

Incident ID	nAB1711551324
District RP	
Facility ID	30-015-24827
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: Environmental Professional

Signature: Dale Woodall

Date: February 7, 2023

Email: Dale.Woodall@dmv.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: Brittany Hall

Date: 2/8/2023

Printed Name: Brittany Hall

Title: Environmental Specialist

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Closure Report

Cotton Draw Unit #089
Eddy County, New Mexico
API# 30-015-24827

**Incident #s nMLB1128636288, nAB1522442205,
nAB1616231629, and nAB1711551324**

Prepared For:

Devon Energy Production Company
6488 Seven Rivers Highway
Artesia, NM 88210

Prepared By:

Talon/LPE
408 W. Texas Avenue
Artesia, New Mexico 88210

February 6, 2023



Mr. Mike Bratcher
NMOCD District 2
506 W. Texas Avenue
Artesia, NM 88210

Subject: **Closure Report**
Cotton Draw Unit #089
Eddy County, New Mexico
API# 30-015-24827
**Incident #s nMLB1128636288, nAB1522442205, nAB1616231629, and
nAB1711551324**

Dear Mr. Bratcher,

Devon Energy Production Company (Devon) contracted Talon/LPE (Talon) to complete remediation and closure activities at the above referenced location. The results of the remediation and final data for closure are provided herein.

Site Information

The Cotton Draw Unit #089 is located approximately 46 miles southeast of Carlsbad, New Mexico. The legal location for this release is Unit Letter O, Section 3, Township 25 South and Range 31 East in Eddy County, New Mexico. The latitude and longitude for the site is 32.1528893 and -103.7636414. Site maps are presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soils in the area are made up of Berino complexes, with 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology are Holocene to upper Pleistocene in age and comprised of mixed alluvium and/or eolian sands. Drainage courses in this area are typically well drained.

Groundwater and Site Characterization

Based on New Mexico Office of the State Engineer Database, the nearest reported groundwater depth is 390 feet below ground surface (bgs) but is located greater than 0.5 miles from the subject site. Because the data is over 0.5 miles from the site, a temporary well was drilled to a depth of 55 feet bgs approximately 0.14 miles southeast of the site to conclusively determine the presence or absence of groundwater at that depth. See [Appendix II](#) for the submitted well record and log to the New Mexico Office of the State Engineer. Groundwater was not encountered at 55 feet bgs following a six (6) day period after the installation of the temporary well. The FEMA Flood Map Service Center does not locate the site in a 100-year flood plain. Further research of the Bureau of Land

Management Karst data indicates that the site is not located in a potential karst area. See [Appendix II](#) for the site characterization data.

If a release occurs within the following areas, the responsible party must treat the release as if it occurred in an area where the groundwater is less than 50 feet bgs in Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 NMAC.

Approximate Depth to Groundwater	> 55 feet/bgs
---	-------------------------

- | | |
|---|---|
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 300 feet of any continuously flowing watercourse or any other significant watercourse |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 200 feet of any lakebed, sinkhole or a playa lake |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 300 feet from an occupied permanent residence, school, hospital, institution or church |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 1000 feet of any freshwater well or spring |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within incorporated municipal boundaries or within a defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978 |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within 300 feet of a wetland |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within the area overlying a subsurface mine |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within an unstable area |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Within a 100-year floodplain |

Because the releases occurred in a production area (well pad) and the verified depth to groundwater is greater than 55 feet bgs, the clean-up criteria for this site is as follows.

Table I Closure Criteria for Soils Impacted by a Release			
Depth below horizontal extents of release to ground water less than 10,000 mg/l TDS	Constituent	Method	Limit
51-100 feet	Total Chlorides	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	TPH (GRO + DRO)	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

Incident Description

On September 20, 2011, lightning struck a fiberglass produced water tank and the associated piping. Approximately 28 barrels (bbls) of condensate were released inside the diked area. Approximately six (6) bbls of condensate was recovered. A fire resulted from the lightning strike and the residual fluid was burned in the explosion that followed. Devon personnel shut in the well and all of the burned equipment was later removed. Devon converted this production site to a Salt Water Disposal Facility. The release was reported to the NMOCD and was assigned incident number **nMLB1128636288**.

On August 6, 2015, a transport driver for Black River Trucking was loading produced water when the connecting high pressure 4" hose blew apart, resulting in the release of 35 bbls onto the pad area location. The well was immediately shut in and a hydro-vac service immediately commenced recovering approximately 25 bbls of produced water. An initial C-141 was received by the NMOCD on August 11, 2015 and assigned the incident **nAB1522442205**. Talon assessed the site and submitted a work plan for the remediation of the affected area. The work plan was approved by the NMOCD on February 9, 2016, but was voided based on a later release in the area.

On June 2, 2016, the plug on the strainer traversing to the number three water injection pump had corroded resulting in a release of approximately seven (7) bbls of produced water. The number three water injection pump was immediately shut down in order to prevent further release. Approximately six (6) bbls of fluid were recovered. This impacted an area on the pad that measured approximately 3 ft. wide x 18 ft. long, extending to the southwestern part of the pad. The footprint of this incident overlapped the previous release, nAB1522442205. The release was reported to NMOCD and was assigned the incident number **nAB1616231629**.

On April 10, 2017, a filter screen plug was missing on the triplex pump, resulting in a release of 16 bbls of produced water outside of the containment. The main water supply valve feeding the pump was closed and the plug was replaced. The C-141 for this incident was submitted to the NMOCD on April 21, 2017. The NMOCD assigned the incident number **nAB1711551324**. Devon contracted Talon to assess the site and submit a work plan to the NMOCD. The work plan to remediate for this incident was approved on June 11, 2018. The referenced NMOCD approved work plan and approval are in [Appendix III](#).

Site maps of the releases are presented in [Appendix I](#). Initial C-141 spill notifications were filed with the NMOCD and are attached in [Appendix III](#).

Site Assessment Activities

On August 3, 2020, Talon personnel and equipment were mobilized to the location to perform a direction Geoprobe drilling under the south end of the containment to assess release nMLB1128636288. The final sampling depth was approximately 10 feet bgs and the sample results are summarized in Table 1a.

The samples were transported with the chain of custody to Hall Laboratories, for analysis of Total Chlorides (EPA Method 300.0), Total Petroleum Hydrocarbons (TPH, EPA Method 8015M) and Volatile Organics (BTEX, EPA Method 8021B).

Table 1a
Site Assessment Analytical Data
Incident #s nMLB1128636288

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	DRO + GRO = 1,000 mg/kg			2,500 mg/kg	10,000 mg/kg
B-1	8/3/2020	0-1'	ND	ND	ND	45	ND	45	1,500
	8/3/2020	2'	ND	ND	ND	ND	ND	-	72
	8/3/2020	3'	ND	ND	ND	ND	ND	-	76
	8/3/2020	4'	ND	ND	ND	ND	ND	-	1,300
	8/3/2020	6'	ND	ND	ND	ND	ND	-	690
	8/3/2020	8'	ND	ND	ND	ND	ND	-	210
	8/3/2020	10'	ND	ND	ND	ND	ND	-	96
BG-1	8/3/2020	0-1'	ND	ND	ND	17	85	102	ND
2011 Fire Incident ND = Analyte not detected									

On September 16, 2015, Talon collected soil samples from test trench, S-1, from surface to four (4) feet bgs. Following receipt of the laboratory data, Talon returned on January 11, 2016 and collected grab samples for delineation at S-2 through S-4 locations to four (4) feet bgs. The samples were transported to Cardinal Laboratories, for analysis of Total Chlorides (SM4500Cl-B). The summary of the results are presented in the following Table 1b.

Table 1b
Site Assessment Analytical Data
Incident # nAB1522442205

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Clorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	DRO + GRO = 1,000 mg/kg			2,500 mg/kg	10,000 mg/kg
S-1	9/16/2015	1'	NT	NT	NT	NT	NT	-	2,800
	9/16/2015	2'	NT	NT	NT	NT	NT	-	160
	9/16/2015	3'	NT	NT	NT	NT	NT	-	144
	9/16/2015	4'	NT	NT	NT	NT	NT	-	64
S-2	1/11/2016	1'	NT	NT	NT	NT	NT	-	720
	1/11/2016	2'	NT	NT	NT	NT	NT	-	1,880
	1/11/2016	3'	NT	NT	NT	NT	NT	-	128
	1/11/2016	4'	NT	NT	NT	NT	NT	-	80
S-3	1/11/2016	1'	NT	NT	NT	NT	NT	-	2,600
	1/11/2016	2'	NT	NT	NT	NT	NT	-	2,080
	1/11/2016	3'	NT	NT	NT	NT	NT	-	2,840
	1/11/2016	4' R	NT	NT	NT	NT	NT	-	2,320
S-4	1/11/2016	1'	NT	NT	NT	NT	NT	-	624
	1/11/2016	2'	NT	NT	NT	NT	NT	-	288
	1/11/2016	3'	NT	NT	NT	NT	NT	-	176
	1/11/2016	4'	NT	NT	NT	NT	NT	-	624
2015 Release from Loadout onto Pad Location ND = Analyte Not Detected NT = Not Tested R = Refusal with Hand Auger									

On December 6, 2017, Talon mobilized peronnel to the site to complete a site assessment for the incident number nAB1711551324. A work plan was completed and approved by NMOCD on June 11, 2018. The samples were transported to Cardinal Laboratories and analyzed for Total Chlorides (SM4500Cl-B), and the data is summarized in the following Table 1c.

Table 1c
Site Assessment Analytical Data
Incident # nAB1711551324

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	DRO + GRO = 1,000 mg/kg			2,500 mg/kg	10,000 mg/kg
S-1	12/6/2017	0'	NT	NT	NT	NT	NT	-	6,960
	12/6/2017	1'	NT	NT	NT	NT	NT	-	1,040
	12/6/2017	2'	NT	NT	NT	NT	NT	-	336
S-2	12/6/2017	0'	NT	NT	NT	NT	NT	-	432
S-3	12/6/2017	0'	NT	NT	NT	NT	NT	-	752
	12/6/2017	1'	NT	NT	NT	NT	NT	-	432
	12/6/2017	2'	NT	NT	NT	NT	NT	-	704
	12/6/2017	3'	NT	NT	NT	NT	NT	-	496
	12/6/2017	4'	NT	NT	NT	NT	NT	-	496
S-4	12/6/2017	0'	NT	NT	NT	NT	NT	-	32
2017 Produced Water Release Outside of Containment									
NT = Not Tested									

Results from the assessment sampling events are presented in the following data tables and the complete laboratory reports can be found in [Appendix V](#). Sample locations are shown on the attached Figure 1a through Figure 1c in [Appendix I](#).

Remediation Activities

On July 16, 2020, upon client authorization Talon personnel and equipment were mobilized to the location in order to commence remediation activities and to remove impacted soil above NMOCD closure criteria. The impacted area on the pad was excavated to depths of three (3) feet bgs, correlating to incident numbers nAB1522442205 and nAB1616231629. The impacted area associated with incident number nAB1711551324 was hand excavated in accordance with the approved work plan to depths of two (2) feet bgs. Confirmation composite samples were taken from the respective bottom and sidewalls of the excavated areas where indicated on the site plan, and can be referenced in [Appendix I](#). All soil samples were properly contained, preserved, and transported to Hall Laboratories for analysis of Total Chlorides (EPA Method 300.0). The complete laboratory report for the remediation efforts are attached in [Appendix V](#) and the summarized data is presented in the following Table 2.

Table 2
Site Closure Analytical Data

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	DRO + GRO = 1,000 mg/kg			2,500 mg/kg	10,000 mg/kg
Incident # nAB1522442205 and nAB1616231629 (Releases from Loadout onto Pad Location)									
S-1	7/16/2020	1'	NT	NT	NT	NT	NT	-	1,100
S-2	7/16/2020	3'	NT	NT	NT	NT	NT	-	190
S-3	7/16/2020	3'	NT	NT	NT	NT	NT	-	310
S-4	7/16/2020	0.5'	NT	NT	NT	NT	NT	-	120
S-1 NSW 1'	7/16/2020	1'	NT	NT	NT	NT	NT	-	ND
S-1 SSW 1'	7/16/2020	1'	NT	NT	NT	NT	NT	-	720
S-2 NSW 3'	7/16/2020	3'	NT	NT	NT	NT	NT	-	460
S-2 SSW 3'	7/16/2020	3'	NT	NT	NT	NT	NT	-	110
S-3 NSW 3'	7/16/2020	3'	NT	NT	NT	NT	NT	-	290
S-3 SSW 3'	7/16/2020	3'	NT	NT	NT	NT	NT	-	320
S-4 ESW 0.5'	7/16/2020	0.5'	NT	NT	NT	NT	NT	-	340
S-4 WSW 0.5'	7/16/2020	0.5'	NT	NT	NT	NT	NT	-	140
Incident # nAB1711551324 (2017 Produced Water Release Outside of Containment)									
S-1A	7/16/2020	2'	NT	NT	NT	NT	NT	-	200
S-2A	7/16/2020	2'	NT	NT	NT	NT	NT	-	1,000
S-3A	7/16/2020	2'	NT	NT	NT	NT	NT	-	88
ND = Analyte not detected NT = Not Tested NSW = North Side Wall ESW = East Side Wall SSW = South Side Wall WSW = West Side Wall									

Remedial Action Summary

- All impacted areas on the pad location were excavated to depths of 0.5-3 feet bgs. Field titration of soil samples for Total Chlorides was utilized to guide the excavation process involving incident numbers nAB1522442205 and nAB1616231629.
- The impacted area associated with incident number nAB1711551324 was excavated to a depth of two (2) feet bgs. Field titration of soil samples for Total Chlorides was utilized to guide the excavation process.
- The area under the battery was assessed down to 10 feet bgs for the incident number nMLB1128636288. Based on depth to groundwater, closure criteria was not exceeded based on the laboratory analytical data.

- The excavated areas on the well pad were backfilled with new caliche, machine compacted and contoured to match the surrounding location.
- Approximately 1,032 cubic yards of excavated material was transported to Lea Land, LLC, a NMOCD approved solid waste disposal facility.
- Photographic documentation is provided in [Appendix IV](#).
- Copies of the Final C-141s are presented in [Appendix III](#).

Closure

Based upon the completed remedial actions and confirmation sampling results, on behalf of Devon Energy Production Company, we respectfully request that no further actions be required and that closure of these incidents be granted.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-746-8768.

Respectfully submitted,

Talon/LPE

**Kayla
Taylor**
Kayla Taylor
Project Manager

Digitally signed by Kayla Taylor
DN: cn=Kayla Taylor,
o=Talon/LPE, ou=Project
Manager,
email=ktaylor@talonlpe.com,
c=US
Date: 2023.02.06 15:52:00
+06'00'

**David J
Adkins**
David J. Adkins
Regional Manager

Digitally signed by David J Adkins
DN: cn=David J Adkins,
o=Talon/LPE, ou=Regional
Manager,
email=dadkins@talonlpe.com,
c=US
Date: 2023.02.06 14:57:06 -07'00'

Attachments:

- Appendix I Site Maps
- Appendix II Groundwater Data, Soil Data, FEMA Flood Map
- Appendix III C-141 Forms, NMOCD Correspondence, Approved Work Plan for Incident Number nAB1711551324
- Appendix IV Photographic Documentation
- Appendix V Laboratory Analytical Data



APPENDIX I

Site Maps



Devon Energy Corporation
Devon Energy Cotton Draw Unit #089
Eddy County, NM
Figure 1A - nMLB11268636288 Site Assessment

Drafted: 2/3/2023
1 in = 50 ft
Drafted By: IJR





Drafted: 2/3/2023
1 in = 100 ft
Drafted By: IJR

Devon Energy Corporation
Devon Energy Cotton Draw Unit #089
Eddy County, NM
Figure 1B - nAB1522442205 and nAB1616231629 Site Assessment



Devon Energy Corporation
Devon Energy Cotton Draw Unit #089
Eddy County, NM
Figure 1C - nAB1711551324 Site Assessment

Drafted: 2/2/2023
1 in = 60 ft
Drafted By: IJR





Maxar, Microsoft



Drafted: 2/3/2023
1 in = 100 ft
Drafted By: IJR

Devon Energy Corporation
Devon Energy Cotton Draw Unit #089
Eddy County, NM

Figure 2A - nAB1522442205 and nAB161623162 Confirmation Data



Devon Energy Corporation
Devon Energy Cotton Draw Unit #089
Eddy County, NM
Figure 2B - nAB1711551324 Confirmation Data

Drafted: 2/2/2023
1 in = 60 ft
Drafted By: IJR

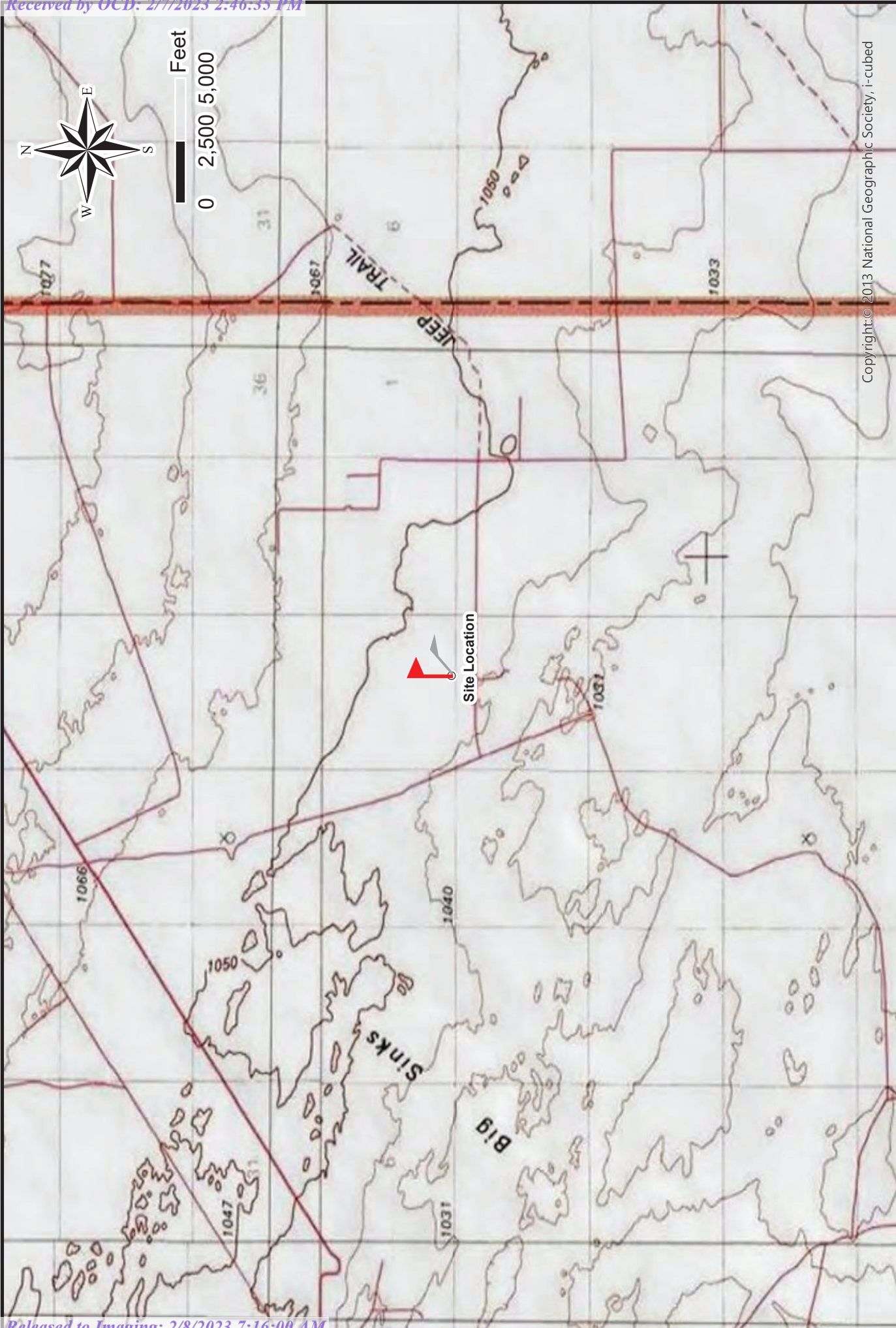




Devon Energy Corporation
Devon Energy Cotton Draw Unit #089
Eddy County, NM
Figure 3 - Site Location Map

Drafted: 2/2/2023
1 in = 3,000 ft
Drafted By: IJR





Devon Energy Corporation
Devon Energy Cotton Draw Unit #089
Eddy County, NM
Figure 4 - Topographic Map

Drafted: 2/2/2023
1 in = 5,000 ft
Drafted By: IJR





Devon Energy Corporation
Devon Energy Cotton Draw Unit #089
Eddy County, NM
Figure 5 - Karst Map

Drafted: 2/2/2023
1 in = 2,000 ft
Drafted By: IJR





APPENDIX II

Groundwater and Soil Data
FEMA Flood Map



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4632			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL) 575-748-1838			
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 9	SECONDS 7.47 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	45	41.06 W	* 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. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 6/8/2022	DRILLING ENDED 6/8/2022	DEPTH OF COMPLETED WELL (FT) Temporary Well		BORE HOLE DEPTH (FT) ±55	DEPTH WATER FIRST ENCOUNTERED (FT) N/A		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		DATE STATIC MEASURED 6/14/2022	
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl) FROM 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 TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		

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	



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
C 02250		CUB	ED	3	1	4	21	25S	31E	614912	3553620*	400	390	10
C 02568		CUB	ED	4	3	1	01	25S	31E	619103	3558892*	1025		
C 02569		CUB	ED	4	4	2	02	25S	31E	618699	3558891*	1016		
C 02570		CUB	ED	4	2	4	02	25S	31E	618704	3558489*	895		
C 02571		CUB	ED	4	1	2	02	25S	31E	618292	3559294*	860		
C 02572		CUB	ED	4	2	2	02	25S	31E	618695	3559294*	852		
C 02573		CUB	ED	1	4	2	02	25S	31E	618499	3559091*			
C 02574		CUB	ED	1	1	2	02	25S	31E	618092	3559494*			
C 03830 POD1		CUB	ED	4	2	4	02	25S	31E	618632	3558432	450		
C 04479 POD1		CUB	ED	2	1	1	04	25S	31E	614182	3559400	0	0	0
C 04500 POD1		CUB	ED	4	4	1	28	25S	31E	614620	3552380			
C 04619 POD1		CUB	ED	2	1	2	27	25S	31E	616750	3552958	55		
C 04624 POD1		CUB	ED	4	4	1	30	25S	31E	611501	3552305	120	0	120
C 04632 POD1		CUB	ED	1	2	2	10	25S	31E	616802	3557964	55		
C 04635 POD1		CUB	ED	4	3	4	01	25S	31E	619958	3558078	55		

Average Depth to Water: **130 feet**

Minimum Depth: **0 feet**

Maximum Depth: **390 feet**

Record Count: 15

PLSS Search:

Township: 25S **Range:** 31E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/1/23 1:24 PM

WATER COLUMN/ AVERAGE DEPTH TO
WATER

Custom Soil Resource Report

Eddy Area, New Mexico**BB—Berino complex, 0 to 3 percent slopes, eroded****Map Unit Setting**

National map unit symbol: 1w43
Elevation: 2,000 to 5,700 feet
Mean annual precipitation: 5 to 15 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Berino and similar soils: 60 percent
Pajarito and similar soils: 25 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Berino**Setting**

Landform: Fan piedmonts, plains
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 17 inches: fine sand
H2 - 17 to 58 inches: sandy clay loam
H3 - 58 to 60 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Custom Soil Resource Report

Description of Pajarito**Setting**

Landform: Interdunes, plains, dunes
Landform position (three-dimensional): Side slope
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 9 inches: loamy fine sand
H2 - 9 to 72 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Minor Components**Cacique**

Percent of map unit: 4 percent
Ecological site: R042XC004NM - Sandy
Hydric soil rating: No

Pajarito

Percent of map unit: 4 percent
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Wink

Percent of map unit: 4 percent
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

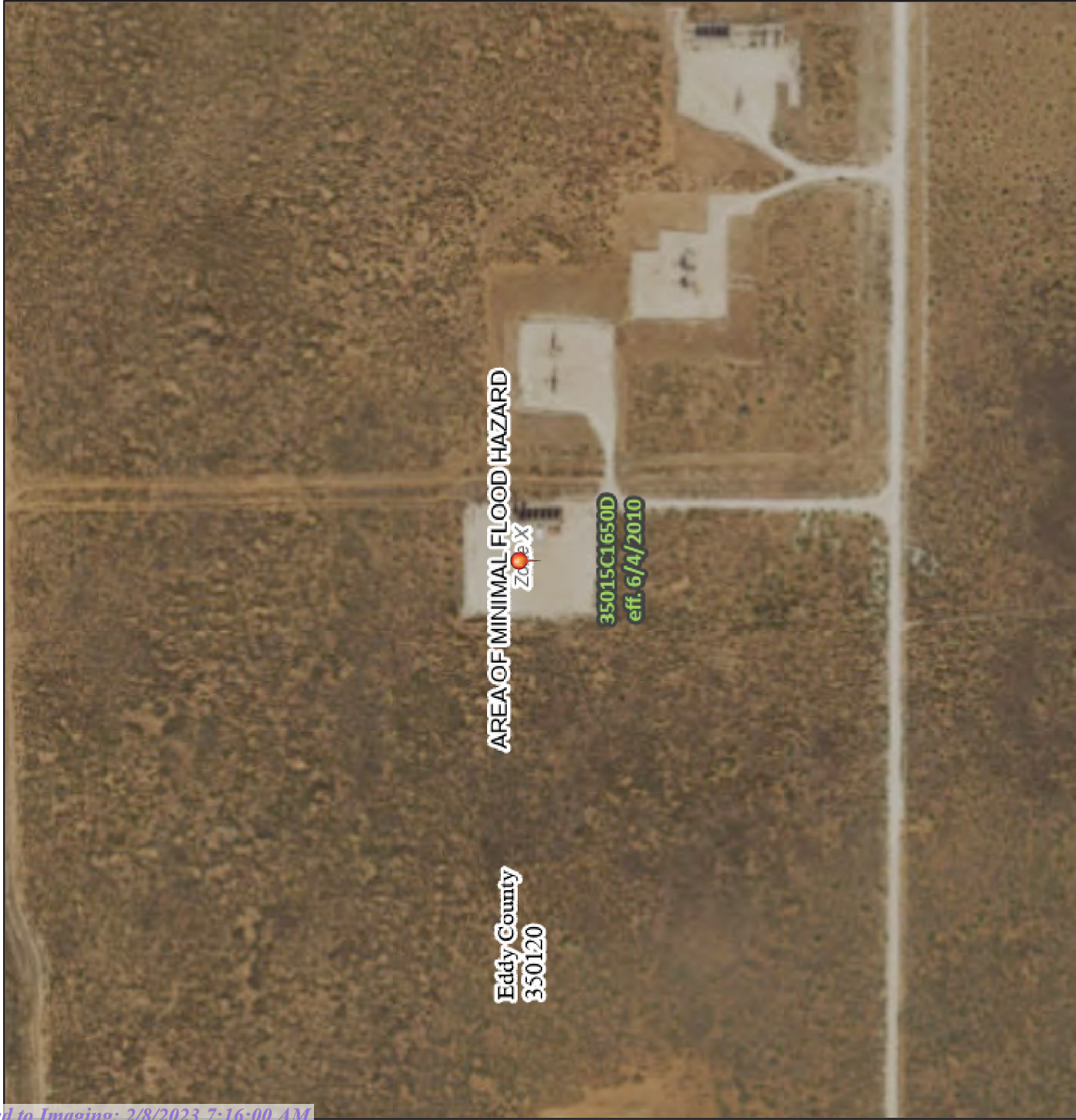
Kermit

Percent of map unit: 3 percent
Ecological site: R042XC005NM - Deep Sand
Hydric soil rating: No

National Flood Hazard Layer FIRMette



103°46'8"W 32°9'26"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000
Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020
103°45'30"W 32°8'55"N

Legend

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

Without Base Flood Elevation (BFE)
Zone A, V, A99

With BFE or Depth
Zone AE, AO, AH, VE, AP

Regulatory Floodway

SPECIAL FLOOD HAZARD AREAS

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 X

OTHER AREAS OF FLOOD HAZARD

NO SCREEN

Area of Minimal Flood Hazard
Zone X

Effective LOMRs

Area of Undetermined Flood Hazard
Zone D

OTHER AREAS

Cross Sections with 1% Annual Chance Water Surface Elevation
20.2
17.5

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

OTHER FEATURES

Digital Data Available

No Digital Data Available

Unmapped

MAP PANELS

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 **2/3/2023 at 11:51 AM** 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.



APPENDIX III

C-141 Forms

NMOCD Correspondence

Approved Work Plan for Incident Number nAB1711551324

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

30-015-31381

Release Notification and Corrective Action

NMLB 11286.36288

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy	6137	Contact Roger Hernandez
Address P. O. Box 250 Artesia, NM 88211		Telephone No. 575-748-5238
Facility Name Cotton Draw #89		Facility Type Gas Well

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

LOCATION OF RELEASE

Unit Letter	Section 3	Township 25S	Range 31E	Feet from the 250	North/South Line South	Feet from the 1980	East/West Line East	County Eddy County
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NATURE OF RELEASE

Type of Release Condensate	Volume of Release 28 BBLS	Volume Recovered 6 BBLS
Source of Release Lightening Struck Produced Water Tank	Date and Hour of Occurrence 9-20-11 11:30 PM	Date and Hour of Discovery 9-20-11 11:30 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher (OCD) Kent Cassell (BLM)	
By Whom? Merle Lewis	Date and Hour 9-21-11 11:47 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

Lightening struck the battery destroying the fiberglass produced water tank and associated piping. It resulted in a release of 28 bbls of condensate on location. We were able to recover 6 bbls of condensate. The rest was burned in the explosion.

Describe Area Affected and Cleanup Action Taken.*

The well was immediately shut in, the spill was contained in the dike area 20'x 40' the area was stained but nothing standing. Will remove burned equipment and will now convert this location to a SWD well.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Adrienne Verkler		OIL CONSERVATION DIVISION	
Printed Name: Adrienne Verkler		Approved by <u>Signed By Mike Bratcher</u>	
Title: Field Tech II		OCT 13 2011	
Date: Sept. 26, 2011 Phone: (575) 748-0174		Approval Date:	Expiration Date:
Conditions of Approval:		Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

Remediation per OCD Rules &
Guidelines. **SUBMIT REMEDIATION
PROPOSAL NOT LATER THAN:**

11/13/2011

2RP-912

Incident ID	nMLB1128636288
District RP	
Facility ID	30-015-31381
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: Environmental Professional

Signature: Dale Woodall Date: 2/7/2023

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: _____

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

WAB 1522442205 **6137** **OPERATOR** ☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production	Contact Garry Michael
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575-513-4895
Facility Name Cotton Draw Unit 89	Facility Type SWD
Surface Owner Federal	Mineral Owner Federal
API No. 30-015-31381	

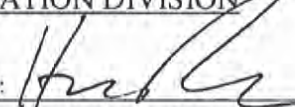
LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	3	25S	31E	250'	FSL	1980'	FEL	Eddy

Latitude: 32.1528893

Longitude: -103.7636414

NATURE OF RELEASE

Type of Release Spill	Volume of Release 35bbl	Volume Recovered 25bbl
Source of Release 4" high pressure hose	Date and Hour of Occurrence August 6, 2015 5:04 PM	Date and Hour of Discovery August 6, 2015 5:04 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jim Amos, BLM Mike Bratcher, OCD	
By Whom? Hubert Perry, Production Foreman	Date and Hour Jim Amos, August 6, 2015 7:35 PM Mike Bratcher, August 6, 2015 7:37 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* On August 6, 2015 5:04 at the Cotton Draw Unit 89 Truck Driver for Black River Trucking was loading produced water when the connecting high pressure 4" hose blew apart releasing 35bbls onto location. The well was immediately shut in and the next truck in line was Standard Trucking so they started recovering the released produced water immediately.		
Describe Area Affected and Cleanup Action Taken.* The affected area was approximately 80' x 120' x 50' all contained on location with 25bbls produced water recovered. The broken hose will be repaired. And environmental company will be contacted to determine the extent of clean up.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.		
Signature: Sheila Fisher	OIL CONSERVATION DIVISION	
Printed Name: Sheila Fisher	Approved by Environmental Specialist: 	
Title: Field Admin Support	Approval Date: 8/11/15	Expiration Date: N/A
E-mail Address: Sheila.Fisher@dvn.com	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines Attached <input type="checkbox"/> SUBMIT REMEDIATION PROPOSAL NO	
Date: 8/11/15 Phone: 575.748.1829	LATER THAN: 9/11/15	

* Attach Additional Sheets If Necessary

2RP-3198

Incident ID	NAB1522442205
District RP	
Facility ID	30-015-31381
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: Environmental Professional

Signature: Dale Woodall Date: 2/7/2023

email: dale.woodall@dvn.com Telephone: 575-748-1848

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: _____

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

ARTESIA DISTRICT

Form C-141

Revised August 8, 2011

JUN 09 2016

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

RECEIVED

Release Notification and Corrective Action

NAB16/16231629

4/37

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Devon Energy Production Company	Contact	Jake Harrington, Production Foreman
Address	6488 Seven Rivers Hwy Artesia, NM 88210	Telephone No.	432-214-5175
Facility Name	Cotton Draw Unit #89	Facility Type	Salt Water Disposal

Surface Owner	Federal	Mineral Owner	Federal	API No	30-015-31381
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	3	25S	31E	250	South	1980	East	Eddy

Latitude: 32.1528893 Longitude: -103.7636414

NATURE OF RELEASE

Type of Release	Spill Produced water	Volume of Release	7 BBLS	Volume Recovered	6 BBLS
Source of Release	Strainer on water injection pump number 3	Date and Hour of Occurrence	6/2/2016 @ 10:40pm	Date and Hour of Discovery	6/2/2016 @ 10:40pm
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	OCD-Mike Bratcher BLM-Jim Amos		
By Whom?	Matt Nettles, Production Foreman & Brett Fulks, EHS Professional	Date and Hour	OCD- 6/8/2016 @ 11:04am BLM- 6/3/2016 @ 9:00am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse	N/A		

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

The plug on the strainer running to the number three water injection pump corroded resulting in a release of 7 BBLS of produced water. The number 3 water injection pump was shut down immediately to prevent further release. The corroded plug was replaced on the strainer.

Describe Area Affected and Cleanup Action Taken.*

7 BBLS of produced water was released from a corroded plug on the strainer that runs from the water injection pump number 3. The approximate area affected was 3ft wide x 18ft long flowing to the south western part of the pad. All 7 BBLS of produced water released remained on location. None of the released fluid left location. Vacuum truck recovered approximately 6 BBLS of the released produced water. Environmental agency will be contacted for remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Sarah Gallegos-Troublefield

Printed Name: Sarah Gallegos-Troublefield

Title: Field Admin Support

E-mail Address: Sarah.Gallegos-Troublefield@dm.com

Date: 6/9/2016 Phone: 575.748.1864

OIL CONSERVATION DIVISION

Signed By

Approved by Environmental Specialist:

Approval Date: 6/10/16

Expiration Date: N/A

Conditions of Approval:

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO

Attached ☐

LATER THAN: 7/10/16

2RD-3728

* Attach Additional Sheets If Necessary

Incident ID	NAB1616231629
District RP	
Facility ID	30-015-31381
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: Environmental Professional

Signature: Dale Woodall Date: 2/7/2023

email: Dale.Woodall@dvn.com Telephone: 575-748-1848

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: _____

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

ARTESIA DISTRICT

APR 21 2017

Form C-141
Revised August 8, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

NAB1711551324

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production Company *6137* Contact Matt Nettles, Production Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88210 Telephone No. 575-513-5767
Facility Name Cotton Draw Unit 89 Facility Type Salt Water Disposal

Surface Owner Federal Mineral Owner Federal API No 30-015-31381

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	3	25S	31E	250	FSL	1980	FEL	Eddy

Latitude: 32.1528893

Longitude: -103.7636414

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 16bbls	Volume Recovered 5BBLs
Source of Release Water tanks	Date and Hour of Occurrence 4/10/2017 @ 10:00 PM	Date and Hour of Discovery 4/10/2017 @ 10:00 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM OCD	
By Whom? David Simmons, Assistant Production Foreman	Date and Hour BLM-4/10/2017 @ 11:00 PM OCD-4/10/2017 @ 11:02 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*

A filter screen plug was missing on the triplex pump causing a 16BBL produced water release outside of containment. The main water supply valve feeding the pump was closed and the plug was replaced.

Describe Area Affected and Cleanup Action Taken.*

Approximately 16bbls produced water was released outside of containment. A vacuum truck was dispatched and recovered 5BBLs of produced water. A remediation contractor will be contacted to assist with remediation efforts.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Dana DeLaRosa

Printed Name: Dana DeLaRosa

Title: Field Admin Support

E-mail Address: Dana.Delarosa@dmv.com

Date: 4.20.2017

Phone: 575.74.5594

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: *Crystal Wren*

Approval Date: 4/25/17

Expiration Date: N/A

Conditions of Approval:

see attached

Attached: ☒

* Attach Additional Sheets If Necessary

2RP-A186

Incident ID	NAB1711551324
District RP	
Facility ID	30-015-31381
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: Environmental Professional

Signature: Dale Woodall Date: 2/7/2023

email: Dale.woodall@dvn.com Telephone: 575-748-1848

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: _____

talonlpe.com • 866.742.0742



Soil Assessment and Remediation Work Plan

Cotton Draw Unit 89
API # 30-015-31381 * 2RP-4186
Talon Project No. 700794.241.01

Prepared For:

Devon Energy Production
6488 Seven Rivers Hwy
Artesia, New Mexico 88210

Prepared By:

TALON/LPE
408 W. Texas Avenue
Artesia, New Mexico 88210

March 16, 2018

Mr. Mike Bratcher
NMOCD District 2
811 S. 1st Street
Artesia, NM 88210

Subject: **Soil Assessment and Remediation Work Plan**
Cotton Draw Unit 89
API # 30-015-31381 * 2RP-4186

Dear Mr. Bratcher,

Devon Corporation has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities consist of the following.

Site Information

The Cotton Draw Unit 89 is located approximately forty-four (44) miles southeast of Carlsbad, New Mexico. The legal location for this release is Unit Letter O, Section 3, Township 25 South and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.1528893 North and -103.7636414 West. A site plan is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of of Berino complex with 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to Pleistocene in age and is comprised of eolian sands and piedmont deposits which include silty soils under lain with hard caliche.

Ground Water and Site Ranking

The New Mexico State Engineer web site indicates that there are 7 wells in the vicinity and they all appear to be dry. The Chevron/Texaco Water Trend Map has the ground water in this area to be greater than 450-feet below ground surface. See [Appendix III](#) for the referenced groundwater data.

Therefore the ranking for this site is a **0** based on the following:

Depth to ground water	>100'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

Based upon the site ranking of **0**, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 5,000 mg/kg for TPH. The recommended guidelines for total chlorides is 600 mg/kg.

Incident Description and Initial Remedial Actions

On May 10, 2017 a filter screen plug was missing on the triplex pump causing 16 barrels of produced waste to be released outside of the containment. A vac truck was called to the location and recovered 5 barrels of fluid. The main supply valve feeding the pump was closed and the plug was replaced. A site plan is presented in [Appendix I](#) which illustrates the impacted area. See initial C-141 in [Appendix II](#).

On December 6, 2017, Talon mobilized personnel to begin the site assessment and soil sampling activities for the construction of a work plan. Grab soil samples were collected from around the impacted area utilizing a hand auger.

See [Appendix IV](#) for complete report of laboratory results.

Sample ID	Depth (feet)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH EXT (mg/kg)	BTEX (mg/kg)	Chlorides (mg/kg)
S-1	0'	-	-	-	-	6960
	1'	-	-	-	-	1040
	2'	-	-	-	-	336
S-2	0'	-	-	-	-	432
S-3	0'	-	-	-	-	752
	1'	-	-	-	-	432
	2'	-	-	-	-	704
	3'	-	-	-	-	496
	4'	-	-	-	-	496
S-4	0'	-	-	-	-	32

--Analyte Not Tested

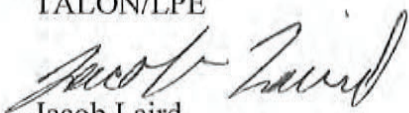
Proposed Remedial Actions of:

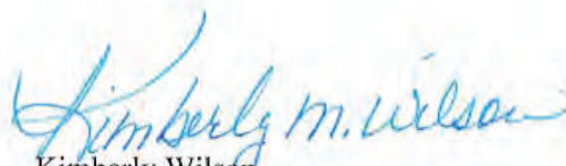
- The impacted soil in the vicinity of S-1 and S-3, as well as the flow paths southward will be excavated to a depth of 2-feet deep.
- All contaminated soil will be transported to Lea Land, LLC, a NMOCD approved disposal facility.
- The excavated area will be backfilled with new caliche. Once the backfilling activities are complete the work area will be contoured to match the surrounding location.
- A final closure report documenting all remedial actions will be provided to the NMOCD Artesia Office along with a Final C-141 Form.

Should you have any questions or if further information is required, please do not hesitate to contact our office at (575)-746-8768

Respectfully submitted,

TALON/LPE


Jacob Laird
Environmental Scientist


Kimberly Wilson
Project Manager

Attachments:




Appendix I Site Plan
Appendix II Initial C-141
Appendix III Groundwater Data
Appendix IV Laboratory Results

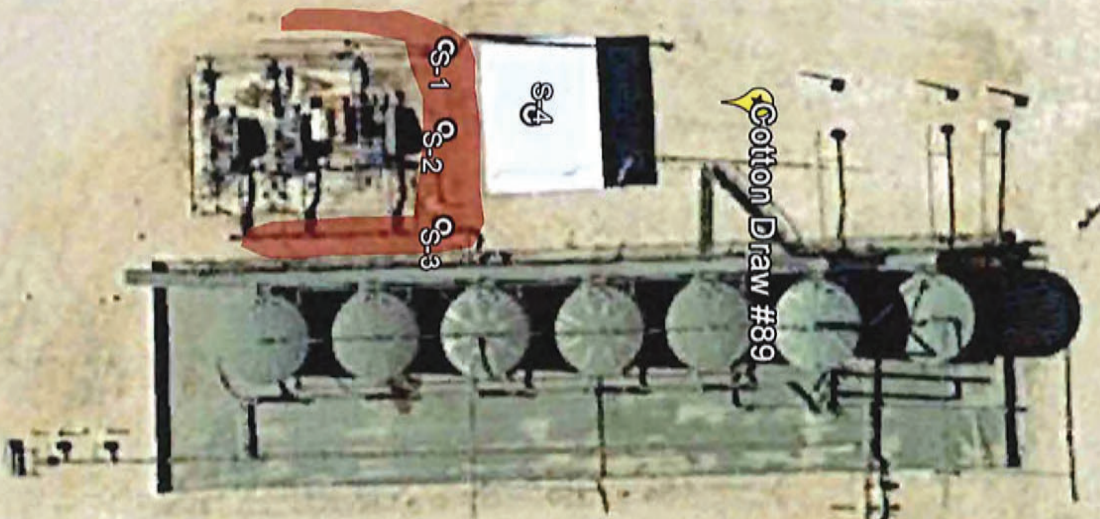
APPENDIX I

SITE PLAN

Cotton Draw #89

Devon Energy

- Legend**
-  Cotton Draw #89
 -  Impacted Area
 -  Sample Locations





APPENDIX IV

Photographic Documentation

Devon Energy Cotton Draw Unit #89 SWD

Photo Documentation



Excavation 2RP-3198/2RP-3728



2RP-4186



Devon Energy Cotton Draw Unit #89 SWD

Completion



Completion 2RP-4186



2RP-3198/2RP-3728





APPENDIX V

Analytical Data



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

September 18, 2015

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COTTON DRAW NO. 89

Enclosed are the results of analyses for samples received by the laboratory on 09/17/15 15:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TALON LPE
 KIMBERLY WILSON
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received: 09/17/2015
 Reported: 09/18/2015
 Project Name: COTTON DRAW NO. 89
 Project Number: 700794.165.01
 Project Location: EDDY CTY.

Sampling Date: 09/16/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

Sample ID: S-1 1' (H502452-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2800	16.0	09/18/2015	ND	432	108	400	3.77	

Sample ID: S-1 2' (H502452-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/18/2015	ND	432	108	400	3.77	

Sample ID: S-1 3' (H502452-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	09/18/2015	ND	432	108	400	3.77	

Sample ID: S-1 4' (H502452-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/18/2015	ND	432	108	400	3.77	

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager



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

January 13, 2016

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COTTON DRAW #89

Enclosed are the results of analyses for samples received by the laboratory on 01/11/16 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 accredited through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TALON LPE
 KIMBERLY WILSON
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received: 01/11/2016
 Reported: 01/13/2016
 Project Name: COTTON DRAW #89
 Project Number: 700794.165.01
 Project Location: EDDY COUNTY, NM

Sampling Date: 01/11/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S-2 1.0 (H600056-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	720	16.0	01/13/2016	ND	400	100	400	0.00		

Sample ID: S-2 2.0 (H600056-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1880	16.0	01/13/2016	ND	400	100	400	0.00	

Sample ID: S-2 3.0 (H600056-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	01/13/2016	ND	400	100	400	0.00		

Sample ID: S-2 4.0 (H600056-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	01/13/2016	ND	400	100	400	0.00		

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE
KIMBERLY WILSON
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 01/11/2016
Reported: 01/13/2016
Project Name: COTTON DRAW #89
Project Number: 700794.165.01
Project Location: EDDY COUNTY, NM

Sampling Date: 01/11/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S-3 1.0 (H600056-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2600	16.0	01/13/2016	ND	400	100	400	0.00	

Sample ID: S-3 2.0 (H600056-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2080	16.0	01/13/2016	ND	400	100	400	0.00	

Sample ID: S-3 3.0 (H600056-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2840	16.0	01/13/2016	ND	400	100	400	0.00	

Sample ID: S-3 4.0 (H600056-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2320	16.0	01/13/2016	ND	400	100	400	0.00	

Sample ID: S-4 1.0 (H600056-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	01/13/2016	ND	400	100	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE
 KIMBERLY WILSON
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received: 01/11/2016
 Reported: 01/13/2016
 Project Name: COTTON DRAW #89
 Project Number: 700794.165.01
 Project Location: EDDY COUNTY, NM

Sampling Date: 01/11/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S-4 2.0 (H600056-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	01/13/2016	ND	400	100	400	0.00	

Sample ID: S-4 3.0 (H600056-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	01/13/2016	ND	400	100	400	0.00	

Sample ID: S-4 4.0 (H600056-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	01/13/2016	ND	400	100	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

ANALYSIS REQUEST

Company Name: Talon/PE		P.O. #:	
Project Manager:		Company: Talon/PE	
Address: 408 W. Texas Ave.		Attn:	
City: Artesia		Address:	
State: NM Zip: 88210		City:	
Phone #: 575-746-8768		State:	
Fax #: 575-746-8905		Zip:	
Project #: 700994 16501		Project Owner: DEW	
Project Name: COTTON DRAIN 89		Phone #:	
Project Location: EDDY CT		Fax #:	
Sampler Name: Bev Swift		PRESERV.	
FOR LAB USE ONLY		SAMPLING	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	CHLORIDES	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:				ICE / COOL
1000050	9													
	S-4													
	10													
	S-4													
	11													
	S-4													
	12													
	S-4													

Relinquished By:	Date: 1/11/16	Received By:	1/11/16
Relinquished By:	Time:	Received By:	Time:
Relinquished By:	Date:	Received By:	Date:
Relinquished By:	Time:	Received By:	Time:

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other:	Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	1/11/16
	No <input type="checkbox"/> Yes <input type="checkbox"/>	

Phone Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Fax Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

ANALYSIS REQUEST

Company Name: Talon/LPE		P.O. #:	
Project Manager: Kimberly M. Wilcox		Company: Talon/LPE	
Address: 408 W. Texas Ave.		Attn:	
City: Artesia		Address:	
State: NM Zip: 88210		City:	
Phone #: 575-746-8768		State:	
Fax #: 575-746-8905		Zip:	
Project #: 700794/165.01		Project Owner: Ardon	
Project Name: Cotton Draw # 99		Phone #:	
Project Location: Eddy City		Fax #:	
Sampler Name: hls sw/14		PRESERV.	
FOR LAB USE ONLY		SAMPLING	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	REMARKS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			
1	S-2 1.0			X							11/16	10:53	Chlorides
2	S-2 2.0										11/16	11:01	
3	S-2 3.0										11/16	11:05	
4	S-2 4.0										11/16	11:10	
5	S-3 1.0										11/16	11:39	
6	S-3 2.0										11/16	11:40	
7	S-3 3.0										11/16	11:43	
8	S-3 4.0										11/16	11:45	

Relinquished By:	Date: 11/16	Received By: [Signature]
Time: 8:00		
Relinquished By:	Date:	Received By:
Time:		

Delivered By: (Circle One)	Sample Condition	CHECKED BY: [Signature]
Sampler - UPS - Bus - Other:	<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	(Initials) <input type="checkbox"/> Yes <input type="checkbox"/> No
4:22		

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



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

December 09, 2017

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COTTON DRAW #89

Enclosed are the results of analyses for samples received by the laboratory on 12/06/17 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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 accredited through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TALON LPE
 KIMBERLY WILSON
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received: 12/06/2017
 Reported: 12/09/2017
 Project Name: COTTON DRAW #89
 Project Number: 700794.244.01
 Project Location: EDDY COUNTY, NM

Sampling Date: 12/05/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S-1 0' (H703364-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6960	16.0	12/07/2017	ND	448	112	400	0.00	

Sample ID: S-1 1' (H703364-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	12/07/2017	ND	448	112	400	0.00	

Sample ID: S-1 2' R (H703364-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	12/07/2017	ND	448	112	400	0.00	

Sample ID: S-2 0' (H703364-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	12/07/2017	ND	448	112	400	0.00	

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE
KIMBERLY WILSON
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 12/06/2017
Reported: 12/09/2017
Project Name: COTTON DRAW #89
Project Number: 700794.244.01
Project Location: EDDY COUNTY, NM

Sampling Date: 12/05/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S-2 0.5' R (H703364-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	12/07/2017	ND	448	112	400	0.00	

Sample ID: S-3 0' (H703364-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	12/07/2017	ND	448	112	400	0.00	

Sample ID: S-3 1' (H703364-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	12/07/2017	ND	448	112	400	0.00	

Sample ID: S-3 2' (H703364-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	12/08/2017	ND	448	112	400	0.00	

Sample ID: S-3 3' (H703364-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	12/08/2017	ND	448	112	400	0.00	

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE
 KIMBERLY WILSON
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received: 12/06/2017
 Reported: 12/09/2017
 Project Name: COTTON DRAW #89
 Project Number: 700794.244.01
 Project Location: EDDY COUNTY, NM

Sampling Date: 12/05/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: S-3 4' (H703364-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	12/08/2017	ND	448	112	400	0.00	

Sample ID: S-4 0' (H703364-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/08/2017	ND	448	112	400	0.00	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

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

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Page 1 of 2

Company Name: Talon/LPE		P.O. #:		BIL TO		ANALYSIS REQUEST	
Project Manager: <i>Kimberly M. Wilson</i>		Company: Talon/LPE					
Address: 408 W. Texas Ave.		Attn:					
City: Artesia		State: NM Zip: 88210					
Phone #: 575-746-8768		Fax #: 575-746-8905					
Project #: 700794.24.01		Project Owner: <i>Devon</i>					
Project Name: <i>Cotton Davis #89</i>		State: Zip:					
Project Location: <i>Edley Hwy</i>		Phone #:					
Sample Name: <i>Edley Hill</i>		Fax #:					
FOR LAB USE ONLY		PRESERV		SAMPLING			
Lab I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		DATE	
Sample I.D.		GROUNDWATER		WASTEWATER		TIME	
		SOIL		OIL			
		SLUDGE		OTHER:			
		ACID/BASE:		ICE / COOL			
		OTHER:					
1 5-1 0' 1		1		1		17/5/17	
2 5-1 1' 2		1		1			
3 5-1 2' 2		1		1			
4 5-2 0' 1		1		1			
5 5-2 0.5' 2		1		1			
6 5-3 0' 1		1		1			
7 5-3 1' 1		1		1			
8 5-3 2' 1		1		1			
9 5-3 3' 1		1		1			
10 5-3 4		1		1			

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Relinquished By: *Kimberly M. Wilson* Date: *12/16/17* Received By: *Baron C. C. C. C.* Date: *12/16/17*

Delivered By: (Circle One) *Baron C. C. C. C.* Sample Condition: ☒ Intact ☐ Cool ☐ Yes ☐ No

Sampler - UPS - Bus - Other: *1. Use Caravan* CHECKED BY: *Baron C. C. C. C.* (Initials) *Baron C. C. C. C.*

REMARKS: *Chlorides*

Phone Result: ☐ Yes ☐ No Add'l Phone #: ☐ Yes ☐ No Add'l Fax #: ☐ Yes ☐ No

* Cardinal cannot accept verbal change. Please fax written change to (575) 393-2476



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 2 of 2

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

BILL TO

ANALYSIS REQUEST

Company Name: Talon/LPE

P.O. #:

Project Manager: Kimberly M. Wilson

Company: Talon/LPE

Address: 408 W. Texas Ave.

State: NM zip: 88210

Attn:

City: Artesia

Fax #: 575-746-8905

Address:

Phone #: 700 794 2410

Project Owner: Decon

City:

Project Name: Cotton House #89

State: zip:

Phone #:

Project Location: 644 Hwy

Fax #:

Sample Name: Kim Wilson

MATRIX

PRESERV

SAMPLING

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

11. S-4 0'

G

1

1/26/17

Chlorides

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Relinquished By:

Date:

Time:

Received By:

Phone Result:

Yes

No

Add'l Phone #:

Fax Result:

Yes

No

Add'l Fax #:

REMARKS:

Relinquished By:

Date:

Time:

Received By:

Phone Result:

Yes

No

Add'l Phone #:

Fax Result:

Yes

No

Add'l Fax #:

REMARKS:

Delivered By: (Circle One)

Date:

Time:

Received By:

Phone Result:

Yes

No

Add'l Phone #:

Fax Result:

Yes

No

Add'l Fax #:

REMARKS:

Sampler - UPS - Bus - Other:

Date:

Time:

Received By:

Phone Result:

Yes

No

Add'l Phone #:

Fax Result:

Yes

No

Add'l Fax #:

REMARKS:

Please fax written changes to (575) 393-2326



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

July 20, 2020

Rebecca Pons
Talon Artesia
408 West Texas Ave
Artesia, NM 88210
TEL:
FAX:

RE: Cotton Draw Unit 89

OrderNo.: 2007963

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 15 sample(s) on 7/18/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Project: Cotton Draw Unit 89

Lab ID: 2007963-001

Matrix: SOIL

Client Sample ID: S-1'

Collection Date: 7/16/2020 12:03:00 PM

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	1100	60		mg/Kg	20	7/19/2020 7:54:29 PM	53808

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2007963
Date Reported: 7/20/2020

CLIENT:	Talon Artesia	Client Sample ID:	S-1 S SW 1'
Project:	Cotton Draw Unit 89	Collection Date:	7/16/2020 12:10:00 PM
Lab ID:	2007963-003	Matrix:	SOIL
		Received Date:	7/18/2020 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	720	60		mg/Kg	20	7/19/2020 5:52:41 PM	53811

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

Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Project: Cotton Draw Unit 89

Lab ID: 2007963-004

Matrix: SOIL

Client Sample ID: S-2 3'

Collection Date: 7/16/2020 12:13:00 PM

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	190	60		mg/Kg	20	7/19/2020 6:05:05 PM	53811

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

Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: S-2 N SW 3'

Project: Cotton Draw Unit 89

Collection Date: 7/16/2020 12:15:00 PM

Lab ID: 2007963-005

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	460	60		mg/Kg	20	7/19/2020 6:17:30 PM	53811

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

Page 5 of 16

Date Reported: 7/20/2020

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

Analyst: JMT

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

CLIENT:	Talon Artesia	Client Sample ID:	S-3 3'
Project:	Cotton Draw Unit 89	Collection Date:	7/16/2020 12:34:00 PM
Lab ID:	2007963-007	Matrix:	SOIL
		Received Date:	7/18/2020 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	310	60		mg/Kg	20	7/19/2020 6:42:18 PM	53811

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

CLIENT:	Talon Artesia	Client Sample ID:	S-3 N SW 3'
Project:	Cotton Draw Unit 89	Collection Date:	7/16/2020 12:35:00 PM
Lab ID:	2007963-008	Matrix:	SOIL
		Received Date:	7/18/2020 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	280	60		mg/Kg	20	7/19/2020 7:19:32 PM	53811

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

CLIENT:	Talon Artesia	Client Sample ID:	S-3 S SW 3'
Project:	Cotton Draw Unit 89	Collection Date:	7/16/2020 12:36:00 PM
Lab ID:	2007963-009	Matrix:	SOIL
		Received Date:	7/18/2020 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	320	60		mg/Kg	20	7/19/2020 7:31:57 PM	53811

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

Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia Client Sample ID: S-4 0.5'
Project: Cotton Draw Unit 89 Collection Date: 7/16/2020 12:38:00 PM
Lab ID: 2007963-010 Matrix: SOIL Received Date: 7/18/2020 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	120	60		mg/Kg	20	7/19/2020 7:44:21 PM	53811

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

Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: S-4 W SW 0.5'

Project: Cotton Draw Unit 89

Collection Date: 7/16/2020 12:41:00 PM

Lab ID: 2007963-011

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	140	60		mg/Kg	20	7/19/2020 7:56:45 PM	53811

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

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Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: S-4 E SW 0.5'

Project: Cotton Draw Unit 89

Collection Date: 7/16/2020 12:44:00 PM

Lab ID: 2007963-012

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	340	61		mg/Kg	20	7/19/2020 8:09:09 PM	53811

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

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Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Project: Cotton Draw Unit 89

Lab ID: 2007963-013

Client Sample ID: S-1 A 2'

Collection Date: 7/16/2020 12:50:00 PM

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

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	200	60		mg/Kg	20	7/19/2020 8:21:34 PM	53811

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

Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: S-2 A 2'

Project: Cotton Draw Unit 89

Collection Date: 7/16/2020 12:54:00 PM

Lab ID: 2007963-014

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	1000	60		mg/Kg	20	7/19/2020 8:33:59 PM	53811

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

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Analytical Report

Lab Order 2007963

Date Reported: 7/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: S-3 A 2'

Project: Cotton Draw Unit 89

Collection Date: 7/16/2020 1:00:00 PM

Lab ID: 2007963-015

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	88	60		mg/Kg	20	7/19/2020 8:46:24 PM	53811

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007963
20-Jul-20

Client: Talon Artesia

Project: Cotton Draw Unit 89

Sample ID: MB-53808	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 53808	RunNo: 70454
Prep Date: 7/19/2020	Analysis Date: 7/19/2020	SeqNo: 2449910 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-53808	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 53808	RunNo: 70454
Prep Date: 7/19/2020	Analysis Date: 7/19/2020	SeqNo: 2449911 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 94.0 90 110

Sample ID: MB-53811	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 53811	RunNo: 70458
Prep Date: 7/19/2020	Analysis Date: 7/19/2020	SeqNo: 2450132 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-53811	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 53811	RunNo: 70458
Prep Date: 7/19/2020	Analysis Date: 7/19/2020	SeqNo: 2450133 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.7 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 Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

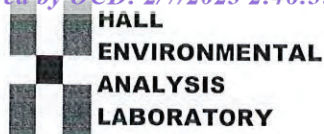
E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

Sample Log-In Check List

Client Name: **Talon Artesia**Work Order Number: **2007963**RcptNo: **1**Received By: **Leah Baca**

7/18/2020 11:05:00 AM

*Leah Baca*Completed By: **Leah Baca**

7/18/2020 12:06:39 PM

Leah Baca

Reviewed By:

LB 7/18/20

Chain of Custody

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

Log In

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

(Note discrepancies on chain of custody)

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

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

LB 7/18/20

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.0	Good				
2	5.2	Good				

Chain-of-Custody Record

Client: <u>Talon LPE</u>		Turn-Around Time: <u>4-day</u> <u>Same Day</u>	
		<input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush	
Mailing Address: <u>408 W Texas Ave</u>		Project Name: <u>2RP-3198</u>	
Phone #: <u>575-746-8768</u>		Project #: <u>Cotton Draw Unit #89</u>	
email or Fax#:		Project #: <u>700794.241.01</u>	
QA/QC Package:		Project Manager: <u>Rebecca Pons</u>	
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Sampler: <u>Brandon Sinclair</u>	
Accreditation: <input type="checkbox"/> Az Compliance		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> NELAC <input type="checkbox"/> Other		# of Coolers: <u>2</u> <u>50</u> <u>10F</u> <u>5.0</u>	
<input type="checkbox"/> EDD (Type)		Cooler Temp (including CF): <u>5.2</u> <u>0</u> <u>5.2</u>	
Date	Time	Matrix	Sample Name
7-16-20	12:03	soil	S-1 1'
	12:06		S-1 N SW 1'
	12:10		S-1 S SW 1'
	12:13		S-2 3'
	12:15		S-2 N SW 3'
	12:30		S-2 S SW 3'
	12:34		S-3 3'
	12:35		S-3 N SW 3'
	12:36		S-3 S SW 3'
	12:38		S-4 0.5'
	12:41		S-4 W SW 0.5'
	12:44		S-4 E SW 0.5'
Date:	Time:	Relinquished by:	Relinquished by:
7/17/20	10:50	<u>Rebecca Pons</u>	<u>Rebecca Pons</u>
Date:	Time:	Relinquished by:	Relinquished by:
7/17/20	1900	<u>Rebecca Pons</u>	<u>Rebecca Pons</u>

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTEX / MTBE / TMBs (8021) ☐
 TPH:8015D(GRO / DRO / MRO) ☐
 8081 Pesticides/8082 PCB's ☐
 EDB (Method 504.1) ☐
 PAHs by 8310 or 8270SIMS ☐
 RCRA 8 Metals ☐
 Cl, F, Br, NO₃, NO₂, PO₄, SO₄ ☒
 8260 (VOA) ☐
 8270 (Semi-VOA) ☐
 Total Coliform (Present/Absent) ☐

Remarks:

Bill directly to Devon Energy

Pg 1 of 98

Chain-of-Custody Record

Client: Talon LPEMailing Address: 408 W Texas AvePhone #: 575-746-8768

email or Fax#:

QA/QC Package:

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

Turn-Around Time:

☒ Standard 4-day Same Day☒ Rush

Project Name:

2RP-4186Project #: Cotton Draw Unit #89

Project Manager:

700794.241.01

Project Manager:

Rebecca PonsSampler: Brandon SinclairOn Ice: ☒ Yes ☐ No# of Coolers: (2)Cooler Temp (including CP): 50 + 5 = 5552 50 = 52

Container Type and #

Preservative Type

HEAL No.

402 jarice2007963-013-014-015

Analysis Request

BTX / 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, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Remarks:

Bill directly to Devon Energy

Received by:

Date

Via:

Alummining

Relinquished by:

42-8

Time:

1050

Received by:

Date

Via:

Alummining

Relinquished by:

Alummining

Time:

19007/17/20 10507/18/20 1105

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.

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

August 12, 2020

Rebecca Pons
Talon Artesia
408 West Texas Ave
Artesia, NM 88210
TEL:
FAX:

RE: Devon Cotton Draw 89 CDU89

OrderNo.: 2008120

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/5/2020 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2008120

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: B-1 0'-1'

Project: Devon Cotton Draw 89 CDU89

Collection Date: 8/3/2020 12:51:00 PM

Lab ID: 2008120-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	1500	60		mg/Kg	20	8/7/2020 4:36:02 PM	54256
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	45	9.8		mg/Kg	1	8/7/2020 6:08:28 PM	54200
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/7/2020 6:08:28 PM	54200
Surr: DNOP	110	30.4-154		%Rec	1	8/7/2020 6:08:28 PM	54200
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/6/2020 3:31:26 PM	54195
Surr: BFB	100	75.3-105		%Rec	1	8/6/2020 3:31:26 PM	54195
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	8/6/2020 3:31:26 PM	54195
Toluene	ND	0.050		mg/Kg	1	8/6/2020 3:31:26 PM	54195
Ethylbenzene	ND	0.050		mg/Kg	1	8/6/2020 3:31:26 PM	54195
Xylenes, Total	ND	0.099		mg/Kg	1	8/6/2020 3:31:26 PM	54195
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	8/6/2020 3:31:26 PM	54195

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

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Analytical Report

Lab Order 2008120

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: B-1 2'

Project: Devon Cotton Draw 89 CDU89

Collection Date: 8/3/2020 12:53:00 PM

Lab ID: 2008120-002

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	72	60		mg/Kg	20	8/7/2020 4:48:24 PM	54256
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/6/2020 5:48:54 PM	54200
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/6/2020 5:48:54 PM	54200
Surr: DNOP	88.9	30.4-154		%Rec	1	8/6/2020 5:48:54 PM	54200
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/6/2020 4:42:18 PM	54195
Surr: BFB	104	75.3-105		%Rec	1	8/6/2020 4:42:18 PM	54195
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	8/6/2020 4:42:18 PM	54195
Toluene	ND	0.049		mg/Kg	1	8/6/2020 4:42:18 PM	54195
Ethylbenzene	ND	0.049		mg/Kg	1	8/6/2020 4:42:18 PM	54195
Xylenes, Total	ND	0.097		mg/Kg	1	8/6/2020 4:42:18 PM	54195
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	8/6/2020 4:42:18 PM	54195

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

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Analytical Report

Lab Order 2008120

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: B-1 3'

Project: Devon Cotton Draw 89 CDU89

Collection Date: 8/3/2020 12:56:00 PM

Lab ID: 2008120-003

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	76	60		mg/Kg	20	8/7/2020 5:00:44 PM	54256
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/6/2020 5:59:04 PM	54200
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/6/2020 5:59:04 PM	54200
Surr: DNOP	87.1	30.4-154		%Rec	1	8/6/2020 5:59:04 PM	54200
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/6/2020 7:03:39 PM	54195
Surr: BFB	98.4	75.3-105		%Rec	1	8/6/2020 7:03:39 PM	54195
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	8/6/2020 7:03:39 PM	54195
Toluene	ND	0.047		mg/Kg	1	8/6/2020 7:03:39 PM	54195
Ethylbenzene	ND	0.047		mg/Kg	1	8/6/2020 7:03:39 PM	54195
Xylenes, Total	ND	0.094		mg/Kg	1	8/6/2020 7:03:39 PM	54195
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	8/6/2020 7:03:39 PM	54195

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

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Analytical Report

Lab Order 2008120

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: B-1 4'

Project: Devon Cotton Draw 89 CDU89

Collection Date: 8/3/2020 1:06:00 PM

Lab ID: 2008120-004

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	1300	60		mg/Kg	20	8/7/2020 5:13:04 PM	54256
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/6/2020 6:09:17 PM	54200
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 6:09:17 PM	54200
Surr: DNOP	97.6	30.4-154		%Rec	1	8/6/2020 6:09:17 PM	54200
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/6/2020 7:27:12 PM	54195
Surr: BFB	98.8	75.3-105		%Rec	1	8/6/2020 7:27:12 PM	54195
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	8/6/2020 7:27:12 PM	54195
Toluene	ND	0.046		mg/Kg	1	8/6/2020 7:27:12 PM	54195
Ethylbenzene	ND	0.046		mg/Kg	1	8/6/2020 7:27:12 PM	54195
Xylenes, Total	ND	0.093		mg/Kg	1	8/6/2020 7:27:12 PM	54195
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	8/6/2020 7:27:12 PM	54195

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

Analytical Report

Lab Order 2008120

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: B-1 6'

Project: Devon Cotton Draw 89 CDU89

Collection Date: 8/3/2020 1:09:00 PM

Lab ID: 2008120-005

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	690	60		mg/Kg	20	8/7/2020 5:25:25 PM	54256
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/6/2020 6:19:16 PM	54200
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/6/2020 6:19:16 PM	54200
Surr: DNOP	101	30.4-154		%Rec	1	8/6/2020 6:19:16 PM	54200
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/6/2020 7:50:40 PM	54195
Surr: BFB	99.6	75.3-105		%Rec	1	8/6/2020 7:50:40 PM	54195
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	8/6/2020 7:50:40 PM	54195
Toluene	ND	0.046		mg/Kg	1	8/6/2020 7:50:40 PM	54195
Ethylbenzene	ND	0.046		mg/Kg	1	8/6/2020 7:50:40 PM	54195
Xylenes, Total	ND	0.092		mg/Kg	1	8/6/2020 7:50:40 PM	54195
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	8/6/2020 7:50:40 PM	54195

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

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Analytical Report

Lab Order 2008120

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: B-1 8'

Project: Devon Cotton Draw 89 CDU89

Collection Date: 8/3/2020 1:08:00 PM

Lab ID: 2008120-006

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	210	60		mg/Kg	20	8/8/2020 1:09:37 PM	54277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/6/2020 6:29:22 PM	54200
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 6:29:22 PM	54200
Surr: DNOP	97.4	30.4-154		%Rec	1	8/6/2020 6:29:22 PM	54200
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/6/2020 8:14:13 PM	54195
Surr: BFB	98.8	75.3-105		%Rec	1	8/6/2020 8:14:13 PM	54195
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	8/6/2020 8:14:13 PM	54195
Toluene	ND	0.049		mg/Kg	1	8/6/2020 8:14:13 PM	54195
Ethylbenzene	ND	0.049		mg/Kg	1	8/6/2020 8:14:13 PM	54195
Xylenes, Total	ND	0.098		mg/Kg	1	8/6/2020 8:14:13 PM	54195
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	8/6/2020 8:14:13 PM	54195

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

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Analytical Report

Lab Order 2008120

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: B-1 10'

Project: Devon Cotton Draw 89 CDU89

Collection Date: 8/3/2020 1:10:00 PM

Lab ID: 2008120-007

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	96	60		mg/Kg	20	8/8/2020 1:46:38 PM	54277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/6/2020 6:39:26 PM	54200
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 6:39:26 PM	54200
Surr: DNOP	98.1	30.4-154		%Rec	1	8/6/2020 6:39:26 PM	54200
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/6/2020 8:37:41 PM	54195
Surr: BFB	100	75.3-105		%Rec	1	8/6/2020 8:37:41 PM	54195
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	8/6/2020 8:37:41 PM	54195
Toluene	ND	0.049		mg/Kg	1	8/6/2020 8:37:41 PM	54195
Ethylbenzene	ND	0.049		mg/Kg	1	8/6/2020 8:37:41 PM	54195
Xylenes, Total	ND	0.098		mg/Kg	1	8/6/2020 8:37:41 PM	54195
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	8/6/2020 8:37:41 PM	54195

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

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Analytical Report

Lab Order 2008120

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BG-1 0'-1'

Project: Devon Cotton Draw 89 CDU89

Collection Date: 8/3/2020 2:37:00 PM

Lab ID: 2008120-008

Matrix: SOIL

Received Date: 8/5/2020 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	8/8/2020 1:58:58 PM	54277
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	17	9.8		mg/Kg	1	8/6/2020 6:49:26 PM	54200
Motor Oil Range Organics (MRO)	85	49		mg/Kg	1	8/6/2020 6:49:26 PM	54200
Surr: DNOP	101	30.4-154		%Rec	1	8/6/2020 6:49:26 PM	54200
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/6/2020 9:01:07 PM	54195
Surr: BFB	99.4	75.3-105		%Rec	1	8/6/2020 9:01:07 PM	54195
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	8/6/2020 9:01:07 PM	54195
Toluene	ND	0.047		mg/Kg	1	8/6/2020 9:01:07 PM	54195
Ethylbenzene	ND	0.047		mg/Kg	1	8/6/2020 9:01:07 PM	54195
Xylenes, Total	ND	0.095		mg/Kg	1	8/6/2020 9:01:07 PM	54195
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	8/6/2020 9:01:07 PM	54195

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

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

WO#: 2008120

12-Aug-20

Client: Talon Artesia**Project:** Devon Cotton Draw 89 CDU89

Sample ID: MB-54256	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54256	RunNo: 70901								
Prep Date: 8/7/2020	Analysis Date: 8/7/2020	SeqNo: 2470133			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54256	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54256	RunNo: 70901								
Prep Date: 8/7/2020	Analysis Date: 8/7/2020	SeqNo: 2470135			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	90	110			

Sample ID: MB-54277	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54277	RunNo: 70937								
Prep Date: 8/8/2020	Analysis Date: 8/8/2020	SeqNo: 2470842			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54277	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54277	RunNo: 70937								
Prep Date: 8/8/2020	Analysis Date: 8/8/2020	SeqNo: 2470843			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.4	90	110			

Qualifiers:

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

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

Page 9 of 12

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

WO#: 2008120

12-Aug-20

Client: Talon Artesia**Project:** Devon Cotton Draw 89 CDU89

Sample ID: LCS-54200	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 54200	RunNo: 70894								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469095 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	99.4	70	130			
Surr: DNOP	4.5		5.000		90.4	30.4	154			

Sample ID: MB-54200	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 54200	RunNo: 70894								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469098 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	8.6		10.00		86.5	30.4	154			

Sample ID: 2008120-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: B-1 0'-1'	Batch ID: 54200	RunNo: 70908								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2472511 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	130	9.8	49.02	45.12	164	47.4	136			S
Surr: DNOP	5.0		4.902		103	30.4	154			

Sample ID: 2008120-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: B-1 0'-1'	Batch ID: 54200	RunNo: 70908								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2472512 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	110	9.5	47.71	45.12	139	47.4	136	11.8	43.4	S
Surr: DNOP	5.9		4.771		124	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2008120

12-Aug-20

Client: Talon Artesia**Project:** Devon Cotton Draw 89 CDU89

Sample ID: 2008120-001ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: B-1 0'-1'	Batch ID: 54195	RunNo: 70872								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469358 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.56	0	102	61.3	114			
Surr: BFB	1100		982.3		111	75.3	105			S

Sample ID: 2008120-001amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: B-1 0'-1'	Batch ID: 54195	RunNo: 70872								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469359 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	24.02	0	108	61.3	114	3.20	20	
Surr: BFB	1100		960.6		113	75.3	105	0	0	S

Sample ID: LCS-54195	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 54195	RunNo: 70872								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469384 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	95.0	72.5	106			
Surr: BFB	1100		1000		114	75.3	105			S

Sample ID: mb-54195	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 54195	RunNo: 70872								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469386 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	990		1000		98.8	75.3	105			

Qualifiers:

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

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

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

WO#: 2008120

12-Aug-20

Client: Talon Artesia**Project:** Devon Cotton Draw 89 CDU89

Sample ID: 2008120-002ams	SampType: MS			TestCode: EPA Method 8021B: Volatiles						
Client ID: B-1 2'	Batch ID: 54195			RunNo: 70872						
Prep Date: 8/5/2020	Analysis Date: 8/6/2020			SeqNo: 2469479		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	0.9804	0	100	76.3	120			
Toluene	1.0	0.049	0.9804	0	103	78.5	120			
Ethylbenzene	1.0	0.049	0.9804	0	106	78.1	124			
Xylenes, Total	3.1	0.098	2.941	0	106	79.3	125			
Surr: 4-Bromofluorobenzene	1.1		0.9804		107	80	120			

Sample ID: 2008120-002amsd	SampType: MSD			TestCode: EPA Method 8021B: Volatiles						
Client ID: B-1 2'	Batch ID: 54195			RunNo: 70872						
Prep Date: 8/5/2020	Analysis Date: 8/6/2020			SeqNo: 2469480		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9506	0	95.6	76.3	120	7.72	20	
Toluene	0.95	0.048	0.9506	0	99.8	78.5	120	5.76	20	
Ethylbenzene	0.98	0.048	0.9506	0	103	78.1	124	5.44	20	
Xylenes, Total	3.0	0.095	2.852	0	104	79.3	125	5.39	20	
Surr: 4-Bromofluorobenzene	1.0		0.9506		106	80	120	0	0	

Sample ID: LCS-54195	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 54195			RunNo: 70872						
Prep Date: 8/5/2020	Analysis Date: 8/6/2020			SeqNo: 2469503		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.3	80	120			
Toluene	0.94	0.050	1.000	0	94.4	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.2	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID: mb-54195	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 54195			RunNo: 70872						
Prep Date: 8/5/2020	Analysis Date: 8/6/2020			SeqNo: 2469505		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		103	80	120			

Qualifiers:

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

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



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

Sample Log-In Check List

Client Name: Talon Artesia

Work Order Number: 2008120

RcptNo: 1

Received By: Juan Rojas

8/5/2020 8:00:00 AM

Completed By: Juan Rojas

8/5/2020 8:20:19 AM

Reviewed By:

8/5/20

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°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: SPA 8.5.20

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0	Good				
2	0.1	Good				

Chain-of-Custody Record

Client: Talon LPE

408 W Texas St

Mailing Address: Artesia, NM 88210

Phone #: 575-441-0980

email or Fax#: (575) 746-8905

QA/QC Package:

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

Project Manager:

Rebecca Pons

Sampler: Roy Bell

On Ice ☒ Yes ☐ No

of Coolers: 2

Cooler Temp (including CO₂): 6.4 - 0.4 = 6

Container Type and #

Preservative Type

Date Time Matrix Sample Name

8-3-20 12:51 B-1 0'-1'

12:53 B-1 2'

12:56 B-1 3'

1:06 B-1 4'

1:09 B-1 6'

1:08 B-1 8'

1:10 B-1 10'

2:37 BG-1 0'-1'

Turn-Around Time: 4-Day

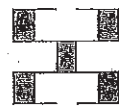
☒ Standard ☐ Rush

Project Name:

Devon Cotton Draw 39 (CDU89)

Project #:

700 794.241.01

HALL ENVIRONMENTAL
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTX / 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

Cd, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Remarks: Please cc the following via email:

Dadkins@talonlpe.com

Rpons@talonlpe.com

Bsincclair@talonlpe.com

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.

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

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

CONDITIONS

Action 183774

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 183774
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	The site will need to meet the requirement of 19.15.29.13 NMAC at time of plugging and abandonment.	2/8/2023