Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAB1911943617
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

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

☐ Description of remediation activities

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

Printed Name: Dale Woodall Title: Env. Professional

Signature: Dale Woodall Date: 11/16/2022

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Robert Hamlet Date: 2/13/2023

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

Closure Approved by: Robert Hamlet Date: 2/13/2023

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

Form C-141
Page 6

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Printed Name: Dale Woodall Title: Env. Professional

Signature: Dale Woodall Date: 11/16/2022

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

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Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

DEVON ENERGY
Cotton Draw Unit #10 Fed Com 2H

Closure Plan

UL A, Section 10, T25S, R31E
Eddy County, New Mexico

2RP4804, NAB1816432279
2RP-5375, NAB1911943617

August 22, 2022

Prepared for:

Devon Energy
6488 Seven Rivers Hwy
Artesia, NM 88210

By:

Safety & Environmental Solutions, Inc.
703 East Clinton
Hobbs, New Mexico 88240
(575) 397-0510

Company Contacts

Representative	Company	Telephone	E-mail
Dale Woodall	Devon Energy	575-748-1838	Dale.Woodall@dvn.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was contracted by Devon Energy to assess a release at the Cotton Draw Unit #10 Fed Com H location. This site is situated in UL A, Section 10, Township 25S and Range 31E, in Eddy County New Mexico. We are addressing the release in this plan which will be remediated upon plan approval. There are two releases at this location: 2RP4804, NAB1816432279 and 2RP-5375, NAB1911943617.

Release 2RP4804, NAB1816432279

C-141, 2RP4804, dated 6-08-2018, reports the lease operator arrived on location and discovered oil coming from out of the pop off on the heater. The lease operator switched to the test vessel and isolated the heater to stop the release from occurring. Approximately 11.7bbls of oil was released and 0 bbls were recovered. The total size of the affected area is approximately 80' x 60'. All fluids remained on location.

Release 2RP-5375, NAB1911943617

C-141 NAB1911943617, dated October 23, 2018, reports that a heater treater over pressured. Repairs were made and approximately 15.441bbls of produced water was released and 12 bbls of produced water was recovered.

Surface and Ground Water

According to the NMOCD Oil and Gas Map, there is no surface water within 3,000 feet of this location and spill areas. The nearest water well to the location records water level at 390.27 on 1/28/1976 which does not successfully establish current water levels in the area. However, on 4/25/2022, Devon made Application for Permit to Drill a well with No Water Right (WR-07) #C-4632 to install a soil boring at 32.152075, -103.761405 to the depth of 55' BGS. On 5/24/2022, the application was approved, and the soil boring was installed to a depth BGS of 55' on 6/08/2022. The borehole was left open for the required 72 hours and no water was encountered. The soil boring was plugged on 6/14/2022. (See Evidence Documents).

Characterization

Both releases have been fully delineated both vertically and horizontally, which includes establishing horizontal and vertical extent of delineation to the most stringent standard of 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene.

Release Area 2RP4804, NAB1816432279 Investigation

SESI personnel tracked and mapped the release and sampled the area to achieve both vertical and horizontal delineation. Samples were taken at the surface and 1-foot intervals until field testing indicated the samples to meet target levels. The horizontal extent samples are denoted on the map with an H beside the sample number. The samples were properly preserved and packaged and sent to Hall Environmental Labs for testing.

The results of the analytical are captured in the summary tables below.

		AH1 @ SURFACE	AH1 @ 1'	AH1 @ 2'	AH1 @ 3'
Analyte	**Method**	2/11/20	2/11/20	2/11/20	8/11/20
		mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B	<0.050	<0.050	<0.050	ND
Toluene	BTEX 8021B	<0.050	<0.050	<0.050	ND
Ethylbenzene	BTEX 8021B	<0.050	<0.050	<0.050	ND
Total Xylenes	BTEX 8021B	<0.150	<0.150	<0.150	ND
Total BTEX	BTEX 8021B	<0.300	<0.300	<0.300	N/A
Chloride	SM4500Cl-B	**10400**	**656**	**1170**	ND
GRO	TPH 8015M	**75.9**	<10.0	<10.0	ND
DRO	TPH 8015M	**12100**	**17.4**	<10.0	ND
EXT DRO/MRO	TPH 8015M	**2360**	<10.0	<10.0	ND

		AH2 @ SURFACE	AH2 @ 1'	AH2 @ 2'	AH2 @ 2.5'
Analyte	**Method**	2/11/20	2/11/20	2/11/20	8/11/20
		mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B	<0.050	<0.050	<0.050	ND
Toluene	BTEX 8021B	<0.050	<0.050	<0.050	ND
Ethylbenzene	BTEX 8021B	**0.236**	<0.050	<0.050	ND
Total Xylenes	BTEX 8021B	<0.150	<0.150	<0.150	ND
Total BTEX	BTEX 8021B	<0.300	<0.300	<0.300	N/A
Chloride	SM4500Cl-B	**7460**	**624**	**1230**	ND
GRO	TPH 8015M	**11.2**	<10.0	<10.0	ND
DRO	TPH 8015M	**5120**	**19.7**	<10.0	ND
EXT DRO/MRO	TPH 8015M	**1290**	<10.0	<10.0	ND

		AH3 @ SURFACE	AH3 @ 1'	AH3 @ 2'
Analyte	**Method**	2/11/20	2/11/20	2/11/20
		mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B	<0.050	<0.050	<0.050
Toluene	BTEX 8021B	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B	**5520**	**640**	**144**
GRO	TPH 8015M	<10.0	<10.0	<10.0
DRO	TPH 8015M	**7330**	<10.0	<10.0
EXT DRO	TPH 8015M	**1180**	<10.0	<10.0

		AH4 @ SURFACE	AH4 @ 1'	AH4 @ 2'
Analyte	**Method**	2/11/20	2/11/20	2/11/20
		mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B	<0.050	<0.050	<0.050
Toluene	BTEX 8021B	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B	**0.38**	<0.050	<0.050
Total Xylenes	BTEX 8021B	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B	**0.38**	<0.300	<0.300

		AH4 @ SURFACE	AH4 @ 1'	AH4 @ 2'
Analyte	**Method**	2/11/20	2/11/20	2/11/20
		mg/kg	mg/kg	mg/kg
Chloride	SM4500Cl-B	**1100**	**640**	**160**
GRO	TPH 8015M	**16.5**	<10.0	**12.8**
DRO	TPH 8015M	**4020**	**35.1**	<10.0
EXT DRO	TPH 8015M	**811**	<10.0	<10.0

Horizontal		H-5 north	H-6 West	H-7 Southwest	H-8 South	H-9 East
Analyte	**Method**	8/11/20	8/11/20	8/11/20	8/11/20	8/11/20
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B	ND	ND	ND	ND	ND
Toluene	BTEX 8021B	ND	ND	ND	ND	ND
Ethylbenzene	BTEX 8021B	ND	ND	ND	ND	ND
Total Xylenes	BTEX 8021B	ND	ND	ND	ND	ND
Total BTEX	BTEX 8021B	N/A	N/A	N/A	N/A	N/A
Chloride	SM4500Cl-B	ND	**160**	**190**	**77**	**89**
GRO	TPH 8015M	ND	ND	ND	ND	ND
DRO	TPH 8015M	**34**	**18**	**21**	ND	ND
EXT DRO/MRO	TPH 8015M	ND	ND	ND	ND	ND

Based on the results of the soil boring installed on 6/8/2022, SESI respectfully requests that the closure criteria in Table 1 in Title 19 Chapter 15 part 21 NMAC be used for this release. The soil boring proved the depth to groundwater within ½ mile of the release location is more than 51' BGS. The table allows leaving Chlorides of 10,000 mg/kg, TPH (GRO+DRO+MRO) of 2,500 mg/kg, GRO + DRO of 1,000 mg/kg, BTEX 50mg/kg, and Benzene of 10 mg/kg.

The sampling results do not meet this criterion. Based on the results above for vertical extent samples AH-1 through AH-4, SESI proposes the entire release area **(approximately 1,161 square feet)** be excavated to a depth of approximately 1' where closure target levels may be found.

Based on the results above for horizontal extent samples H-5 through H-8, the horizontal extent of this release has been identified.

Release Area 2RP-5375, NAB1911943617 Investigation

SESI personnel tracked and mapped the release and sampled the area to achieve both vertical and horizontal delineation. Samples were taken at the surface and 1-foot intervals until field testing indicated the samples to meet target levels. The horizontal extent samples are denoted on the map with an H beside the sample number. The samples were properly preserved and packaged and sent to Hall Environmental Labs for testing.

The results of the analytical are captured in the summary table below.

		AH-1 @ Surface	AH-1 @ 1'	AH-1 @ 2'
Analyte	**Method**	2/21/20	2/21/20	2/21/20
		mg/kg	mg/kg	mg/kg
Chloride	SM4500Cl-B	**260**	ND	ND
DRO	TPH 8015M	**28000**	**1100**	**73**
MRO	TPH 8015M	**11000**	**550**	ND

		AH-1 @ Surface	AH-1 @ 1'	AH-1 @ 2'
Analyte	**Method**	2/21/20	2/21/20	2/21/20
		mg/kg	mg/kg	mg/kg
GRO	TPH 8015M	**350**	**40**	ND
Benzene	BTEX 8021B	ND	ND	ND
Toluene	BTEX 8021B	ND	ND	ND
Ethylbenzene	BTEX 8021B	ND	ND	ND
Total Xylenes	BTEX 8021B	ND	ND	ND

		AH-2 @ Surface	AH-2 @ 1'	AH-2 @ 2'
Analyte	**Method**	2/21/20	2/21/20	2/21/20
		mg/kg	mg/kg	mg/kg
Chloride	SM4500Cl-B	**110**	ND	ND
DRO	TPH 8015M	**12000**	**630**	**160**
MRO	TPH 8015M	**6200**	**250**	**88**
GRO	TPH 8015M	**120**	**69**	**7.3**
Benzene	BTEX 8021B	ND	ND	ND
Toluene	BTEX 8021B	ND	ND	ND
Ethylbenzene	BTEX 8021B	ND	ND	ND
Total Xylenes	BTEX 8021B	ND	**0.12**	ND

		AH-3 @ Surface	AH-3 @ 1'	AH-3 @ 2'	AH-3 @ 2.5'
Analyte	**Method**	2/21/20	2/21/20	2/21/20	8/11/20
		mg/kg	mg/kg	mg/kg	mg/kg
Chloride	SM4500Cl-B	**260**	ND	ND	**170**
DRO	TPH 8015M	**29000**	**740**	**180**	ND
MRO	TPH 8015M	**11000**	**400**	**91**	ND
GRO	TPH 8015M	**230**	**29**	ND	ND
Benzene	BTEX 8021B	ND	ND	ND	ND
Toluene	BTEX 8021B	ND	ND	ND	ND
Ethylbenzene	BTEX 8021B	ND	ND	ND	ND
Total Xylenes	BTEX 8021B	**0.53**	ND	ND	ND

		AH-4 @ Surface	AH-4 @ 1'	AH-4 @ 2'	AH-4 @ 3'
Analyte	**Method**	2/21/20	2/21/20	2/21/20	8/11/20
		mg/kg	mg/kg	mg/kg	mg/kg
Chloride	SM4500Cl-B	**110**	ND	ND	**180**
DRO	TPH 8015M	**13000**	**730**	**250**	ND
MRO	TPH 8015M	**6500**	**300**	**130**	ND
GRO	TPH 8015M	**130**	**68**	**12**	ND
Benzene	BTEX 8021B	ND	ND	ND	ND
Toluene	BTEX 8021B	ND	ND	ND	ND
Ethylbenzene	BTEX 8021B	ND	ND	ND	ND
Total Xylenes	BTEX 8021B	ND	**0.2**	ND	ND

		UC1
Analyte	**Method**	2/21/20
		mg/kg
Chloride	SM4500Cl-B	ND
DRO	TPH 8015M	ND
MRO	TPH 8015M	ND
GRO	TPH 8015M	ND
Benzene	BTEX 8021B	ND
Toluene	BTEX 8021B	ND
Ethylbenzene	BTEX 8021B	ND
Total Xylenes	BTEX 8021B	ND

Horizontal		**H-5 West**	**H-6 Southwest**	**H-7 South**	**H-8 East**	**H-9 Northeast**	**H-10 Northwest**
Analyte	**Method**	8/11/20	8/11/20	8/11/20	8/11/20	8/11/20	8/11/20
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Chloride	SM4500Cl-B	**190**	ND	**110**	ND	**180**	**79**
DRO	TPH 8015M	**15**	ND	ND	ND	**16**	ND
MRO	TPH 8015M	ND	ND	ND	ND	ND	ND
GRO	TPH 8015M	ND	ND	ND	ND	ND	ND
Benzene	BTEX 8021B	ND	ND	ND	ND	ND	ND
Toluene	BTEX 8021B	ND	ND	ND	ND	ND	ND
Ethylbenzene	BTEX 8021B	ND	ND	ND	ND	ND	ND
Total Xylenes	BTEX 8021B	ND	ND	ND	ND	ND	ND

Based on the results of the soil boring installed on 6/8/2022, SESI respectfully requests that the closure criteria in Table 1 in Title 19 Chapter 15 part 21 NMAC be used for this release. The soil boring proved the depth to groundwater within ½ mile of the release location is more than 51' BGS. The table allows leaving Chlorides of 10,000 mg/kg, TPH (GRO+DRO+MRO) of 2,500 mg/kg, GRO + DRO of 1,000 mg/kg, BTEX 50mg/kg, and Benzene of 10 mg/kg.

The sampling results do not meet this criterion. Based on the results above for vertical extent samples AH-1 through AH-4, SESI proposes the entire release area **(approximately 5,609 square feet)** be excavated to a depth of approximately 1' where closure target levels may be found**.**

Release Area 2RP-5375, NAB1911943617 Work Performed

On March 25, 2020, SESI was onsite to hand excavate a portion of this release. Approximately 317 square feet of the release area was excavated by hand to a depth of 1'. The excavated soil was transported to and NMOCD approved disposal facility. The excavation was backfilled with fresh caliche and returned to previous grade.

SESI personnel tracked and mapped the release and sampled the bottom of the excavation. The samples were properly preserved and packaged and sent to Hall Environmental Labs for testing.

The results of the analytical are captured in the summary tables below.

		SP1 @ 1'
Analyte	Method	3/30/20
		mg/kg
Chloride	SM4500Cl-B	**580**
DRO	TPH 8015M	ND
MRO	TPH 8015M	ND
GRO	TPH 8015M	ND
Benzene	BTEX 8021B	ND
Toluene	BTEX 8021B	ND
Ethylbenzene	BTEX 8021B	ND
Total Xylenes	BTEX 8021B	ND

		SP2 @ 1'
Analyte	Method	3/30/20
		mg/kg
Chloride	SM4500Cl-B	**590**
DRO	TPH 8015M	ND
MRO	TPH 8015M	ND
GRO	TPH 8015M	ND
Benzene	BTEX 8021B	ND
Toluene	BTEX 8021B	ND
Ethylbenzene	BTEX 8021B	ND
Total Xylenes	BTEX 8021B	ND

Based on the results above for confirmation samples SP1 and SP2, and the results of the soil boring installed on 6/1/2022, SESI respectfully requests that this area of the release be closed using the closure criteria in Table 1 in Title 19 Chapter 15 part 21 NMAC. The soil boring proved the depth to groundwater within ½ mile of the spill location is over 51' BGS.

The table allows leaving Chlorides of 10,000 mg/kg, TPH (GRO+DRO+MRO) of 2,500 mg/kg, GRO + DRO of 1,000 mg/kg, BTEX 50mg/kg, and Benzene of 10 mg/kg. Sampling results meet this criterion.

Of the remaining 5,292 square feet of this release area, only 1,869 square feet can be excavated by mechanical means to the depth of 1'. Approximately 3,423 square feet of this release area is under production vessels and associated piping and will cannot be excavated using mechanized equipment. **SESI proposes that this area be deferred until the decommissioning of this location**. (See Photos of Area for Proposed Deferment).

Action Plan Release Area 2RP-5375, NAB1911943617

SESI proposes **the 1,869 square foot area be excavated to the depth of 1'**. The excavated soil will be transported to an NMOCD approved disposal facility. Notice of confirmation sampling will be given to Devon prior to sampling of the sides and bottom of this excavation. Once the results of the confirmation sampling are received and meet the closure criterion, the excavation will be backfilled with fresh caliche and returned to grade.

Supplemental and Supporting Documentation

Evidence Document 1: Map of Release area, with vertical and horizontal extent sample locations
Evidence Document 2: NMOCD Oil and Gas Topo map detailing area water features
Evidence Document 3: Photos (Excavation and Deferral Area)
Evidence Document 4: NMOSE Form WR-07
Evidence Document 5 NMOSE Approval
Evidence Document 6 Plugging Plan
Evidence Document 7: Well Log
Evidence Document 8: BLM Cave Karst map showing location in low potential area
Evidence Document 9: FEMA demonstrating minimal flood hazards for this area
Evidence Document 10: Lab analysis for Release area

Devon, CDU 10 Fed Com 2H

DEV-20-008
2RP-4804, NAB1816432279
2RP-5375, NAB1911943617

OSE POD Locations Map

8/31/2022, 10:55:59 AM

GIS WATERS PODs

- Active
- OSE District Boundary

New Mexico State Trust Lands

- Subsurface Estate
- SiteBoundaries

1:9,028

0 0.07 0.15 0.3 mi

0 0.15 0.3 0.6 km

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

Web Generated Map
Map is generated by web users.

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q q q 6416 4	Sec	Tws	Rng	X	Y
C 04632	CUB	EXP	0	DEVON ENERGY	ED	C 04632 POD1	NA				1 2 2	10	25S	31E	616802	3557964

Record Count: 1

POD Search:

POD Number: C 04632

Sorted by: File Number

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: New Mexico | GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320932103443801

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320932103443801 25S.31E.02.23441

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

Output formats

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

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

Explanation

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

Questions about sites/data?
Feedback on this web site

Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
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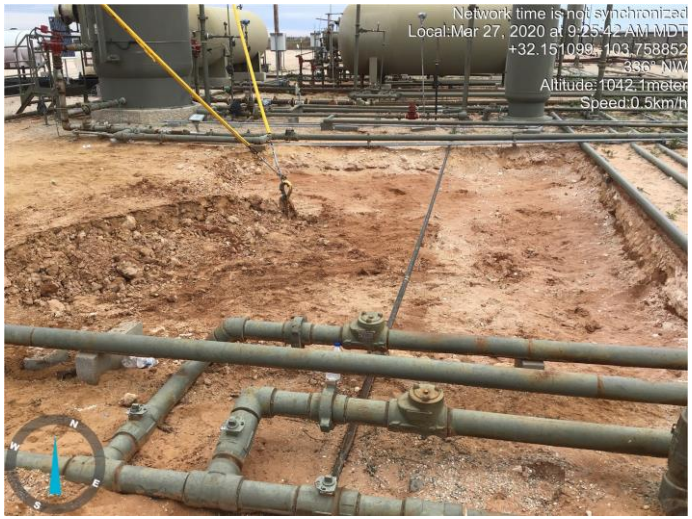
U.S. Department of the Interior | U.S. Geological Survey

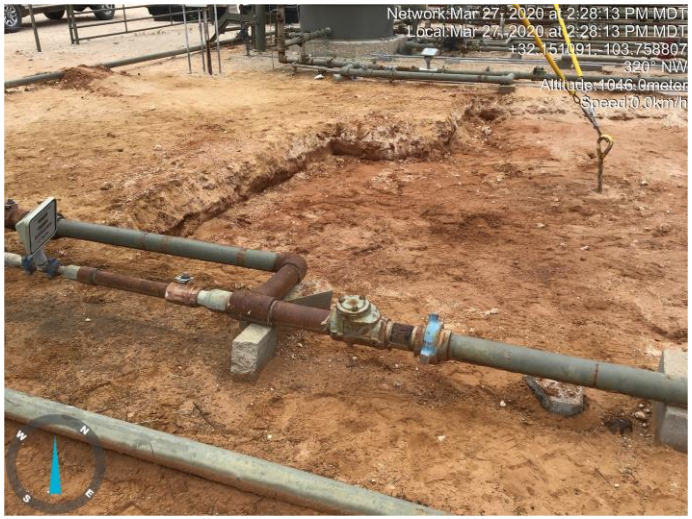
Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2020-03-25 12:35:26 EDT
1.61 0.25 nadww01

Devon – Cotton Draw Unit #10 Fed Com 2H
Excavation Photos



Devon – Cotton Draw Unit #10 Fed Com 2H
Excavation Photos



Devon – Cotton Draw Unit #10 Fed Com 2H
Deferral Area Photos

File No. C-04632

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☒ Other(Describe): Groundwater Determination
☐ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☐ Temporary Request - Requested Start Date: Requested End Date:

Plugging Plan of Operations Submitted? ☒ Yes ☐ No

1. APPLICANT(S)

Name: Devon Energy	Name:
Contact or Agent: check here if Agent ☐ Dale Woodall	Contact or Agent: check here if Agent ☐
Mailing Address: 6488 7 Rivers Hwy	Mailing Address:
City: Artesia	City:
State: NM Zip Code: 88210	State: Zip Code:
Phone: 575-748-1838 ☐ Home ☒ Cell Phone (Work):	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional): Dale.Woodall@dvn.com	E-mail (optional):

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FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/18

File No.: C-04632	Trn. No.: 726269	Receipt No.: 2-44570
Trans Description (optional):	10 25S 31E	1.2.2
Sub-Basin: C	PCW/LOG Due Date:	5/24/23

Page 1 of 3

2. **WELL(S)** Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

■ Lat/Long (WGS84) (to the nearest 1/10[th] of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
C-04632-POD1 ~~(FW-1)~~	-103°45'41.06"	32°97.47"	NW NE NE Sec.10 T25S R31E NMPM

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ■ No **If yes, how many** _____

Other description relating well to common landmarks, streets, or other:
Site ID:20
Location Name:Cotton Draw Unit 134H

Well is on land owned by: Bureau of Land Management

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. **Attached?** ☐ Yes ■ No
If yes, how many_____

Approximate depth of well (feet): 55	Outside diameter of well casing (inches): 2.375 or 1.315
Driller Name: Jackie D. Atkins	Driller License Number: 1249

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

A Soil Boring to determine depth up to 55 feet. Temporary PVC well material will be placed to total depth and secured at surface. Temporary well will be in place for minimum of 72 hours. If ground water is encountered the boring will be plugged immediately using augers as tremie to land a slurry of Portland TYPE I/II Neat cement less than 6.0 gallons of water per 94 lb. sack. If no water is encountered then drill cuttings will be used to (10) ten feet of land surface and plugged using hydrated bentonite.

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FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.: C-04632	Trn No.: 726269

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory: ☐ Include a description of any proposed pump test, if applicable.	**Pollution Control and/or Recovery:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	**Construction De-Watering:** ☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation. ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	**Mine De-Watering:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ☐ Include the reason for the monitoring well, and, ☐ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Dale Woodall (Devon Energy)
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Dale Woodall
Dale Woodall (Apr 25, 2022 10:35 MDT)
Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☑ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 24 day of May 20 22, for the State Engineer,

Mike Hamman, P.E., State Engineer

By: K. Parekh
Signature

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Kashyap Pareth
Print

Title: Water Resource manager I
Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: C-04632 Trn No.: 726269

FORM 61-A COPY

LEASE NO. K-4562 APPLICATION NO. K-4562

OIL AND GAS LEASE

THIS AGREEMENT, dated this the 17th day of November A.D., 19 64 made and entered into by and between the state of New Mexico, acting by and through the undersigned, its commissioner of public lands thereunto duly authorized, party of the first part and hereinafter called the "lessor", and

TEXACO, INC.

P. O. Box 3109, Midland, Texas

party of the second part, hereinafter called the "lessee", whether one or more,

WITNESSETH:

WHEREAS, the said lessee has filed in the office of the commissioner of public lands an application for an oil and gas lease covering the lands hereinafter described and has tendered therewith the required first payment being not less than the amount required by law and by the rules and regulations of the New Mexico State Land Office; and

WHEREAS, all of the requirements of law relative to said application and tender have been duly complied with and said application has been approved and allowed by the commissioner of public lands;

THEREFORE, for and in consideration of the premises as well as the sum of FORTY TWO THOUSAND AND NO/100 DOLLARS ($ 42,000.00) Dollars, the same being the amount of $5.00 under above mentioned, paid in cash and evidenced by official receipt no. B-07951 and of the further sum of $ filing fee, and of the covenants and agreements hereinafter contained on the part of the lessee to be paid, kept and performed, the said lessor has granted and demised, leased and let, and by these presents does grant, demise, lease and let unto the said lessee, exclusively, for the sole and only purpose of exploration, development and production of oil or gas, or both thereon and therefrom with the right to own all oil and gas so produced and saved therefrom and not reserved as royalty by the lessor under the terms of this lease, together with right of ways, easements and servitudes for pipelines, telephone and telegraph lines, tanks, power houses, stations, gasoline plants, and fixtures for producing, treating and caring for such products, and housing and boarding employees, and any and all rights and privileges necessary, incident to or convenient for the economical operation of said land, for oil and gas, with right for such purposes to the free use of oil, gas, casing-head gas or water from said lands, but not from lessee's water wells, and with the rights of removing either during or after the term hereof, all and any improvements placed or erected on the premises by the lessee, including the right to pull or remove casing, subject, however, to the conditions hereinafter set out, the following described land situated in the County of Eddy state of New Mexico, and more particularly described as follows:

Line	SUBDIVISION	Sec.	Twp.	Rge.	Acres	Institution	✓
1	Lot 1 (40.30), Lot 2 (40.08), Lot 3 (39.88), Lot 4(39.66), S½N½, S½	2	25S	31E	639.92 639.92	CS	
2							
3							
4							
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6							
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Said lands having been awarded to lessee and designated as Tract No. C-3 at a public sale held by the commissioner of public lands on November 17th, 64 (To be filled in only where lands are offered at public sale.)

To have and to hold said land, and all the rights and privileges granted hereunder, to and unto the lessee for a primary term of five years from the date hereof, and as long thereafter as oil and gas in paying quantities, or either of them, is produced from said land by the lessee, subject to all of the terms and conditions as hereinafter set forth.

In consideration of the premises the parties covenant and agree as follows:

1. Subject to the free use without royalty, as hereinbefore provided, the lessee shall pay the lessor as royalty one-eighth part of the oil produced and saved from the leased premises or the cash value thereof, at the option of the lessor, such value to be the price prevailing the day oil is run into a pipeline, if the oil be run into a pipeline, or into storage tanks, if the oil be stored.

2. Subject to the free use without royalty, as hereinbefore provided, the lessee shall pay the lessor as royalty one-eighth of the cash value of gas, including casing-head gas, produced and saved from the leased premises and marketed or utilized, such value to be equal to the greater of the following amounts:

(a) the net proceeds derived from the sale of such gas in the field, or

(b) five cents ($0.05) per thousand cubic feet (m.c.f.) the volume of gas for such purposes to be computed on a pressure basis of 10 ounces above an assumed atmospheric pressure of 14.4 pounds per square inch, or 15.025 pounds per square inch absolute, at 60° Fahrenheit, and pursuant to appropriate regulations of the commissioner of public lands which may provide, among other things, for a flowing temperature of 60° Fahrenheit to be assumed and applied in volume computation in all cases where a recording thermometer is not employed by the lessee in gas measurement, and for specific gravity tests at the lessee's expense at intervals not greater than one year in all cases where a recording gravitometer is not employed by the lessee in gas measurement; provided, however, the cash value for royalty purposes of carbon dioxide gas and of hydrocarbon gas delivered to a gasoline plant for extraction of liquid hydrocarbons shall be equal to the net proceeds derived from the sale of such gas, including any liquid hydrocarbons recovered therefrom.

Notwithstanding the foregoing provisions, the lessor, acting by its commissioner of public lands, may require the payment of royalty for all or any part of the gas produced and saved under this lease and marketed or utilized at a price per m.c.f. equal to the maximum price being paid for gas of like kind and quality and under like conditions in the same field or area or may reduce the royalty value of any such gas (to any amount not less than the net proceeds of sale thereof in the field) if the commissioner of public lands shall determine such action to be necessary to the successful operation of the lands for oil or gas purposes or to encouragement of the greatest ultimate recovery of oil or gas or to the promotion of conservation of oil or gas.

This lease shall not expire at the end of either the primary or secondary term hereof if there is a well capable of producing gas in paying quantities located upon some part of the lands embraced herein where such well is shut-in due to the inability of the lessee to obtain a pipeline connection or to market the gas therefrom; provided, however, the owner of this lease as to the lands upon which such well is located shall pay an annual royalty equal to the annual rental payable by such owner under the terms of this lease but not less than one hundred dollars ($100.00) per well per year, said royalty to be paid on or before the annual rental paying date next ensuing after the expiration of ninety days from the date said well was shut-in and on or before said rental date thereafter. The payment of said annual royalty shall be considered for all purposes the same as if gas were being produced in paying quantities and upon the commencement of marketing of gas from said well or wells the royalty paid for the lease year in which the gas is first marketed shall be credited upon the royalty payable hereunder to the lessor for such year. The provisions of this section shall also apply where gas is being marketed from said leasehold premises and through no fault of the lessee, the pipeline connection or market is lost or ceases, in which case this lease shall not expire so long as said annual royalty is paid as herein provided. Notwithstanding the provisions of this section to the contrary, this lease shall not be continued after ten years from the date hereof for any period of more than five years by the payment of said annual royalty.

3. Lessee agrees to make full settlement on the 20th day of each month for all royalties due the lessor for the preceding month, under this lease, and to permit the lessor or its agents, at all reasonable hours, to examine lessee's books relating to the production and disposition of oil and gas produced. Lessee further agrees to submit to lessor annually upon forms furnished by lessor, verified reports showing lessee's operations for the preceding year.

4. It is expressly agreed that the consideration hereinbefore specified is a good, valid and substantial consideration and sufficient in all respects to support each and every covenant herein, including specifically the option granted the lessee to prevent the termination of this lease from year to year, by the payment or tender of the further rental hereinafter provided for.

An annual rental at the rate of 25¢ per acre shall become due and payable to the lessor by the lessee, or by any transferee or assignee of the same, or any part thereof, where such transferee or assignee has been recognized, and such transfer or assignment approved by the lessor as hereinafter provided, upon each acre of the land above described and then claimed by such lessee, transferee or assignee hereunder, and the same shall be due and payable in advance to the lessor on the successive anniversary dates of this lease, but the annual rental on any assignment shall in no event be less than six dollars ($6.00).

In the event the lessee shall elect to surrender any or all of said acreage, he shall deliver to the commissioner a duly executed release thereof and in event said lease has been recorded, then he shall upon request furnish and deliver to said commissioner a certified copy of a duly recorded release.

5. The lessee may at any time by paying to the state of New Mexico, acting by its commissioner of public lands, or other authorized officer, all amounts then due as provided herein and the further sum of ten dollars ($10.00), surrender and cancel this lease insofar as the same covers all or any portion of the lands herein leased and be relieved from further obligations or liability hereunder, in the manner as hereinbefore provided. Provided, this surrender clause and the option herein reserved to the lessee shall cease and become absolutely inoperative immediately and concurrently with the institution of any suit in any court of law or equity by the lessee, lessor, or any assignee, to enforce this lease, or any of its terms express or implied.

6. All payments due hereunder shall be made on or before the day such payment is due, in cash or by certified exchange at the office of the commissioner of public lands in Santa Fe, New Mexico.

7. The lessee with the consent of the lessor, shall have the right to assign this lease in whole or in part. Provided, however, that no assignment of an undivided interest in the lease or in any part thereof nor any assignment of less than a legal subdivision shall be recognized or approved by the lessor. Upon approval in writing by the lessor of an assignment, the assignor shall stand relieved from all obligations to the lessor with respect to the lands embraced in the assignment and the lessee shall likewise be relieved from all obligations to the assignee as to such tracts, and the assignee shall succeed to all of the rights and privileges of the assignor with respect to such tracts and shall be held to have assumed all of the duties and obligations of the assignor to the lessor as to such tracts.

8. In the event a well or wells producing oil or gas in paying quantities should be brought in on adjacent land draining the leased premises, lessee shall drill such offset well or wells as a reasonably prudent operator would drill under the same or similar circumstances.

9. The lessee agrees to notify the lessor of the location of each well before commencing drilling thereon, to keep a complete and accurate log of each well drilled and to furnish a copy thereof, verified by some person having actual knowledge of the facts, to the lessor upon the completion of any well, and to furnish the log of any unfinished well at any time when requested to do so by the lessor.

If any lands embraced in this lease shall be included in any deed or contract of purchase outstanding and subsisting issued pursuant to any sale made of the surface of such lands prior to the date of this lease, it is agreed and understood that no drilling operation shall be commenced on any such lands so sold unless and until the lessee or his assignee shall have filed a good and sufficient bond with the lessor as required by law, to secure the payment for such damage to the livestock, range, water, crops or tangible improvements on such lands as may be suffered by the purchaser holding such deed or contract of purchase, or his successors, by reason of the development, use and occupation of such lands by such lessee. Provided, however, that no such bond shall be required if such purchaser shall waive the right to require such bond to be given in the manner provided by law.

10. In drilling wells all water-bearing strata shall be cased in the log, and the lessor reserves the right to require that all or any part of the casing shall be left in any nonproductive well when lessor deems it to the interest of the state of New Mexico to maintain said well or wells for water. For such casing so left in wells the lessor shall pay to the lessee the reasonable value thereof.

11. Lessee shall be liable and agree to pay for all damages to the range, livestock, growing crops or improvements caused by lessee's operations on said lands. When requested by the lessor, the lessee shall bury pipelines below plow depth.

12. The lessee shall remove [illegible] machinery or fixtures placed on said premises [illegible] draw the casing from any well unless and until all payments and obligations due the lessor under the terms of this agreement shall have been paid or satisfied. The lessee's right to remove the casing is subject to the provision of Paragraph 10 above.

13. Upon failure or default of the lessee or any assignee to comply with any of the provisions or covenants hereof, the lessor is hereby authorized to cancel this lease and such cancellation shall extend to and include all rights hereunder as to the whole of the tract so claimed, or possessed by the lessee or assignee so defaulting, but shall not extend to, nor affect the rights of any other lessee or assignee claiming any portion of the lands upon which no default has been made; provided, however, that before any such cancellation shall be made, the lessor shall mail to the lessee or assignee so defaulting, by registered mail, addressed to the post-office address of such lessee or assignee as shown by the records of the state land office, a notice of intention of cancellation specifying the default for which cancellation is to be made, and if within thirty days from the date of mailing said notice the said lessee or assignee shall remedy the default specified in said notice, cancellation shall not be made.

14. All of the terms of this agreement shall extend to and bind the heirs, executors, administrators, successors and assigns of the parties hereto.

15. If the lessee shall have failed to make discovery of oil or gas in paying quantities during the primary term hereof or if such discovery shall have been made and production shall have ceased for any reason, the lessee may continue this lease in full force and effect for an additional term of five years, and as long thereafter as oil and gas in paying quantities or either of them is produced from the leased premises by paying each year in advance, as herein provided, double the rental provided herein for the primary term, or the highest rental prevailing at the commencement of the secondary term in any rental district, or districts in which the lands, or any part thereof, may be situated, if it be greater than double the rental provided for the primary term; provided, however, such rental shall be paid within the time provided by Section 13 hereof, and provided, further, that if oil or gas in paying quantities should be discovered during the secondary term hereof, but production should cease, this lease shall continue for the remainder of said secondary term of five years so long as said rental is paid, UNLESS oil or gas in paying quantities is being produced at the end of the secondary term of five years, so long thereafter as oil and gas in paying quantities or either of them is produced from the leased premises.

16. If this lease shall have been maintained in accordance with the provisions hereof and if at the expiration of the secondary term provided for herein oil or gas is not being produced on said land but lessee or any assignee is then engaged in bona fide drilling or reworking operations thereon, this lease shall remain in full force and effect so long as such operations are diligently prosecuted and, if they result in the production of oil or gas, so long thereafter as oil and gas in paying quantities, or either of them, is produced from said land; provided, however, such operations extending beyond the secondary term shall be approved by the lessor upon written application filed with the lessor on or before the expiration of said term, and a report of the status of all such operations shall be made by the lessee to the lessor every thirty days and a cessation of such operations for more than twenty consecutive days shall be considered as an abandonment of such operations and thereupon the provisions hereof shall be of no further force or effect. Operations commenced and continued as herein provided shall extend this lease as to all lands as to which the same is in full force and effect, as of the time said drilling operations are commenced; provided, however, this lease shall be subject to cancellation for failure to pay rentals or to otherwise comply with the foregoing provisions of this section in accordance with Section 13 hereof.

17. Should production of oil or gas of either of them in paying quantities be obtained while this lease is in force and effect and should thereafter cease from any cause after the expiration of ten years from the date hereof this lease shall not terminate if lessee commences additional drilling or reworking operations within sixty days after the cessation of such production and shall remain in full force and effect so long as such operations are prosecuted in good faith with no cessation of more than twenty consecutive days, and if such operations result in the production of oil or gas in paying quantities, so long thereafter as oil or gas in paying quantities is produced from said land; provided, however, written notice of intention to commence such operations shall be filed with the lessor within thirty days after the cessation of such production, and report of the status of such operations shall be made by the lessee to the lessor every thirty days, and the cessation of such operations for more than twenty consecutive days shall be considered as an abandonment of such operations and this lease shall thereupon terminate.

In witness whereof, the party of the first part has hereunto signed and caused its name to be signed by its commissioner of public lands thereunto duly authorized, with the seal of his office affixed, and the lessee has signed this agreement the day and year first above written.

STATE OF NEW MEXICO

Approved as to Terms: [illegible] By: E. S. Johnny Walker
Commissioner of Public Lands, Lessor

Approved as to Form: [illegible]

TEXACO INC.

By: J. H. Markley (Seal)
Attorney-in-Fact Lessee

Distributed this the 23rd day of November, 19 64

(PERSONAL ACKNOWLEDGMENT)

STATE OF .....
} ss.
COUNTY OF .....

The foregoing instrument was acknowledged before me this .....day of ....., 19....., by .....

My commission expires: ..... Notary Public

(ACKNOWLEDGMENT BY ATTORNEY-IN-FACT)

STATE OF .....
} ss.
COUNTY OF .....

The foregoing instrument was acknowledged before me this .....day of ....., 19....., by .....as attorney-in-fact in behalf of .....

My commission expires: ..... Notary Public

(ACKNOWLEDGMENT BY CORPORATION)

STATE OF TEXAS
} ss.
COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me this 27 day of November, 1964, by J. H. Markley, Attorney-in-Fact (Name) (Title) of TEXACO INC. (Corporation)

a Delaware corporation, on behalf of said corporation.

My commission expires: 6-1-65 Notary Public

BESS WALLACE

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NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

17-16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.

17-1A Depth of the well shall not exceed the thickness of the valley fill.

17-4 No water shall be appropriated and beneficially used under this permit.

17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

Trn Desc: C 04632 POD1

File Number: C 04632
Trn Number: 726269

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.

17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.
The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.

17-C2 No water shall be diverted from this well except for testing purposes which shall not exceed ten (10) cumulative days, and well shall be plugged or capped on or before , unless a permit to use water from this well is acquired from the Office of the State Engineer.

17-G If artesian water is encountered, the well driller shall comply with all rules and regulations pertaining to the drilling and casing of artesian wells.

17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.

Trn Desc: C 04632 POD1 File Number: C 04632
Trn Number: 726269

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

17-Q The State Engineer retains jurisdiction over this permit.

17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

LOG The Point of Diversion C 04632 POD1 must be completed and the Well Log filed on or before 05/24/2023.

IT IS THE PERMITTEE_S RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd: Date Rcvd. Corrected:
Formal Application Rcvd: 05/12/2022 Pub. of Notice Ordered:
Date Returned - Correction: Affidavit of Pub. Filed:

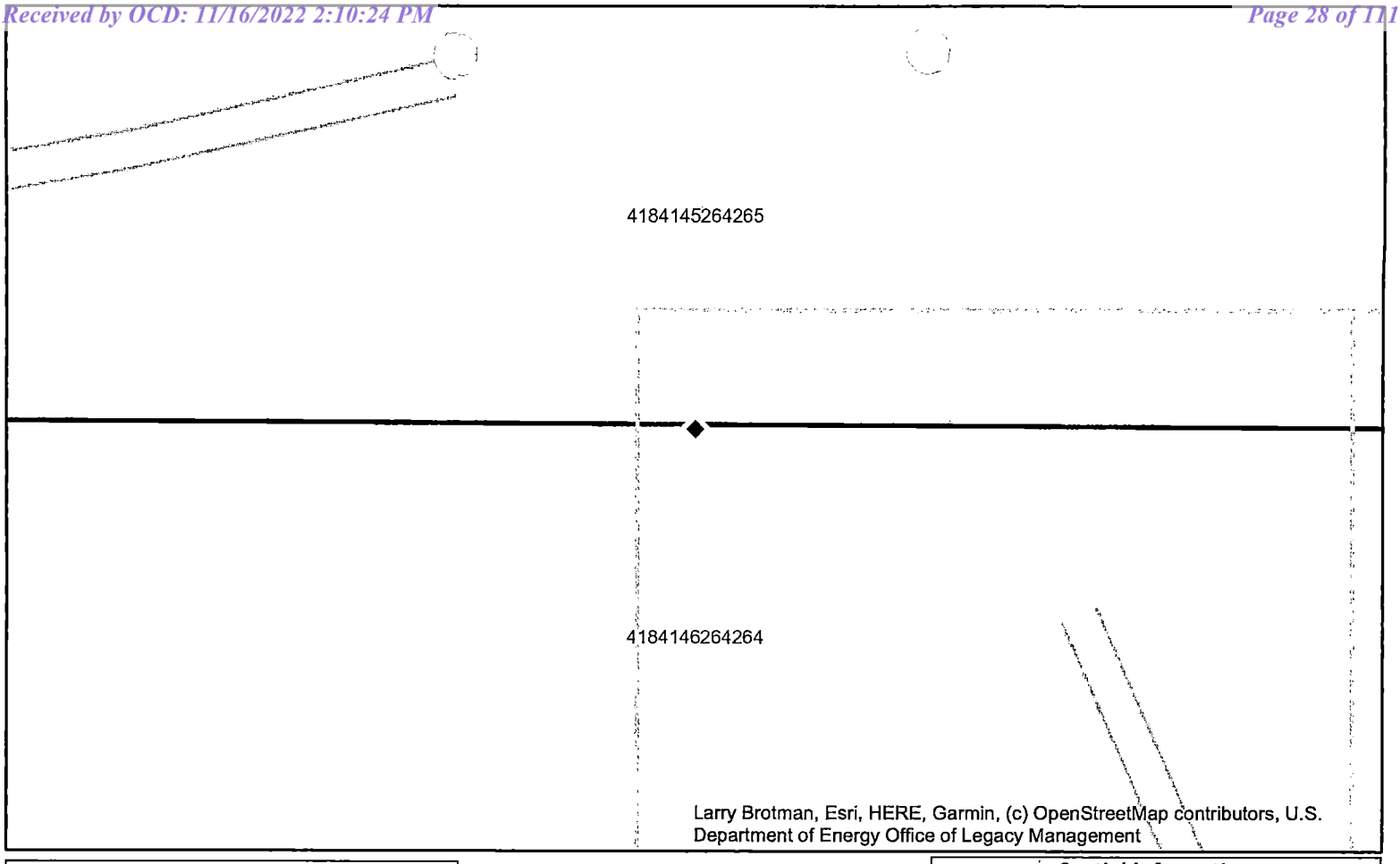
This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 24 day of May A.D., 2022

Mike A. Hamman, P.E., State Engineer

By: K. Parekh
KASHYAP PAREKH

Trn Desc: C 04632 POD1 File Number: C 04632
Trn Number: 726269



Coordinates

UTM - NAD 83 (m) - Zone 13

Easting 616803.201

Northing 3557963.604

State Plane - NAD 83 (f) - Zone E

Easting 718339.168

Northing 419528.434

Degrees Minutes Seconds

Latitude 32 : 9 : 7.470000

Longitude -103 : 45 : 41.060000

Location pulled from Coordinate Search

NEW MEXICO OFFICE OF THE STATE ENGINEER

1:1,128

ft

0 20 40 80

N

M.TELLES 5/24/2022

Office of the State Engineer — Interstate Stream Commission

Spatial Information

County: Eddy

Groundwater Basin: Carlsbad

Abstract Area: Carlsbad 72-12-1
Carlsbad Underground Basin

Land Grant:
Not in Land Grant

Restrictions:

NA

PLSS Description

NWNWNENE Qtr of Sec 10 of 025S 031E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

Parcel Information

UPC/DocNum: 4184146264264

Parcel Owner: Bureau Of Land

Address: null null null

Legal: Quarter: Ne S: 10 T: 25S R: 31E Quarter: Nw S: 10 T: 25S R: 31E Quarter: Sw S: 10 T: 25S R: 31E Quarter: Se S: 10 T: 25S R: 31E All Map# 386-10 Loc Carlsbad Exempt

POD Information

Owner:

File Number:

POD Status: NoData

Permit Status: NoData

Permit Use: NoData

Purpose:

Calculated PLSS
Coord Search Location
OSE District Boundary
Bernalillo County Parcels 2021
Catron County Parcels 2021
Chaves County Parcels 2021
Cibola County Parcels 2021
Colfax County Parcels 2021
Curry County Parcels 2021
De Baca County Parcels 2021
Doña Ana County Parcels 2021
Eddy County Parcels 2021
Grant County Parcels 2021
Harding County Parcels 2021
Hidalgo County Parcels 2021
Guadalupe County Parcels 2021
Lea County Parcels 2021
Lincoln County Parcels 2021
Los Alamos County Parcels 2021
Luna County Parcels 2021
McKinley County Parcels 2021
Mora County Parcels 2021
Otero County Parcels 2021
Quay County Parcels 2021
Rio Arriba County Parcels 2021
Roosevelt County Parcels 2021
Sandoval County Parcels 2021
San Juan County Parcels 2021
San Miguel County Parcels 2021
Santa Fe County Parcels 2021
Sierra County Parcels 2021
Socorro County Parcels 2021
Taos County Parcels 2021
Torrance County Parcels 2021
Union County Parcels 2021
Valencia County Parcels 2021
SiteBoundaries

Mike A. Hamman, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 726269
File Nbr: C 04632

May. 26, 2022

DALE WOODALL
DEVON ENERGY
6488 7 RIVERS HWY
ARTESIA, NM 88210

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.

* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.

* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.

* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely,

Megen Telles
(575)622-6521

Enclosure

explore

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/ egmn/ if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email nmbg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☐ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: C- 4632 - (POD-1)

Name of well owner: Devon Energy

Mailing address: 6488 7 Rivers Hwy County: Eddy

City: Artesia State: NM Zip code: 88210

Phone number: 575-748-1838 E-mail: Dale.Woodall@dvn.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Jackie D. Atkins (Atkins Engineering Associates)

New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/2023

IV. WELL INFORMATION: ☐ **Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.**

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 9 min, 7.47 sec
Longitude: 103 deg, 45 min, 41.06 sec, NAD 83

2) Reason(s) for plugging well(s):

Soil boring to determine groundwater level

OSE OIT MAY 12 2022 PM 1:33

3) Was well used for any type of monitoring program? NO If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? N/A If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: Unknown feet below land surface / feet above land surface (circle one)

6) Depth of the well: 55 feet

7) Inside diameter of innermost casing: 1" or 2" inches.

8) Casing material: Temporary PVC SCH 40

9) The well was constructed with:

☐ an open-hole production interval, state the open interval: _____

☐ a well screen or perforated pipe, state the screened interval(s): _____

10) What annular interval surrounding the artesian casing of this well is cement-grouted? N/A

11) Was the well built with surface casing? NO If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? _____ If yes, please describe:

12) Has all pumping equipment and associated piping been removed from the well? N/A If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

☐ **If plugging method differs between multiple wells on same site, a separate form must be completed for each method.**

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

The temporary 1" or 2" well material will be removed. Tremied from bottom to land Neat Cement in lifts

2) Will well head be cut-off below land surface after plugging? N/A

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe from the cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: 87

4) Type of Cement proposed: Type I/II Neat Cement

5) Proposed cement grout mix: <6.0 gallons of water per 94 pound sack of Portland cement.

6) Will the grout be: _____ batch-mixed and delivered to the site

X mixed on site

OSE OIL MAY 12 2022 PM1:33

7) Grout additives requested, and percent by dry weight relative to cement:

N/A

8) Additional notes and calculations:

Site ID:20
Location Name:Cotton Draw Unit 134H

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

The temporary well material will be removed. If no water is encountered then drill cuttings will be used to (10) ten feet of land surface and plugged using hydrated bentonite. If ground water is encountered the boring will be plugged tremie from bottom to a slurry of Portland TYPE I/II Neat cement in lifts. A 6.5" borehole will be plugged.

VIII. SIGNATURE:

I, Dale Woodall (Devon Energy), say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Dale Woodall — 04/25/2022

Signature of Applicant — Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

X Approved subject to the attached conditions.
____ Not approved for the reasons provided on the attached letter.

OSE DII MAY 12 2022 PM1:34

Witness my hand and official seal this 17th day of May, 2022

Mike A. Hammon
John R. D'Antonio Jr. P.E., New Mexico State Engineer

By: K. Parekh
KASHYAP PAREKH
W.R.M. I

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)	N/A	N/A	N/A
Bottom of proposed interval of grout placement (ft bgl)	N/A	N/A	55
Theoretical volume of grout required per interval (gallons)	N/A	N/A	87
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement	N/A	N/A	<6.0
Mixed on-site or batch-mixed and delivered?	N/A	N/A	On-Site
Grout additive 1 requested	N/A	N/A	N/A
Additive 1 percent by dry weight relative to cement	N/A	N/A	N/A
Grout additive 2 requested	N/A	N/A	N/A
Additive 2 percent by dry weight relative to cement	N/A	N/A	N/A

OSE DII MAY 12 2022 PM1:34

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	N/A	N/A	0
Bottom of proposed sealant of grout placement (ft bgl)	N/A	N/A	10
Theoretical volume of sealant required per interval (gallons)	N/A	N/A	15
Proposed abandonment sealant (manufacturer and trade name)	N/A	N/A	Bariod Hole Plug

OSE DII MAY 12 2022 PM1:34

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL

Mike A. Hamman, P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623-8559

May 17, 2022

Devon Energy
6488 7 Rivers Highway
Artesia, NM 88210

RE: Well Plugging Plan of Operations for **C-4632-POD1**

Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above referenced project. The proposed method of operation is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 30, 2017 by the State Engineer.

(1) Plugging operations shall also be conducted in accordance with NMED, NMOCD, or other State or Federal agencies having oversight for the above described project.
(2) In accordance with Subsection A of 19.27.4.29 NMAC, on-site supervision of well drilling/plugging by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor is required. The New Mexico licensed Well Driller shall ensure that well drilling activities are completed in accordance with 19.27.4.29, 19.27.4.30, 19.27.4.31, 19.27.4.33 NMAC, and all specific conditions of approval. While conducting the well drilling activities, the Well Driller shall maintain a copy of the approved permit, conditions and Well Plugging Plan of Operations on-site and available for inspection upon request.
(3) Well that encounters water - Maximum 6 gallons water per 94 lb. sack Portland Cement
(4) Dry hole – Drill cuttings used to ten feet of land surface. Hydrated bentonite – Fresh water to be added above water column at rate of 5 gallons per 50-lb sack/bucket.
(5) Any deviation from this plan must obtain an approved variance from this office prior to implementation.

Well Plugging Plan of Operations form (WD-08) has been updated. Current form can be found on the OSE website at the following link https://www.ose.state.nm.us/Statewide/wdForms.php.

Within 30 days after the well is plugged, the well driller is required to file a complete plugging record with the OSE and the permit holder.

Sincerely,

K. Parekh

Kashyap Parekh
Water Resources Manager I

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4632

Well owner: Devon Energy Phone No.: 575-748-1838

Mailing address: 6488 7 Rivers Hwy

City: Artesia State: New Mexico Zip code: 88210

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)

2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge, Cameron Pruitt

4) Date well plugging began: 6/14/2022 Date well plugging concluded: 6/14/2022

5) GPS Well Location: Latitude: 32 deg, 9 min, 7.47 sec
Longitude: 103 deg, 45 min, 41.06 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 55 ft below ground level (bgl), by the following manner: water level probe

7) Static water level measured at initiation of plugging: n/a ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 5/26/2022

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

OSE DII JUN 15 2022 PM3:12

Version: September 8, 2009
Page 1 of 2

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	0-10' Hydrated Bentonite	Approx. 15 gallons	15 gallons	Augers	
	10'-55' Drill Cuttings	Approx. 71 gallons	71 gallons	Boring	

OSE DIT JUN 16 2022 PM 3:12

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jack Atkins

Signature of Well Driller

6/16/2022

Date

Version: September 8, 2009
Page 2 of 2

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD 1 (TW-1)	N/A	C-4632

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Devon Energy	575-748-1838

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6488 7 Rivers Hwy	Artesia	NM	88210

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	9	7.47	N
	LONGITUDE	103	45	41.06	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

NW NE NE Sec.10 T25S R31S NMPM

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
6/8/2022	6/8/2022	Temporary Well	±55	N/A

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): N/A

DATE STATIC MEASURED: 6/14/2022

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☑ OTHER – SPECIFY: Hollow Stem Auger

CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	55	6.5	Boring-HSA	–	--	–	--

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT

OSE DIT JUN 15 2022 PM 12:12

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-4632	POD NO. 1	TRN NO. 726269
LOCATION 25S.31E.10 122	WELL TAG ID NO. —	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	4	4	Sand, Fine-grained, poorly graded, unconsolidated 7.5 YR 5/4, Brown	Y ✓ N	
4	23	19	Sand, Fine-grained, poorly graded, with Caliche, 7.5 YR 7/6, Reddish Yellow	Y ✓ N	
23	47	24	Sand, Fine-grained, poorly graded, 7.5 YR 7/6, Reddish Yellow	Y ✓ N	
47	55	8	Sand, Fine-grained, poorly graded, 5 YR 7/6, Reddish Yellow	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface.
20
Cotton Draw Unit 134H

OSE DIT JUN 16 2022 PM 3:12

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Shane Eldridge, Cameron Pruitt

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jack Atkins — Jackie D. Atkins — 6/16/2022

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-4632	POD NO. 1	TRN NO. 726269	
LOCATION 25S.31E.10.122		WELL TAG ID NO. —	PAGE 2 OF 2

Mike A. Hamman, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 726269
File Nbr: C 04632
Well File Nbr: C 04632 POD1

Jun. 24, 2022

DALE WOODALL
DEVON ENERGY
6488 7 RIVERS HWY
ARTESIA, NM 88210

Greetings:

The above numbered permit was issued in your name on 05/24/2022.

The Well Record was received in this office on 06/16/2022, stating that it had been completed on 06/08/2022, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 05/24/2023.

If you have any questions, please feel free to contact us.

Sincerely,

Azucena Ramirez
(575)622-6521

drywell

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04632 POD1	1	2	2	10	25S	31E	616802	3557964

x

Driller License:	1249	**Driller Company:**	ATKINS ENGINEERING ASSOC. INC.		
Driller Name:	JACKIE D ATKINS				
Drill Start Date:	06/08/2022	**Drill Finish Date:**	06/08/2022	**Plug Date:**	06/14/2022
Log File Date:	06/16/2022	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	55 feet	**Depth Water:**	

x

New Mexico Office of the State Engineer
Transaction Summary

EXPL Permit To Explore

Transaction Number: 726269 **Transaction Desc:** C 04632 POD1 **File Date:** 05/12/2022

Primary Status: PMT Permit
Secondary Status: APR Approved
Person Assigned: *******
Applicant: DEVON ENERGY
Contact: DALE WOODALL

x
Events

	Date	Type	Description	Comment	Processed By
get images	05/12/2022	APP	Application Received	*	*******
get images	05/12/2022	TEC	Technical Report	*PLG PLN OPS C-	*******
	05/26/2022	FTN	Finalize non-published Trans.		*******
	06/16/2022	QAT	Quality Assurance Completed	SQ2	*******
get images	06/16/2022	LOG	Well Log Received	*	*******
get images	06/16/2022	LGI	Well Log Image	*PLG RECORD C-	*******
	06/23/2022	QAT	Quality Assurance Completed	IMAGE/WELL	*******
	06/23/2022	QAT	Quality Assurance Completed	IMAGE/PLUGGING	*******
	06/24/2022	DRY	Dry well log received		*******
	08/01/2022	QAT	Quality Assurance Completed	IMAGE/LOG	*******
	08/01/2022	QAT	Quality Assurance Completed	IMAGE/LGI	*******

x
Water Right Information

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 04632	0	0		EXP EXPLORATION

****Point of Diversion**

C 04632 POD1	616802	3557964

x
Remarks

"SOIL BORING TO DETEREMINE DEPTH UP TO 55 FEET. TEMPORARY PVC WELL MATERIAL WILL BE PLACED TO TOTAL DEPTH AND SECURED AT SURFACE. TEMPORARY WELL WILL BE IN PLACE FOR MINIMUM OF 72 HOURS. IF GROUND WATER IS ENCOUNTERED THE BORING WILL BE"

"PLUGGED IMMEDIATELY USING AUGERS AS TREMIE TO LAND A SLURRY OF PORTLAND TYPE I/II NEAT CEMENT LESS THAN 6.0 GALLONS OF WATER PER 94 LB. SACK. IF NOT WATER IS ENCOUNTERED THEN DRILL CUTTINGS WILL BE USED TO (10) TEN FEET OF LAND SURFACE AND"

"PLUGGED USING HYDRATED BENTONITE."

---

x

Conditions

1A Depth of the well shall not exceed the thickness of the valley fill.

4 No water shall be appropriated and beneficially used under this permit.

B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.

C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record. The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.

C2 No water shall be diverted from this well except for testing purposes which shall not exceed ten (10) cumulative days, and well shall be plugged or capped on or before , unless a permit to use water from this well is acquired from the Office of the State Engineer.

6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable

7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.

P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.

G If artesian water is encountered, the well driller shall comply with all rules and regulations pertaining to the drilling and casing of artesian wells.

Q The State Engineer retains jurisdiction over this permit.

R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

---

x

Action of the State Engineer

IT IS THE PERMITTEE_S RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved

Action Date: 05/24/2022
Log Due Date: 05/24/2023
State Engineer: Mike A. Hamman, P.

8/31/22 12:48 PM TRANSACTION SUMMARY

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: C 04632 **Subbasin:** CUB **Cross Reference:** -

Primary Purpose: EXP EXPLORATION

Primary Status: PMT PERMIT

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 0 **Cause/Case:** -

Owner: DEVON ENERGY

Contact: DALE WOODALL

x

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	726269	EXPL	2022-05-24	PMT	APR	C 04632 POD1	T	0	0	

x

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 04632 POD1	NA		1	2	2	10	25S	31E	616802	3557964	

CDU Fed Com 10 2H

Low Karst Area

Legend

High

Low

Medium

6-2-19 Release Containment 36' x 6' outside 11-21-18 inside contanment overspray

Devon CDU 10 Fed Com 2H

NO C-141 - Release 5/27/18

@No C-141

Proposed Borehole to confirm depth to water> 50'

Release on 10/10/18

Unknown Release

853 ft

900 ft

Google Earth

National Flood Hazard Layer FIRMette

FEMA

103°45'51"W 32°9'20"N

103°45'14"W 32°8'49"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

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 / 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
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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 9/6/2022 at 7:46 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.

CARDINAL Laboratories

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

February 14, 2020

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: COTTON DRAW #10

Enclosed are the results of analyses for samples received by the laboratory on 02/12/20 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 1 SURFACE (H000417-01)

BTEX 8021B mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	GC-NC
Total BTEX	<0.300	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *133 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**10400**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**75.9**	50.0	02/13/2020	ND	222	111	200	4.06	
DRO >C10-C28*	**12100**	50.0	02/13/2020	ND	224	112	200	3.96	QM-07
EXT DRO >C28-C36	**2360**	50.0	02/13/2020	ND					

Surrogate: 1-Chlorooctane *124 %* *41-142*

Surrogate: 1-Chlorooctadecane *401 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

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Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 1 1' (H000417-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**656**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/12/2020	ND	222	111	200	4.06	
DRO >C10-C28*	**17.4**	10.0	02/12/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	<10.0	10.0	02/12/2020	ND					

Surrogate: 1-Chlorooctane *93.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *97.2 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

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Bob Allen
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Fax To: (575) 393-4388

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 1 2' (H000417-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.7 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1170**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/12/2020	ND	222	111	200	4.06	
DRO >C10-C28*	<10.0	10.0	02/12/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	<10.0	10.0	02/12/2020	ND					

Surrogate: 1-Chlorooctane *94.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *97.1 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 2 SURFACE (H000417-04)

BTEX 8021B mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	**0.236**	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *139 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7460**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**11.2**	10.0	02/13/2020	ND	222	111	200	4.06	
DRO >C10-C28*	**5120**	10.0	02/13/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	**1290**	10.0	02/13/2020	ND					

Surrogate: 1-Chlorooctane *93.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *264 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 2 1' (H000417-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**624**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/12/2020	ND	222	111	200	4.06	
DRO >C10-C28*	**19.7**	10.0	02/12/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	<10.0	10.0	02/12/2020	ND					

Surrogate: 1-Chlorooctane *93.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *96.3 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

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Fax To: (575) 393-4388

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 2 2' (H000417-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.0 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1230**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/12/2020	ND	222	111	200	4.06	
DRO >C10-C28*	<10.0	10.0	02/12/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	<10.0	10.0	02/12/2020	ND					

Surrogate: 1-Chlorooctane *88.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *90.1 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
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Fax To: (575) 393-4388

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 3 SURFACE (H000417-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/12/2020	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5520**	16.0	02/13/2020	ND	432	108	400	0.00	QM-07

TPH 8015M mg/kg Analyzed By: MS **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2020	ND	222	111	200	4.06	
DRO >C10-C28*	**7330**	10.0	02/13/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	**1180**	10.0	02/13/2020	ND					

Surrogate: 1-Chlorooctane *104 %* *41-142*

Surrogate: 1-Chlorooctadecane *299 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 3 1' (H000417-08)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**640**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/12/2020	ND	222	111	200	4.06	
DRO >C10-C28*	<10.0	10.0	02/12/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	<10.0	10.0	02/12/2020	ND					

Surrogate: 1-Chlorooctane *78.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.4 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

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

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 3 2' (H000417-09)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2020	ND	222	111	200	4.06	
DRO >C10-C28*	<10.0	10.0	02/13/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	<10.0	10.0	02/13/2020	ND					

Surrogate: 1-Chlorooctane *89.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *91.4 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 4 SURFACE (H000417-10)

BTEX 8021B mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	**0.380**	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	GC-NC
Total BTEX	**0.380**	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *161 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1100**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**16.5**	10.0	02/13/2020	ND	222	111	200	4.06	
DRO >C10-C28*	**4020**	10.0	02/13/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	**811**	10.0	02/13/2020	ND					

Surrogate: 1-Chlorooctane *98.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *211 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 4 1' (H000417-11)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/12/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/12/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/12/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/12/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**640**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2020	ND	222	111	200	4.06	
DRO >C10-C28*	**35.1**	10.0	02/13/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	<10.0	10.0	02/13/2020	ND					

Surrogate: 1-Chlorooctane *92.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *95.0 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	02/12/2020	Sampling Date:	02/11/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	COTTON DRAW #10	Sampling Condition:	Cool & Intact
Project Number:	DEV - 20 - 008	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: AH - 4 2' (H000417-12)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/13/2020	ND	1.92	96.2	2.00	10.9	
Toluene*	<0.050	0.050	02/13/2020	ND	1.96	98.0	2.00	11.3	
Ethylbenzene*	<0.050	0.050	02/13/2020	ND	2.00	100	2.00	11.2	
Total Xylenes*	<0.150	0.150	02/13/2020	ND	5.84	97.3	6.00	11.4	
Total BTEX	<0.300	0.300	02/13/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	02/13/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**12.8**	10.0	02/13/2020	ND	222	111	200	4.06	
DRO >C10-C28*	<10.0	10.0	02/13/2020	ND	224	112	200	3.96	
EXT DRO >C28-C36	<10.0	10.0	02/13/2020	ND					

Surrogate: 1-Chlorooctane *89.5 %* *41-142*

Surrogate: 1-Chlorooctadecane *91.4 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Safety and Environmental Solutions	BILL TO	
Project Manager:	Bob Allen	P.O. #:	
Address:	703 East Clinton, PO Box 1613	Company:	Same
City:	Hobbs	State: NM Zip: 88240	Attn:
Phone #:	575 397-0510	Fax #: 575 393-4388	Address:
Project #:	DCU-20-008	Project Owner:	City:
Project Name:	Custer Draw 10		State: Zip:
Project Location:			Phone #:
Sampler Name:	Sean Jones		Fax #:

ANALYSIS REQUEST: TPH (8015GRO) | BTEX | Chlorides

FOR LAB USE ONLY Lab I.D.	Sample I.D.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME	TPH	BTEX	Chlorides
H000417																
1	Alt-1 Surface	1			X					X		02/11	0900	X	X	X
2	Alt-1 1ft	1			X					X			0910			
3	Alt-1 2ft	1			X					X			0920			
4	Alt-2 Surface	1			X					X			0935			
5	Alt-2 1ft	1			X					X			0940			
6	Alt-2 2ft	1			X					X			0955			
7	Alt-3 Surface	1			X					X			1005			
8	Alt-3 1ft	1			X					X			1020			
9	Alt-3 2ft	1			X					X			1035	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

Relinquished By:	Date: 11/12/22	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 0900		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date: 11:30	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: #113 5.9c

Sample Condition: Cool ☑ Yes ☐ No; Intact ☐ Yes ☐ No
CHECKED BY: (Initials)

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Safety and Environmental Solutions	BILL TO	
Project Manager:	Bob Allen	P.O. #:	
Address:	703 East Clinton, PO Box 1613	Company:	Same
City:	Hobbs	State: NM Zip: 88240	Attn:
Phone #:	575 397-0510	Fax #: 575 393-4388	Address:
Project #:	DEV-20-008	Project Owner:	City:
Project Name:	Corral Draw 10		State: Zip:
Project Location:			Phone #:
Sampler Name:	Jesse Young		Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST												
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH (8015 EXT)	BTEX	Chlorides										
H000417																											
10	AH-4 Surface	G	1			X					X		02/11	1045	X	X	X										
11	AH-4 (TX	G	1			X					X		02/11	1115	X	X	X										
12	AH-4 25'	G	1			X					X		02/11	1135	X	X	X										

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 02.12.20	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 0803		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date: 02.13.20	Received By:	REMARKS:
	Time:		
Delivered By: (Circle One)	Sample Condition: Cool ☑ Yes ☐ No, Intact ☑ Yes ☐ No	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other: #113 5.9c		TO	

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 07, 2020

Bob Allen

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

RE: Cotton Draw 10 Fed Com 2H Devon WO 20713717 OrderNo.: 2004067

Dear Bob Allen:

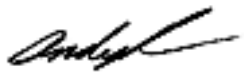
Hall Environmental Analysis Laboratory received 2 sample(s) on 4/2/2020 for the analyses presented in the following report.

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

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

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

Sincerely,



Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2004067**
Date Reported: **4/7/2020**

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-1 1ft
Project: Cotton Draw 10 Fed Com 2H Devon WO
Collection Date: 3/30/2020 9:50:00 AM
Lab ID: 2004067-001 **Matrix:** SOIL
Received Date: 4/2/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	580	60		mg/Kg	20	4/5/2020 9:42:44 PM	51572
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/5/2020 6:31:49 PM	51530
Surr: BFB	99.0	70-130		%Rec	1	4/5/2020 6:31:49 PM	51530
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/5/2020 4:49:08 PM	51541
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/5/2020 4:49:08 PM	51541
Surr: DNOP	94.8	55.1-146		%Rec	1	4/5/2020 4:49:08 PM	51541
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	4/5/2020 6:31:49 PM	51530
Toluene	ND	0.050		mg/Kg	1	4/5/2020 6:31:49 PM	51530
Ethylbenzene	ND	0.050		mg/Kg	1	4/5/2020 6:31:49 PM	51530
Xylenes, Total	ND	0.10		mg/Kg	1	4/5/2020 6:31:49 PM	51530
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	1	4/5/2020 6:31:49 PM	51530
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	4/5/2020 6:31:49 PM	51530
Surr: Dibromofluoromethane	92.7	70-130		%Rec	1	4/5/2020 6:31:49 PM	51530
Surr: Toluene-d8	99.6	70-130		%Rec	1	4/5/2020 6:31:49 PM	51530

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2004067**
Date Reported: **4/7/2020**

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-2 1ft
Project: Cotton Draw 10 Fed Com 2H Devon WO
Collection Date: 3/30/2020 10:15:00 AM
Lab ID: 2004067-002 **Matrix:** SOIL
Received Date: 4/2/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	590	60		mg/Kg	20	4/5/2020 9:55:08 PM	51572
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/5/2020 7:01:13 PM	51530
Surr: BFB	94.0	70-130		%Rec	1	4/5/2020 7:01:13 PM	51530
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/5/2020 5:13:37 PM	51541
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/5/2020 5:13:37 PM	51541
Surr: DNOP	93.6	55.1-146		%Rec	1	4/5/2020 5:13:37 PM	51541
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	4/5/2020 7:01:13 PM	51530
Toluene	ND	0.048		mg/Kg	1	4/5/2020 7:01:13 PM	51530
Ethylbenzene	ND	0.048		mg/Kg	1	4/5/2020 7:01:13 PM	51530
Xylenes, Total	ND	0.096		mg/Kg	1	4/5/2020 7:01:13 PM	51530
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	1	4/5/2020 7:01:13 PM	51530
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	4/5/2020 7:01:13 PM	51530
Surr: Dibromofluoromethane	95.8	70-130		%Rec	1	4/5/2020 7:01:13 PM	51530
Surr: Toluene-d8	95.0	70-130		%Rec	1	4/5/2020 7:01:13 PM	51530

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004067**
07-Apr-20

Client: Safety & Environmental Solutions
Project: Cotton Draw 10 Fed Com 2H Devon WO 20713

Sample ID: **MB-51572**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **51572**	RunNo: **67876**							
Prep Date: **4/5/2020**	Analysis Date: **4/5/2020**	SeqNo: **2344946**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-51572**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **51572**	RunNo: **67876**							
Prep Date: **4/5/2020**	Analysis Date: **4/5/2020**	SeqNo: **2344947**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.7	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004067**
07-Apr-20

Client: Safety & Environmental Solutions
Project: Cotton Draw 10 Fed Com 2H Devon WO 20713

Sample ID: **MB-51541**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51541**	RunNo: **67859**
Prep Date: **4/3/2020**	Analysis Date: **4/5/2020**	SeqNo: **2344068** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.6	55.1	146			

Sample ID: **LCS-51541**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51541**	RunNo: **67859**
Prep Date: **4/3/2020**	Analysis Date: **4/5/2020**	SeqNo: **2344069** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.3	70	130			
Surr: DNOP	4.3		5.000		85.8	55.1	146			

Sample ID: **MB-51554**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **51554**	RunNo: **67859**
Prep Date: **4/4/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345130** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		100	55.1	146			

Sample ID: **LCS-51554**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **51554**	RunNo: **67859**
Prep Date: **4/4/2020**	Analysis Date: **4/6/2020**	SeqNo: **2345131** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.3	55.1	146			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004067**
07-Apr-20

Client: Safety & Environmental Solutions
Project: Cotton Draw 10 Fed Com 2H Devon WO 20713

Sample ID: **mb-51530** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **51530** RunNo: **67853**
Prep Date: **4/2/2020** Analysis Date: **4/5/2020** SeqNo: **2343895** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.8	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.4	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.49		0.5000		97.3	70	130			

Sample ID: **lcs-51530** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **51530** RunNo: **67853**
Prep Date: **4/2/2020** Analysis Date: **4/5/2020** SeqNo: **2343896** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	86.5	80	120			
Toluene	1.1	0.050	1.000	0	105	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.1	70	130			
Surr: Toluene-d8	0.50		0.5000		99.2	70	130			

Sample ID: **mb-51487** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **51487** RunNo: **67881**
Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345162** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.5	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.0	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.2	70	130			
Surr: Toluene-d8	0.49		0.5000		98.8	70	130			

Sample ID: **lcs-51487** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **51487** RunNo: **67881**
Prep Date: **4/1/2020** Analysis Date: **4/5/2020** SeqNo: **2345164** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.48		0.5000		97.0	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004067**
07-Apr-20

Client: Safety & Environmental Solutions
Project: Cotton Draw 10 Fed Com 2H Devon WO 20713

Sample ID: **mb-51530**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51530**	RunNo: **67853**
Prep Date: **4/2/2020**	Analysis Date: **4/5/2020**	SeqNo: **2343932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		97.5	70	130			

Sample ID: **lcs-51530**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51530**	RunNo: **67853**
Prep Date: **4/2/2020**	Analysis Date: **4/5/2020**	SeqNo: **2343933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.5	70	130			
Surr: BFB	500		500.0		101	70	130			

Sample ID: **mb-51487**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/5/2020**	SeqNo: **2345213** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	490		500.0		98.6	70	130			

Sample ID: **lcs-51487**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **51487**	RunNo: **67881**
Prep Date: **4/1/2020**	Analysis Date: **4/5/2020**	SeqNo: **2345214** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	500		500.0		99.3	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2004057 RcptNo: 1

Received By: Isaiah Ortiz 4/2/2020 8:30:00 AM I Ortiz
Completed By: John Caldwell 4/2/2020 8:48:00 AM John Caldwell
Reviewed By: IO 4/7/20

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° C to 6.0°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: DAD 4/7/20

Special Handling (if applicable)

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

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

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good				
2	1.2	Good				

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)

Turn-Around Time: 5 day Turn
☑ Standard ☐ Rush

Project Name: Devon Cotton Draw 10 Fed Com 2h
WO# 20713717

Project #: DEV-20-008

Project Manager: Allen, Bob

Sampler: Sergio Jimenez

On Ice: ☑ Yes ☐ No

# of Coolers: 2 16-0.7 °C / 1.4 °C

Cooler Temp (including CF): 1.4-0.2 (CF) = 1.2 °C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2004067
03/30	0950	S	SP-1 1ft	1	Ice	-001
03/30	1015	S	SP-2 1ft	1	Ice	-002

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
X	X									X
X	X									X

Relinquished by:	Date	Time	Received by:	Via:	Date	Time
Sergio Jimenez	04/01/20	1600				
	4/1/20	1900		courier	4/2/20	0830

Remarks: e-mail data To Bob, Sergio, Kathey, Jerry Bill Person

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 20, 2020

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

RE: Devon Cotton Draw 10 Fed Com 2H 2RP-5378 OrderNo.: 2008699

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/13/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2008699**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-3 2.5ft
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 9:35:00 AM
Lab ID: 2008699-001 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	170	59		mg/Kg	20	8/18/2020 3:02:18 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**CLP**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	8/17/2020 2:50:32 PM	54431
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/17/2020 2:50:32 PM	54431
Surr: DNOP	103	30.4-154		%Rec	1	8/17/2020 2:50:32 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/15/2020 9:15:30 PM	54430
Surr: BFB	99.4	75.3-105		%Rec	1	8/15/2020 9:15:30 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	8/15/2020 9:15:30 PM	54430
Toluene	ND	0.049		mg/Kg	1	8/15/2020 9:15:30 PM	54430
Ethylbenzene	ND	0.049		mg/Kg	1	8/15/2020 9:15:30 PM	54430
Xylenes, Total	ND	0.099		mg/Kg	1	8/15/2020 9:15:30 PM	54430
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	8/15/2020 9:15:30 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008699**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-4 3ft
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 10:10:00 AM
Lab ID: 2008699-002 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	180	60		mg/Kg	20	8/18/2020 3:14:42 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	8/17/2020 3:14:28 PM	54431
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	8/17/2020 3:14:28 PM	54431
Surr: DNOP	108	30.4-154		%Rec	1	8/17/2020 3:14:28 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/15/2020 9:38:53 PM	54430
Surr: BFB	98.8	75.3-105		%Rec	1	8/15/2020 9:38:53 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/15/2020 9:38:53 PM	54430
Toluene	ND	0.048		mg/Kg	1	8/15/2020 9:38:53 PM	54430
Ethylbenzene	ND	0.048		mg/Kg	1	8/15/2020 9:38:53 PM	54430
Xylenes, Total	ND	0.097		mg/Kg	1	8/15/2020 9:38:53 PM	54430
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	8/15/2020 9:38:53 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008699**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-5 West
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 10:30:00 AM
Lab ID: 2008699-003 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	190	60		mg/Kg	20	8/18/2020 3:51:55 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	15	9.5		mg/Kg	1	8/17/2020 3:38:27 PM	54431
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2020 3:38:27 PM	54431
Surr: DNOP	93.5	30.4-154		%Rec	1	8/17/2020 3:38:27 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/15/2020 10:02:15 PM	54430
Surr: BFB	95.7	75.3-105		%Rec	1	8/15/2020 10:02:15 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/15/2020 10:02:15 PM	54430
Toluene	ND	0.049		mg/Kg	1	8/15/2020 10:02:15 PM	54430
Ethylbenzene	ND	0.049		mg/Kg	1	8/15/2020 10:02:15 PM	54430
Xylenes, Total	ND	0.099		mg/Kg	1	8/15/2020 10:02:15 PM	54430
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	8/15/2020 10:02:15 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008699**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-6 Southwest
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 10:45:00 AM
Lab ID: 2008699-004 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	8/18/2020 4:04:20 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/17/2020 4:02:24 PM	54431
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/17/2020 4:02:24 PM	54431
Surr: DNOP	99.2	30.4-154		%Rec	1	8/17/2020 4:02:24 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/15/2020 10:25:36 PM	54430
Surr: BFB	96.6	75.3-105		%Rec	1	8/15/2020 10:25:36 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/15/2020 10:25:36 PM	54430
Toluene	ND	0.049		mg/Kg	1	8/15/2020 10:25:36 PM	54430
Ethylbenzene	ND	0.049		mg/Kg	1	8/15/2020 10:25:36 PM	54430
Xylenes, Total	ND	0.098		mg/Kg	1	8/15/2020 10:25:36 PM	54430
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	8/15/2020 10:25:36 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008699**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-7 South
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 11:00:00 AM
Lab ID: 2008699-005 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	110	60		mg/Kg	20	8/18/2020 4:16:45 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/17/2020 4:26:17 PM	54431
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/17/2020 4:26:17 PM	54431
Surr: DNOP	99.2	30.4-154		%Rec	1	8/17/2020 4:26:17 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/15/2020 10:48:59 PM	54430
Surr: BFB	95.9	75.3-105		%Rec	1	8/15/2020 10:48:59 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/15/2020 10:48:59 PM	54430
Toluene	ND	0.047		mg/Kg	1	8/15/2020 10:48:59 PM	54430
Ethylbenzene	ND	0.047		mg/Kg	1	8/15/2020 10:48:59 PM	54430
Xylenes, Total	ND	0.095		mg/Kg	1	8/15/2020 10:48:59 PM	54430
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	8/15/2020 10:48:59 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008699**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-8 East
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 11:25:00 AM
Lab ID: 2008699-006 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	8/18/2020 4:29:10 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/17/2020 4:50:08 PM	54431
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2020 4:50:08 PM	54431
Surr: DNOP	99.5	30.4-154		%Rec	1	8/17/2020 4:50:08 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/15/2020 11:12:20 PM	54430
Surr: BFB	95.7	75.3-105		%Rec	1	8/15/2020 11:12:20 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/15/2020 11:12:20 PM	54430
Toluene	ND	0.050		mg/Kg	1	8/15/2020 11:12:20 PM	54430
Ethylbenzene	ND	0.050		mg/Kg	1	8/15/2020 11:12:20 PM	54430
Xylenes, Total	ND	0.099		mg/Kg	1	8/15/2020 11:12:20 PM	54430
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	8/15/2020 11:12:20 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008699**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-9 Northeast
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 11:55:00 AM
Lab ID: 2008699-007 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	180	60		mg/Kg	20	8/18/2020 4:41:34 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	16	9.7		mg/Kg	1	8/17/2020 5:14:05 PM	54431
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2020 5:14:05 PM	54431
Surr: DNOP	98.7	30.4-154		%Rec	1	8/17/2020 5:14:05 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/15/2020 11:35:48 PM	54430
Surr: BFB	97.9	75.3-105		%Rec	1	8/15/2020 11:35:48 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/15/2020 11:35:48 PM	54430
Toluene	ND	0.049		mg/Kg	1	8/15/2020 11:35:48 PM	54430
Ethylbenzene	ND	0.049		mg/Kg	1	8/15/2020 11:35:48 PM	54430
Xylenes, Total	ND	0.099		mg/Kg	1	8/15/2020 11:35:48 PM	54430
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	8/15/2020 11:35:48 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008699**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-10 Northwest
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 12:15:00 PM
Lab ID: 2008699-008 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	79	60		mg/Kg	20	8/18/2020 4:53:59 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/18/2020 7:08:53 PM	54431
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/18/2020 7:08:53 PM	54431
Surr: DNOP	105	30.4-154		%Rec	1	8/18/2020 7:08:53 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/15/2020 11:59:10 PM	54430
Surr: BFB	101	75.3-105		%Rec	1	8/15/2020 11:59:10 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/15/2020 11:59:10 PM	54430
Toluene	ND	0.048		mg/Kg	1	8/15/2020 11:59:10 PM	54430
Ethylbenzene	ND	0.048		mg/Kg	1	8/15/2020 11:59:10 PM	54430
Xylenes, Total	ND	0.095		mg/Kg	1	8/15/2020 11:59:10 PM	54430
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	8/15/2020 11:59:10 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008699**

20-Aug-20

Client: Safety & Environmental Solutions

Project: Devon Cotton Draw 10 Fed Com 2H 2RP-5378

Sample ID: **MB-54499**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **54499**	RunNo: **71154**							
Prep Date: **8/18/2020**	Analysis Date: **8/18/2020**	SeqNo: **2481784**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-54499**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **54499**	RunNo: **71154**							
Prep Date: **8/18/2020**	Analysis Date: **8/18/2020**	SeqNo: **2481785**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008699**
20-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 10 Fed Com 2H 2RP-5378

Sample ID: **MB-54431**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **54431**	RunNo: **71115**
Prep Date: **8/14/2020**	Analysis Date: **8/17/2020**	SeqNo: **2478838** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		105	30.4	154			

Sample ID: **LCS-54431**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **54431**	RunNo: **71115**
Prep Date: **8/14/2020**	Analysis Date: **8/17/2020**	SeqNo: **2479491** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	101	70	130			
Surr: DNOP	4.8		5.000		96.2	30.4	154			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008699**

20-Aug-20

Client: Safety & Environmental Solutions

Project: Devon Cotton Draw 10 Fed Com 2H 2RP-5378

Sample ID: **mb-54430**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478539**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		100	75.3	105			

Sample ID: **lcs-54430**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478540**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.8	72.5	106			
Surr: BFB	1100		1000		111	75.3	105			S

Sample ID: **mb-54437**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **54437**	RunNo: **71136**							
Prep Date: **8/15/2020**	Analysis Date: **8/17/2020**	SeqNo: **2480048**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	75.3	105			

Sample ID: **lcs-54437**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **54437**	RunNo: **71136**							
Prep Date: **8/15/2020**	Analysis Date: **8/17/2020**	SeqNo: **2480049**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		111	75.3	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008699**

20-Aug-20

Client: Safety & Environmental Solutions

Project: Devon Cotton Draw 10 Fed Com 2H 2RP-5378

Sample ID: **mb-54430**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **54430**	RunNo: **71111**
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478583** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: **LCS-54430**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **54430**	RunNo: **71111**
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478584** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.8	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.9	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: **mb-54437**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **54437**	RunNo: **71136**
Prep Date: **8/15/2020**	Analysis Date: **8/17/2020**	SeqNo: **2480091** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID: **LCS-54437**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **54437**	RunNo: **71136**
Prep Date: **8/15/2020**	Analysis Date: **8/17/2020**	SeqNo: **2480092** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2008699 | RcptNo: 1

Received By: Emily Mocho 8/13/2020 8:00:00 AM

Completed By: Michelle Garcia 8/13/2020 9:10:55 AM Michelle Garcia

Reviewed By: LB 8/13/20

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° C to 6.0°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: CMC 8/13/20

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			

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)

Turn-Around Time: 5 days
☑ Standard ☐ Rush

Project Name: Devon Cotton Draw 10 Fed Com 2H 2RP-5378

Project #: Dev-20-008

Project Manager: Allen, Bob

Sampler: Son Jeny

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.5+0.3=3.8(°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2008499	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides
08/11	0935	S	AH-3 2.5Ft	1	Ice	001	X	X									X
	1010	S	AH-4 3Ft	1		002											
	1030	S	H-5 WEST	1		003											
	1045	S	H-6 SOUTHWEST	1		004											
	1100	S	H-7 SOUTH	1		005											
	1125	S	H-8 EAST	1		006											
	1155	S	H-9 NORTH EAST	1		007											
08/11	1245	S	H-10 NORTH WEST	1		008	X	X									X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
08/12	0800	Son Jeny			8/12/20	0800
8/12/20	1900		EVM	courier	8/13/20	8:00

Remarks:
Bill Devon

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 20, 2020

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

RE: Devon Cotton Draw 10 Fed Com 2H 2RP-4804 OrderNo.: 2008698

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/13/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2008698**
Date Reported: **8/20/2020**

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-1 3ft
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 12:50:00 PM
Lab ID: 2008698-001 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	8/18/2020 12:45:47 PM	54499
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/16/2020 1:08:46 PM	54415
Surr: BFB	99.5	70-130		%Rec	1	8/16/2020 1:08:46 PM	54415
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/17/2020 10:51:02 AM	54431
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2020 10:51:02 AM	54431
Surr: DNOP	96.6	30.4-154		%Rec	1	8/17/2020 10:51:02 AM	54431
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	8/16/2020 1:08:46 PM	54415
Toluene	ND	0.049		mg/Kg	1	8/16/2020 1:08:46 PM	54415
Ethylbenzene	ND	0.049		mg/Kg	1	8/16/2020 1:08:46 PM	54415
Xylenes, Total	ND	0.097		mg/Kg	1	8/16/2020 1:08:46 PM	54415
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%Rec	1	8/16/2020 1:08:46 PM	54415
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	8/16/2020 1:08:46 PM	54415
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/16/2020 1:08:46 PM	54415
Surr: Toluene-d8	89.3	70-130		%Rec	1	8/16/2020 1:08:46 PM	54415

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

Qualifiers:

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

Analytical Report
Lab Order **2008698**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-2 2.5ft
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 1:20:00 PM
Lab ID: 2008698-002 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	61		mg/Kg	20	8/18/2020 1:47:50 PM	54499
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/16/2020 8:17:38 PM	54415
Surr: BFB	106	70-130		%Rec	1	8/16/2020 8:17:38 PM	54415
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/17/2020 12:02:44 PM	54431
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/17/2020 12:02:44 PM	54431
Surr: DNOP	96.0	30.4-154		%Rec	1	8/17/2020 12:02:44 PM	54431
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.023		mg/Kg	1	8/16/2020 8:17:38 PM	54415
Toluene	ND	0.047		mg/Kg	1	8/16/2020 8:17:38 PM	54415
Ethylbenzene	ND	0.047		mg/Kg	1	8/16/2020 8:17:38 PM	54415
Xylenes, Total	ND	0.094		mg/Kg	1	8/16/2020 8:17:38 PM	54415
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	8/16/2020 8:17:38 PM	54415
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	8/16/2020 8:17:38 PM	54415
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/16/2020 8:17:38 PM	54415
Surr: Toluene-d8	91.3	70-130		%Rec	1	8/16/2020 8:17:38 PM	54415

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008698**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-5 North
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 1:40:00 PM
Lab ID: 2008698-003 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	8/18/2020 2:00:15 PM	54499
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/16/2020 8:46:08 PM	54415
Surr: BFB	105	70-130		%Rec	1	8/16/2020 8:46:08 PM	54415
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	34	9.7		mg/Kg	1	8/17/2020 12:26:40 PM	54431
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2020 12:26:40 PM	54431
Surr: DNOP	104	30.4-154		%Rec	1	8/17/2020 12:26:40 PM	54431
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	8/16/2020 8:46:08 PM	54415
Toluene	ND	0.048		mg/Kg	1	8/16/2020 8:46:08 PM	54415
Ethylbenzene	ND	0.048		mg/Kg	1	8/16/2020 8:46:08 PM	54415
Xylenes, Total	ND	0.095		mg/Kg	1	8/16/2020 8:46:08 PM	54415
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	8/16/2020 8:46:08 PM	54415
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/16/2020 8:46:08 PM	54415
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/16/2020 8:46:08 PM	54415
Surr: Toluene-d8	93.0	70-130		%Rec	1	8/16/2020 8:46:08 PM	54415

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008698**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-6 West
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 1:50:00 PM
Lab ID: 2008698-004 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	190	60		mg/Kg	20	8/18/2020 2:12:40 PM	54499
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/16/2020 9:14:37 PM	54415
Surr: BFB	104	70-130		%Rec	1	8/16/2020 9:14:37 PM	54415
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	18	9.8		mg/Kg	1	8/17/2020 12:50:39 PM	54431
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/17/2020 12:50:39 PM	54431
Surr: DNOP	103	30.4-154		%Rec	1	8/17/2020 12:50:39 PM	54431
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.023		mg/Kg	1	8/16/2020 9:14:37 PM	54415
Toluene	ND	0.047		mg/Kg	1	8/16/2020 9:14:37 PM	54415
Ethylbenzene	ND	0.047		mg/Kg	1	8/16/2020 9:14:37 PM	54415
Xylenes, Total	ND	0.094		mg/Kg	1	8/16/2020 9:14:37 PM	54415
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%Rec	1	8/16/2020 9:14:37 PM	54415
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	8/16/2020 9:14:37 PM	54415
Surr: Dibromofluoromethane	108	70-130		%Rec	1	8/16/2020 9:14:37 PM	54415
Surr: Toluene-d8	91.3	70-130		%Rec	1	8/16/2020 9:14:37 PM	54415

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008698**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-7 Southwest
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 2:10:00 PM
Lab ID: 2008698-005 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	190	60		mg/Kg	20	8/18/2020 2:25:05 PM	54499
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/16/2020 9:43:03 PM	54415
Surr: BFB	110	70-130		%Rec	1	8/16/2020 9:43:03 PM	54415
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	21	9.6		mg/Kg	1	8/17/2020 1:14:39 PM	54431
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2020 1:14:39 PM	54431
Surr: DNOP	108	30.4-154		%Rec	1	8/17/2020 1:14:39 PM	54431
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	8/16/2020 9:43:03 PM	54415
Toluene	ND	0.047		mg/Kg	1	8/16/2020 9:43:03 PM	54415
Ethylbenzene	ND	0.047		mg/Kg	1	8/16/2020 9:43:03 PM	54415
Xylenes, Total	ND	0.094		mg/Kg	1	8/16/2020 9:43:03 PM	54415
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%Rec	1	8/16/2020 9:43:03 PM	54415
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	8/16/2020 9:43:03 PM	54415
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/16/2020 9:43:03 PM	54415
Surr: Toluene-d8	90.6	70-130		%Rec	1	8/16/2020 9:43:03 PM	54415

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008698**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-8 South
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 2:20:00 PM
Lab ID: 2008698-006 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	77	60		mg/Kg	20	8/18/2020 2:37:29 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/17/2020 8:02:35 PM	54431
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2020 8:02:35 PM	54431
Surr: DNOP	110	30.4-154		%Rec	1	8/17/2020 8:02:35 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/15/2020 6:54:27 PM	54430
Surr: BFB	101	75.3-105		%Rec	1	8/15/2020 6:54:27 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/15/2020 6:54:27 PM	54430
Toluene	ND	0.048		mg/Kg	1	8/15/2020 6:54:27 PM	54430
Ethylbenzene	ND	0.048		mg/Kg	1	8/15/2020 6:54:27 PM	54430
Xylenes, Total	ND	0.096		mg/Kg	1	8/15/2020 6:54:27 PM	54430
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	8/15/2020 6:54:27 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2008698**
Date Reported: **8/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: H-9 East
Project: Devon Cotton Draw 10 Fed Com 2H 2RP
Collection Date: 8/11/2020 2:30:00 PM
Lab ID: 2008698-007 **Matrix:** SOIL
Received Date: 8/13/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	89	60		mg/Kg	20	8/18/2020 2:49:54 PM	54499
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/17/2020 8:26:29 PM	54431
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/17/2020 8:26:29 PM	54431
Surr: DNOP	106	30.4-154		%Rec	1	8/17/2020 8:26:29 PM	54431
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/15/2020 8:05:08 PM	54430
Surr: BFB	102	75.3-105		%Rec	1	8/15/2020 8:05:08 PM	54430
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/15/2020 8:05:08 PM	54430
Toluene	ND	0.049		mg/Kg	1	8/15/2020 8:05:08 PM	54430
Ethylbenzene	ND	0.049		mg/Kg	1	8/15/2020 8:05:08 PM	54430
Xylenes, Total	ND	0.097		mg/Kg	1	8/15/2020 8:05:08 PM	54430
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	8/15/2020 8:05:08 PM	54430

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

Qualifiers:

*	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008698**
20-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 10 Fed Com 2H 2RP-4804

Sample ID: **MB-54499**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **54499**	RunNo: **71154**							
Prep Date: **8/18/2020**	Analysis Date: **8/18/2020**	SeqNo: **2481784**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-54499**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **54499**	RunNo: **71154**							
Prep Date: **8/18/2020**	Analysis Date: **8/18/2020**	SeqNo: **2481785**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008698**
20-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 10 Fed Com 2H 2RP-4804

Sample ID: **MB-54431**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **54431**	RunNo: **71115**
Prep Date: **8/14/2020**	Analysis Date: **8/17/2020**	SeqNo: **2478838** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		105	30.4	154			

Sample ID: **LCS-54431**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **54431**	RunNo: **71115**
Prep Date: **8/14/2020**	Analysis Date: **8/17/2020**	SeqNo: **2479491** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	101	70	130			
Surr: DNOP	4.8		5.000		96.2	30.4	154			

Sample ID: **2008698-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **AH-1 3ft**	Batch ID: **54431**	RunNo: **71115**
Prep Date: **8/14/2020**	Analysis Date: **8/17/2020**	SeqNo: **2479502** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.8	48.78	0	104	47.4	136			
Surr: DNOP	4.7		4.878		95.7	30.4	154			

Sample ID: **2008698-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **AH-1 3ft**	Batch ID: **54431**	RunNo: **71115**
Prep Date: **8/14/2020**	Analysis Date: **8/17/2020**	SeqNo: **2479503** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.5	47.71	0	101	47.4	136	5.11	43.4	
Surr: DNOP	4.5		4.771		94.0	30.4	154	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008698**

20-Aug-20

Client: Safety & Environmental Solutions

Project: Devon Cotton Draw 10 Fed Com 2H 2RP-4804

Sample ID: **mb-54430**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478539**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		100	75.3	105			

Sample ID: **lcs-54430**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478540**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.8	72.5	106			
Surr: BFB	1100		1000		111	75.3	105			S

Sample ID: **2008698-007ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **H-9 East**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478543**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.6	23.06	0	98.2	61.3	114			
Surr: BFB	1000		922.5		112	75.3	105			S

Sample ID: **2008698-007amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **H-9 East**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478544**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.37	0	98.3	61.3	114	5.62	20	
Surr: BFB	1100		974.7		109	75.3	105	0	0	S

Sample ID: **mb-54437**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **54437**	RunNo: **71136**							
Prep Date: **8/15/2020**	Analysis Date: **8/17/2020**	SeqNo: **2480048**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	75.3	105			

Sample ID: **lcs-54437**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **54437**	RunNo: **71136**							
Prep Date: **8/15/2020**	Analysis Date: **8/17/2020**	SeqNo: **2480049**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		111	75.3	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008698**
20-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 10 Fed Com 2H 2RP-4804

Sample ID: **mb-54430**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **PBS**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478583**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: **LCS-54430**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **LCSS**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478584**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.8	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.9	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: **2008698-006ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **H-8 South**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478586**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	0.9862	0	96.8	76.3	120			
Toluene	0.99	0.049	0.9862	0.01096	99.0	78.5	120			
Ethylbenzene	1.0	0.049	0.9862	0.01192	100	78.1	124			
Xylenes, Total	3.0	0.099	2.959	0.02904	101	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9862		105	80	120			

Sample ID: **2008698-006amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **H-8 South**	Batch ID: **54430**	RunNo: **71111**							
Prep Date: **8/14/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478587**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9833	0	95.3	76.3	120	1.87	20	
Toluene	0.97	0.049	0.9833	0.01096	97.3	78.5	120	2.06	20	
Ethylbenzene	1.0	0.049	0.9833	0.01192	100	78.1	124	0.503	20	
Xylenes, Total	3.0	0.098	2.950	0.02904	101	79.3	125	0.916	20	
Surr: 4-Bromofluorobenzene	1.1		0.9833		107	80	120	0	0	

Qualifiers:

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PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008698**
20-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 10 Fed Com 2H 2RP-4804

Sample ID: **mb-54437**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **PBS**	Batch ID: **54437**	RunNo: **71136**							
Prep Date: **8/15/2020**	Analysis Date: **8/17/2020**	SeqNo: **2480091**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID: **LCS-54437**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **LCSS**	Batch ID: **54437**	RunNo: **71136**							
Prep Date: **8/15/2020**	Analysis Date: **8/17/2020**	SeqNo: **2480092**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2008698**
20-Aug-20

Client: Safety & Environmental Solutions
Project: Devon Cotton Draw 10 Fed Com 2H 2RP-4804

Sample ID: **mb-54415** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **54415** RunNo: **71105**
Prep Date: **8/13/2020** Analysis Date: **8/15/2020** SeqNo: **2478157** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.7	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.48		0.5000		95.1	70	130			

Sample ID: **lcs-54415** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **54415** RunNo: **71105**
Prep Date: **8/13/2020** Analysis Date: **8/15/2020** SeqNo: **2478158** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.8	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.8	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.46		0.5000		92.1	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008698**

20-Aug-20

Client: Safety & Environmental Solutions

Project: Devon Cotton Draw 10 Fed Com 2H 2RP-4804

Sample ID: **mb-54415**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **54415**	RunNo: **71105**
Prep Date: **8/13/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478196** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	530		500.0		106	70	130			

Sample ID: **lcs-54415**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **54415**	RunNo: **71105**
Prep Date: **8/13/2020**	Analysis Date: **8/15/2020**	SeqNo: **2478197** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.5	70	130			
Surr: BFB	540		500.0		107	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
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H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
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

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: 2008698 | RcptNo: 1

Received By: Emily Mocho 8/13/2020 8:00:00 AM

Completed By: Michelle Garcia 8/13/2020 8:58:30 AM Michelle Garcia

Reviewed By: LB 8/13/20

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° C to 6.0°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: CME 8/13/20

Special Handling (if applicable)

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

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

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			

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)

Turn-Around Time: 5day
☐ Standard ☐ Rush

Project Name: Devon Cotton Draw 10 Fed Com 2H 2RP-4804

Project #: DEV-20-008

Project Manager: Allen Bob

Sampler: Son-Jerry

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.5+0=3.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2008098	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
08/11	1250	S	AH-1 3ft	1	Ice	-001	X	X									X
	1320	S	AH-2 2.5ft	1		-002											
	1340	S	H-5 North	1		-003											
	1350	S	H-6 West	1		-004											
	1410	S	H-7 South West	1		-005											
	1420	S	H-8 South	1		-006											
08/11	1430	S	H-9 East	1		-007	X	X									X

Date	Time	Relinquished by	Received by	Via	Date	Time
08/12	0800	Son Jerry				
8/12/20	1910			9em courier	8/13/20	8:00

Remarks: Bill Devon

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Devon – Cotton Draw Unit #10 Fed Com 2H
Excavation Photos

Devon – Cotton Draw Unit #10 Fed Com 2H
Excavation Photos

Devon – Cotton Draw Unit #10 Fed Com 2H
Deferral Area Photos

State of New Mexico
Oil Conservation Division

Incident ID	nAB1816432279
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

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

☐ Description of remediation activities

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

Printed Name: Dale Woodall Title: Env. Professional

Signature: Dale Woodall Date: 11/16/2022

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1911943617
District RP	
Facility ID	
Application ID	

Closure

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

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Printed Name: Dale Woodall Title: Env. Professional

Signature: Dale Woodall Date: 11/16/2022

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

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Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 159442
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAB1911943617 COTTON DRAW 10 FEDERAL COM #002H, thank you. This closure is approved.	2/13/2023