

Incident ID	NAB1911936996
District RP	
Facility ID	
Application ID	

## Closure

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

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

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dale Woodall Title: Env. Professional  
Signature: Dale Woodall Date: 11/9/2022  
email: dale.woodall@dvn.com Telephone: 575-748-1838

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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.

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

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- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dale Woodall Title: Env. Professional  
Signature: Dale Woodall Date: 11/9/2022  
email: dale.woodall@dvn.com Telephone: 575-748-1838

**OCD Only**

Received by: Robert Hamlet Date: 1/26/2023

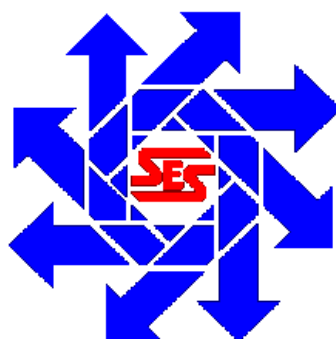
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Robert Hamlet Date: 1/26/2023  
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	<a href="mailto:Tom.Bynum@dvn.com">Tom.Bynum@dvn.com</a>
Bob Allen	SESI	575-397-0510	<a href="mailto:ballen@sesi-nm.com">ballen@sesi-nm.com</a>

## 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 DRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total 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 DRO	Benzene	Toluene	Ethyl benzene	Total Xylenes
AH-10 SURFACE N WALL	4800	ND	270	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



# Devon Energy

CDU 221H  
UL N - Sec 1 - T25S - R31E  
NAB1911936996  
NAB1912032237

## Legend

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

AH16 N @ Surface  
SP4 N Wall  
SP3 W Wall  
SP2 BTM @ 1.5'  
AH19 W @ Surface  
AH18 E @ Surface  
SP9 BTM @ Surface  
P7 BTM @ 1'  
SP8 S Wall  
AH13 S Wall @ 1'  
SP5 E Wall  
AH14 S Wall @ 1'  
AH17 S @ Surface





# Devon Energy

CDU 221H  
UL N - Sec 1 - T25S - R31E  
NAB1911936996  
NAB1912032237

## Legend

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







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- 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.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

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 of measurement
1966-08-18		D	400.00			2			U	
1976-01-28		D	390.27			2			U	

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	A	Approved for publication -- Processing and review completed.

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**Title: Groundwater for New Mexico: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>**



Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2020-03-09 15:11:52 EDT

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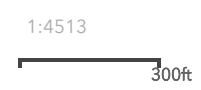
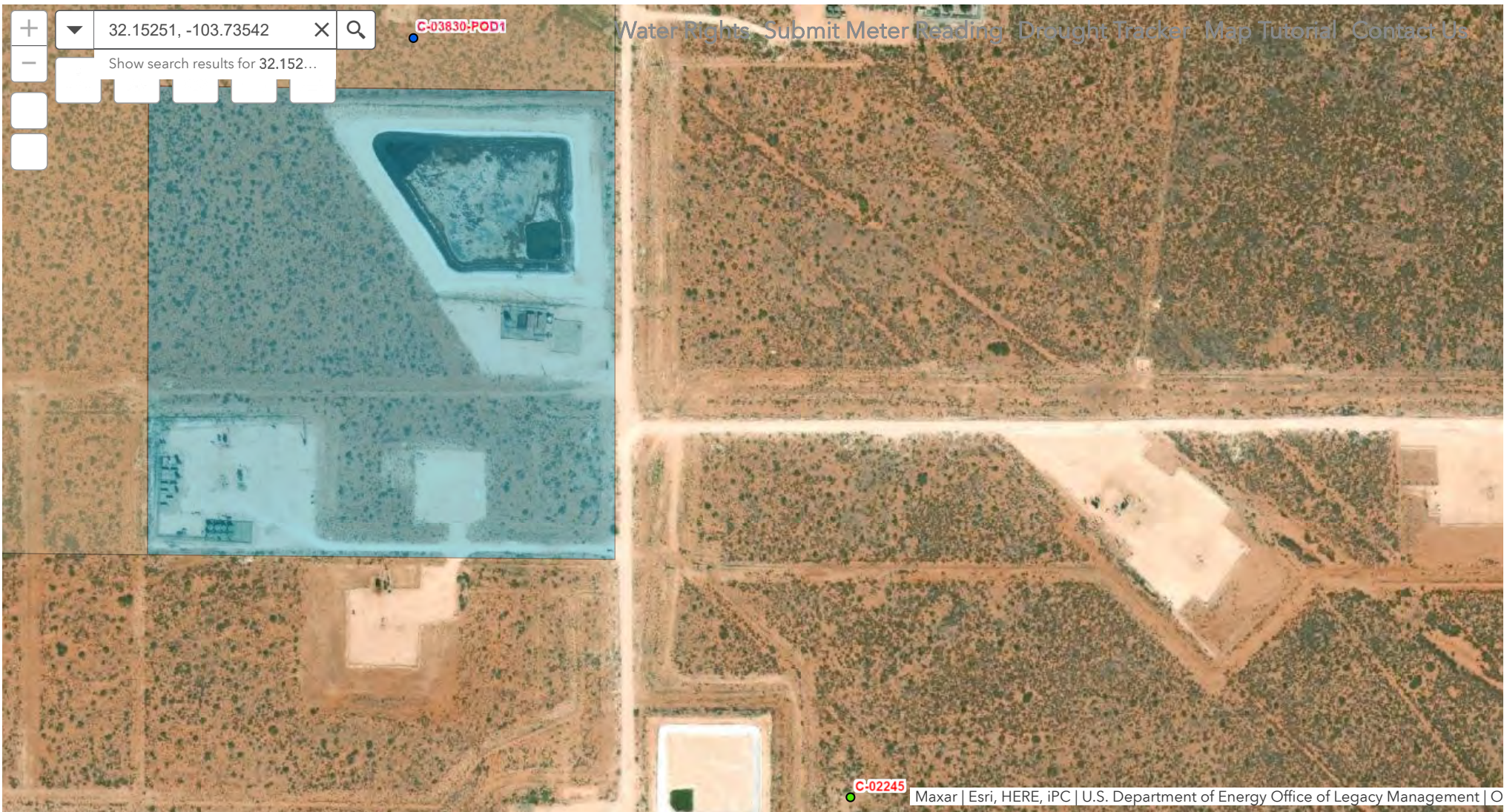
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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

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 [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

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

Received: 02/28/2020  
 Reported: 03/04/2020  
 Project Name: CDU 221H  
 Project Number: DEV - 20 - 019  
 Project Location: LEA COUNTY

Sampling Date: 02/27/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

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

BTX 8021B		mg/kg	Analyzed 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	
<b>Toluene*</b>	<b>0.062</b>	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	
<b>Total Xylenes*</b>	<b>6.90</b>	0.150	03/03/2020	ND	5.86	97.7	6.00	0.618	
<b>Total BTX</b>	<b>6.96</b>	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 171 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>20000</b>	16.0	03/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>399</b>	100	03/03/2020	ND	187	93.5	200	0.778	
<b>DRO &gt;C10-C28*</b>	<b>17400</b>	100	03/03/2020	ND	182	90.9	200	1.46	
<b>EXT DRO &gt;C28-C36</b>	<b>4130</b>	100	03/03/2020	ND					

Surrogate: 1-Chlorooctane 213 % 44.3-144

Surrogate: 1-Chlorooctadecane 722 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received: 02/28/2020  
 Reported: 03/04/2020  
 Project Name: CDU 221H  
 Project Number: DEV - 20 - 019  
 Project Location: LEA COUNTY

Sampling Date: 02/27/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

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

BTEx 8021B		mg/kg	Analyzed 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*	<b>0.483</b>	0.050	03/03/2020	ND	2.00	99.8	2.00	0.270	
Ethylbenzene*	<b>0.970</b>	0.050	03/03/2020	ND	2.00	100	2.00	0.666	
Total Xylenes*	<b>17.2</b>	0.150	03/03/2020	ND	5.86	97.7	6.00	0.618	
Total BTEX	<b>18.6</b>	0.300	03/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 134 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>23200</b>	16.0	03/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<b>819</b>	100	03/03/2020	ND	187	93.5	200	0.778	
DRO >C10-C28*	<b>18400</b>	100	03/03/2020	ND	182	90.9	200	1.46	
EXT DRO >C28-C36	<b>4100</b>	100	03/03/2020	ND					

Surrogate: 1-Chlorooctane 275 % 44.3-144

Surrogate: 1-Chlorooctadecane 744 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received: 02/28/2020  
 Reported: 03/04/2020  
 Project Name: CDU 221H  
 Project Number: DEV - 20 - 019  
 Project Location: LEA COUNTY

Sampling Date: 02/27/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

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

BTEx 8021B		mg/kg	Analyzed 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	
<b>Total Xylenes*</b>	<b>0.345</b>	0.150	03/02/2020	ND	5.86	97.7	6.00	0.618	
<b>Total BTEX</b>	<b>0.345</b>	0.300	03/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 130 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>9060</b>	16.0	03/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>18.2</b>	10.0	03/02/2020	ND	187	93.5	200	0.778	
<b>DRO &gt;C10-C28*</b>	<b>2140</b>	10.0	03/02/2020	ND	182	90.9	200	1.46	
<b>EXT DRO &gt;C28-C36</b>	<b>598</b>	10.0	03/02/2020	ND					

Surrogate: 1-Chlorooctane 93.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 157 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

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

Received: 02/28/2020  
 Reported: 03/04/2020  
 Project Name: CDU 221H  
 Project Number: DEV - 20 - 019  
 Project Location: LEA COUNTY

Sampling Date: 02/27/2020  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

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

BTX 8021B		mg/kg		Analyzed 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 BTX	<0.300	0.300	03/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-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		Analyzed 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 % 44.3-144

Surrogate: 1-Chlorooctadecane 100 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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### 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

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\*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

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Celey D. Keene, Lab Director/Quality Manager



Ljo 2 ebag



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Safety and Environmental Solutions		P.O. #:		BILL TO												ANALYSIS REQUEST																									
Project Manager: Bob Allen		Company: Same																																							
Address: 703 East Clinton, PO Box 1613		Attn:																																							
City: Hobbs		Address:																																							
Phone #: 575 397-0510		City:																																							
Fax #: 575 393-4388		State:																																							
Project #: DEV-20-019		Project Owner:																																							
Project Name: COE 221H		State:																																							
Project Location:		Phone #:																																							
Sampler Name: Bob Allen		Fax #:																																							
FOR LAB USE ONLY																																									
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME													
H000647		AH #1 Surface		G1		1		X																		2-27-20		11:45													
2		AH #2 Surface		G1		1		X																				1:55													
3		AH #3 Surface		G1		1		X																				2:05													
4		AH #4 Surface		G1		1		X																				2:10													



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

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

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

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-10 Surface North Wall

Project: Devon Cotton Draw 221H

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

Lab ID: 2005796-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	4800	150		mg/Kg	50	5/23/2020 11:29:56 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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.

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

Page 1 of 16

## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-10 1 ft North Wall

Project: Devon Cotton Draw 221H

Collection Date: 5/15/2020 9:40:00 AM

Lab ID: 2005796-002

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	240	59		mg/Kg	20	5/23/2020 1:46:39 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/22/2020 5:20:50 AM	52589
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/22/2020 5:20:50 AM	52589
Surr: DNOP	107	55.1-146		%Rec	1	5/22/2020 5:20:50 AM	52589
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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.

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

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## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-11 Surface North Wall

Project: Devon Cotton Draw 221H

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

Lab ID: 2005796-003

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	4300	150		mg/Kg	50	5/23/2020 11:42:20 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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.

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

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## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-11 1 ft North Wall

Project: Devon Cotton Draw 221H

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

Lab ID: 2005796-004

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	60		mg/Kg	20	5/23/2020 2:11:28 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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

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

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

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## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	4300	150		mg/Kg	50	5/23/2020 11:54:45 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	490	10		mg/Kg	1	5/22/2020 6:32:58 AM	52589
Motor Oil Range Organics (MRO)	320	50		mg/Kg	1	5/22/2020 6:32:58 AM	52589
Surr: DNOP	100	55.1-146		%Rec	1	5/22/2020 6:32:58 AM	52589
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.024		mg/Kg	1	5/21/2020 4:01:58 AM	52570
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	1	5/21/2020 4:01:58 AM	52570
Surr: 1,2-Dichloroethane-d4	84.9	70-130		%Rec	1	5/21/2020 4:01:58 AM	52570
Surr: 4-Bromofluorobenzene	87.3	70-130		%Rec	1	5/21/2020 4:01:58 AM	52570
Surr: Dibromofluoromethane	104	70-130		%Rec	1	5/21/2020 4:01:58 AM	52570
Surr: Toluene-d8	95.4	70-130		%Rec	1	5/21/2020 4:01:58 AM	52570

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

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

Page 5 of 16

## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-12 1ft East Wall

Project: Devon Cotton Draw 221H

Collection Date: 5/15/2020 10:20:00 AM

Lab ID: 2005796-006

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	59		mg/Kg	20	5/23/2020 2:36:18 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/21/2020 4:30:32 AM	52570
Surr: BFB	97.3	70-130		%Rec	1	5/21/2020 4:30:32 AM	52570
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/22/2020 6:56:55 AM	52589
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/22/2020 6:56:55 AM	52589
Surr: DNOP	92.5	55.1-146		%Rec	1	5/22/2020 6:56:55 AM	52589
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.024		mg/Kg	1	5/21/2020 4:30:32 AM	52570
Toluene	ND	0.048		mg/Kg	1	5/21/2020 4:30:32 AM	52570
Ethylbenzene	ND	0.048		mg/Kg	1	5/21/2020 4:30:32 AM	52570
Xylenes, Total	ND	0.096		mg/Kg	1	5/21/2020 4:30:32 AM	52570
Surr: 1,2-Dichloroethane-d4	88.1	70-130		%Rec	1	5/21/2020 4:30:32 AM	52570
Surr: 4-Bromofluorobenzene	91.7	70-130		%Rec	1	5/21/2020 4:30:32 AM	52570
Surr: Dibromofluoromethane	102	70-130		%Rec	1	5/21/2020 4:30:32 AM	52570
Surr: Toluene-d8	94.4	70-130		%Rec	1	5/21/2020 4:30:32 AM	52570

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

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

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## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-13 Surface South Wall

Project: Devon Cotton Draw 221H

Collection Date: 5/15/2020 10:40:00 AM

Lab ID: 2005796-007

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	310	60		mg/Kg	20	5/23/2020 2:48:43 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/21/2020 4:59:06 AM	52570
Surr: BFB	94.1	70-130		%Rec	1	5/21/2020 4:59:06 AM	52570
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range 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: DNOP	66.7	55.1-146		%Rec	1	5/22/2020 7:21:00 AM	52589
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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
Ethylbenzene	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: Dibromofluoromethane	101	70-130		%Rec	1	5/21/2020 4:59:06 AM	52570
Surr: Toluene-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.

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

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## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-13 1 ft South Wall

Project: Devon Cotton Draw 221H

Collection Date: 5/15/2020 10:50:00 AM

Lab ID: 2005796-008

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	240	60		mg/Kg	20	5/23/2020 3:01:07 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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

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

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

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## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-14 Surface South Wall

Project: Devon Cotton Draw 221H

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

Lab ID: 2005796-009

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	290	60		mg/Kg	20	5/23/2020 3:38:21 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.024		mg/Kg	1	5/21/2020 5:56:20 AM	52570
Toluene	ND	0.047		mg/Kg	1	5/21/2020 5:56:20 AM	52570
Ethylbenzene	ND	0.047		mg/Kg	1	5/21/2020 5:56:20 AM	52570
Xylenes, Total	ND	0.095		mg/Kg	1	5/21/2020 5:56:20 AM	52570
Surr: 1,2-Dichloroethane-d4	84.9	70-130		%Rec	1	5/21/2020 5:56:20 AM	52570
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	5/21/2020 5:56:20 AM	52570
Surr: Dibromofluoromethane	102	70-130		%Rec	1	5/21/2020 5:56:20 AM	52570
Surr: Toluene-d8	92.0	70-130		%Rec	1	5/21/2020 5:56:20 AM	52570

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

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

## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-14 1 ft South Wall

Project: Devon Cotton Draw 221H

Collection Date: 5/15/2020 11:10:00 AM

Lab ID: 2005796-010

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	60		mg/Kg	20	5/23/2020 3:50:45 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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

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

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

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## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; 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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	280	60		mg/Kg	20	5/23/2020 4:03:09 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/22/2020 8:56:57 AM	52589
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/22/2020 8:56:57 AM	52589
Surr: DNOP	50.8	55.1-146	S	%Rec	1	5/22/2020 8:56:57 AM	52589
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.023		mg/Kg	1	5/21/2020 6:53:24 AM	52570
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
Xylenes, Total	ND	0.093		mg/Kg	1	5/21/2020 6:53:24 AM	52570
Surr: 1,2-Dichloroethane-d4	88.7	70-130		%Rec	1	5/21/2020 6:53:24 AM	52570
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	5/21/2020 6:53:24 AM	52570
Surr: Dibromofluoromethane	105	70-130		%Rec	1	5/21/2020 6:53:24 AM	52570
Surr: Toluene-d8	95.9	70-130		%Rec	1	5/21/2020 6:53:24 AM	52570

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

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

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## Analytical Report

Lab Order 2005796

Date Reported: 5/26/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-15 1 ft West Wall

Project: Devon Cotton Draw 221H

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

Lab ID: 2005796-012

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	230	60		mg/Kg	20	5/23/2020 4:15:33 PM	52665
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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.

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

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2005796

26-May-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 221H

Sample ID: <b>MB-52665</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52665</b>	RunNo: <b>69127</b>								
Prep Date: <b>5/23/2020</b>	Analysis Date: <b>5/23/2020</b>	SeqNo: <b>2395485</b>	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: <b>LCS-52665</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52665</b>	RunNo: <b>69127</b>								
Prep Date: <b>5/23/2020</b>	Analysis Date: <b>5/23/2020</b>	SeqNo: <b>2395486</b>	Units: <b>mg/Kg</b>							
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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2005796

26-May-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 221H

Sample ID: <b>LCS-52589</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>52589</b>			RunNo: <b>69011</b>						
Prep Date: <b>5/20/2020</b>	Analysis Date: <b>5/22/2020</b>			SeqNo: <b>2392465</b>		Units: <b>mg/Kg</b>				
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: <b>MB-52589</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>52589</b>			RunNo: <b>69011</b>						
Prep Date: <b>5/20/2020</b>	Analysis Date: <b>5/22/2020</b>			SeqNo: <b>2392471</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2005796

26-May-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 221H

Sample ID: <b>mb-52570</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52570</b>	RunNo: <b>69064</b>								
Prep Date: <b>5/19/2020</b>	Analysis Date: <b>5/20/2020</b>	SeqNo: <b>2391817</b>			Units: <b>mg/Kg</b>					
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	0.44		0.5000		88.0	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.4	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.48		0.5000		95.1	70	130			

Sample ID: <b>lcs-52570</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>52570</b>	RunNo: <b>69064</b>								
Prep Date: <b>5/19/2020</b>	Analysis Date: <b>5/20/2020</b>	SeqNo: <b>2391818</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.2	0.10	3.000	0	107	80	120			
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.3	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.47		0.5000		93.4	70	130			

**Qualifiers:**

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

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

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

WO#: 2005796

26-May-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 221H

Sample ID: <b>mb-52570</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52570</b>	RunNo: <b>69064</b>								
Prep Date: <b>5/19/2020</b>	Analysis Date: <b>5/20/2020</b>	SeqNo: <b>2391843</b>		Units: <b>mg/Kg</b>						
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			

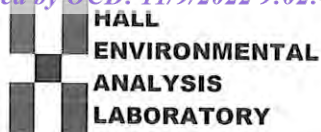
Sample ID: <b>lcs-52570</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52570</b>	RunNo: <b>69064</b>								
Prep Date: <b>5/19/2020</b>	Analysis Date: <b>5/20/2020</b>	SeqNo: <b>2391844</b>		Units: <b>mg/Kg</b>						
Analyte	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

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

## Sample Log-In Check List

Client Name: **Safety Env Solutions**Work Order Number: **2005796**

RcptNo: 1

Received By: **Isaiah Ortiz**

5/19/2020 9:30:00 AM

I-OK

Completed By: **Isaiah Ortiz**

5/19/2020 9:57:04 AM

I-OK

Reviewed By: **LB**

5/19/20

### Chain of Custody

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

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. Received at least 1 vial with headspace  $<1/4"$  for AQ VOA? Yes ☐ No ☐ NA ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

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

(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

(&lt;2 or &gt;12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: Em 5/19/20

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			







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

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

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

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2003B53

Date Reported: 3/31/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety Environmental Services

Client Sample ID: SP-1 Bottom 1.5'

Project: Cotton Draw 221 Devon

Collection Date: 3/23/2020 2:15:00 PM

Lab ID: 2003B53-001

Matrix: SOIL

Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	140	59		mg/Kg	20	3/29/2020 7:43:59 PM	51389
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>CLP</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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

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

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

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## Analytical Report

Lab Order 2003B53

Date Reported: 3/31/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety Environmental Services

Client Sample ID: SP-2 BottoM 1.5'

Project: Cotton Draw 221 Devon

Collection Date: 3/23/2020 2:35:00 PM

Lab ID: 2003B53-002

Matrix: SOIL

Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	84	60		mg/Kg	20	3/29/2020 8:21:13 PM	51389
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							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

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

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

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## Analytical Report

Lab Order 2003B53

Date Reported: 3/31/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety Environmental Services

Client Sample ID: SP-3 West Wall

Project: Cotton Draw 221 Devon

Collection Date: 3/23/2020 2:55:00 PM

Lab ID: 2003B53-003

Matrix: SOIL

Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	110	59		mg/Kg	20	3/29/2020 8:33:38 PM	51389
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>CLP</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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

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

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

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## Analytical Report

Lab Order 2003B53

Date Reported: 3/31/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety Environmental Services

Client Sample ID: SP-4 North Wall

Project: Cotton Draw 221 Devon

Collection Date: 3/24/2020 8:40:00 AM

Lab ID: 2003B53-004

Matrix: SOIL

Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	100	60		mg/Kg	20	3/29/2020 8:46:03 PM	51389
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>CLP</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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

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

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

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## Analytical Report

Lab Order 2003B53

Date Reported: 3/31/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety Environmental Services

Client Sample ID: SP-5 East Wall

Project: Cotton Draw 221 Devon

Collection Date: 3/24/2020 8:45:00 AM

Lab ID: 2003B53-005

Matrix: SOIL

Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	61	59		mg/Kg	20	3/29/2020 8:58:27 PM	51389
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/30/2020 3:13:50 AM	51354
Surr: BFB	94.1	70-130		%Rec	1	3/30/2020 3:13:50 AM	51354
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>CLP</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/27/2020 12:11:31 PM	51355
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/27/2020 12:11:31 PM	51355
Surr: DNOP	98.6	55.1-146		%Rec	1	3/27/2020 12:11:31 PM	51355
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
Benzene	ND	0.023		mg/Kg	1	3/30/2020 3:13:50 AM	51354
Toluene	ND	0.047		mg/Kg	1	3/30/2020 3:13:50 AM	51354
Ethylbenzene	ND	0.047		mg/Kg	1	3/30/2020 3:13:50 AM	51354
Xylenes, Total	ND	0.093		mg/Kg	1	3/30/2020 3:13:50 AM	51354
Surr: 1,2-Dichloroethane-d4	78.1	70-130		%Rec	1	3/30/2020 3:13:50 AM	51354
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	3/30/2020 3:13:50 AM	51354
Surr: Dibromofluoromethane	103	70-130		%Rec	1	3/30/2020 3:13:50 AM	51354
Surr: Toluene-d8	101	70-130		%Rec	1	3/30/2020 3:13:50 AM	51354

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

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

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## Analytical Report

Lab Order 2003B53

Date Reported: 3/31/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety Environmental Services

Client Sample ID: SP-6 Bottom 1'

Project: Cotton Draw 221 Devon

Collection Date: 3/24/2020 8:55:00 AM

Lab ID: 2003B53-006

Matrix: SOIL

Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	580	60		mg/Kg	20	3/29/2020 9:35:40 PM	51389
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>CLP</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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

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

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

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## Analytical Report

Lab Order 2003B53

Date Reported: 3/31/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety Environmental Services

Client Sample ID: SP-7 Bottom 1'

Project: Cotton Draw 221 Devon

Collection Date: 3/24/2020 9:10:00 AM

Lab ID: 2003B53-007

Matrix: SOIL

Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	840	60		mg/Kg	20	3/29/2020 9:48:04 PM	51389
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>CLP</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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.

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

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## Analytical Report

Lab Order 2003B53

Date Reported: 3/31/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety Environmental Services

Client Sample ID: SP-8 South Wall

Project: Cotton Draw 221 Devon

Collection Date: 3/24/2020 9:30:00 AM

Lab ID: 2003B53-008

Matrix: SOIL

Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	60		mg/Kg	20	3/29/2020 10:00:29 PM	51389
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>CLP</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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.

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

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## Analytical Report

Lab Order 2003B53

Date Reported: 3/31/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety Environmental Services

Client Sample ID: SP-9 Surface

Project: Cotton Draw 221 Devon

Collection Date: 3/24/2020 10:00:00 AM

Lab ID: 2003B53-009

Matrix: SOIL

Received Date: 3/25/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	66	60		mg/Kg	20	3/29/2020 10:12:54 PM	51389
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>JMR</b>
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
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>CLP</b>
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
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>JMR</b>
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

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2003B53  
31-Mar-20

Client: Safety Environmental Services  
Project: Cotton Draw 221 Devon

Sample ID: <b>MB-51389</b>		SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>		Batch ID: <b>51389</b>		RunNo: <b>67692</b>						
Prep Date: <b>3/29/2020</b>		Analysis Date: <b>3/29/2020</b>		SeqNo: <b>2337033</b>			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: <b>LCS-51389</b>		SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>51389</b>		RunNo: <b>67692</b>						
Prep Date: <b>3/29/2020</b>		Analysis Date: <b>3/29/2020</b>		SeqNo: <b>2337034</b>			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.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

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

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

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

WO#: 2003B53

31-Mar-20

**Client:** Safety Environmental Services**Project:** Cotton Draw 221 Devon

Sample ID: <b>MB-51355</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51355</b>	RunNo: <b>67623</b>								
Prep Date: <b>3/26/2020</b>	Analysis Date: <b>3/27/2020</b>	SeqNo: <b>2334371</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		93.5	55.1	146			

Sample ID: <b>LCS-51355</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51355</b>	RunNo: <b>67623</b>								
Prep Date: <b>3/26/2020</b>	Analysis Date: <b>3/27/2020</b>	SeqNo: <b>2334372</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	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: <b>2003B53-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SP-1 Bottom 1.5'</b>	Batch ID: <b>51355</b>	RunNo: <b>67623</b>								
Prep Date: <b>3/26/2020</b>	Analysis Date: <b>3/27/2020</b>	SeqNo: <b>2334374</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	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: <b>2003B53-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SP-1 Bottom 1.5'</b>	Batch ID: <b>51355</b>	RunNo: <b>67623</b>								
Prep Date: <b>3/26/2020</b>	Analysis Date: <b>3/27/2020</b>	SeqNo: <b>2334998</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	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:**

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

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

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

WO#: 2003B53

31-Mar-20

**Client:** Safety Environmental Services**Project:** Cotton Draw 221 Devon

Sample ID: <b>2003b53-001ams</b>		SampType: <b>MS</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>SP-1 Bottom 1.5'</b>		Batch ID: <b>51354</b>		RunNo: <b>67682</b>						
Prep Date: <b>3/26/2020</b>		Analysis Date: <b>3/29/2020</b>		SeqNo: <b>2336683</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.024	0.9425	0	88.8	70	130			
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		0.4713		81.9	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.4713		101	70	130			
Surr: Dibromofluoromethane	0.47		0.4713		100	70	130			
Surr: Toluene-d8	0.51		0.4713		108	70	130			

Sample ID: <b>2003b53-001amsd</b>		SampType: <b>MSD</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>SP-1 Bottom 1.5'</b>		Batch ID: <b>51354</b>		RunNo: <b>67682</b>						
Prep Date: <b>3/26/2020</b>		Analysis Date: <b>3/30/2020</b>		SeqNo: <b>2336684</b>		Units: <b>mg/Kg</b>				
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: <b>lcs-51354</b>		SampType: <b>LCS</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>51354</b>		RunNo: <b>67682</b>						
Prep Date: <b>3/26/2020</b>		Analysis Date: <b>3/29/2020</b>		SeqNo: <b>2336709</b>		Units: <b>mg/Kg</b>				
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			
Surr: 1,2-Dichloroethane-d4	0.38		0.5000		76.1	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.6	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

**Qualifiers:**

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2003B53  
31-Mar-20

Client: Safety Environmental Services  
Project: Cotton Draw 221 Devon

Sample ID: mb-51354	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 51354	RunNo: 67682								
Prep Date: 3/26/2020	Analysis Date: 3/29/2020	SeqNo: 2336710		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.42		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
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

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

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



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

WO#: 2003B53

31-Mar-20

**Client:** Safety Environmental Services**Project:** Cotton Draw 221 Devon

Sample ID: <b>2003b53-002ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>SP-2 BottoM 1.5'</b>	Batch ID: <b>51354</b>	RunNo: <b>67682</b>								
Prep Date: <b>3/26/2020</b>	Analysis Date: <b>3/30/2020</b>	SeqNo: <b>2336715</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	4.8	24.04	0	74.1	70	130			
Surr: BFB	490		480.8		101	70	130			

Sample ID: <b>2003b53-002amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>SP-2 BottoM 1.5'</b>	Batch ID: <b>51354</b>	RunNo: <b>67682</b>								
Prep Date: <b>3/26/2020</b>	Analysis Date: <b>3/30/2020</b>	SeqNo: <b>2336716</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range 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	

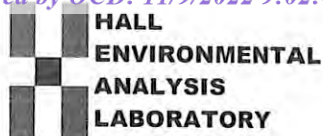
Sample ID: <b>lcs-51354</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51354</b>	RunNo: <b>67682</b>								
Prep Date: <b>3/26/2020</b>	Analysis Date: <b>3/29/2020</b>	SeqNo: <b>2336742</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	5.0	25.00	0	77.2	70	130			
Surr: BFB	500		500.0		99.8	70	130			

Sample ID: <b>mb-51354</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51354</b>	RunNo: <b>67682</b>								
Prep Date: <b>3/26/2020</b>	Analysis Date: <b>3/29/2020</b>	SeqNo: <b>2336743</b>	Units: <b>mg/Kg</b>							
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		96.9	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

## Sample Log-In Check List

Client Name: **Safety Env Solutions**Work Order Number: **2003B53**

RcptNo: 1

Received By: **Juan Rojas**

3/25/2020 8:30:00 AM

Completed By: **Anne Thorne**

3/25/2020 4:27:24 PM

Reviewed By: **DAD 3/26/20**

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted?

Checked by:

### Special Handling (if applicable)

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

Person Notified:

Date

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.2	Good	Yes			

## Chain-of-Custody Record

Client: Safety &amp; Environmental Solutions

Mailing Address: 703 E. Clinton

bbbs N.W. 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Date	Time	Matrix	Sample Name
03/23	1415	S	SP-1 Boston 1.5 ft
03/23	1435	S	SP-2 Boston 1.5 ft
03/23	1455	S	SP-3 Wagon
03/24	0840	S	SP-4 Wagon
03/24	0845	S	SP-5 Wagon
03/24	0855	S	SP-6 Boston 1 ft
03/24	0910	S	SP-7 Boston 1 ft
03/24	0930	S	SP-8 South Wagon
03/24	1000	S	SP-9 Surface

Date:	Time:	Relinquished by:
03/24/20	1700	Sam June
Date:	Time:	Relinquished by:
03/24/20	1900	Sam June

Turn-Around Time: ☒ Standard ☐ Rush

Project Name: Devon Cotton Draw 221

WO# 20838990

Project #: DEV-20-019

Project Manager: Allen, Bob

Sampler: Sam June

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Container Type and #	Preservative Type	HEAL No.	Cooler Temp (including CF): 0.2-0.2 (°C)
1	For	2003B53	201
1	For		202
1			203
1			204
1			205
1			206
1			207
1			208
1			209

Received by:	Via:	Date	Time
Sam June		3/24/20	1700
Received by:	Via:	Date	Time
Sam June		3/25/20	8:30



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCBs	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
X	X								X Coliforms
X	X								X Coliforms
X	X								X Coliforms
X	X								X Coliforms
X	X								X Coliforms
X	X								X Coliforms
X	X								X Coliforms
X	X								X Coliforms
X	X								X Coliforms

Remarks:	Bill Devon Direct
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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

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

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

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2005D04

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-16 Surface North

Project: Devon Cotton Draw 221 H

Collection Date: 5/28/2020 10:50:00 AM

Lab ID: 2005D04-001

Matrix: SOIL

Received Date: 5/30/2020 8:22:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/5/2020 10:23:54 PM	52903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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
<b>EPA METHOD 8021B: VOLATILES</b>							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.

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

Page 1 of 8



## Analytical Report

Lab Order 2005D04

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-17 Surface South

Project: Devon Cotton Draw 221 H

Collection Date: 5/28/2020 11:00:00 AM

Lab ID: 2005D04-002

Matrix: SOIL

Received Date: 5/30/2020 8:22:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/5/2020 10:36:19 PM	52903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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
<b>EPA METHOD 8021B: VOLATILES</b>							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.

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

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## Analytical Report

Lab Order 2005D04

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-18 Surface East

Project: Devon Cotton Draw 221 H

Collection Date: 5/28/2020 11:15:00 AM

Lab ID: 2005D04-003

Matrix: SOIL

Received Date: 5/30/2020 8:22:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/5/2020 10:48:43 PM	52903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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
<b>EPA METHOD 8021B: VOLATILES</b>							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
Surr: 4-Bromofluorobenzene	93.2	80-120		%Rec	1	6/1/2020 8:54:57 PM	52788

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

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

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## Analytical Report

Lab Order 2005D04

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-19 Surface West

Project: Devon Cotton Draw 221 H

Collection Date: 5/28/2020 11:30:00 AM

Lab ID: 2005D04-004

Matrix: SOIL

Received Date: 5/30/2020 8:22:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/5/2020 11:01:07 PM	52903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							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
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							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
<b>EPA METHOD 8021B: VOLATILES</b>							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.

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2005D0408-Jun-20

Client: Safety & Environmental Solutions  
Project: Devon Cotton Draw 221 H

Sample ID: MB-52903	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 52903	RunNo: 69444
Prep Date: 6/5/2020	Analysis Date: 6/5/2020	SeqNo: 2409023 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-52903	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 52903	RunNo: 69444
Prep Date: 6/5/2020	Analysis Date: 6/5/2020	SeqNo: 2409024 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 91.8 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 Quantitative Limit

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

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2005D04

08-Jun-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 221 H

Sample ID: <b>LCS-52791</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>52791</b>		RunNo: <b>69277</b>							
Prep Date: <b>5/31/2020</b>	Analysis Date: <b>5/31/2020</b>		SeqNo: <b>2401817</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	70	130			
Surr: DNOP	3.6		5.000		72.3	55.1	146			

Sample ID: <b>MB-52791</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>52791</b>		RunNo: <b>69277</b>							
Prep Date: <b>5/31/2020</b>	Analysis Date: <b>5/31/2020</b>		SeqNo: <b>2401818</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.5		10.00		85.0	55.1	146			

**Qualifiers:**

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

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



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

WO#: 2005D04

08-Jun-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 221 H

Sample ID: <b>mb-52788</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52788</b>	RunNo: <b>69307</b>								
Prep Date: <b>5/31/2020</b>	Analysis Date: <b>6/1/2020</b>	SeqNo: <b>2403247</b>	Units: <b>mg/Kg</b>							
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: <b>lcs-52788</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52788</b>	RunNo: <b>69307</b>								
Prep Date: <b>5/31/2020</b>	Analysis Date: <b>6/1/2020</b>	SeqNo: <b>2403248</b>	Units: <b>mg/Kg</b>							
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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

Page 7 of 8

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

WO#: 2005D04

08-Jun-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 221 H

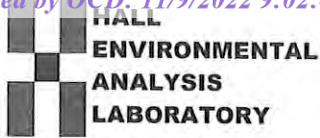
Sample ID: <b>mb-52788</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52788</b>	RunNo: <b>69307</b>								
Prep Date: <b>5/31/2020</b>	Analysis Date: <b>6/1/2020</b>	SeqNo: <b>2403285</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	80	120			

Sample ID: <b>LCS-52788</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52788</b>	RunNo: <b>69307</b>								
Prep Date: <b>5/31/2020</b>	Analysis Date: <b>6/1/2020</b>	SeqNo: <b>2403286</b>	Units: <b>mg/Kg</b>							
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-Bromofluorobenzene	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

## Sample Log-In Check List

Client Name: **Safety Env Solutions**Work Order Number: **2005D04**RcptNo: **1**Received By: **Isaiah Ortiz** 5/30/2020 8:22:00 AMCompleted By: **Isaiah Ortiz** 5/30/2020 8:55:50 AMReviewed By: **LB** 5/30/20

I-0x

I-0x

### Chain of Custody

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

### Log In

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

# of preserved bottles checked for pH: 5/30/20  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
By Whom: \_\_\_\_\_ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person  
Regarding: \_\_\_\_\_  
Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.1	Good	Not Present			





## Devon Energy

### CDU 221H





Incident ID	NAB1911936996
District RP	
Facility ID	
Application ID	

## Closure

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

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

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dale Woodall Title: Env. Professional  
Signature: Dale Woodall Date: 11/9/2022  
email: dale.woodall@dvn.com Telephone: 575-748-1838

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_



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.

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

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dale Woodall Title: Env. Professional  
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Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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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  
  
Action 157279

CONDITIONS

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

CONDITIONS

Created By	Condition	Condition Date
rhamlet	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