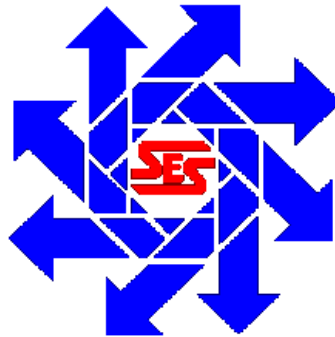


**Devon Energy Production Company  
Cotton Draw Unit #254**

**Closure Report  
U/L N, Section 01, T25S, R31E  
Eddy County, New Mexico  
NAB1912056434  
2RP-5382**

**October 13, 2020**



**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 CDU #254 concerning a 14.775 bbls crude oil release on the South side of the location. According to the C-141, a back pressure valve got washed out on the well head causing a spill. The valve issue was resolved and a vacuum truck recovered 9.775 bbls of oil. This site is situated in Eddy County, Section 1, Township 25S, and Range 31E.

SESI personnel performed an assessment of the site in February of 2020 based on generator knowledge of the leak location. SESI personnel mapped the leak and performed delineation.

## Surface and Ground Water

Based on the NMOCD Oil and Gas map included in this report, surface water, or remnants thereof, do not appear to be within 3000 feet of this release. The New Mexico Office of the State Engineer records indicates the average depth to groundwater for the area to be between 350' and 375' bgs; however, since no wells less than 25 years old and less than a half mile away are known to be present, SESI will delineate this release to the most stringent criteria established by NMOCD.

## Characterization

On February 17, 2020, SESI personnel performed sampling to determine vertical extent of the release. SESI advanced 2 auger holes within the leak area. An additional sample was taken on the North side of the location as requested by Devon in an area with staining they were concerned about. This sample is included in the lab analysis, but not the summary in this report because it isn't relevant to this particular release. The samples were properly packaged and preserved and sent to Hall Environmental Laboratories for analyzation. The results of the testing are captured in the summary below:

Devon Energy Cotton Draw #254 Soil Sample Results: Hall Environmental Laboratories 2/17/20									
SAMPLE ID	Chloride	GRO	DRO	MRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
AH1 @ SURFACE	ND	ND	3400	2300	ND	ND	ND	ND	N/A
AH1 @ 1'	ND	ND	ND	ND	ND	ND	ND	ND	N/A
AH1 @ 2'	ND	ND	ND	ND	ND	ND	ND	ND	N/A
AH2 @ SURFACE	1400	ND	110	160	ND	ND	ND	ND	ND
AH2 @ 1'	ND	ND	ND	ND	ND	ND	ND	ND	N/A
AH2 @ 2'	ND	ND	ND	ND	ND	ND	ND	ND	N/A

Based on these results, SESI believed the site to be vertically delineated; however, it was discovered that horizontal delineation would need to be achieved as well. Therefore, in May of 2020, SESI obtained horizontal samples at the four cardinal points. The samples were properly packaged and preserved and sent to Hall Environmental Laboratories for analyzation. The results of the testing are captured in the summary below:

Devon Energy Cotton Draw #254 Soil Sample Results: Hall Environmental Laboratories 5/28/20									
SAMPLE ID	Chloride	GRO	DRO	MRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
AH10 NORTH	ND	ND	ND	ND	ND	ND	ND	ND	N/A
AH11 SOUTH	ND	ND	ND	ND	ND	ND	ND	ND	N/A
AH12 EAST	ND	ND	ND	ND	ND	ND	ND	ND	N/A
AH13 WEST	ND	ND	ND	ND	ND	ND	ND	ND	N/A

It was determined after reviewing the results of the samples that horizontal extent had also been achieved and remediation could be performed.

## Remediation

Based on the findings of the sampling events, SESI, determined the best course of action was to excavate the contaminated soil to a depth of one foot. In July of 2020, approximately 125 yards of contaminated material were removed via shovel and backhoe. The contaminated soil was disposed of in a NMOCD-approved landfill.

During excavation, SESI performed field testing to ensure remediation efforts had been successful; however, the results revealed that the excavation had not quite removed the material to the most stringent standards, so SESI excavated another ½ foot. Therefore, an additional 60 yards of material were excavated and disposed of in a NMOCD approved landfill.

Upon excavation completion, seven confirmation samples were taken to ensure successful remediation efforts had been completed. The samples were properly preserved and packaged then sent to Hall Laboratories for analyzation. The results of the sampling are captured in the table below.

<b>Devon Energy</b> <b>Cotton Draw #254</b> <b>Soil Sample Results: Hall Environmental Laboratories 7/15/20</b>									
SAMPLE ID	Chloride	GRO	DRO	MRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
SP1 @ BOTTOM 1.5'	ND	ND	ND	ND	ND	ND	ND	ND	n/a
SP2 @ BOTTOM 1.5'	ND	ND	ND	ND	ND	ND	ND	ND	n/a
SP3 @ BOTTOM 1.5'	ND	ND	ND	ND	ND	ND	ND	ND	n/a
EAST WALL	ND	ND	ND	ND	ND	ND	ND	ND	n/a
NORTH WALL	<b>110</b>	ND	ND	ND	ND	ND	ND	ND	n/a
SOUTH WALL	<b>110</b>	ND	ND	ND	ND	ND	ND	ND	n/a
WEST WALL	<b>110</b>	ND	ND	ND	ND	ND	ND	ND	n/a

Once sample results verified successful remediation had been achieved, the site was backfilled with clean soil. Pictures of the remediation are included in this report.

### Closure Request

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

### Supplemental Documentation for Closure






Map of Release with sample locations  
 Photos of remediation  
 NMOCD Oil and Gas Map  
 BLM Cave Karst Map  
 FEMA Floodplain Map  
 Laboratory Analysis  
 C-141, pages 3-6

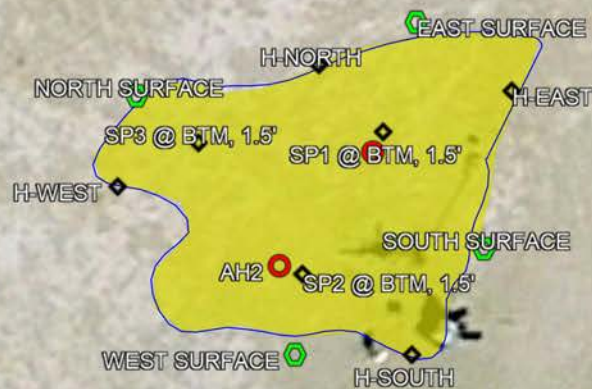


# Devon, CDU #254

NAB1912056434  
2RP-5382  
DEV-20-015

## Legend

-  1.5 ft excavation
-  Confirmation samples
-  Horizontal extent samples
-  Spill Area (blue)
-  Vertical extent samples

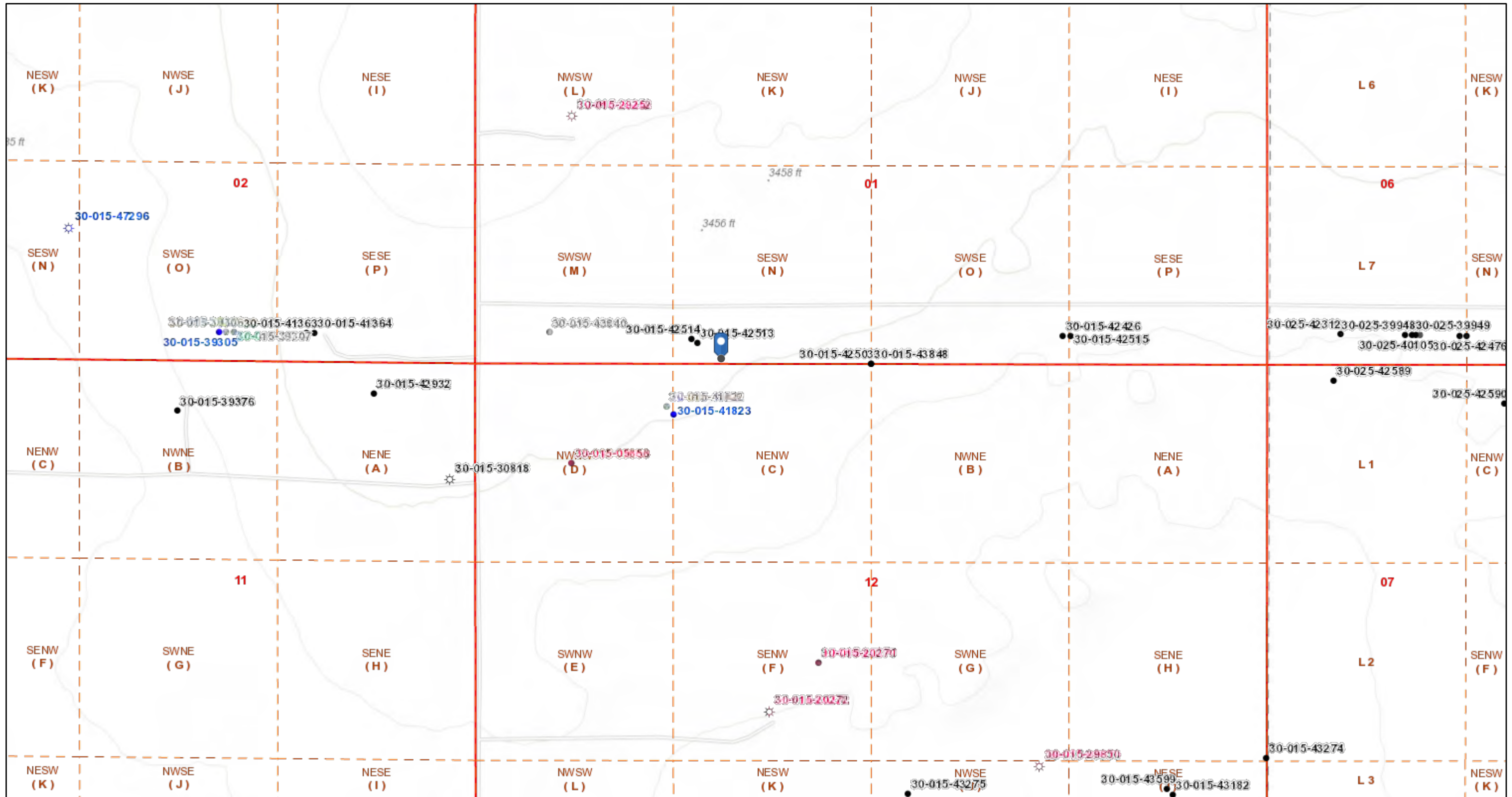



































# Devon, CDU #254



10/13/2020, 10:31:48 AM

Wells - Large Scale		CO2, Temporarily Abandoned		Injection, Active
?		Gas, Active		Injection, Cancelled
●		Gas, Cancelled		Injection, New
		Gas, New		Injection, Plugged
		Gas, Plugged		Injection, Temporarily Abandoned
		Gas, Temporarily Abandoned	●	Oil, Active
				

 Oil, Cancelled	 Salt Water Injection, New
 Oil, New	 Salt Water Injection, Plugged
 Oil, Plugged	 Salt Water Injection, Temporarily Abandoned
 Oil, Temporarily Abandoned	 Water, Active
 Salt Water Injection, Active	 Water, Cancelled
 Salt Water Injection, Cancelled	 Water, New

1:9,028

0 0.07 0.15 0.3 mi







0 0.15 0.3 0.6 km

Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,

## Devon, CDU #254

NAB1912056434  
2RP-5382  
DEV-20-015

### Legend

-  1.5 ft excavation
-  Confirmation samples
-  Horizontal extent samples
-  Low potential
-  Spill Area (blue)
-  Vertical extent samples





# National Flood Hazard Layer FIRMette



103°44'24"W 32°9'23"N



USGS The National Map: Orthoimagery. Data refreshed April 2020

Released to Imaging: 3/18/2021 2:12:15 PM 1,500 2,000 1:6,000

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/13/2020 at 12:32 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



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)

February 28, 2020

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

RE: Cotton Draw 254 2RP 5382

OrderNo.: 2002914

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 2/21/2020 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 light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2002914

Date Reported: 2/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-1 Surface

Project: Cotton Draw 254 2RP 5382

Collection Date: 2/17/2020 3:05:00 PM

Lab ID: 2002914-001

Matrix: SOIL

Received Date: 2/21/2020 8:00:00 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	2/25/2020 7:50:20 PM	50663
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	3400	160		mg/Kg	20	2/25/2020 10:32:44 PM	50613
Motor Oil Range Organics (MRO)	2300	820		mg/Kg	20	2/25/2020 10:32:44 PM	50613
Surr: DNOP	0	55.1-146	S	%Rec	20	2/25/2020 10:32:44 PM	50613
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	24	D	mg/Kg	5	2/25/2020 4:49:17 PM	50588
Surr: BFB	84.1	66.6-105	D	%Rec	5	2/25/2020 4:49:17 PM	50588
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12	D	mg/Kg	5	2/25/2020 4:49:17 PM	50588
Toluene	ND	0.24	D	mg/Kg	5	2/25/2020 4:49:17 PM	50588
Ethylbenzene	ND	0.24	D	mg/Kg	5	2/25/2020 4:49:17 PM	50588
Xylenes, Total	ND	0.48	D	mg/Kg	5	2/25/2020 4:49:17 PM	50588
Surr: 4-Bromofluorobenzene	92.0	80-120	D	%Rec	5	2/25/2020 4:49:17 PM	50588

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 11



## Analytical Report

Lab Order 2002914

Date Reported: 2/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-1 1Ft

Project: Cotton Draw 254 2RP 5382

Collection Date: 2/17/2020 3:10:00 PM

Lab ID: 2002914-002

Matrix: SOIL

Received Date: 2/21/2020 8:00:00 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	2/25/2020 8:52:05 PM	50663
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/25/2020 10:54:25 PM	50613
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/25/2020 10:54:25 PM	50613
Surr: DNOP	99.4	55.1-146		%Rec	1	2/25/2020 10:54:25 PM	50613
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/25/2020 5:12:43 PM	50588
Surr: BFB	82.8	66.6-105		%Rec	1	2/25/2020 5:12:43 PM	50588
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	2/25/2020 5:12:43 PM	50588
Toluene	ND	0.048		mg/Kg	1	2/25/2020 5:12:43 PM	50588
Ethylbenzene	ND	0.048		mg/Kg	1	2/25/2020 5:12:43 PM	50588
Xylenes, Total	ND	0.095		mg/Kg	1	2/25/2020 5:12:43 PM	50588
Surr: 4-Bromofluorobenzene	91.8	80-120		%Rec	1	2/25/2020 5:12:43 PM	50588

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 2 of 11

## Analytical Report

Lab Order 2002914

Date Reported: 2/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-1 2Ft

Project: Cotton Draw 254 2RP 5382

Collection Date: 2/17/2020 3:25:00 PM

Lab ID: 2002914-003

Matrix: SOIL

Received Date: 2/21/2020 8:00:00 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	2/25/2020 9:04:26 PM	50663
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/25/2020 11:16:19 PM	50613
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/25/2020 11:16:19 PM	50613
Surr: DNOP	118	55.1-146		%Rec	1	2/25/2020 11:16:19 PM	50613
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/25/2020 5:36:03 PM	50588
Surr: BFB	83.5	66.6-105		%Rec	1	2/25/2020 5:36:03 PM	50588
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	2/25/2020 5:36:03 PM	50588
Toluene	ND	0.046		mg/Kg	1	2/25/2020 5:36:03 PM	50588
Ethylbenzene	ND	0.046		mg/Kg	1	2/25/2020 5:36:03 PM	50588
Xylenes, Total	ND	0.093		mg/Kg	1	2/25/2020 5:36:03 PM	50588
Surr: 4-Bromofluorobenzene	91.2	80-120		%Rec	1	2/25/2020 5:36:03 PM	50588

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 3 of 11

## Analytical Report

Lab Order 2002914

Date Reported: 2/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-2 Surface

Project: Cotton Draw 254 2RP 5382

Collection Date: 2/17/2020 3:30:00 PM

Lab ID: 2002914-004

Matrix: SOIL

Received Date: 2/21/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1400	60		mg/Kg	20	2/25/2020 9:16:46 PM	50663
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	110	9.8		mg/Kg	1	2/25/2020 11:38:11 PM	50613
Motor Oil Range Organics (MRO)	160	49		mg/Kg	1	2/25/2020 11:38:11 PM	50613
Surr: DNOP	110	55.1-146		%Rec	1	2/25/2020 11:38:11 PM	50613
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/25/2020 5:59:32 PM	50588
Surr: BFB	84.7	66.6-105		%Rec	1	2/25/2020 5:59:32 PM	50588
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	2/25/2020 5:59:32 PM	50588
Toluene	ND	0.049		mg/Kg	1	2/25/2020 5:59:32 PM	50588
Ethylbenzene	ND	0.049		mg/Kg	1	2/25/2020 5:59:32 PM	50588
Xylenes, Total	ND	0.099		mg/Kg	1	2/25/2020 5:59:32 PM	50588
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	2/25/2020 5:59:32 PM	50588

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 4 of 11



## Analytical Report

Lab Order 2002914

Date Reported: 2/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-2 1Ft

Project: Cotton Draw 254 2RP 5382

Collection Date: 2/17/2020 3:40:00 PM

Lab ID: 2002914-005

Matrix: SOIL

Received Date: 2/21/2020 8:00:00 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	2/25/2020 9:29:06 PM	50663
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	2/26/2020 12:00:04 AM	50613
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/26/2020 12:00:04 AM	50613
Surr: DNOP	104	55.1-146		%Rec	1	2/26/2020 12:00:04 AM	50613
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/25/2020 6:23:01 PM	50588
Surr: BFB	83.9	66.6-105		%Rec	1	2/25/2020 6:23:01 PM	50588
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	2/25/2020 6:23:01 PM	50588
Toluene	ND	0.049		mg/Kg	1	2/25/2020 6:23:01 PM	50588
Ethylbenzene	ND	0.049		mg/Kg	1	2/25/2020 6:23:01 PM	50588
Xylenes, Total	ND	0.098		mg/Kg	1	2/25/2020 6:23:01 PM	50588
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	1	2/25/2020 6:23:01 PM	50588

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 11

## Analytical Report

Lab Order 2002914

Date Reported: 2/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-2 2Ft

Project: Cotton Draw 254 2RP 5382

Collection Date: 2/17/2020 3:55:00 PM

Lab ID: 2002914-006

Matrix: SOIL

Received Date: 2/21/2020 8:00:00 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	2/25/2020 9:41:26 PM	50663
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/26/2020 12:21:52 AM	50613
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/26/2020 12:21:52 AM	50613
Surr: DNOP	105	55.1-146		%Rec	1	2/26/2020 12:21:52 AM	50613
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/25/2020 6:46:18 PM	50588
Surr: BFB	83.7	66.6-105		%Rec	1	2/25/2020 6:46:18 PM	50588
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	2/25/2020 6:46:18 PM	50588
Toluene	ND	0.049		mg/Kg	1	2/25/2020 6:46:18 PM	50588
Ethylbenzene	ND	0.049		mg/Kg	1	2/25/2020 6:46:18 PM	50588
Xylenes, Total	ND	0.099		mg/Kg	1	2/25/2020 6:46:18 PM	50588
Surr: 4-Bromofluorobenzene	92.9	80-120		%Rec	1	2/25/2020 6:46:18 PM	50588

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 6 of 11

## Analytical Report

Lab Order 2002914

Date Reported: 2/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-3 Surface

Project: Cotton Draw 254 2RP 5382

Collection Date: 2/17/2020 4:00:00 PM

Lab ID: 2002914-007

Matrix: SOIL

Received Date: 2/21/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	10000	300		mg/Kg	100	2/27/2020 1:51:41 PM	50663
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	4600	86		mg/Kg	10	2/26/2020 12:43:47 AM	50613
Motor Oil Range Organics (MRO)	1900	430		mg/Kg	10	2/26/2020 12:43:47 AM	50613
Surr: DNOP	0	55.1-146	S	%Rec	10	2/26/2020 12:43:47 AM	50613
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	15	4.7		mg/Kg	1	2/25/2020 7:09:41 PM	50588
Surr: BFB	201	66.6-105	S	%Rec	1	2/25/2020 7:09:41 PM	50588
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	2/25/2020 7:09:41 PM	50588
Toluene	ND	0.047		mg/Kg	1	2/25/2020 7:09:41 PM	50588
Ethylbenzene	ND	0.047		mg/Kg	1	2/25/2020 7:09:41 PM	50588
Xylenes, Total	ND	0.093		mg/Kg	1	2/25/2020 7:09:41 PM	50588
Surr: 4-Bromofluorobenzene	96.5	80-120		%Rec	1	2/25/2020 7:09:41 PM	50588

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 7 of 11



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

WO#: 2002914

28-Feb-20

**Client:** Safety & Environmental Solutions**Project:** Cotton Draw 254 2RP 5382

Sample ID: <b>MB-50663</b>	SampType: <b>mbk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>50663</b>	RunNo: <b>66788</b>								
Prep Date: <b>2/25/2020</b>	Analysis Date: <b>2/25/2020</b>	SeqNo: <b>2297154</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-50663</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>50663</b>	RunNo: <b>66788</b>								
Prep Date: <b>2/25/2020</b>	Analysis Date: <b>2/25/2020</b>	SeqNo: <b>2297155</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	93.2	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

Page 8 of 11

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

WO#: 2002914

28-Feb-20

**Client:** Safety & Environmental Solutions**Project:** Cotton Draw 254 2RP 5382

Sample ID: <b>LCS-50613</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>50613</b>			RunNo: <b>66776</b>						
Prep Date: <b>2/24/2020</b>	Analysis Date: <b>2/25/2020</b>			SeqNo: <b>2295573</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.4	70	130			
Surr: DNOP	4.3		5.000		85.3	55.1	146			

Sample ID: <b>MB-50613</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>50613</b>			RunNo: <b>66776</b>						
Prep Date: <b>2/24/2020</b>	Analysis Date: <b>2/25/2020</b>			SeqNo: <b>2295575</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	10		10.00		102	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#: 2002914

28-Feb-20

**Client:** Safety & Environmental Solutions**Project:** Cotton Draw 254 2RP 5382

Sample ID: <b>mb-50588</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>50588</b>	RunNo: <b>66771</b>								
Prep Date: <b>2/21/2020</b>	Analysis Date: <b>2/25/2020</b>	SeqNo: <b>2296837</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	830		1000		83.5	66.6	105			

Sample ID: <b>lcs-50588</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>50588</b>	RunNo: <b>66771</b>								
Prep Date: <b>2/21/2020</b>	Analysis Date: <b>2/25/2020</b>	SeqNo: <b>2296838</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.8	80	120			
Surr: BFB	950		1000		94.7	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



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

WO#: 2002914

28-Feb-20

**Client:** Safety & Environmental Solutions**Project:** Cotton Draw 254 2RP 5382

Sample ID: <b>mb-50588</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>50588</b>	RunNo: <b>66771</b>								
Prep Date: <b>2/21/2020</b>	Analysis Date: <b>2/25/2020</b>	SeqNo: <b>2296886</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	0.92		1.000		92.3	80	120			

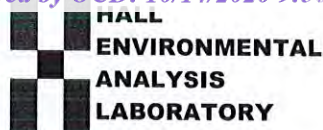
Sample ID: <b>LCS-50588</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>50588</b>	RunNo: <b>66771</b>								
Prep Date: <b>2/21/2020</b>	Analysis Date: <b>2/25/2020</b>	SeqNo: <b>2296887</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.1	80	120			
Toluene	0.96	0.050	1.000	0	95.7	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.0	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.1	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

Page 11 of 11



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: **2002914**

RcptNo: 1

Received By: **Juan Rojas**

2/21/2020 8:00:00 AM

Completed By: **Erin Melendrez**

2/21/2020 8:56:33 AM

Reviewed By: **YG 2/24/20**

### Chain of Custody

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

### Log In

3. Was an attempt made to cool the samples? Yes ☒ 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: **JR 2/21/20**

### Special Handling (if applicable)

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

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

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

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

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

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

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

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good				
2	0.1	Good				







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 254H 2RP 5382

OrderNo.: 2005D03

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 2005D03

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-10 Surface North

Project: Devon Cotton Draw 254H 2RP 5382

Collection Date: 5/28/2020 12:30:00 PM

Lab ID: 2005D03-001

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 9:09:26 PM	52903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/31/2020 8:11:39 PM	52791
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/31/2020 8:11:39 PM	52791
Surr: DNOP	43.1	55.1-146	S	%Rec	1	5/31/2020 8:11:39 PM	52791
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/1/2020 6:34:23 PM	52788
Surr: BFB	79.4	66.6-105		%Rec	1	6/1/2020 6:34:23 PM	52788
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/1/2020 6:34:23 PM	52788
Toluene	ND	0.048		mg/Kg	1	6/1/2020 6:34:23 PM	52788
Ethylbenzene	ND	0.048		mg/Kg	1	6/1/2020 6:34:23 PM	52788
Xylenes, Total	ND	0.097		mg/Kg	1	6/1/2020 6:34:23 PM	52788
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	1	6/1/2020 6:34:23 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		

## Analytical Report

Lab Order 2005D03

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-11 Surface South

Project: Devon Cotton Draw 254H 2RP 5382

Collection Date: 5/28/2020 12:45:00 PM

Lab ID: 2005D03-002

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 9:21:51 PM	52903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/31/2020 8:36:09 PM	52791
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/31/2020 8:36:09 PM	52791
Surr: DNOP	35.6	55.1-146	S	%Rec	1	5/31/2020 8:36:09 PM	52791
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/1/2020 6:57:48 PM	52788
Surr: BFB	81.5	66.6-105		%Rec	1	6/1/2020 6:57:48 PM	52788
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/1/2020 6:57:48 PM	52788
Toluene	ND	0.048		mg/Kg	1	6/1/2020 6:57:48 PM	52788
Ethylbenzene	ND	0.048		mg/Kg	1	6/1/2020 6:57:48 PM	52788
Xylenes, Total	ND	0.096		mg/Kg	1	6/1/2020 6:57:48 PM	52788
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	6/1/2020 6:57:48 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 2 of 8

## Analytical Report

Lab Order 2005D03

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-12 Surface East

Project: Devon Cotton Draw 254H 2RP 5382

Collection Date: 5/28/2020 1:10:00 PM

Lab ID: 2005D03-003

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 9:34:16 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 9:00:34 PM	52791
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/31/2020 9:00:34 PM	52791
Surr: DNOP	34.6	55.1-146	S	%Rec	1	5/31/2020 9:00:34 PM	52791
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/1/2020 7:21:18 PM	52788
Surr: BFB	80.8	66.6-105		%Rec	1	6/1/2020 7:21:18 PM	52788
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/1/2020 7:21:18 PM	52788
Toluene	ND	0.049		mg/Kg	1	6/1/2020 7:21:18 PM	52788
Ethylbenzene	ND	0.049		mg/Kg	1	6/1/2020 7:21:18 PM	52788
Xylenes, Total	ND	0.098		mg/Kg	1	6/1/2020 7:21:18 PM	52788
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	6/1/2020 7:21:18 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 3 of 8

## Analytical Report

Lab Order 2005D03

Date Reported: 6/8/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-13 Surface West

Project: Devon Cotton Draw 254H 2RP 5382

Collection Date: 5/28/2020 1:35:00 PM

Lab ID: 2005D03-004

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 9:46:40 PM	52903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/31/2020 9:24:59 PM	52791
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/31/2020 9:24:59 PM	52791
Surr: DNOP	33.5	55.1-146	S	%Rec	1	5/31/2020 9:24:59 PM	52791
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/1/2020 7:44:43 PM	52788
Surr: BFB	80.3	66.6-105		%Rec	1	6/1/2020 7:44:43 PM	52788
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/1/2020 7:44:43 PM	52788
Toluene	ND	0.048		mg/Kg	1	6/1/2020 7:44:43 PM	52788
Ethylbenzene	ND	0.048		mg/Kg	1	6/1/2020 7:44:43 PM	52788
Xylenes, Total	ND	0.097		mg/Kg	1	6/1/2020 7:44:43 PM	52788
Surr: 4-Bromofluorobenzene	91.7	80-120		%Rec	1	6/1/2020 7:44:43 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 4 of 8



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

WO#: 2005D03

08-Jun-20

**Client:** Safety & Environmental Solutions  
**Project:** Devon Cotton Draw 254H 2RP 5382

Sample ID: <b>MB-52903</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52903</b>	RunNo: <b>69444</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/5/2020</b>	SeqNo: <b>2409023</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-52903</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52903</b>	RunNo: <b>69444</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/5/2020</b>	SeqNo: <b>2409024</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	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#: 2005D03

08-Jun-20

**Client:** Safety & Environmental Solutions  
**Project:** Devon Cotton Draw 254H 2RP 5382

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#: 2005D03

08-Jun-20

**Client:** Safety & Environmental Solutions  
**Project:** Devon Cotton Draw 254H 2RP 5382

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

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

WO#: 2005D03

08-Jun-20

**Client:** Safety & Environmental Solutions  
**Project:** Devon Cotton Draw 254H 2RP 5382

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			

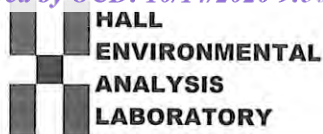
Sample ID: <b>LCS-52788</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52788</b>	RunNo: <b>69307</b>								
Prep Date: <b>5/31/2020</b>	Analysis Date: <b>6/1/2020</b>	SeqNo: <b>2403286</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	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: **2005D03**

RcptNo: 1

Received By: **Isaiah Ortiz**

5/30/2020 8:22:00 AM

I-OX

Completed By: **Isaiah Ortiz**

5/30/2020 8:47:11 AM

I-OX

Reviewed By: **LB**

5/30/20

### 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?  
(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	4.1	Good	Not Present			

## Chain-of-Custody Record

Client: Safety & Environmental Solutions  
 Mailing Address: 703 E Clinton  
Hobbs N.M. 88240  
 Phone #: 575-397-0510

email or Fax#:

QA/QC Package:

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

Project Manager:

Allen, Bob

Sampler:

Sam LongOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 4.1 - 0.1 °C 41.2 °F

Container Type and #

Preservative Type

HEAL No.

Date Time Matrix Sample Name

5/29 1230 S AH-10 Surface  
 5/29 1245 S AH-11 Surface  
 5/29 1310 S AH-12 Surface  
 5/29 1335 S AH-13 Surface

Date Time

Matrix

Sample Name

Date Time

Matrix

Sample Name

Date Time

Matrix

Sample Name

Date Time

Matrix

Sample Name

Date Time

Matrix

Sample Name

Date Time

Matrix

Sample Name

Date Time

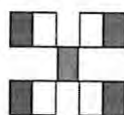
Matrix

Sample Name

Date Time

Matrix

Sample Name

Turn-Around Time: 5 Day  
☒ Standard ☐ RushProject Name: Clinton Draw 254 HProject #: 2 RP-5382Project #: NEW-20-015

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

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

Remarks:

Received by: Sam Long Date: 5/29/20 Time: 1400Received by: Sam Long Date: 5/29/20 Time: 0822



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

July 24, 2020

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

RE: Devon Cotton Draw 254 H

OrderNo.: 2007966

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/18/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](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 2007966

Date Reported: 7/24/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-1 1.5ft Bottom

Project: Devon Cotton Draw 254 H

Collection Date: 7/15/2020 10:30:00 AM

Lab ID: 2007966-001

Matrix: SOIL

Received Date: 7/18/2020 11:05:00 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	7/23/2020 6:19:57 PM	53917
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/22/2020 2:34:26 PM	53863
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/22/2020 2:34:26 PM	53863
Surr: DNOP	138	55.1-146		%Rec	1	7/22/2020 2:34:26 PM	53863
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/22/2020 2:11:41 AM	53815
Surr: BFB	94.5	66.6-105		%Rec	1	7/22/2020 2:11:41 AM	53815
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	7/22/2020 2:11:41 AM	53815
Toluene	ND	0.050		mg/Kg	1	7/22/2020 2:11:41 AM	53815
Ethylbenzene	ND	0.050		mg/Kg	1	7/22/2020 2:11:41 AM	53815
Xylenes, Total	ND	0.099		mg/Kg	1	7/22/2020 2:11:41 AM	53815
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	7/22/2020 2:11:41 AM	53815

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 11

## Analytical Report

Lab Order 2007966

Date Reported: 7/24/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-2 1.5ft Bottom

Project: Devon Cotton Draw 254 H

Collection Date: 7/15/2020 11:05:00 AM

Lab ID: 2007966-002

Matrix: SOIL

Received Date: 7/18/2020 11:05:00 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	7/23/2020 6:32:18 PM	53917
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/22/2020 2:44:36 PM	53863
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/22/2020 2:44:36 PM	53863
Surr: DNOP	138	55.1-146		%Rec	1	7/22/2020 2:44:36 PM	53863
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/22/2020 2:35:12 AM	53815
Surr: BFB	91.1	66.6-105		%Rec	1	7/22/2020 2:35:12 AM	53815
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	7/22/2020 2:35:12 AM	53815
Toluene	ND	0.050		mg/Kg	1	7/22/2020 2:35:12 AM	53815
Ethylbenzene	ND	0.050		mg/Kg	1	7/22/2020 2:35:12 AM	53815
Xylenes, Total	ND	0.10		mg/Kg	1	7/22/2020 2:35:12 AM	53815
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	7/22/2020 2:35:12 AM	53815

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 2 of 11



## Analytical Report

Lab Order 2007966

Date Reported: 7/24/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-3 1.5ft Bottom

Project: Devon Cotton Draw 254 H

Collection Date: 7/15/2020 2:00:00 PM

Lab ID: 2007966-003

Matrix: SOIL

Received Date: 7/18/2020 11:05:00 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	7/23/2020 6:44:39 PM	53917
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/22/2020 2:54:46 PM	53863
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/22/2020 2:54:46 PM	53863
Surr: DNOP	144	55.1-146		%Rec	1	7/22/2020 2:54:46 PM	53863
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/22/2020 3:22:26 AM	53815
Surr: BFB	93.5	66.6-105		%Rec	1	7/22/2020 3:22:26 AM	53815
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	7/22/2020 3:22:26 AM	53815
Toluene	ND	0.050		mg/Kg	1	7/22/2020 3:22:26 AM	53815
Ethylbenzene	ND	0.050		mg/Kg	1	7/22/2020 3:22:26 AM	53815
Xylenes, Total	ND	0.099		mg/Kg	1	7/22/2020 3:22:26 AM	53815
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	7/22/2020 3:22:26 AM	53815

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 3 of 11

## Analytical Report

Lab Order 2007966

Date Reported: 7/24/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: H-East

Project: Devon Cotton Draw 254 H

Collection Date: 7/15/2020 12:15:00 PM

Lab ID: 2007966-004

Matrix: SOIL

Received Date: 7/18/2020 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	61		mg/Kg	20	7/23/2020 6:57:00 PM	53917
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/22/2020 3:04:56 PM	53863
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/22/2020 3:04:56 PM	53863
Surr: DNOP	201	55.1-146	S	%Rec	1	7/22/2020 3:04:56 PM	53863
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/22/2020 3:45:57 AM	53815
Surr: BFB	92.6	66.6-105		%Rec	1	7/22/2020 3:45:57 AM	53815
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/22/2020 3:45:57 AM	53815
Toluene	ND	0.048		mg/Kg	1	7/22/2020 3:45:57 AM	53815
Ethylbenzene	ND	0.048		mg/Kg	1	7/22/2020 3:45:57 AM	53815
Xylenes, Total	ND	0.097		mg/Kg	1	7/22/2020 3:45:57 AM	53815
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	7/22/2020 3:45:57 AM	53815

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 4 of 11

## Analytical Report

Lab Order 2007966

Date Reported: 7/24/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: H-North

Project: Devon Cotton Draw 254 H

Collection Date: 7/15/2020 12:45:00 PM

Lab ID: 2007966-005

Matrix: SOIL

Received Date: 7/18/2020 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	110	60		mg/Kg	20	7/23/2020 7:09:20 PM	53917
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/22/2020 3:15:03 PM	53863
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/22/2020 3:15:03 PM	53863
Surr: DNOP	153	55.1-146	S	%Rec	1	7/22/2020 3:15:03 PM	53863
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/22/2020 3:57:46 PM	53815
Surr: BFB	95.5	66.6-105		%Rec	1	7/22/2020 3:57:46 PM	53815
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	7/22/2020 3:57:46 PM	53815
Toluene	ND	0.050		mg/Kg	1	7/22/2020 3:57:46 PM	53815
Ethylbenzene	ND	0.050		mg/Kg	1	7/22/2020 3:57:46 PM	53815
Xylenes, Total	ND	0.10		mg/Kg	1	7/22/2020 3:57:46 PM	53815
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	7/22/2020 3:57:46 PM	53815

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 11

## Analytical Report

Lab Order 2007966

Date Reported: 7/24/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: H-South

Project: Devon Cotton Draw 254 H

Collection Date: 7/15/2020 1:20:00 PM

Lab ID: 2007966-006

Matrix: SOIL

Received Date: 7/18/2020 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	110	60		mg/Kg	20	7/23/2020 7:21:40 PM	53917
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/22/2020 3:25:10 PM	53863
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/22/2020 3:25:10 PM	53863
Surr: DNOP	168	55.1-146	S	%Rec	1	7/22/2020 3:25:10 PM	53863
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/22/2020 5:08:01 PM	53815
Surr: BFB	97.1	66.6-105		%Rec	1	7/22/2020 5:08:01 PM	53815
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	7/22/2020 5:08:01 PM	53815
Toluene	ND	0.050		mg/Kg	1	7/22/2020 5:08:01 PM	53815
Ethylbenzene	ND	0.050		mg/Kg	1	7/22/2020 5:08:01 PM	53815
Xylenes, Total	ND	0.10		mg/Kg	1	7/22/2020 5:08:01 PM	53815
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	7/22/2020 5:08:01 PM	53815

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 6 of 11

## Analytical Report

Lab Order 2007966

Date Reported: 7/24/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: H-West

Project: Devon Cotton Draw 254 H

Collection Date: 7/15/2020 1:45:00 PM

Lab ID: 2007966-007

Matrix: SOIL

Received Date: 7/18/2020 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	110	60		mg/Kg	20	7/23/2020 7:34:01 PM	53917
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/22/2020 3:35:15 PM	53863
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/22/2020 3:35:15 PM	53863
Surr: DNOP	141	55.1-146		%Rec	1	7/22/2020 3:35:15 PM	53863
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/22/2020 5:31:26 PM	53815
Surr: BFB	97.4	66.6-105		%Rec	1	7/22/2020 5:31:26 PM	53815
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	7/22/2020 5:31:26 PM	53815
Toluene	ND	0.050		mg/Kg	1	7/22/2020 5:31:26 PM	53815
Ethylbenzene	ND	0.050		mg/Kg	1	7/22/2020 5:31:26 PM	53815
Xylenes, Total	ND	0.10		mg/Kg	1	7/22/2020 5:31:26 PM	53815
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	7/22/2020 5:31:26 PM	53815

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 7 of 11



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

WO#: 2007966

24-Jul-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 254 H

Sample ID: <b>MB-53917</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53917</b>	RunNo: <b>70560</b>								
Prep Date: <b>7/23/2020</b>	Analysis Date: <b>7/23/2020</b>	SeqNo: <b>2455116</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-53917</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53917</b>	RunNo: <b>70560</b>								
Prep Date: <b>7/23/2020</b>	Analysis Date: <b>7/23/2020</b>	SeqNo: <b>2455117</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	91.6	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

Page 8 of 11

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

WO#: 2007966

24-Jul-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 254 H

Sample ID: <b>LCS-53863</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>53863</b>		RunNo: <b>70516</b>							
Prep Date: <b>7/21/2020</b>	Analysis Date: <b>7/22/2020</b>		SeqNo: <b>2453230</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	63	10	50.00	0	126	70	130			
Surr: DNOP	6.2		5.000		124	55.1	146			

Sample ID: <b>LCS-53863</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>53863</b>		RunNo: <b>70513</b>							
Prep Date: <b>7/21/2020</b>	Analysis Date: <b>7/22/2020</b>		SeqNo: <b>2453272</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	70	10	50.00	0	140	70	130			S
Surr: DNOP	7.0		5.000		141	55.1	146			

Sample ID: <b>MB-53863</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>53863</b>		RunNo: <b>70513</b>							
Prep Date: <b>7/21/2020</b>	Analysis Date: <b>7/22/2020</b>		SeqNo: <b>2453273</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	13		10.00		132	55.1	146			

**Qualifiers:**

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

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

Page 9 of 11

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

WO#: 2007966

24-Jul-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 254 H

Sample ID: <b>mb-53815</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53815</b>	RunNo: <b>70500</b>								
Prep Date: <b>7/20/2020</b>	Analysis Date: <b>7/22/2020</b>	SeqNo: <b>2452236</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	950		1000		95.3	66.6	105			

Sample ID: <b>lcs-53815</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53815</b>	RunNo: <b>70500</b>								
Prep Date: <b>7/20/2020</b>	Analysis Date: <b>7/22/2020</b>	SeqNo: <b>2452237</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	78.9	72.5	106			
Surr: BFB	1100		1000		106	66.6	105			S

**Qualifiers:**

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

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

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

WO#: 2007966

24-Jul-20

**Client:** Safety & Environmental Solutions**Project:** Devon Cotton Draw 254 H

Sample ID: <b>mb-53815</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53815</b>	RunNo: <b>70500</b>								
Prep Date: <b>7/20/2020</b>	Analysis Date: <b>7/22/2020</b>	SeqNo: <b>2452266</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	1.0		1.000		103	80	120			

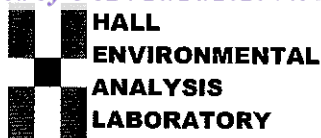
Sample ID: <b>LCS-53815</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53815</b>	RunNo: <b>70500</b>								
Prep Date: <b>7/20/2020</b>	Analysis Date: <b>7/22/2020</b>	SeqNo: <b>2452267</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.5	80	120			
Toluene	0.94	0.050	1.000	0	93.9	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	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

Page 11 of 11



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

## Sample Log-In Check List

Client Name: **Safety & Environmental Solutions**

Work Order Number: **2007966**

RcptNo: 1

Received By: **Leah Baca**

7/18/2020 11:05:00 AM

*Leah Baca*

Completed By: **Leah Baca**

7/18/2020 1:15:15 PM

*Leah Baca*

Reviewed By: *[Signature]* 7/19/2020

*labeled by 7/19/2020*

**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: \_\_\_\_\_  
( $<2$  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	5.0	Good				
2	5.2	Good				





Incident ID	
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### **Characterization Report Checklist:** *Each of the following items must be included in the report.*

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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.

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

Signature: Tom Bynum Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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.

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: Tom Bynum Date: \_\_\_\_\_  
email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

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

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

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

Incident ID	
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: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: Tom Bynum Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**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	
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: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: Tom Bynum Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: Robert Hamlet Date: 3/18/2021

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: 3/18/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced



**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 10626

**CONDITIONS OF APPROVAL**

Operator:		OGRID:	Action Number:	Action Type:
SAFETY & ENVIRONMENTAL SOLUTIONS 703 E Clinton Hobbs, NM88240		329088	10626	C-141
PO Box 1613				
OCD Reviewer	Condition			
rharmlet	We have received your closure report and final C-141 for incident #NAB1912056434 COTTON DRAW UNIT #254H, thank you. This closure is approved.			