualifiers:** 

- Value exceeds Maximum Contaminant Level. \*
- D Sample Diluted Due to Matrix
- Н 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 S

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

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**Client:** 

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

Safety Environmental Services

Project:	5	raw 221 De									
Sample ID:	2003b53-002ams	SampTy	/pe: <b>M</b> \$	6	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	SP-2 BottoM 1.5'	Batch	ID: <b>51</b>	354	F	RunNo: 6	7682				
Prep Date:	3/26/2020	Analysis Da	ate: 3/	30/2020	S	SeqNo: 2	336715	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	18	4.8	24.04	0	74.1	70	130			
Surr: BFB		490		480.8		101	70	130			
Sample ID:	2003b53-002amsd	SampTy	/pe: <b>M\$</b>	SD	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	SP-2 BottoM 1.5'	Batch	ID: <b>51</b>	354	F	RunNo: 6	7682				
Prep Date:	3/26/2020	Analysis Da	ate: 3/	30/2020	S	SeqNo: 2	336716	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	19	5.0	24.78	0	75.3	70	130	4.69	20	
Surr: BFB		500		495.5		100	70	130	0	0	
Sample ID:	lcs-51354	SampTy	/pe: <b>LC</b>	S	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	LCSS	Batch	ID: 51	354	F	RunNo: 6	7682				
Prep Date:	3/26/2020	Analysis Da	ate: 3/	29/2020	S	SeqNo: 2	336742	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	19	5.0	25.00	0	77.2	70	130			
Surr: BFB		500		500.0		99.8	70	130			
Sample ID:	mb-51354	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	PBS	Batch	ID: 51	354	F	RunNo: 6	7682				
Prep Date:	3/26/2020	Analysis Da	ate: 3/	29/2020	S	SeqNo: 2	336743	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
•	e Organics (GRO)	ND	5.0								
Surr: BFB		480		500.0		96.9	70	130			

#### Qualifiers:

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

2003B53

31-Mar-20

HALL HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albu TEL: 505-345-3975 Website: www.ha	490 querq FAX:	01 Hawkin. que, NM 8. 505-345	s NE 7109 4107	Sar	Page 5
Client Name: Safety Env Solutions	Work Order Number:	200	3B53			RcptNo: 1
Received By: Juan Rojas 3/	25/2020 8:30:00 AM			Hear	A.S	
Completed By: Anne Thorne 3/2	25/2020 4:27:24 PM			Juan	1	
Reviewed By: DAD 3/26/20				Can	An	~
Chain of Custody						
1. Is Chain of Custody sufficiently complete?		Yes		No		Not Present
2. How was the sample delivered?		Clie	<u>nt</u>			
Log In 3. Was an attempt made to cool the samples?						
o. Was an altempt made to cool the samples?		Yes		NO		NA 🗌
4. Were all samples received at a temperature of >	0° C to 6.0°C	Yes		No		
5. Sample(s) in proper container(s)?		Yes		No		
6. Sufficient sample volume for indicated test(s)?		Yes	~	No		
7. Are samples (except VOA and ONG) properly pre	eserved?	Yes		No		
8. Was preservative added to bottles?		Yes		No	$\checkmark$	NA 🗌
9. Received at least 1 vial with headspace <1/4" for	AQ VOA?	Yes		No		
10. Were any sample containers received broken?		Yes		No		# of preserved
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	~	No		for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Cust	ody?	Yes	~	No		Adjusted?
13. Is it clear what analyses were requested?		Yes		No		
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No		Checked by:
Special Handling (if applicable)						
15. Was client notified of all discrepancies with this of	order?	Yes		No		NA 🗹
Person Notified:	Date					
By Whom:	Via:	] eMa	ail 🗌 P	hone	] Fax	In Person
Regarding:						
Client Instructions:						
16. Additional remarks:						
17. <u>Cooler Information</u> Cooler No Temp ºC Condition Seal Ir	tact Seal No Seal No	eal D	ate	Signed	Bv	
1 0.2 Good Yes				Signed	-1	

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Page 1 of 1

Received by OCD: 11/9/2022 9	:02:46 AM		Page 54 of
HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com kins NE - Albuquerque, NM 87109 345-3975 Fax 505-345-4107 Analysis Request	Total Coliform (Present/Absent)		Time: Relinguished by: 1700 Sr Juny Received by: Via: Date Time Remarks: 1700 Sr Juny Divect 1700 Sr Juny Divect 1900 Mine Relinguished by: Via: Date Time Sr 11 Device Divect 1900 Mine Received by: Via: Date Time Sr 11 Device Divect
VIF S L nnment nument x 505- x Req	(AOV) 0828 (AOV-im92) 0728		Bill Devon Direct
- ENV LYSIS allenvironi - Albuqu	Cl' L' BL' NO <sup>3</sup> ' NO <sup>5</sup> ' EO <sup>4</sup> ' 2O <sup>4</sup>		À
MLL ML w.hall NE - 8975 A	RCRA 8 Metals		(vo)
HA AN ww kins 345-3	PAHs by 8310 or 8270SIMS		ja
HALL ANAL www.ha 4901 Hawkins NE Tel. 505-345-3975	EDB (Method 504.1)		
4901 Tel.	(DRH:8015D(GRO / DRO / MRO)		rks:
	BTEX / MTBE / TMB's (8021)		Remarks:
Sder Tuerd Rush Vew 221 38990 20-019	ED P NO 2-020.2 (°C) HEAL NO. 20031353	1907 - 19	Date Time F 3/24/20 1700 Date Time 3/25/20 5:30
	Iger:	No Contraction of the second s	Via: Via: COUN'Er
Turn-Around Tir Defect Name: 1 Project Name: 1 Project #:	Project Manager: A Low Sampler: Sampler: On Ice: D Yes n f Coolers: I Cooler Temp(including cr): Cooler Temp(including cr): Type and # Type		Received by: Received by:
Stody Record Swillihonweight Trow 8240 7-051 0	D Level	SP2 Reiter 1.54 SP2 Reiter 1.54 SP2 Reiter 1.54 SP2 Biter 1.54 SP2 Biter 1.4 SP2 Biter 1.4 SP2 Biter 1.4	ped by:
25-39			Relinguished by: Relinguished by
Client: Study Client: Study Mailing Address: Phone #: 57	email or Fax#: QA/QC Package: Calon: Accreditation: DELAC Date Time	1535 1535 1535 1535 1535 1535 1535	Time: Time: (900)
Client: Client	email or Fax# avac Packag avac Packag Caraditation: Accreditation: Date Time	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Date: Date: Date:



June 08, 2020

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

RE: Devon Cotton Draw 221 H

OrderNo.: 2005D04

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/30/2020 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

**Analytical Report** Lab Order 2005D04

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solution	s	Cl	lient Sa	mple II	D: AF	I-16 Surface North	
Project: Devon Cotton Draw 221 H		(	Collecti	on Dat	<b>e:</b> 5/2	28/2020 10:50:00 AM	
Lab ID: 2005D04-001	Matrix: SOIL		Receiv	ed Dat	<b>e:</b> 5/3	30/2020 8:22:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: ЈМТ
Chloride	ND	60		mg/Kg	20	6/5/2020 10:23:54 PM	52903
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/31/2020 7:01:11 PM	52791
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/31/2020 7:01:11 PM	52791
Surr: DNOP	72.1	55.1-146		%Rec	1	5/31/2020 7:01:11 PM	52791
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/1/2020 8:08:08 PM	52788
Surr: BFB	80.3	66.6-105		%Rec	1	6/1/2020 8:08:08 PM	52788
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.025		mg/Kg	1	6/1/2020 8:08:08 PM	52788
Toluene	ND	0.049		mg/Kg	1	6/1/2020 8:08:08 PM	52788
Ethylbenzene	ND	0.049		mg/Kg	1	6/1/2020 8:08:08 PM	52788
Xylenes, Total	ND	0.098		mg/Kg	1	6/1/2020 8:08:08 PM	52788
Surr: 4-Bromofluorobenzene	92.2	80-120		%Rec	1	6/1/2020 8:08:08 PM	52788

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
- Н 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 S

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

Page 1 of 8

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Analytical Report Lab Order 2005D04

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solution	IS	C	ient Sample II	D: Ał	H-17 Surface South	
<b>Project:</b> Devon Cotton Draw 221 H			Collection Dat	<b>e:</b> 5/2	28/2020 11:00:00 AM	
Lab ID: 2005D04-002	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/3	30/2020 8:22:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	ND	60	mg/Kg	20	6/5/2020 10:36:19 PM	52903
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/31/2020 7:25:34 PM	52791
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/31/2020 7:25:34 PM	52791
Surr: DNOP	68.3	55.1-146	%Rec	1	5/31/2020 7:25:34 PM	52791
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/1/2020 8:31:34 PM	52788
Surr: BFB	79.3	66.6-105	%Rec	1	6/1/2020 8:31:34 PM	52788
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	6/1/2020 8:31:34 PM	52788
Toluene	ND	0.047	mg/Kg	1	6/1/2020 8:31:34 PM	52788
Ethylbenzene	ND	0.047	mg/Kg	1	6/1/2020 8:31:34 PM	52788
Xylenes, Total	ND	0.094	mg/Kg	1	6/1/2020 8:31:34 PM	52788
Surr: 4-Bromofluorobenzene	91.9	80-120	%Rec	1	6/1/2020 8:31:34 PM	52788

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: 4-Bromofluorobenzene

Analytical Report Lab Order 2005D04

Date Reported: 6/8/2020

6/1/2020 8:54:57 PM

52788

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solution	ns	Client Sample ID: AH-18 Surface East							
<b>Project:</b> Devon Cotton Draw 221 H					28/2020 11:15:00 AM				
Lab ID: 2005D04-003	Matrix: SOIL	<b>Received Date:</b> 5/30/2020 8:22:00 AM							
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analyst	: JMT			
Chloride	ND	60	mg/Kg	20	6/5/2020 10:48:43 PM	52903			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM			
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	5/31/2020 7:50:00 PM	52791			
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/31/2020 7:50:00 PM	52791			
Surr: DNOP	66.1	55.1-146	%Rec	1	5/31/2020 7:50:00 PM	52791			
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB			
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/1/2020 8:54:57 PM	52788			
Surr: BFB	80.2	66.6-105	%Rec	1	6/1/2020 8:54:57 PM	52788			
EPA METHOD 8021B: VOLATILES					Analyst	: NSB			
Benzene	ND	0.024	mg/Kg	1	6/1/2020 8:54:57 PM	52788			
Toluene	ND	0.048	mg/Kg	1	6/1/2020 8:54:57 PM	52788			
Ethylbenzene	ND	0.048	mg/Kg	1	6/1/2020 8:54:57 PM	52788			
Xylenes, Total	ND	0.096	mg/Kg	1	6/1/2020 8:54:57 PM	52788			

93.2

80-120

%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

Page 3 of 8

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Analytical Report Lab Order 2005D04

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solution	Client Sample ID: AH-19 Surface West							
Project: Devon Cotton Draw 221 H	(	Collect	ion Dat	<b>e:</b> 5/2	28/2020 11:30:00 AM			
Lab ID: 2005D04-004	Matrix: SOIL		Recei	ved Dat	<b>e:</b> 5/3	80/2020 8:22:00 AM		
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS						Analyst	: ЈМТ	
Chloride	ND	60		mg/Kg	20	6/5/2020 11:01:07 PM	52903	
EPA METHOD 8015M/D: DIESEL RANGE					Analyst	BRM		
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/31/2020 8:14:42 PM	52791	
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/31/2020 8:14:42 PM	52791	
Surr: DNOP	52.3	55.1-146	S	%Rec	1	5/31/2020 8:14:42 PM	52791	
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/1/2020 9:18:21 PM	52788	
Surr: BFB	80.0	66.6-105		%Rec	1	6/1/2020 9:18:21 PM	52788	
EPA METHOD 8021B: VOLATILES						Analyst	: NSB	
Benzene	ND	0.024		mg/Kg	1	6/1/2020 9:18:21 PM	52788	
Toluene	ND	0.047		mg/Kg	1	6/1/2020 9:18:21 PM	52788	
Ethylbenzene	ND	0.047		mg/Kg	1	6/1/2020 9:18:21 PM	52788	
Xylenes, Total	ND	0.094		mg/Kg	1	6/1/2020 9:18:21 PM	52788	
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	6/1/2020 9:18:21 PM	52788	

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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Client: Project:		y & Environme n Cotton Draw									
Sample ID:	MB-52903	SampTy	pe: <b>mb</b>	olk	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	ID: 529	903	F	RunNo: <b>69</b>	9444				
Prep Date:	6/5/2020	Analysis Da	ate: 6/	5/2020	S	SeqNo: 24	409023	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-52903	SampTy	pe: Ics	i	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 529	903	F	RunNo: <b>69</b>	9444				
Prep Date:	6/5/2020	Analysis Da	ate: 6/	5/2020	S	SeqNo: 24	109024	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	91.8	90	110			

Qualifiers:

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

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

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2005D04

08-Jun-20

## **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc. \_\_\_\_

10

50

10.00

ND

ND

8.5

•	& Environmental Cotton Draw 221								
Sample ID: LCS-52791	SampType:	LCS	Test	Code: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch ID:	52791	R	unNo: 6	9277				
Prep Date: 5/31/2020	Analysis Date:	5/31/2020	S	eqNo: 24	401817	Units: mg/K	g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50 1	10 50.00	0	100	70	130			
Surr: DNOP	3.6	5.000		72.3	55.1	146			
Sample ID: MB-52791	SampType:	MBLK	Test	Code: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID:	52791	R	unNo: 6	9277				
Prep Date: 5/31/2020	Analysis Date:	5/31/2020	S	eqNo: 24	401818	Units: mg/K	g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

85.0

55.1

146

**Qualifiers:** 

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

**Diesel Range Organics (DRO)** 

Surr: DNOP

Motor Oil Range Organics (MRO)

% Recovery outside of range due to dilution or matrix S

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

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2005D04

08-Jun-20

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

•	z Environm Cotton Drav									
Sample ID: mb-52788	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batcl	h ID: 52	788	R	unNo: 69	9307				
Prep Date: 5/31/2020	Analysis D	Date: 6/	1/2020	S	eqNo: 24	403247	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	820		1000		82.3	66.6	105			
Sample ID: Ics-52788	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batcl	h ID: 52	788	R	unNo: 69	9307				
Prep Date: 5/31/2020	Analysis D	Date: 6/	1/2020	S	eqNo: 24	403248	Units: <b>mg/K</b>	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	81.6	80	120			
Surr: BFB	890		1000		89.3	66.6	105			

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical 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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2005D04

08-Jun-20

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

Client: Sat	fety & Environm	nental Sc	olutions							
Project: De	von Cotton Drav	w 221 H								
Sample ID: mb-52788	Samp	Type: ME	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Bato	h ID: 52	788	F	RunNo: 6	9307				
Prep Date: 5/31/2020	Analysis I	Date: 6/	1/2020	S	SeqNo: 2	403285	Units: <b>mg/K</b>	íg		
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-Bromofluorobenzen	e 0.94		1.000		94.3	80	120			
Sample ID: LCS-52788	Samp	Type: LC	S	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: LCSS	Bato	h ID: 52	788	F	RunNo: <b>6</b>	9307				
Prep Date: 5/31/2020	Analysis I	Date: 6/	1/2020	S	SeqNo: 2	403286	Units: mg/K	ſg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.0	80	120			
Toluene	0.98	0.050	1.000	0	98.3	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzen	e 0.96		1.000		96.2	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

Page 8 of 8

2005D04

08-Jun-20

ANALYSIS LABORATORY		TEI	l Environmeni A L: 505-345-39 Vebsite: www.	490 Ibuquera 175 FAX:	01 Hawki jue, NM 6 505-345	ns NE 87109 <b>Sa</b> -4107	mple Log-In (	<i>P</i> Check Lis
Client Name:	Safety Env Solutions	Work	Order Numb	er: 200	5D04		RcptNc	: 1
Received By:	Isaiah Ortiz	5/30/202	20 8:22:00 A	м		I	ox	
Completed By:	Isaiah Ortiz	5/30/202	20 8:55:50 A	M		エー・	2	
Reviewed By:	1.6	5/30/						
Chain of Custo	<u>ody</u>							
1. Is Chain of Cus	stody complete?			Yes	~	No 🗌	Not Present	
2. How was the sa	ample delivered?			Cou	rier			
Log In		0		1.5	-			
<ol><li>vvas an attemp</li></ol>	t made to cool the sample	s?		Yes		No 🗌	NA	
4. Were all samples received at a temperature of >0° C to 6.0°C				Yes		No 🗌	NA 🗌	
5. Sample(s) in pr	oper container(s)?			Yes	~	No 🗌		
6. Sufficient samp	e volume for indicated tes	t(s)?		Yes	~	No 🗌		
7. Are samples (ex	ccept VOA and ONG) prop	erly preserve	d?	Yes		No 🗌		
8. Was preservativ	ve added to bottles?			Yes		No 🔽	NA 🗌	
9. Received at least	st 1 vial with headspace <	1/4" for AQ V	OA?	Yes		No 🗌	NA 🔽	70
10. Were any samp	le containers received bro	ken?		Yes		No 🔽	Constant Section	
	match bottle labels?			Yes	~	No 🗌	# of preserved bottles checked for pH:	5/30/20
	cies on chain of custody) rrectly identified on Chain	of Custodu2		Yes	2	No 🗌	Adjusted?	r >12 unless note
	inalyses were requested?	or Gustouy?						/
14. Were all holding	times able to be met? tomer for authorization.)			Yes		No 🗌	Checked by:	
Special Handlin	ig (if applicable)							
15. Was client notif	ied of all discrepancies wi	th this order?		Yes		No 🗌	NA 🔽	
Person N	otified:		Date:	1			n	
By Whom			Via:	eMa	ail 🗌 A	Phone 🗌 Fax	x 🔲 In Person	
Regarding								
Client Ins								
16. Additional rem								
17. <u>Cooler Inform</u> Cooler No	CAN PARTY AND AN AN AN AN AN AN AN AN	Cool Intent	CostN	Ocal D		Circuit C	1	
and the second second second	Temp °C Condition 4.1 Good M	Seal Intact Not Present	Seal No	Seal D	ate	Signed By		

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Received by OCD: 11/9/2022 9	:02:46 AM		Page 65 of 69
<ul> <li>HALL ENVIRONMENTAL</li> <li>HALL ENVIRONMENTAL</li> <li>ANALYSIS LABORATOR</li> <li>Mauv.hallenvironmental.com</li> <li>www.hallenvironmental.com</li> <li>Hawkins NE - Albuquerque, NM 87109</li> <li>Hawkins NE - Albuquerque, NM 87109</li> <li>Hawkins NE - Albuquerque, NM 87109</li> <li>Tel. 505-345-3975 Fax 505-345-4107</li> <li>Tel. 505-345-3975 Request</li> </ul>	8081 Pesticides/8082 PCB's BDB (Method 504.1) PPHs by 8310 or 8270SIMS CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> 8260 (VOA) B270 (Semi-VOA) Total Coliform (Present/Absent)	3	Date     Time     Remarks:       5/04     14/00       Date     Time       20     0822       Inis serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report
	ВТЕХ / МТВЕ / ТМВ's (8021) ТРН:8015D(GRO / DRO / МRO)		Remarks:
Turn-Around Time: 5 Rey Project Name: BUDN 221 H Project Name: BUDN 221 H Project #: Project #:	Project Manager:		0
Client: STS- 397-0510	email or Fax#: QA/QC Package: DA/QC Package: Accreditation: Date A (Full Validation) Accreditation: Date A (Full Validation) A (Full Validat	8 (eso 5 1 (100 5 1 (	Date:     Time:     RelipedIShed by:       Date:     Time:     Received by:       Via:     Received by:       Date:     Time:       Received by:     Via:       Date:     Time:       Received by:     Via:       Pate:     Received by:       No     No       No     No       If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.

# Devon Energy

CDU 221H









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Oil Conservation Division

Incident ID	NAB1911936996
District RP	
Facility ID	
Application ID	

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## 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.

<b><u>Closure Report Attachment Checklist</u>: Each of the following a</b>	items must be included in the closure report.				
A scaled site and sampling diagram as described in 19.15.29.	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)	s 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					
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 re human health or the environment. In addition, OCD acceptance of	ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in				
Printed Name: Dale Woodall	Title: Env. Professional				
Signature: Dale Woodall	Date: <u>11/9/2022</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 for regulations.				
Closure Approved by:	Date:				
Printed Name:	Title:				

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Oil Conservation Division

	Page 68 of 69
Incident ID	NAB19122032237
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.

<b><u>Closure Report Attachment Checklist</u></b> : Each of the following	items must be included in the closure report.				
$\Box$ A scaled site and sampling diagram as described in 19.15.29.	11 NMAC				
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)					
Laboratory analyses of final sampling (Note: appropriate OD	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 certaid may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re- human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the co- accordance with 19.15.29.13 NMAC including notification to the O- Printed Name: Dale Woodall	ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in				
Signature: Dale Woodall	Date: <u>11/9/2022</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 District IV

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

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

CONDITIONS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	157279
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By Condition

We have received your closure report and final C-141 for Incident #NAB1912032237 COTTON DRAW UNIT #221H, thank you. This closure is approved. 1/26/2023 rhamlet

CONDITIONS

Action 157279

Condition Date