4441District 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

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production Company	**Contact** Mark Kramer, Drilling Supervisor
Address 6488 Seven Rivers Hwy Artesia, NM 88210	**Telephone No.** 405-552-7820
Facility Name Arabian 30-19 Fed Com 2H	**Facility Type** Oil

Surface Owner Federal	**Mineral Owner** Federal	**API No 30-025-43773**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	30	25S	32E	2486	North	1594	West	Lea

Latitude: 32.1018231 **Longitude:**-103.7177108

NATURE OF RELEASE

Type of Release Water Based Mud (WBM)	**Volume of Release** 5BBLS	**Volume Recovered** 4.5BBLS
Source of Release Centrifuge Feed Pump Hose	**Date and Hour of Occurrence** 8/17/2017 @ 10:00 PM	**Date and Hour of Discovery** 8/17/2017 @ 10:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?** OCD-Olivia Yu BLM-Shelly Tucker	
By Whom? Mike Shoemaker, Environmental Specialist	**Date and Hour** OCD- 8/18/2017 @ 9:01 PM BLM- 8/18/2017 @ 9:02 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse**	

RECEIVED
By Olivia Yu at 7:29 am, Sep 05, 2017

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

Describe Cause of Problem and Remedial Action Taken.*
While rigging down the solids control equipment, solids control employee disconnected the centrifuge feed pump hose and approximately 5 barrels of water based mud spilled onto the ground, due to the valve on the mud tanks not being closed. The valve was immediately closed and a peanut pump was used to collect material from pad surface.

Describe Area Affected and Cleanup Action Taken.*
Approximately 5BBLS of WBM was released as a result of a centrifuge pump hose being disconnected and the valve on the mud tank not being closed. Approximately 4.5 BBLS of WBM was recovered via the peanut pump and scraping the location surface. All fluid stayed on the pad location.

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: *Michael R. Shoemaker*	OIL CONSERVATION DIVISION
Printed Name: Michael R. Shoemaker	Approved by Environmental Specialist:
Title: Environmental Specialist	Approval Date: 9/5/2017 Expiration Date:
E-mail Address: mike.shoemaker@dvn.com	Conditions of Approval: see attached directive Attached ☑
Date: 08/31/17 Phone: 575.748.3371	

* Attach Additional Sheets If Necessary

1RP-4799 nOY1724827524 pOY1724828133

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _8/31/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4799__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _10/5/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us


S30, T25S, R32E
5 BBLS WBM

Incident ID	NOY1724827524
District RP	1RP-4799
Facility ID	30-025-43773
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	340 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NOY1724827524
District RP	1RP-4799
Facility ID	30-025-43773
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Brandon Sinclair

Brandon Sinclair
Digitally signed by Brandon Sinclair
DN: cn=Brandon Sinclair, o=Talon LPE, ou=Environmental, email=bsinclair@talonlpe.com, c=US
Date: 2021.02.25 08:35:40 -07'00'

Title: Environmental Project Manager

Signature: _____

Date: 2-25-2021

email: bsinclair@talonlpe.com

Telephone: 575-746-8768

OCD Only

Received by: _____

Date: _____

Incident ID	NOY1724827524
District RP	1RP-4799
Facility ID	30-025-43773
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: Brandon Sinclair

Signature: Brandon Sinclair Digitally signed by Brandon Sinclair DN: cn=Brandon Sinclair, o=Talon LPE, ou=Environmental, email=bsinclair@talonlpe.com, c=US Date: 2021.02.25 08:36:02 -07'00'

Title: Environmental Project Manager

Date: 2-25-2021

email: bsinclair@talonlpe.com

Telephone: 575-746-8768

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: 9/20/2022

Printed Name: Brittany Hall Title: Environmental Specialsit

talonlpe.com • 866.742.0742

TALON LPE

Remediation and Closure Report

Arabian 30 19 Federal Com #002H
Lea County, NM
API # 30-025-43773, NOY1724827524 (1RP-4799)

Prepared For:

Devon Energy Production Company
6488 Seven Rivers Highway
Artesia, New Mexico 88210

Prepared By:

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

February 22, 2021

Mr. Jim Amos
Bureau of Land Management
620 East Green Street
Carlsbad, NM 88220

Mr. Mike Bratcher
NMOCD District 1
1625 N. French Drive
Hobbs, NM 88240

Subject: **Remediation and Closure Report**
Arabian 30 19 Federal Com #002H
Lea County, NM
API # 30-025-43773, NOY1724827524 (1RP-4799)

Dear Mr. Amos & Mr. Bratcher,

Devon Energy Production Company (Devon) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above-referenced location. The results of our site characterization and remediation activities are contained herein.

Site Information

The Arabian 30 19 Federal Com #002H is located approximately thirty-seven (37) miles southeast of Carlsbad, New Mexico. The legal location for this release is Unit Letter F, Section 30, Township 25 South and Range 32 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.1018231 North and -103.7177108 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 Maljamar and Palomas fine sands, 0 to 3 percent slopes. See Appendix II for the referenced soil data. The local surface and shallow geology is Holocene to middle Pleistocene in age and is comprised of eolian and piedmont sand deposits. Drainage courses in this area are typically dry.

The New Mexico Office of the State Engineer web site indicates that the nearest depth to groundwater is 340’ below ground surface (BGS). See Appendix II for the referenced groundwater data.

Site Characterization

Pursuant to Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 of the New Mexico Administrative Code (NMAC), if a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater.

Approximate Depth to Groundwater	**340 Feet/BGS**
☐Yes ☒No	Within 300 feet of any continuously flowing watercourse or any other significant watercourse
☐Yes ☒No	Within 200 feet of any lakebed, sinkhole or playa lake
☐Yes ☒No	Within 300 feet from an occupied permanent residence, school, hospital, institution or church
☐Yes ☒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
☐Yes ☒No	Within 1000 feet of any fresh water well or spring
☐Yes ☒No	Within incorporated municipal boundaries or within a defined Municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978
☐Yes ☒No	Within 300 feet of a wetland
☐Yes ☒No	Within the area overlying a subsurface mine
☐Yes ☒No	Within an unstable area
☐Yes ☒No	Within a 100-year floodplain

This site does not meet any of the above criteria, and the depth to groundwater is greater than 100-feet BGS. However, as the depth to groundwater could not be determined using a source within a half-mile of the boundary of this release, a boring was advanced at sample point B-5 using direct-push sampling technology (Geoprobe) to 51’ in order to exclude the presence of water at that depth. As no groundwater was encountered after a 72-hour interval, the closure criteria for this site are as follows:

Table I Closure Criteria for Soils Impacted by a Release			
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
51 feet-100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	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 October 17, 2017, 5 barrels (bbls) of water based mud (WBM) spilled onto the pad area due to a valve on the mud tanks not being closed. Approximately 4.5 bbls of the WBM was recovered using a diaphragm pump. The initial C-141 detailing this incident is attached in Appendix III. A site map illustrating the affected area is presented in Appendix I.

Site Assessment

On September 15, 2020, Talon mobilized personnel to perform a site assessment and collect soil samples. Grab soil samples were collected within and around the impacted area utilizing a Geoprobe. Additional sampling was required on November 18, 2020, in order to further delineate the impacted area. To verify the presence or absence of groundwater at depths below 50-feet (and to complete vertical delineation), an air-rotary drill rig was utilized (a soil boring log is presented in Appendix II). Groundwater was not encountered at 51-feet BGS after a 72-hour interval. Results from our sampling events are presented in the following data table. Complete laboratory reports can be found in Appendix V.

Table 1 *: Soil Sample Analysis*

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	**Total TPH** (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg	1,000 mg/kg			2,500 mg/kg	10,000 mg/kg
B-1	0-1	9/15/2020	ND	ND	ND	ND	ND	-	110
	1-2	9/15/2020	ND	ND	ND	ND	ND	-	290
	2-3	9/15/2020	ND	ND	ND	ND	ND	-	250
	3-4	9/15/2020	ND	ND	ND	ND	ND	-	190
B-2	0-1	9/15/2020	ND	ND	ND	ND	ND	-	200
	1-2	9/15/2020	ND	ND	ND	ND	ND	-	76
	2-3	9/15/2020	ND	ND	ND	ND	ND	-	65
	3-4	9/15/2020	ND	ND	ND	ND	ND	-	69
B-3	0-1	9/15/2020	ND	ND	ND	ND	ND	-	1100
	1-2	9/15/2020	ND	ND	ND	ND	ND	-	95
	2-3	9/15/2020	ND	ND	ND	ND	ND	-	ND
	3-4	9/15/2020	ND	ND	ND	ND	ND	-	ND
B-4	0-1	9/15/2020	ND	ND	ND	28	180	208.0	120
	1-2	9/15/2020	ND	ND	ND	ND	ND	-	200
	2-3	9/15/2020	ND	ND	ND	ND	ND	-	430
	3-4	9/15/2020	ND	ND	ND	ND	ND	-	520
	6	11/18/2020	NT	NT	NT	NT	NT	-	ND
	8 R	11/18/2020	NT	NT	NT	NT	NT	-	ND
B-5	0-1	9/15/2020	ND	ND	ND	ND	ND	-	1100
	1-2	9/15/2020	ND	ND	ND	ND	ND	-	3800
	2-3	9/15/2020	ND	ND	ND	ND	ND	-	880
	3-4	9/15/2020	ND	ND	ND	ND	ND	-	640
	6	11/18/2020	NT	NT	NT	NT	NT	-	ND
	8	11/18/2020	NT	NT	NT	NT	NT	-	ND
	10	11/18/2020	NT	NT	NT	NT	NT	-	ND
B-6	0-1	9/15/2020	ND	ND	ND	37	130	167.0	1900
	1-2	9/15/2020	ND	ND	ND	ND	ND	-	620
	2-3	9/15/2020	ND	ND	ND	ND	ND	-	820
	3-4	9/15/2020	ND	ND	ND	ND	ND	-	460

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	**Total TPH** (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg	1,000 mg/kg			2,500 mg/kg	10,000 mg/kg
B-7	0-1	9/15/2020	ND	ND	ND	ND	ND	-	410
	1-2	9/15/2020	ND	ND	ND	ND	ND	-	250
	2-3	9/15/2020	ND	ND	ND	ND	ND	-	470
	3-4	9/15/2020	ND	ND	ND	ND	ND	-	460
B-8	0-1	9/15/2020	ND	ND	ND	ND	ND	-	730
	1-2	9/15/2020	ND	ND	ND	ND	ND	-	120
	2-3	9/15/2020	ND	ND	ND	ND	ND	-	ND
	3-4	9/15/2020	ND	ND	ND	ND	ND	-	ND
B-9	0-1	9/15/2020	ND	ND	ND	4200	23000	27200.0	61
	1-2	9/15/2020	ND	ND	ND	ND	ND	-	ND
	2-3	9/15/2020	ND	ND	ND	ND	ND	-	ND
	3-4	9/15/2020	ND	ND	ND	ND	ND	-	ND
B-9A	0.5-1	1/6/2021	NT	NT	ND	ND	ND	-	NT
B-10	0-1	11/18/2020	NT	NT	NT	NT	NT	-	6400
	2	11/18/2020	NT	NT	NT	NT	NT	-	120
	3	11/18/2020	NT	NT	NT	NT	NT	-	ND
	4	11/18/2020	NT	NT	NT	NT	NT	-	ND
	6 R	11/18/2020	NT	NT	NT	NT	NT	-	ND
BG-1	0-1	11/18/2020	NT	NT	NT	NT	NT	-	86
BG-2	0-1	11/18/2020	NT	NT	NT	NT	NT	-	210
BG-3	0-1	11/18/2020	NT	NT	NT	NT	NT	-	170
BG-4	0-1	11/18/2020	NT	NT	NT	NT	NT	-	190

ND= Analyte Not Detected
NT= Analyte Not Tested
R= Boring Refusal

Remedial Actions

- The surficial contamination near sample point B-9 was excavated to a depth of 0.5-feet BGS using a hydro-excavator.
- A confirmation sample (B-9A) was obtained to verify that all contaminants above NMOCD closure criteria had been removed.
- The excavated area was backfilled with new caliche and machine compacted to match the surrounding terrain.
- All the excavated material was hauled to Lea Land, LLC, a NMOCD approved solid waste disposal facility.

Closure

Based on the results of our site assessment, remedial actions and confirmation sampling results, we respectfully request that no further actions be required and that closure of this incident 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

Brandon Sinclair
Digitally signed by Brandon Sinclair
DN: cn=Brandon Sinclair, o=Talon LPE, ou=Environmental, email=bsinclair@talonlpe.com, c=US
Date: 2021.02.25 08:32:40 -07'00'

Brandon Sinclair
Project Manager

David J. Adkins
Digitally signed by David J. Adkins
DN: cn=David J. Adkins, o=Talon/LPE, ou=Regional Manager, email=dadkins@talonlpe.com, c=US
Date: 2021.02.25 08:43:14 -07'00'

David J. Adkins
Regional Manager

Attachments:
Appendix I Site Maps
Appendix II Soil Boring Log, Groundwater & Soil Data, FEMA Flood Map
Appendix III C-141 Forms
Appendix IV Photographic Documentation
Appendix V Laboratory Data

APPENDIX I

SITE MAPS

Arabian 30 19 Federal Com #002H

Devon Energy Production Company
API # 30-025-43773, 1RP-4799
Lea County, NM
Site Map

Legend

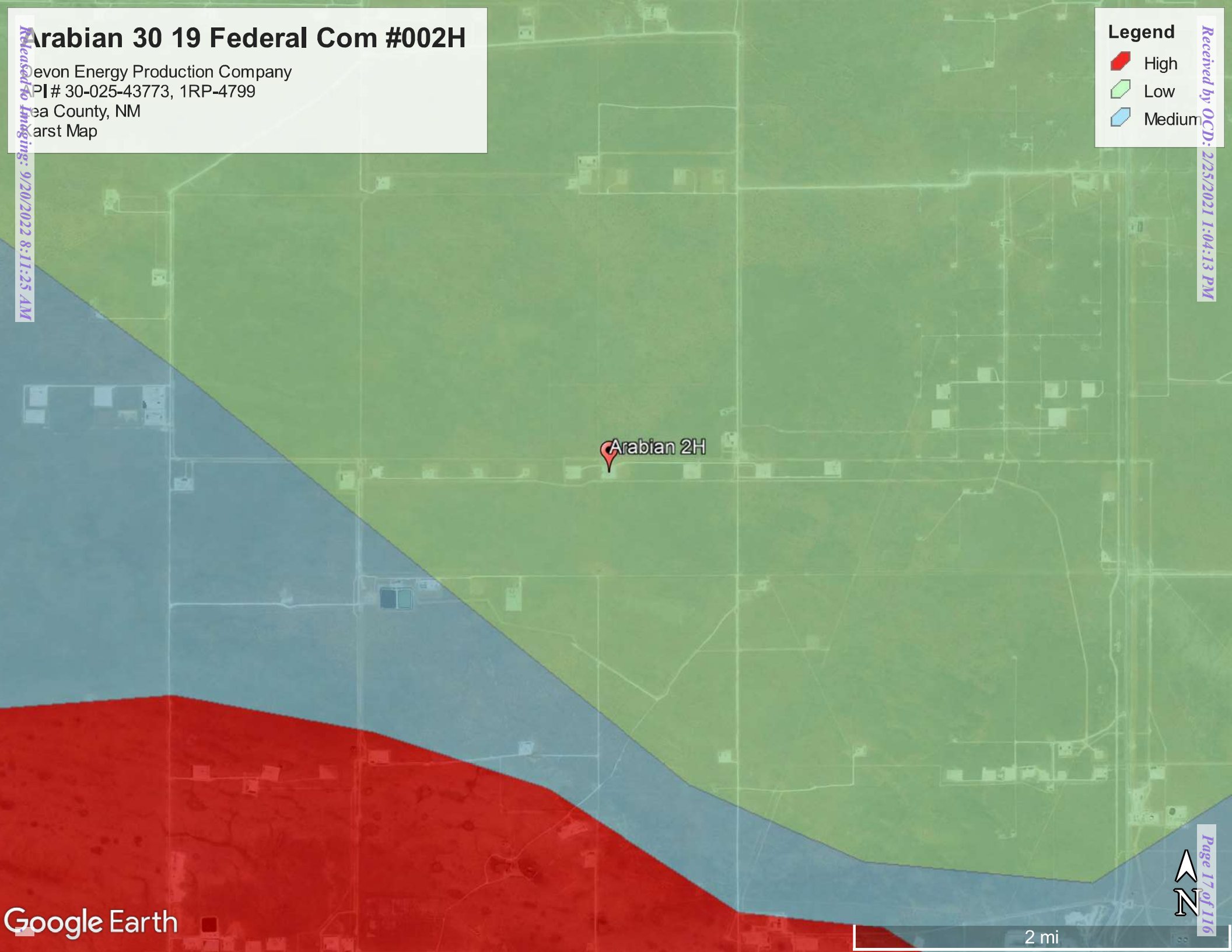
- Soil Sample

BG-1
B-2
B-4
B-5
B-3
B-1
BG-2
B-10
BG-4
B-9
B-7
B-6
B-8
BG-3

N

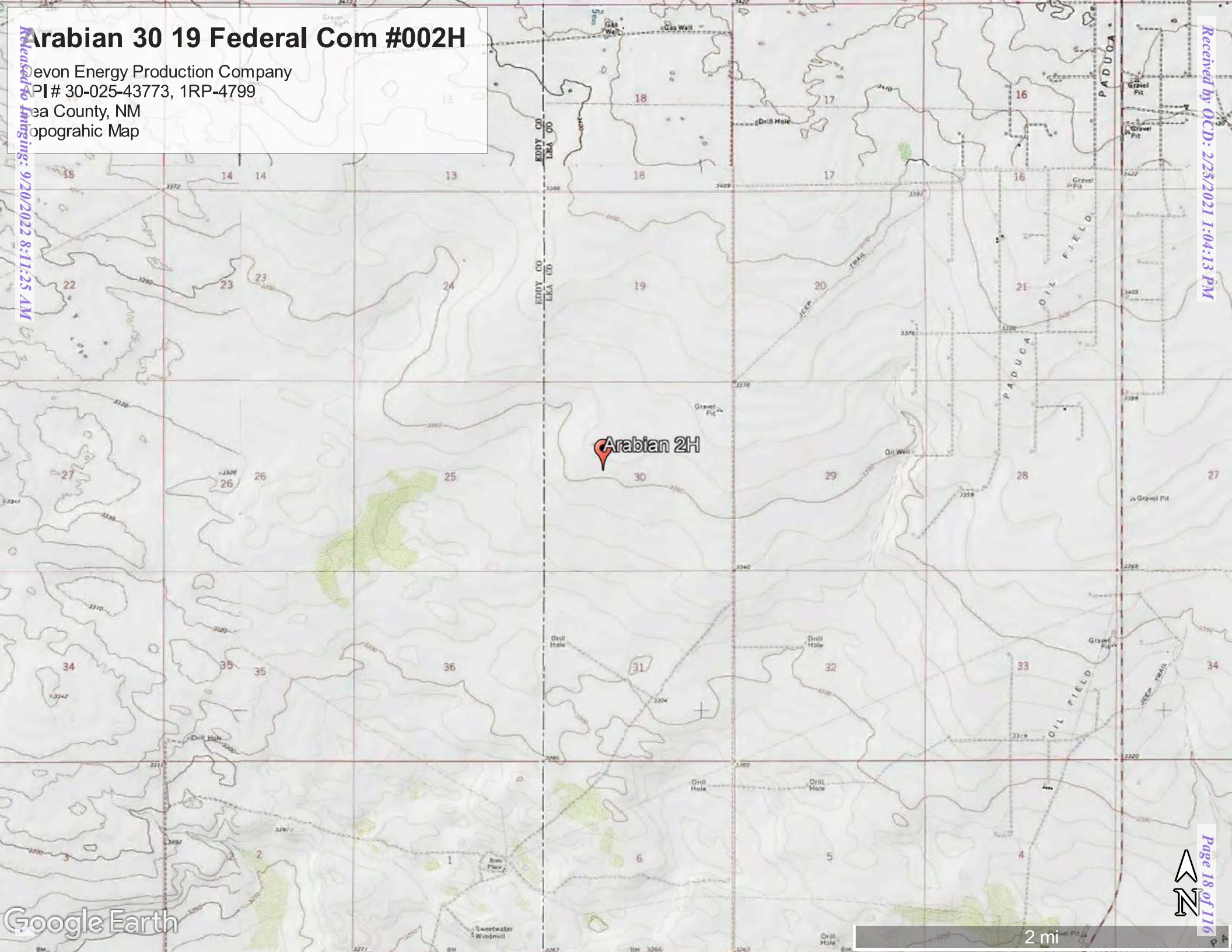
90 ft

Google Earth



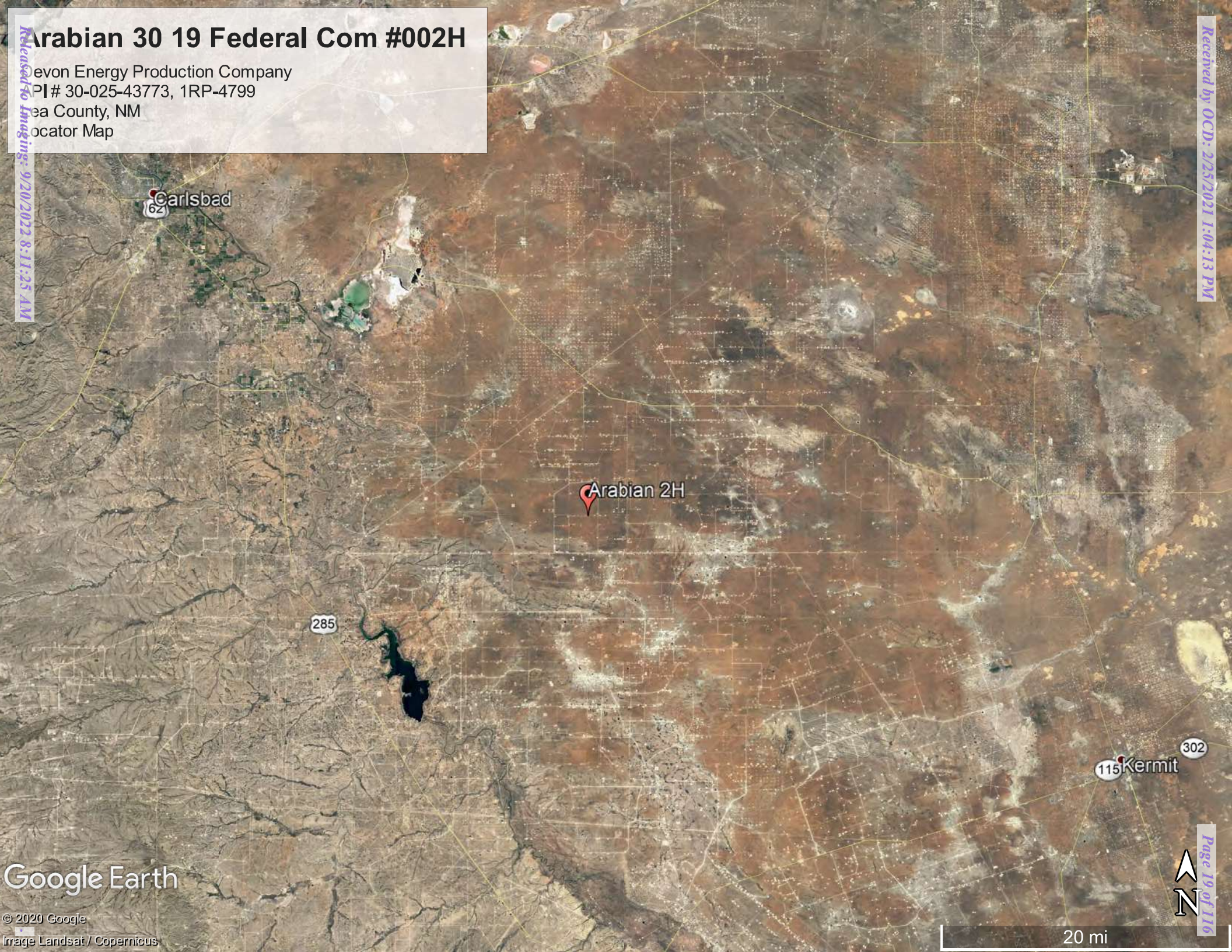
Arabian 30 19 Federal Com #002H

Devon Energy Production Company
API # 30-025-43773, 1RP-4799
Lea County, NM
Topograhic Map



Arabian 30 19 Federal Com #002H

Devon Energy Production Company
API # 30-025-43773, 1RP-4799
Lea County, NM
Locator Map



APPENDIX II

SOIL BORING LOG

GROUNDWATER DATA

SOIL SURVEY

FEMA FLOOD MAP

BORING LOG

Project No.: 700794.333.01
Site Name: Arabian 30 19 Fed Com 2H
Location: Eddy County, New Mexico
Date: 11/18/2020
Boring Number: B-5

Weather: Sunny, Warm Temp.: 80's °F
Logger: B. Sinclair
Field Instrument: Lab Analysis
Latitude: 32.1018231° N
Longitude: -103.7177108°W

Driller: M. Doyle
Rig Type: Geoprobe 7822DT
Bit Size: 5 ¼"
Drilling Method: Air Rotary
Sample Retrieval Method: Core Liner

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	■	0-6'				Dark brown fine Sand (SP) with trace amounts of caliche.	None	
	■	6-25'				Light brown fine Sand (SP) with varying amounts of caliche.	None	
		25-45'				Red/brown fine Sand (SP) with trace amounts of caliche.	None	
		45-51'				Pinkish-white fine Sand (SP).	None	
	☐							
	☐							
	☐							
	☐							
	☐							
	☐							

Surface Elevation: 3,600'
Notes: TD 53', Groundwater Not Encountered
Logger Initials: B.S.

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	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 04256 POD1	C	ED	4	4	2	01	26S	31E	620384	3549257	3241	666	340	326
C 03639 POD1	CUB	ED	3	4	2	01	26S	31E	620168	3549279	3266	700	365	335
C 03829 POD1	CUB	LE	3	3	1	06	26S	32E	620628	3549186	3275	646	350	296
C 03554 POD1	CUB	ED	2	1	4	01	26S	31E	620547	3549148	3322	630	300	330
C 04209 POD2	C	LE	2	3	3	06	26S	32E	620818	3548657	3788	340	155	185
C 04209 POD1	CUB	LE	2	3	3	06	26S	32E	620903	3548619	3822	360	155	205
C 02090	C	ED		4	4	01	26S	31E	620329	3548533*	3964	350	335	15

Average Depth to Water: **285 feet**

Minimum Depth: **155 feet**

Maximum Depth: **365 feet**

Record Count: 7

UTMNAD83 Radius Search (in meters):

Easting (X): 620989.45 **Northing (Y):** 3552441.67 **Radius:** 5000

***UTM location was derived from PLSS - see Help**

Lea County, New Mexico

MF—Maljamar and Palomas fine sands, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: dmqb
Elevation: 3,000 to 3,900 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Maljamar and similar soils: 46 percent
Palomas and similar soils: 44 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Maljamar

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 24 inches: fine sand
Bt - 24 to 50 inches: sandy clay loam
Bkm - 50 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 60 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 7e

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

Description of Palomas

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sandstone

Typical profile

A - 0 to 16 inches: fine sand
Bt - 16 to 60 inches: sandy clay loam
Bk - 60 to 66 inches: sandy loam

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: 45 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 7.5 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

Minor Components

Kermit

Percent of map unit: 5 percent
Ecological site: R042XC022NM - Sandhills
Hydric soil rating: No

Wink

Percent of map unit: 5 percent
Ecological site: R042XC003NM - Loamy Sand

Map Unit Description: Maljamar and Palomas fine sands, 0 to 3 percent slopes---Lea County, New Mexico

Hydric soil rating: No

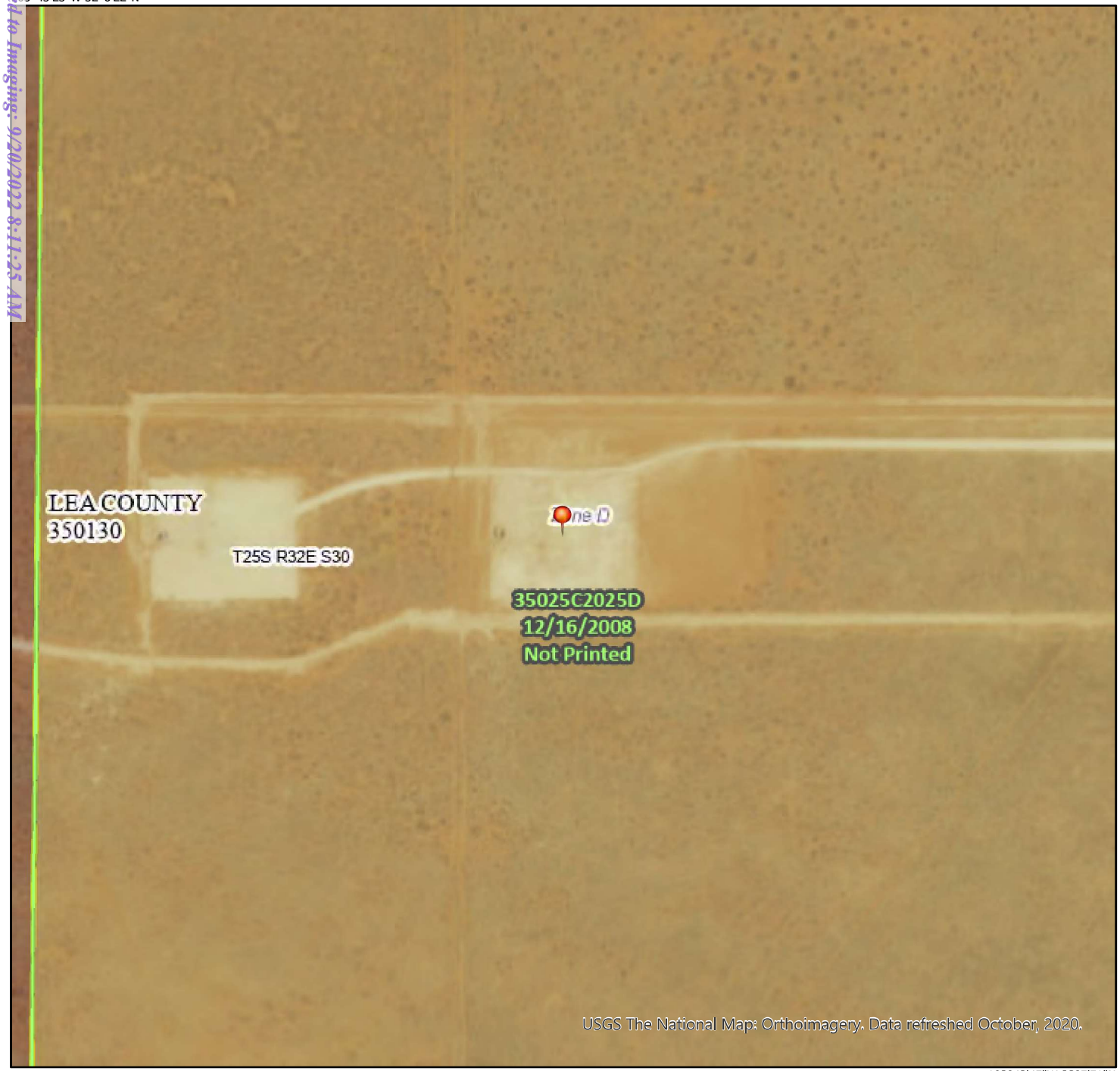
Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 17, Jun 8, 2020

National Flood Hazard Layer FIRMette

FEMA

103°43'23"W 32°6'22"N



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

1:6,000

103°42'45"W 32°5'51"N

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone
- 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

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

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

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/28/2020 at 11:55 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

4441District 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

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production Company	**Contact** Mark Kramer, Drilling Supervisor
Address 6488 Seven Rivers Hwy Artesia, NM 88210	**Telephone No.** 405-552-7820
Facility Name Arabian 30-19 Fed Com 2H	**Facility Type** Oil

Surface Owner Federal	**Mineral Owner** Federal	**API No 30-025-43773**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	30	25S	32E	2486	North	1594	West	Lea

Latitude: 32.1018231 **Longitude:**-103.7177108

NATURE OF RELEASE

Type of Release Water Based Mud (WBM)	**Volume of Release** 5BBLS	**Volume Recovered** 4.5BBLS
Source of Release Centrifuge Feed Pump Hose	**Date and Hour of Occurrence** 8/17/2017 @ 10:00 PM	**Date and Hour of Discovery** 8/17/2017 @ 10:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?** OCD-Olivia Yu BLM-Shelly Tucker	
By Whom? Mike Shoemaker, Environmental Specialist	**Date and Hour** OCD- 8/18/2017 @ 9:01 PM BLM- 8/18/2017 @ 9:02 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse**	

RECEIVED
By Olivia Yu at 7:29 am, Sep 05, 2017

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

Describe Cause of Problem and Remedial Action Taken.*
While rigging down the solids control equipment, solids control employee disconnected the centrifuge feed pump hose and approximately 5 barrels of water based mud spilled onto the ground, due to the valve on the mud tanks not being closed. The valve was immediately closed and a peanut pump was used to collect material from pad surface.

Describe Area Affected and Cleanup Action Taken.*
Approximately 5BBLS of WBM was released as a result of a centrifuge pump hose being disconnected and the valve on the mud tank not being closed. Approximately 4.5 BBLS of WBM was recovered via the peanut pump and scraping the location surface. All fluid stayed on the pad location.

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: *Michael R. Shoemaker*	OIL CONSERVATION DIVISION
Printed Name: Michael R. Shoemaker	Approved by Environmental Specialist:
Title: Environmental Specialist	Approval Date: 9/5/2017 Expiration Date:
E-mail Address: mike.shoemaker@dvn.com	Conditions of Approval: see attached directive Attached ☑
Date: 08/31/17 Phone: 575.748.3371	

* Attach Additional Sheets If Necessary

1RP-4799 nOY1724827524 pOY1724828133

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _8/31/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4799__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _10/5/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us


S30, T25S, R32E
5 BBLS WBM

State of New Mexico
Oil Conservation Division

Incident ID	NOY1724827524
District RP	1RP-4799
Facility ID	30-025-43773
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	340 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NOY1724827524
District RP	1RP-4799
Facility ID	30-025-43773
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Brandon Sinclair

Signature: Brandon Sinclair Digitally signed by Brandon Sinclair DN: cn=Brandon Sinclair, o=Talon LPE, ou=Environmental, email=bsinclair@talonlpe.com, c=US Date: 2021.02.25 08:33:14 -07'00'

email: bsinclair@talonlpe.com

Title: Environmental Project Manager

Date: 2-25-2021

Telephone: 575-746-8768

OCD Only

Received by: _____ Date: _____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NOY1724827524
District RP	1RP-4799
Facility ID	30-025-43773
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: Brandon Sinclair

Signature: Brandon Sinclair Digitally signed by Brandon Sinclair DN: cn=Brandon Sinclair, o=Talon LPE, ou=Environmental, email=bsinclair@talonlpe.com, c=US Date: 2021.02.25 08:33:41 -07'00'

Title: Environmental Project Manager

Date: 2-25-2021

email: bsinclair@talonlpe.com

Telephone: 575-746-8768

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: 9/20/2022

Printed Name: Brittany Hall Title: Environmental Specialist

APPENDIX IV

PHOTOGRAPHIC DOCUMENTATION

Arabian 30 19 Fed Com #002H Excavation Photographs

Arabian 30 19 Fed Com #002H Excavation Photographs

APPENDIX V

LABORATORY DATA

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 25, 2020

Rebecca Pons

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

RE: Devon Energy Arabian 30-19 Fed Com 2H OrderNo.: 2009980

Dear Rebecca Pons:

Hall Environmental Analysis Laboratory received 36 sample(s) on 9/17/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

CLIENT: Talon Artesia
Client Sample ID: B-1 0-1'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 9:00:00 AM
Lab ID: 2009980-001 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	110	60		mg/Kg	20	9/22/2020 6:12:07 PM	55353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/18/2020 10:09:21 PM	55245
Surr: BFB	98.1	70-130		%Rec	1	9/18/2020 10:09:21 PM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/18/2020 5:13:02 PM	55250
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/18/2020 5:13:02 PM	55250
Surr: DNOP	132	30.4-154		%Rec	1	9/18/2020 5:13:02 PM	55250
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/18/2020 10:09:21 PM	55245
Toluene	ND	0.048		mg/Kg	1	9/18/2020 10:09:21 PM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/18/2020 10:09:21 PM	55245
Xylenes, Total	ND	0.096		mg/Kg	1	9/18/2020 10:09:21 PM	55245
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%Rec	1	9/18/2020 10:09:21 PM	55245
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	9/18/2020 10:09:21 PM	55245
Surr: Dibromofluoromethane	94.2	70-130		%Rec	1	9/18/2020 10:09:21 PM	55245
Surr: Toluene-d8	98.9	70-130		%Rec	1	9/18/2020 10:09:21 PM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-1 1-2'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 9:10:00 AM
Lab ID: 2009980-002 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	290	60		mg/Kg	20	9/22/2020 6:49:10 PM	55353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/18/2020 11:37:23 PM	55245
Surr: BFB	97.7	70-130		%Rec	1	9/18/2020 11:37:23 PM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	9/18/2020 5:22:53 PM	55250
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/18/2020 5:22:53 PM	55250
Surr: DNOP	162	30.4-154	S	%Rec	1	9/18/2020 5:22:53 PM	55250
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/18/2020 11:37:23 PM	55245
Toluene	ND	0.049		mg/Kg	1	9/18/2020 11:37:23 PM	55245
Ethylbenzene	ND	0.049		mg/Kg	1	9/18/2020 11:37:23 PM	55245
Xylenes, Total	ND	0.098		mg/Kg	1	9/18/2020 11:37:23 PM	55245
Surr: 1,2-Dichloroethane-d4	90.8	70-130		%Rec	1	9/18/2020 11:37:23 PM	55245
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	9/18/2020 11:37:23 PM	55245
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	9/18/2020 11:37:23 PM	55245
Surr: Toluene-d8	98.1	70-130		%Rec	1	9/18/2020 11:37:23 PM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-1 2-3'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 9:20:00 AM
Lab ID: 2009980-003 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	250	60		mg/Kg	20	9/22/2020 7:01:31 PM	55353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/19/2020 12:07:05 AM	55245
Surr: BFB	98.6	70-130		%Rec	1	9/19/2020 12:07:05 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/18/2020 5:32:46 PM	55250
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/18/2020 5:32:46 PM	55250
Surr: DNOP	157	30.4-154	S	%Rec	1	9/18/2020 5:32:46 PM	55250
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 12:07:05 AM	55245
Toluene	ND	0.047		mg/Kg	1	9/19/2020 12:07:05 AM	55245
Ethylbenzene	ND	0.047		mg/Kg	1	9/19/2020 12:07:05 AM	55245
Xylenes, Total	ND	0.095		mg/Kg	1	9/19/2020 12:07:05 AM	55245
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	1	9/19/2020 12:07:05 AM	55245
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	9/19/2020 12:07:05 AM	55245
Surr: Dibromofluoromethane	92.8	70-130		%Rec	1	9/19/2020 12:07:05 AM	55245
Surr: Toluene-d8	99.8	70-130		%Rec	1	9/19/2020 12:07:05 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-1 3-4'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 9:30:00 AM
Lab ID: 2009980-004 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	190	60		mg/Kg	20	9/22/2020 7:13:52 PM	55353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/19/2020 12:36:19 AM	55245
Surr: BFB	100	70-130		%Rec	1	9/19/2020 12:36:19 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/18/2020 5:42:43 PM	55250
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/18/2020 5:42:43 PM	55250
Surr: DNOP	134	30.4-154		%Rec	1	9/18/2020 5:42:43 PM	55250
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 12:36:19 AM	55245
Toluene	ND	0.048		mg/Kg	1	9/19/2020 12:36:19 AM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/19/2020 12:36:19 AM	55245
Xylenes, Total	ND	0.097		mg/Kg	1	9/19/2020 12:36:19 AM	55245
Surr: 1,2-Dichloroethane-d4	89.9	70-130		%Rec	1	9/19/2020 12:36:19 AM	55245
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	9/19/2020 12:36:19 AM	55245
Surr: Dibromofluoromethane	94.3	70-130		%Rec	1	9/19/2020 12:36:19 AM	55245
Surr: Toluene-d8	100	70-130		%Rec	1	9/19/2020 12:36:19 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-2 0-1'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 9:40:00 AM
Lab ID: 2009980-005 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	200	60		mg/Kg	20	9/22/2020 7:26:13 PM	55353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/19/2020 3:33:06 AM	55245
Surr: BFB	98.7	70-130		%Rec	1	9/19/2020 3:33:06 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/18/2020 5:52:43 PM	55250
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/18/2020 5:52:43 PM	55250
Surr: DNOP	151	30.4-154		%Rec	1	9/18/2020 5:52:43 PM	55250
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 3:33:06 AM	55245
Toluene	ND	0.048		mg/Kg	1	9/19/2020 3:33:06 AM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/19/2020 3:33:06 AM	55245
Xylenes, Total	ND	0.096		mg/Kg	1	9/19/2020 3:33:06 AM	55245
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%Rec	1	9/19/2020 3:33:06 AM	55245
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	9/19/2020 3:33:06 AM	55245
Surr: Dibromofluoromethane	97.1	70-130		%Rec	1	9/19/2020 3:33:06 AM	55245
Surr: Toluene-d8	98.5	70-130		%Rec	1	9/19/2020 3:33:06 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-2 1-2'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 9:50:00 AM
Lab ID: 2009980-006 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	76	60		mg/Kg	20	9/22/2020 8:03:14 PM	55353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/19/2020 4:02:36 AM	55245
Surr: BFB	96.3	70-130		%Rec	1	9/19/2020 4:02:36 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/18/2020 6:02:43 PM	55250
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/18/2020 6:02:43 PM	55250
Surr: DNOP	138	30.4-154		%Rec	1	9/18/2020 6:02:43 PM	55250
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	9/19/2020 4:02:36 AM	55245
Toluene	ND	0.046		mg/Kg	1	9/19/2020 4:02:36 AM	55245
Ethylbenzene	ND	0.046		mg/Kg	1	9/19/2020 4:02:36 AM	55245
Xylenes, Total	ND	0.092		mg/Kg	1	9/19/2020 4:02:36 AM	55245
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%Rec	1	9/19/2020 4:02:36 AM	55245
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	9/19/2020 4:02:36 AM	55245
Surr: Dibromofluoromethane	96.0	70-130		%Rec	1	9/19/2020 4:02:36 AM	55245
Surr: Toluene-d8	97.5	70-130		%Rec	1	9/19/2020 4:02:36 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-2 2-3'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 10:00:00 AM
Lab ID: 2009980-007 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	65	60		mg/Kg	20	9/22/2020 8:15:34 PM	55353
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/19/2020 4:31:38 AM	55245
Surr: BFB	98.9	70-130		%Rec	1	9/19/2020 4:31:38 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/18/2020 6:12:42 PM	55250
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/18/2020 6:12:42 PM	55250
Surr: DNOP	130	30.4-154		%Rec	1	9/18/2020 6:12:42 PM	55250
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 4:31:38 AM	55245
Toluene	ND	0.048		mg/Kg	1	9/19/2020 4:31:38 AM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/19/2020 4:31:38 AM	55245
Xylenes, Total	ND	0.095		mg/Kg	1	9/19/2020 4:31:38 AM	55245
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%Rec	1	9/19/2020 4:31:38 AM	55245
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	9/19/2020 4:31:38 AM	55245
Surr: Dibromofluoromethane	95.6	70-130		%Rec	1	9/19/2020 4:31:38 AM	55245
Surr: Toluene-d8	101	70-130		%Rec	1	9/19/2020 4:31:38 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-2 3-4'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 10:10:00 AM
Lab ID: 2009980-008 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	69	60		mg/Kg	20	9/23/2020 11:10:46 AM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/19/2020 5:01:10 AM	55245
Surr: BFB	98.9	70-130		%Rec	1	9/19/2020 5:01:10 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/18/2020 6:52:36 PM	55253
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/18/2020 6:52:36 PM	55253
Surr: DNOP	137	30.4-154		%Rec	1	9/18/2020 6:52:36 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 5:01:10 AM	55245
Toluene	ND	0.048		mg/Kg	1	9/19/2020 5:01:10 AM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/19/2020 5:01:10 AM	55245
Xylenes, Total	ND	0.095		mg/Kg	1	9/19/2020 5:01:10 AM	55245
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%Rec	1	9/19/2020 5:01:10 AM	55245
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	9/19/2020 5:01:10 AM	55245
Surr: Dibromofluoromethane	96.2	70-130		%Rec	1	9/19/2020 5:01:10 AM	55245
Surr: Toluene-d8	98.4	70-130		%Rec	1	9/19/2020 5:01:10 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-3 0-1'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 10:20:00 AM
Lab ID: 2009980-009 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	1100	60		mg/Kg	20	9/23/2020 11:47:47 AM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/19/2020 5:30:58 AM	55245
Surr: BFB	94.4	70-130		%Rec	1	9/19/2020 5:30:58 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/18/2020 7:22:26 PM	55253
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/18/2020 7:22:26 PM	55253
Surr: DNOP	114	30.4-154		%Rec	1	9/18/2020 7:22:26 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 5:30:58 AM	55245
Toluene	ND	0.048		mg/Kg	1	9/19/2020 5:30:58 AM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/19/2020 5:30:58 AM	55245
Xylenes, Total	ND	0.095		mg/Kg	1	9/19/2020 5:30:58 AM	55245
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%Rec	1	9/19/2020 5:30:58 AM	55245
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	1	9/19/2020 5:30:58 AM	55245
Surr: Dibromofluoromethane	93.7	70-130		%Rec	1	9/19/2020 5:30:58 AM	55245
Surr: Toluene-d8	97.4	70-130		%Rec	1	9/19/2020 5:30:58 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-3 1-2'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 10:30:00 AM
Lab ID: 2009980-010 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	95	60		mg/Kg	20	9/23/2020 12:24:49 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/19/2020 6:00:53 AM	55245
Surr: BFB	98.3	70-130		%Rec	1	9/19/2020 6:00:53 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	9/18/2020 7:32:27 PM	55253
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/18/2020 7:32:27 PM	55253
Surr: DNOP	128	30.4-154		%Rec	1	9/18/2020 7:32:27 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 6:00:53 AM	55245
Toluene	ND	0.048		mg/Kg	1	9/19/2020 6:00:53 AM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/19/2020 6:00:53 AM	55245
Xylenes, Total	ND	0.096		mg/Kg	1	9/19/2020 6:00:53 AM	55245
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%Rec	1	9/19/2020 6:00:53 AM	55245
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	9/19/2020 6:00:53 AM	55245
Surr: Dibromofluoromethane	92.9	70-130		%Rec	1	9/19/2020 6:00:53 AM	55245
Surr: Toluene-d8	94.9	70-130		%Rec	1	9/19/2020 6:00:53 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-3 2-3'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 10:40:00 AM
Lab ID: 2009980-011 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/23/2020 12:37:09 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/19/2020 6:30:05 AM	55245
Surr: BFB	99.8	70-130		%Rec	1	9/19/2020 6:30:05 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/18/2020 7:42:30 PM	55253
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/18/2020 7:42:30 PM	55253
Surr: DNOP	175	30.4-154	S	%Rec	1	9/18/2020 7:42:30 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	9/19/2020 6:30:05 AM	55245
Toluene	ND	0.047		mg/Kg	1	9/19/2020 6:30:05 AM	55245
Ethylbenzene	ND	0.047		mg/Kg	1	9/19/2020 6:30:05 AM	55245
Xylenes, Total	ND	0.094		mg/Kg	1	9/19/2020 6:30:05 AM	55245
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%Rec	1	9/19/2020 6:30:05 AM	55245
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	9/19/2020 6:30:05 AM	55245
Surr: Dibromofluoromethane	95.2	70-130		%Rec	1	9/19/2020 6:30:05 AM	55245
Surr: Toluene-d8	101	70-130		%Rec	1	9/19/2020 6:30:05 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-3 3-4'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 10:50:00 AM
Lab ID: 2009980-012 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/23/2020 1:14:12 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/19/2020 6:59:26 AM	55245
Surr: BFB	96.0	70-130		%Rec	1	9/19/2020 6:59:26 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/18/2020 7:52:31 PM	55253
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/18/2020 7:52:31 PM	55253
Surr: DNOP	136	30.4-154		%Rec	1	9/18/2020 7:52:31 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 6:59:26 AM	55245
Toluene	ND	0.048		mg/Kg	1	9/19/2020 6:59:26 AM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/19/2020 6:59:26 AM	55245
Xylenes, Total	ND	0.096		mg/Kg	1	9/19/2020 6:59:26 AM	55245
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%Rec	1	9/19/2020 6:59:26 AM	55245
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	9/19/2020 6:59:26 AM	55245
Surr: Dibromofluoromethane	95.4	70-130		%Rec	1	9/19/2020 6:59:26 AM	55245
Surr: Toluene-d8	99.9	70-130		%Rec	1	9/19/2020 6:59:26 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 0-1'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 11:00:00 AM
Lab ID: 2009980-013 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	120	59		mg/Kg	20	9/23/2020 1:26:33 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/19/2020 7:28:39 AM	55245
Surr: BFB	98.0	70-130		%Rec	1	9/19/2020 7:28:39 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	28	9.0		mg/Kg	1	9/18/2020 8:02:25 PM	55253
Motor Oil Range Organics (MRO)	180	45		mg/Kg	1	9/18/2020 8:02:25 PM	55253
Surr: DNOP	165	30.4-154	S	%Rec	1	9/18/2020 8:02:25 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 7:28:39 AM	55245
Toluene	ND	0.048		mg/Kg	1	9/19/2020 7:28:39 AM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/19/2020 7:28:39 AM	55245
Xylenes, Total	ND	0.096		mg/Kg	1	9/19/2020 7:28:39 AM	55245
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%Rec	1	9/19/2020 7:28:39 AM	55245
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	9/19/2020 7:28:39 AM	55245
Surr: Dibromofluoromethane	98.5	70-130		%Rec	1	9/19/2020 7:28:39 AM	55245
Surr: Toluene-d8	97.9	70-130		%Rec	1	9/19/2020 7:28:39 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 1-2'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 11:10:00 AM
Lab ID: 2009980-014 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	200	60		mg/Kg	20	9/23/2020 1:38:54 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/19/2020 7:57:51 AM	55245
Surr: BFB	98.2	70-130		%Rec	1	9/19/2020 7:57:51 AM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/18/2020 8:12:28 PM	55253
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/18/2020 8:12:28 PM	55253
Surr: DNOP	158	30.4-154	S	%Rec	1	9/18/2020 8:12:28 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	9/19/2020 7:57:51 AM	55245
Toluene	ND	0.046		mg/Kg	1	9/19/2020 7:57:51 AM	55245
Ethylbenzene	ND	0.046		mg/Kg	1	9/19/2020 7:57:51 AM	55245
Xylenes, Total	ND	0.093		mg/Kg	1	9/19/2020 7:57:51 AM	55245
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%Rec	1	9/19/2020 7:57:51 AM	55245
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	9/19/2020 7:57:51 AM	55245
Surr: Dibromofluoromethane	91.6	70-130		%Rec	1	9/19/2020 7:57:51 AM	55245
Surr: Toluene-d8	99.8	70-130		%Rec	1	9/19/2020 7:57:51 AM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 2-3'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 11:20:00 AM
Lab ID: 2009980-015 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	430	60		mg/Kg	20	9/23/2020 1:51:14 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/19/2020 1:33:52 PM	55245
Surr: BFB	99.6	70-130		%Rec	1	9/19/2020 1:33:52 PM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	9/18/2020 8:22:28 PM	55253
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/18/2020 8:22:28 PM	55253
Surr: DNOP	118	30.4-154		%Rec	1	9/18/2020 8:22:28 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 1:33:52 PM	55245
Toluene	ND	0.048		mg/Kg	1	9/19/2020 1:33:52 PM	55245
Ethylbenzene	ND	0.048		mg/Kg	1	9/19/2020 1:33:52 PM	55245
Xylenes, Total	ND	0.096		mg/Kg	1	9/19/2020 1:33:52 PM	55245
Surr: 1,2-Dichloroethane-d4	86.0	70-130		%Rec	1	9/19/2020 1:33:52 PM	55245
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	9/19/2020 1:33:52 PM	55245
Surr: Dibromofluoromethane	89.0	70-130		%Rec	1	9/19/2020 1:33:52 PM	55245
Surr: Toluene-d8	99.3	70-130		%Rec	1	9/19/2020 1:33:52 PM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 3-4'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 11:30:00 AM
Lab ID: 2009980-016 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	520	60		mg/Kg	20	9/23/2020 2:03:34 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/19/2020 2:03:35 PM	55245
Surr: BFB	94.9	70-130		%Rec	1	9/19/2020 2:03:35 PM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	9/18/2020 8:32:31 PM	55253
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	9/18/2020 8:32:31 PM	55253
Surr: DNOP	114	30.4-154		%Rec	1	9/18/2020 8:32:31 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	9/19/2020 2:03:35 PM	55245
Toluene	ND	0.049		mg/Kg	1	9/19/2020 2:03:35 PM	55245
Ethylbenzene	ND	0.049		mg/Kg	1	9/19/2020 2:03:35 PM	55245
Xylenes, Total	ND	0.098		mg/Kg	1	9/19/2020 2:03:35 PM	55245
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%Rec	1	9/19/2020 2:03:35 PM	55245
Surr: 4-Bromofluorobenzene	90.6	70-130		%Rec	1	9/19/2020 2:03:35 PM	55245
Surr: Dibromofluoromethane	89.0	70-130		%Rec	1	9/19/2020 2:03:35 PM	55245
Surr: Toluene-d8	96.4	70-130		%Rec	1	9/19/2020 2:03:35 PM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 0-1'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 11:40:00 AM
Lab ID: 2009980-017 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	1100	60		mg/Kg	20	9/23/2020 2:15:55 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/19/2020 2:33:09 PM	55245
Surr: BFB	97.2	70-130		%Rec	1	9/19/2020 2:33:09 PM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/18/2020 8:42:46 PM	55253
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/18/2020 8:42:46 PM	55253
Surr: DNOP	142	30.4-154		%Rec	1	9/18/2020 8:42:46 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	9/19/2020 2:33:09 PM	55245
Toluene	ND	0.046		mg/Kg	1	9/19/2020 2:33:09 PM	55245
Ethylbenzene	ND	0.046		mg/Kg	1	9/19/2020 2:33:09 PM	55245
Xylenes, Total	ND	0.092		mg/Kg	1	9/19/2020 2:33:09 PM	55245
Surr: 1,2-Dichloroethane-d4	88.3	70-130		%Rec	1	9/19/2020 2:33:09 PM	55245
Surr: 4-Bromofluorobenzene	92.3	70-130		%Rec	1	9/19/2020 2:33:09 PM	55245
Surr: Dibromofluoromethane	88.7	70-130		%Rec	1	9/19/2020 2:33:09 PM	55245
Surr: Toluene-d8	98.8	70-130		%Rec	1	9/19/2020 2:33:09 PM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 1-2'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 11:50:00 AM
Lab ID: 2009980-018 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	3800	150		mg/Kg	50	9/23/2020 2:28:16 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/19/2020 3:02:48 PM	55245
Surr: BFB	97.8	70-130		%Rec	1	9/19/2020 3:02:48 PM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/18/2020 8:52:55 PM	55253
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/18/2020 8:52:55 PM	55253
Surr: DNOP	101	30.4-154		%Rec	1	9/18/2020 8:52:55 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/19/2020 3:02:48 PM	55245
Toluene	ND	0.047		mg/Kg	1	9/19/2020 3:02:48 PM	55245
Ethylbenzene	ND	0.047		mg/Kg	1	9/19/2020 3:02:48 PM	55245
Xylenes, Total	ND	0.095		mg/Kg	1	9/19/2020 3:02:48 PM	55245
Surr: 1,2-Dichloroethane-d4	88.8	70-130		%Rec	1	9/19/2020 3:02:48 PM	55245
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	9/19/2020 3:02:48 PM	55245
Surr: Dibromofluoromethane	93.0	70-130		%Rec	1	9/19/2020 3:02:48 PM	55245
Surr: Toluene-d8	97.7	70-130		%Rec	1	9/19/2020 3:02:48 PM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 2-3'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 12:00:00 PM
Lab ID: 2009980-019 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	880	59		mg/Kg	20	9/23/2020 2:40:37 PM	55365
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/19/2020 3:32:27 PM	55245
Surr: BFB	99.4	70-130		%Rec	1	9/19/2020 3:32:27 PM	55245
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/18/2020 9:03:07 PM	55253
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/18/2020 9:03:07 PM	55253
Surr: DNOP	117	30.4-154		%Rec	1	9/18/2020 9:03:07 PM	55253
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	9/19/2020 3:32:27 PM	55245
Toluene	ND	0.046		mg/Kg	1	9/19/2020 3:32:27 PM	55245
Ethylbenzene	ND	0.046		mg/Kg	1	9/19/2020 3:32:27 PM	55245
Xylenes, Total	ND	0.093		mg/Kg	1	9/19/2020 3:32:27 PM	55245
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%Rec	1	9/19/2020 3:32:27 PM	55245
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	9/19/2020 3:32:27 PM	55245
Surr: Dibromofluoromethane	90.5	70-130		%Rec	1	9/19/2020 3:32:27 PM	55245
Surr: Toluene-d8	98.7	70-130		%Rec	1	9/19/2020 3:32:27 PM	55245

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 3-4'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 12:10:00 PM
Lab ID: 2009980-020 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	640	60		mg/Kg	20	9/23/2020 2:52:58 PM	55365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/18/2020 9:13:13 PM	55253
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/18/2020 9:13:13 PM	55253
Surr: DNOP	133	30.4-154		%Rec	1	9/18/2020 9:13:13 PM	55253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/20/2020 2:04:38 AM	55251
Surr: BFB	89.4	75.3-105		%Rec	1	9/20/2020 2:04:38 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/20/2020 2:04:38 AM	55251
Toluene	ND	0.046		mg/Kg	1	9/20/2020 2:04:38 AM	55251
Ethylbenzene	ND	0.046		mg/Kg	1	9/20/2020 2:04:38 AM	55251
Xylenes, Total	ND	0.093		mg/Kg	1	9/20/2020 2:04:38 AM	55251
Surr: 4-Bromofluorobenzene	97.3	80-120		%Rec	1	9/20/2020 2:04:38 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-6 0-1'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 12:20:00 PM
Lab ID: 2009980-021 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	1900	60		mg/Kg	20	9/23/2020 3:05:19 PM	55365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	37	8.5		mg/Kg	1	9/18/2020 9:23:24 PM	55253
Motor Oil Range Organics (MRO)	130	43		mg/Kg	1	9/18/2020 9:23:24 PM	55253
Surr: DNOP	113	30.4-154		%Rec	1	9/18/2020 9:23:24 PM	55253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/20/2020 3:15:31 AM	55251
Surr: BFB	89.5	75.3-105		%Rec	1	9/20/2020 3:15:31 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/20/2020 3:15:31 AM	55251
Toluene	ND	0.050		mg/Kg	1	9/20/2020 3:15:31 AM	55251
Ethylbenzene	ND	0.050		mg/Kg	1	9/20/2020 3:15:31 AM	55251
Xylenes, Total	ND	0.10		mg/Kg	1	9/20/2020 3:15:31 AM	55251
Surr: 4-Bromofluorobenzene	98.0	80-120		%Rec	1	9/20/2020 3:15:31 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-6 1-2'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 12:30:00 PM
Lab ID: 2009980-022 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	620	60		mg/Kg	20	9/23/2020 3:42:21 PM	55365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/18/2020 9:33:34 PM	55253
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/18/2020 9:33:34 PM	55253
Surr: DNOP	149	30.4-154		%Rec	1	9/18/2020 9:33:34 PM	55253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/20/2020 4:25:48 AM	55251
Surr: BFB	90.3	75.3-105		%Rec	1	9/20/2020 4:25:48 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/20/2020 4:25:48 AM	55251
Toluene	ND	0.048		mg/Kg	1	9/20/2020 4:25:48 AM	55251
Ethylbenzene	ND	0.048		mg/Kg	1	9/20/2020 4:25:48 AM	55251
Xylenes, Total	ND	0.095		mg/Kg	1	9/20/2020 4:25:48 AM	55251
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/20/2020 4:25:48 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-6 2-3'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 12:40:00 PM
Lab ID: 2009980-023 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	820	60		mg/Kg	20	9/23/2020 3:54:41 PM	55365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/18/2020 9:43:43 PM	55253
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/18/2020 9:43:43 PM	55253
Surr: DNOP	155	30.4-154	S	%Rec	1	9/18/2020 9:43:43 PM	55253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/20/2020 4:49:10 AM	55251
Surr: BFB	85.3	75.3-105		%Rec	1	9/20/2020 4:49:10 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/20/2020 4:49:10 AM	55251
Toluene	ND	0.047		mg/Kg	1	9/20/2020 4:49:10 AM	55251
Ethylbenzene	ND	0.047		mg/Kg	1	9/20/2020 4:49:10 AM	55251
Xylenes, Total	ND	0.094		mg/Kg	1	9/20/2020 4:49:10 AM	55251
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	9/20/2020 4:49:10 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-6 3-4'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 12:50:00 PM
Lab ID: 2009980-024 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	460	60		mg/Kg	20	9/23/2020 4:07:01 PM	55365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/18/2020 9:53:49 PM	55253
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/18/2020 9:53:49 PM	55253
Surr: DNOP	133	30.4-154		%Rec	1	9/18/2020 9:53:49 PM	55253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/20/2020 5:12:52 AM	55251
Surr: BFB	88.1	75.3-105		%Rec	1	9/20/2020 5:12:52 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/20/2020 5:12:52 AM	55251
Toluene	ND	0.047		mg/Kg	1	9/20/2020 5:12:52 AM	55251
Ethylbenzene	ND	0.047		mg/Kg	1	9/20/2020 5:12:52 AM	55251
Xylenes, Total	ND	0.095		mg/Kg	1	9/20/2020 5:12:52 AM	55251
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	9/20/2020 5:12:52 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-7 0-1'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 1:00:00 PM
Lab ID: 2009980-025 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	410	60		mg/Kg	20	9/23/2020 4:19:23 PM	55365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	9/18/2020 10:03:53 PM	55253
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/18/2020 10:03:53 PM	55253
Surr: DNOP	97.5	30.4-154		%Rec	1	9/18/2020 10:03:53 PM	55253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/20/2020 5:36:37 AM	55251
Surr: BFB	90.5	75.3-105		%Rec	1	9/20/2020 5:36:37 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/20/2020 5:36:37 AM	55251
Toluene	ND	0.050		mg/Kg	1	9/20/2020 5:36:37 AM	55251
Ethylbenzene	ND	0.050		mg/Kg	1	9/20/2020 5:36:37 AM	55251
Xylenes, Total	ND	0.099		mg/Kg	1	9/20/2020 5:36:37 AM	55251
Surr: 4-Bromofluorobenzene	98.1	80-120		%Rec	1	9/20/2020 5:36:37 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-7 1-2'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 1:10:00 PM
Lab ID: 2009980-026 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	250	60		mg/Kg	20	9/23/2020 4:31:44 PM	55365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/18/2020 10:13:59 PM	55253
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/18/2020 10:13:59 PM	55253
Surr: DNOP	156	30.4-154	S	%Rec	1	9/18/2020 10:13:59 PM	55253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/20/2020 6:00:24 AM	55251
Surr: BFB	88.2	75.3-105		%Rec	1	9/20/2020 6:00:24 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/20/2020 6:00:24 AM	55251
Toluene	ND	0.050		mg/Kg	1	9/20/2020 6:00:24 AM	55251
Ethylbenzene	ND	0.050		mg/Kg	1	9/20/2020 6:00:24 AM	55251
Xylenes, Total	ND	0.099		mg/Kg	1	9/20/2020 6:00:24 AM	55251
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	9/20/2020 6:00:24 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-7 2-3'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 1:20:00 PM
Lab ID: 2009980-027 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	470	60		mg/Kg	20	9/23/2020 4:44:04 PM	55365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/18/2020 10:24:03 PM	55253
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/18/2020 10:24:03 PM	55253
Surr: DNOP	137	30.4-154		%Rec	1	9/18/2020 10:24:03 PM	55253
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/20/2020 6:23:42 AM	55251
Surr: BFB	93.2	75.3-105		%Rec	1	9/20/2020 6:23:42 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/20/2020 6:23:42 AM	55251
Toluene	ND	0.047		mg/Kg	1	9/20/2020 6:23:42 AM	55251
Ethylbenzene	ND	0.047		mg/Kg	1	9/20/2020 6:23:42 AM	55251
Xylenes, Total	ND	0.094		mg/Kg	1	9/20/2020 6:23:42 AM	55251
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	9/20/2020 6:23:42 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-7 3-4'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 1:30:00 PM
Lab ID: 2009980-028 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	460	60		mg/Kg	20	9/22/2020 11:41:28 PM	55370
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/19/2020 3:01:19 PM	55263
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/19/2020 3:01:19 PM	55263
Surr: DNOP	110	30.4-154		%Rec	1	9/19/2020 3:01:19 PM	55263
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/20/2020 6:47:18 AM	55251
Surr: BFB	88.4	75.3-105		%Rec	1	9/20/2020 6:47:18 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/20/2020 6:47:18 AM	55251
Toluene	ND	0.047		mg/Kg	1	9/20/2020 6:47:18 AM	55251
Ethylbenzene	ND	0.047		mg/Kg	1	9/20/2020 6:47:18 AM	55251
Xylenes, Total	ND	0.094		mg/Kg	1	9/20/2020 6:47:18 AM	55251
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	9/20/2020 6:47:18 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-8 0-1'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 1:40:00 PM
Lab ID: 2009980-029 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	730	60		mg/Kg	20	9/23/2020 12:43:31 AM	55370
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/19/2020 3:30:54 PM	55263
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/19/2020 3:30:54 PM	55263
Surr: DNOP	106	30.4-154		%Rec	1	9/19/2020 3:30:54 PM	55263
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/20/2020 7:10:54 AM	55251
Surr: BFB	88.7	75.3-105		%Rec	1	9/20/2020 7:10:54 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/20/2020 7:10:54 AM	55251
Toluene	ND	0.049		mg/Kg	1	9/20/2020 7:10:54 AM	55251
Ethylbenzene	ND	0.049		mg/Kg	1	9/20/2020 7:10:54 AM	55251
Xylenes, Total	ND	0.098		mg/Kg	1	9/20/2020 7:10:54 AM	55251
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	9/20/2020 7:10:54 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia **Client Sample ID:** B-8 1-2'
Project: Devon Energy Arabian 30-19 Fed Com 2 **Collection Date:** 9/15/2020 1:50:00 PM
Lab ID: 2009980-030 **Matrix:** SOIL **Received Date:** 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	120	59		mg/Kg	20	9/23/2020 12:55:55 AM	55370
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/19/2020 3:40:43 PM	55263
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/19/2020 3:40:43 PM	55263
Surr: DNOP	102	30.4-154		%Rec	1	9/19/2020 3:40:43 PM	55263
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/20/2020 8:21:28 AM	55251
Surr: BFB	90.0	75.3-105		%Rec	1	9/20/2020 8:21:28 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/20/2020 8:21:28 AM	55251
Toluene	ND	0.048		mg/Kg	1	9/20/2020 8:21:28 AM	55251
Ethylbenzene	ND	0.048		mg/Kg	1	9/20/2020 8:21:28 AM	55251
Xylenes, Total	ND	0.096		mg/Kg	1	9/20/2020 8:21:28 AM	55251
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/20/2020 8:21:28 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-8 2-3'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 2:00:00 PM
Lab ID: 2009980-031 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	61		mg/Kg	20	9/23/2020 1:08:20 AM	55370
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/19/2020 3:50:31 PM	55263
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/19/2020 3:50:31 PM	55263
Surr: DNOP	107	30.4-154		%Rec	1	9/19/2020 3:50:31 PM	55263
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/20/2020 8:45:06 AM	55251
Surr: BFB	88.3	75.3-105		%Rec	1	9/20/2020 8:45:06 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/20/2020 8:45:06 AM	55251
Toluene	ND	0.047		mg/Kg	1	9/20/2020 8:45:06 AM	55251
Ethylbenzene	ND	0.047		mg/Kg	1	9/20/2020 8:45:06 AM	55251
Xylenes, Total	ND	0.094		mg/Kg	1	9/20/2020 8:45:06 AM	55251
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/20/2020 8:45:06 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-8 3-4'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 2:10:00 PM
Lab ID: 2009980-032 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/23/2020 1:20:44 AM	55370
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/19/2020 4:00:19 PM	55263
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/19/2020 4:00:19 PM	55263
Surr: DNOP	109	30.4-154		%Rec	1	9/19/2020 4:00:19 PM	55263
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/20/2020 9:08:42 AM	55251
Surr: BFB	90.2	75.3-105		%Rec	1	9/20/2020 9:08:42 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/20/2020 9:08:42 AM	55251
Toluene	ND	0.049		mg/Kg	1	9/20/2020 9:08:42 AM	55251
Ethylbenzene	ND	0.049		mg/Kg	1	9/20/2020 9:08:42 AM	55251
Xylenes, Total	ND	0.099		mg/Kg	1	9/20/2020 9:08:42 AM	55251
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	9/20/2020 9:08:42 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-9 0-1'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 2:20:00 PM
Lab ID: 2009980-033 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JMT**
Chloride	61	60		mg/Kg	20	9/23/2020 1:33:08 AM	55370
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**BRM**
Diesel Range Organics (DRO)	4200	500		mg/Kg	50	9/22/2020 8:42:44 PM	55263
Motor Oil Range Organics (MRO)	23000	2500		mg/Kg	50	9/22/2020 8:42:44 PM	55263
Surr: DNOP	0	30.4-154	S	%Rec	50	9/22/2020 8:42:44 PM	55263
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/20/2020 9:32:23 AM	55251
Surr: BFB	86.4	75.3-105		%Rec	1	9/20/2020 9:32:23 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.023		mg/Kg	1	9/20/2020 9:32:23 AM	55251
Toluene	ND	0.047		mg/Kg	1	9/20/2020 9:32:23 AM	55251
Ethylbenzene	ND	0.047		mg/Kg	1	9/20/2020 9:32:23 AM	55251
Xylenes, Total	ND	0.094		mg/Kg	1	9/20/2020 9:32:23 AM	55251
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	9/20/2020 9:32:23 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-9 1-2'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 2:30:00 PM
Lab ID: 2009980-034 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/23/2020 1:45:32 AM	55370
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/19/2020 4:19:52 PM	55263
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/19/2020 4:19:52 PM	55263
Surr: DNOP	143	30.4-154		%Rec	1	9/19/2020 4:19:52 PM	55263
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/20/2020 9:56:03 AM	55251
Surr: BFB	86.6	75.3-105		%Rec	1	9/20/2020 9:56:03 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/20/2020 9:56:03 AM	55251
Toluene	ND	0.047		mg/Kg	1	9/20/2020 9:56:03 AM	55251
Ethylbenzene	ND	0.047		mg/Kg	1	9/20/2020 9:56:03 AM	55251
Xylenes, Total	ND	0.093		mg/Kg	1	9/20/2020 9:56:03 AM	55251
Surr: 4-Bromofluorobenzene	98.7	80-120		%Rec	1	9/20/2020 9:56:03 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia **Client Sample ID:** B-9 2-3'
Project: Devon Energy Arabian 30-19 Fed Com 2 **Collection Date:** 9/15/2020 2:40:00 PM
Lab ID: 2009980-035 **Matrix:** SOIL **Received Date:** 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/23/2020 1:57:57 AM	55370
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/19/2020 4:29:37 PM	55263
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/19/2020 4:29:37 PM	55263
Surr: DNOP	113	30.4-154		%Rec	1	9/19/2020 4:29:37 PM	55263
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/20/2020 10:19:47 AM	55251
Surr: BFB	89.6	75.3-105		%Rec	1	9/20/2020 10:19:47 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/20/2020 10:19:47 AM	55251
Toluene	ND	0.050		mg/Kg	1	9/20/2020 10:19:47 AM	55251
Ethylbenzene	ND	0.050		mg/Kg	1	9/20/2020 10:19:47 AM	55251
Xylenes, Total	ND	0.10		mg/Kg	1	9/20/2020 10:19:47 AM	55251
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/20/2020 10:19:47 AM	55251

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

Qualifiers:

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

Analytical Report
Lab Order **2009980**
Date Reported: **9/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-9 3-4'
Project: Devon Energy Arabian 30-19 Fed Com 2
Collection Date: 9/15/2020 2:50:00 PM
Lab ID: 2009980-036 **Matrix:** SOIL
Received Date: 9/17/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	59		mg/Kg	20	9/23/2020 2:10:22 AM	55370
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/19/2020 4:39:22 PM	55263
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/19/2020 4:39:22 PM	55263
Surr: DNOP	101	30.4-154		%Rec	1	9/19/2020 4:39:22 PM	55263
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/20/2020 10:43:35 AM	55251
Surr: BFB	87.4	75.3-105		%Rec	1	9/20/2020 10:43:35 AM	55251
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/20/2020 10:43:35 AM	55251
Toluene	ND	0.050		mg/Kg	1	9/20/2020 10:43:35 AM	55251
Ethylbenzene	ND	0.050		mg/Kg	1	9/20/2020 10:43:35 AM	55251
Xylenes, Total	ND	0.099		mg/Kg	1	9/20/2020 10:43:35 AM	55251
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	9/20/2020 10:43:35 AM	55251

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2009980**

25-Sep-20

Client: Talon Artesia

Project: Devon Energy Arabian 30-19 Fed Com 2H

Sample ID: **MB-55370**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **55370**	RunNo: **72041**							
Prep Date: **9/22/2020**	Analysis Date: **9/22/2020**	SeqNo: **2524536**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-55370**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **55370**	RunNo: **72041**							
Prep Date: **9/22/2020**	Analysis Date: **9/22/2020**	SeqNo: **2524537**	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-55353**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **55353**	RunNo: **72068**							
Prep Date: **9/22/2020**	Analysis Date: **9/22/2020**	SeqNo: **2524903**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-55353**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **55353**	RunNo: **72068**							
Prep Date: **9/22/2020**	Analysis Date: **9/22/2020**	SeqNo: **2524904**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.4	90	110			

Sample ID: **MB-55365**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **55365**	RunNo: **72108**							
Prep Date: **9/22/2020**	Analysis Date: **9/23/2020**	SeqNo: **2526889**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-55365**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **55365**	RunNo: **72108**							
Prep Date: **9/22/2020**	Analysis Date: **9/23/2020**	SeqNo: **2526890**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009980**
25-Sep-20

Client: Talon Artesia
Project: Devon Energy Arabian 30-19 Fed Com 2H

Sample ID: **MB-55250**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **55250**	RunNo: **71976**							
Prep Date: **9/17/2020**	Analysis Date: **9/18/2020**	SeqNo: **2519581**	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	12		10.00		123	30.4	154			

Sample ID: **MB-55253**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **55253**	RunNo: **71976**							
Prep Date: **9/17/2020**	Analysis Date: **9/18/2020**	SeqNo: **2519582**	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	12		10.00		121	30.4	154			

Sample ID: **LCS-55250**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **55250**	RunNo: **71976**							
Prep Date: **9/17/2020**	Analysis Date: **9/18/2020**	SeqNo: **2519584**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	65	10	50.00	0	129	70	130			
Surr: DNOP	6.9		5.000		138	30.4	154			

Sample ID: **LCS-55253**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **55253**	RunNo: **71976**							
Prep Date: **9/17/2020**	Analysis Date: **9/18/2020**	SeqNo: **2519585**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	10	50.00	0	122	70	130			
Surr: DNOP	6.7		5.000		134	30.4	154			

Sample ID: **2009980-008AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **B-2 3-4'**	Batch ID: **55253**	RunNo: **71976**							
Prep Date: **9/17/2020**	Analysis Date: **9/18/2020**	SeqNo: **2519648**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.5	47.57	3.724	102	47.4	136			
Surr: DNOP	5.4		4.757		114	30.4	154			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009980**
25-Sep-20

Client: Talon Artesia
Project: Devon Energy Arabian 30-19 Fed Com 2H

Sample ID: **2009980-008AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **B-2 3-4'** Batch ID: **55253** RunNo: **71976**
Prep Date: **9/17/2020** Analysis Date: **9/18/2020** SeqNo: **2519651** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.2	45.83	3.724	103	47.4	136	2.54	43.4	
Surr: DNOP	5.4		4.583		118	30.4	154	0	0	

Sample ID: **LCS-55263** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **55263** RunNo: **71994**
Prep Date: **9/18/2020** Analysis Date: **9/19/2020** SeqNo: **2520476** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.3	70	130			
Surr: DNOP	5.0		5.000		100	30.4	154			

Sample ID: **MB-55263** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **55263** RunNo: **71994**
Prep Date: **9/18/2020** Analysis Date: **9/19/2020** SeqNo: **2520480** 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	10		10.00		102	30.4	154			

Sample ID: **2009980-028AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **B-7 3-4'** Batch ID: **55263** RunNo: **71994**
Prep Date: **9/18/2020** Analysis Date: **9/19/2020** SeqNo: **2520602** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.8	49.16	3.788	93.4	47.4	136			
Surr: DNOP	5.2		4.916		105	30.4	154			

Sample ID: **2009980-028AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **B-7 3-4'** Batch ID: **55263** RunNo: **71994**
Prep Date: **9/18/2020** Analysis Date: **9/19/2020** SeqNo: **2520603** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	62	9.8	48.83	3.788	118	47.4	136	21.3	43.4	
Surr: DNOP	6.8		4.883		139	30.4	154	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009980**
25-Sep-20

Client: Talon Artesia
Project: Devon Energy Arabian 30-19 Fed Com 2H

Sample ID: **mb-55251** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **55251** RunNo: **71993**
Prep Date: **9/17/2020** Analysis Date: **9/20/2020** SeqNo: **2520138** 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	880		1000		88.0	75.3	105			

Sample ID: **lcs-55251** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **55251** RunNo: **71993**
Prep Date: **9/17/2020** Analysis Date: **9/20/2020** SeqNo: **2520139** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.8	72.5	106			
Surr: BFB	990		1000		99.0	75.3	105			

Sample ID: **2009980-020ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **B-5 3-4'** Batch ID: **55251** RunNo: **71993**
Prep Date: **9/17/2020** Analysis Date: **9/20/2020** SeqNo: **2520141** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.37	0	92.8	61.3	114			
Surr: BFB	970		974.7		99.6	75.3	105			

Sample ID: **2009980-020amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **B-5 3-4'** Batch ID: **55251** RunNo: **71993**
Prep Date: **9/17/2020** Analysis Date: **9/20/2020** SeqNo: **2520142** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.04	0	95.1	61.3	114	1.11	20	
Surr: BFB	910		961.5		94.3	75.3	105	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009980**
25-Sep-20

Client: Talon Artesia
Project: Devon Energy Arabian 30-19 Fed Com 2H

Sample ID: **mb-55251** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **55251** RunNo: **71993**
Prep Date: **9/17/2020** Analysis Date: **9/20/2020** SeqNo: **2520197** 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	0.98		1.000		97.6	80	120			

Sample ID: **LCS-55251** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **55251** RunNo: **71993**
Prep Date: **9/17/2020** Analysis Date: **9/20/2020** SeqNo: **2520198** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.4	80	120			
Toluene	0.99	0.050	1.000	0	99.4	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.7	80	120			

Sample ID: **2009980-021ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **B-6 0-1'** Batch ID: **55251** RunNo: **71993**
Prep Date: **9/17/2020** Analysis Date: **9/20/2020** SeqNo: **2520201** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.023	0.9174	0	95.5	76.3	120			
Toluene	0.91	0.046	0.9174	0.01327	98.1	78.5	120			
Ethylbenzene	0.93	0.046	0.9174	0	101	78.1	124			
Xylenes, Total	2.8	0.092	2.752	0	102	79.3	125			
Surr: 4-Bromofluorobenzene	0.93		0.9174		101	80	120			

Sample ID: **2009980-021amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **B-6 0-1'** Batch ID: **55251** RunNo: **71993**
Prep Date: **9/17/2020** Analysis Date: **9/20/2020** SeqNo: **2520202** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.024	0.9407	0	91.6	76.3	120	1.68	20	
Toluene	0.92	0.047	0.9407	0.01327	96.5	78.5	120	0.837	20	
Ethylbenzene	0.95	0.047	0.9407	0	101	78.1	124	1.92	20	
Xylenes, Total	2.9	0.094	2.822	0	101	79.3	125	1.12	20	
Surr: 4-Bromofluorobenzene	0.95		0.9407		101	80	120	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009980**
25-Sep-20

Client: Talon Artesia
Project: Devon Energy Arabian 30-19 Fed Com 2H

Sample ID: **mb-55245** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **55245** RunNo: **71974**
Prep Date: **9/17/2020** Analysis Date: **9/18/2020** SeqNo: **2519469** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.8	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.1	70	130			
Surr: Toluene-d8	0.48		0.5000		95.8	70	130			

Sample ID: **lcs-55245** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **55245** RunNo: **71974**
Prep Date: **9/17/2020** Analysis Date: **9/18/2020** SeqNo: **2519470** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.8	80	120			
Toluene	1.1	0.050	1.000	0	110	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.2	0.10	3.000	0	107	80	120			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		89.0	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.3	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.6	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID: **2009980-001ams** SampType: **MS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **B-1 0-1'** Batch ID: **55245** RunNo: **71974**
Prep Date: **9/17/2020** Analysis Date: **9/18/2020** SeqNo: **2519474** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.024	0.9443	0	104	71.1	115			
Toluene	1.1	0.047	0.9443	0	113	79.6	132			
Ethylbenzene	1.0	0.047	0.9443	0	111	83.8	134			
Xylenes, Total	3.0	0.094	2.833	0	107	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.44		0.4721		93.1	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.4721		96.4	70	130			
Surr: Dibromofluoromethane	0.44		0.4721		94.1	70	130			
Surr: Toluene-d8	0.49		0.4721		103	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009980**
25-Sep-20

Client: Talon Artesia
Project: Devon Energy Arabian 30-19 Fed Com 2H

Sample ID: **2009980-001amsd** SampType: **MSD4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **B-1 0-1'** Batch ID: **55245** RunNo: **71974**
Prep Date: **9/17/2020** Analysis Date: **9/18/2020** SeqNo: **2519475** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9690	0	106	71.1	115	4.19	20	
Toluene	1.1	0.048	0.9690	0	110	79.6	132	0.154	20	
Ethylbenzene	1.0	0.048	0.9690	0	108	83.8	134	0.0585	20	
Xylenes, Total	3.1	0.097	2.907	0	107	82.4	132	1.78	20	
Surr: 1,2-Dichloroethane-d4	0.45		0.4845		93.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.48		0.4845		98.9	70	130	0	0	
Surr: Dibromofluoromethane	0.46		0.4845		95.8	70	130	0	0	
Surr: Toluene-d8	0.47		0.4845		97.3	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009980**
25-Sep-20

Client: Talon Artesia
Project: Devon Energy Arabian 30-19 Fed Com 2H

Sample ID: **mb-55245** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS** Batch ID: **55245** RunNo: **71974**
Prep Date: **9/17/2020** Analysis Date: **9/18/2020** SeqNo: **2519500** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		96.1	70	130			

Sample ID: **lcs-55245** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS** Batch ID: **55245** RunNo: **71974**
Prep Date: **9/17/2020** Analysis Date: **9/18/2020** SeqNo: **2519501** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.2	70	130			
Surr: BFB	490		500.0		97.9	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Talon Artesia Work Order Number: 2009980 RcptNo: 1

Received By: **Cheyenne Cason** 9/17/2020 7:30:00 AM
Completed By: **Juan Rojas** 9/17/2020 8:49:13 AM
Reviewed By: SPA 9.17.20

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: CM 9/17/20

Special Handling (if applicable)

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

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

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good				
2	0.2	Good				

Chain-of-Custody Record

Client: Talon / LPE

Mailing Address: on file

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 4-day
☑ Standard ☐ Rush

Project Name: Devon Energy
Arabian 30-19 Fed Com 2H

Project #:
700794.333.01

Project Manager:
R. Pons

Sampler: Ronnie Rodriguez

On Ice: ☑ Yes ☐ No

# of Coolers: 2

Cooler Temp(including CF): See Remarks

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2009980	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
9-15-20	09:00	soil	B-1 0-1'	4 oz jar	ice	-001	✓	✓					✓			
	09:10		B-1 1-2'			-002										
	09:20		B-1 2-3'			-003										
	09:30		B-1 3-4'			-004										
	09:40		B-2 0-1'			-005										
	09:50		B-2 1-2'			-006										
	10:00		B-2 2-3'			-007										
	10:10		B-2 3-4'			-008										
	10:20		B-3 0-1'			-009										
	10:30		B-3 1-2'			-010										
	10:40		B-3 2-3'			-011										
	10:50		B-3 3-4'			-012										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9/16/20	1330				9/16/20	1370
9/16/20	1900				9/17/20	0730

Remarks:
1.6 + 0.1 = 1.7
WO: 20844201 0.1 + 0.1 = 0.2
Bill directly to Devon Energy

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.

Chain-of-Custody Record

Client: Talon / LPE

Mailing Address: on file

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 4-day
☑ Standard ☐ Rush

Project Name: Devon Energy
Arabian 30-19 Fed Com 2H

Project #:
700794.333.01

Project Manager:
R. Pons

Sampler: Ronnie Rodriguez

On Ice: ☑ Yes ☐ No

# of Coolers: 2

Cooler Temp(Including CF): See Remarks

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
9-15-20	11:00	soil	B-4 0-1'	4 oz jar	ice	2009980-013	✓	✓					✓			
	11:10		B-4 1-2'			-014										
	11:20		B-4 2-3'			-015										
	11:30		B-4 3-4'			-016										
	11:40		B-5 0-1'			-017										
	11:50		B-5 1-2'			-018										
	12:00		B-5 2-3'			-019										
	12:10		B-5 3-4'			-020										
	12:20		B-6 0-1'			-021										
	12:30		B-6 1-2'			-022										
	12:40		B-6 2-3'			-023										
	12:50		B-6 3-4'			-024										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9/16/20	1330				9/16/20	1330
9/16/20	1900			COUR	9/17/20	0730

Remarks:
WO : 20844201
1.6 + 0.1 = 1.7
0.1 + 0.1 = 0.2
Bill directly to Devon Energy

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.

Chain-of-Custody Record

Client: Talon / LPE

Mailing Address: on file

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 4-day
☑ Standard ☐ Rush

Project Name: Devon Energy
Arabian 30-19 Fed Com 2H

Project #:
700794.333.01

Project Manager:
R. Pons

Sampler: Ronnie Rodriguez

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp(including CF): See Rmrk

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2009980	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
9-15-20	13:00	soil	B-7 0-1'	4 oz jar	ice	-025	✓	✓					✓			
	13:10		B-7 1-2'			-026										
	13:20		B-7 2-3'			-027										
	13:30		B-7 3-4'			-028										
	13:40		B-8 0-1'			-029										
	13:50		B-8 1-2'			-030										
	14:00		B-8 2-3'			-031										
	14:10		B-8 3-4'			-032										
	14:20		B-9 0-1'			-033										
	14:30		B-9 1-2'			-034										
	14:40		B-9 2-3'			-035										
	14:50		B-9 3-4'			-036										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9/16/20	1330				9/16/20	1330
9/16/20	1900			courier	9/17/20	7:30

Remarks:
WO: 20844201
1.6 + 0.1 = 1.7
0.1 + 0.1 = 0.2
Bill directly to Devon Energy

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 30, 2020

Brandon Sinclair

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

RE: Arabian 30 19 2H OrderNo.: 2011A46

Dear Brandon Sinclair:

Hall Environmental Analysis Laboratory received 14 sample(s) on 11/20/2020 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued December 01, 2020.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: BG-1 0-1'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 9:00:00 AM
Lab ID: 2011A46-001 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	86	59		mg/Kg	20	11/25/2020 1:55:15 PM	56657

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: BG-2 0-1'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 9:03:00 AM
Lab ID: 2011A46-002 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	210	60		mg/Kg	20	11/25/2020 2:32:30 PM	56657

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: BG-3 0-1'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 9:06:00 AM
Lab ID: 2011A46-003 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	170	60		mg/Kg	20	11/25/2020 3:34:32 PM	56657

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: BG-4 0-1'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 9:09:00 AM
Lab ID: 2011A46-004 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	190	59		mg/Kg	20	11/25/2020 3:46:57 PM	56657

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 6'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 9:15:00 AM
Lab ID: 2011A46-005 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	11/25/2020 3:59:21 PM	56657

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 8'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 9:20:00 AM
Lab ID: 2011A46-006 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	11/25/2020 4:30:27 PM	56657

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 10'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 9:25:00 AM
Lab ID: 2011A46-007 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	11/25/2020 4:42:54 PM	56657

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 6'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 12:30:00 PM
Lab ID: 2011A46-008 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	11/25/2020 4:55:18 PM	56657

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 8'R
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 12:35:00 PM
Lab ID: 2011A46-009 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	11/25/2020 5:32:32 PM	56664

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-10 0-1'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 1:00:00 PM
Lab ID: 2011A46-010 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	6400	300		mg/Kg	100	11/30/2020 9:46:04 AM	56664

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-10 2'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 1:05:00 PM
Lab ID: 2011A46-011 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	120	60		mg/Kg	20	11/25/2020 6:22:09 PM	56664

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-10 3'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 1:10:00 PM
Lab ID: 2011A46-012 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	11/25/2020 6:34:34 PM	56664

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-10 4'
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 1:15:00 PM
Lab ID: 2011A46-013 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	11/25/2020 6:46:59 PM	56664

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

Qualifiers:

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

Analytical Report
Lab Order **2011A46**
Date Reported: **12/30/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-10 6'R
Project: Arabian 30 19 2H
Collection Date: 11/18/2020 1:20:00 PM
Lab ID: 2011A46-014 **Matrix:** SOIL **Received Date:** 11/20/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	61		mg/Kg	20	11/25/2020 6:59:24 PM	56664

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2011A46**

30-Dec-20

Client: Talon Artesia

Project: Arabian 30 19 2H

Sample ID: **MB-56657** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **56657** RunNo: **73610**

Prep Date: **11/25/2020** Analysis Date: **11/25/2020** SeqNo: **2594645** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-56657** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **56657** RunNo: **73610**

Prep Date: **11/25/2020** Analysis Date: **11/25/2020** SeqNo: **2594646** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Sample ID: **MB-56664** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **56664** RunNo: **73610**

Prep Date: **11/25/2020** Analysis Date: **11/25/2020** SeqNo: **2594675** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-56664** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **56664** RunNo: **73610**

Prep Date: **11/25/2020** Analysis Date: **11/25/2020** SeqNo: **2594676** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.5	90	110			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Talon Artesia** Work Order Number: **2011A46** RcptNo: **1**

Received By: **Sean Livingston** **11/20/2020 8:00:00 AM** S Livingston

Completed By: **Isaiah Ortiz** **11/20/2020 9:10:53 AM** I. Ortiz

Reviewed By: JR 11/20/20

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: SGL 11/20/20

Special Handling (if applicable)

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

Person Notified: Date:

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

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	-0.7	Good	Not Present			

Chain-of-Custody Record

Client: Talon LPE

408 W Texas St

Mailing Address: Artesia, NM 88210

Phone #:

email or Fax#: (575) 746-8905

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 4-Day
☒ Standard ☐ Rush

Project Name: (Arabian 2H)
Arabian 30-19 2H

Project #:
7007941.333.01

Project Manager:
B. Sinclair

Sampler: M. Collier

On Ice: ☒ Yes ☐ No

# of Coolers:

Cooler Temp (including CF):

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)						
11/18/20	9:00	Soil	BG-1 0-1'	Jar	Ice/cool	2011A46-001																
	9:03		BG-2 0-1			-002																
	9:06		BG-3 0-1			-003																
	9:09		BG-4 0-1			-004																
	9:15		B-5 6'			-005																
	9:20		B-5 8'			-006																
	9:25		B-5 10'			-007																
	12:30		B-4 6'			-008																
	12:35		B-4 8'R			-009																
	1:00		B-10 0-1'			-010																
	1:05		B-10 2'			-011																
	1:10		B-10 3'			-012																

Date: Time: Relinquished by:

Received by: Via: Date Time

Date: Time: Relinquished by:

Received by: Via: Date Time

Remarks: Please cc the following via email:
Dadkins@talonlpe.com
Rpons@talonlpe.com
As per Brandon, Sample ID update for -010 - 014. MG 12/30/20

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.

Chain-of-Custody Record

Client: Talon LPE

408 W Texas St

Mailing Address: Artesia, NM 88210

Phone #: 575-746-8768

email or Fax#: (575) 746-8905

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 4-Day
☑ Standard ☐ Rush

Project Name: (Arabian 2H)
Arabian 30-19 2H

Project #:
700794.333.01

Project Manager:
B. Sinclair

Sampler: M. Collier

On Ice: ☒ Yes ☐ No

# of Coolers:

Cooler Temp (including CF):

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
11/18/20	1:15	soil	B-10 4'	Jar	Ice/cool	2011A46-013							X			
11/18/20	1:20	soil	B-10 6'R	Jar	Ice/cool	-014							X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
		Tony Ball				
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Please cc the following via email:-
Dadkins@talonlpe.com
Rpons@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.

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Certificate of Analysis Summary 683645

Talon LPE-Artesia, Artesia, NM

Project Name: Devon Energy Arabian 3019 Federal

Project Id: 700794.333.01
Contact: David Adkins
Project Location:

Date Received in Lab: Wed 01.06.2021 14:26
Report Date: 01.07.2021 13:44
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	683645-001					
	Field Id:	B-9 A					
	Depth:	0.5-1 ft					
	Matrix:	SOIL					
	Sampled:	01.06.2021 12:22					
TPH by SW8015 Mod	***Extracted:***	01.06.2021 18:06					
	Analyzed:	01.07.2021 00:18					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8				
Diesel Range Organics (DRO)		<49.8	49.8				
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8				
Total TPH		<49.80	49.80				

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Analytical Report 683645

for

Talon LPE-Artesia

Project Manager: David Adkins

Devon Energy Arabian 3019 Federal

700794.333.01

01.07.2021

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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01.07.2021

Project Manager: **David Adkins**
Talon LPE-Artesia
408 West Texas St.
Artesia, NM 88210

Reference: Eurofins Xenco, LLC Report No(s): **683645**
Devon Energy Arabian 3019 Federal
Project Address:

David Adkins:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 683645. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 683645 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 683645

Talon LPE-Artesia, Artesia, NM

Devon Energy Arabian 3019 Federal

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
B-9 A	S	01.06.2021 12:22	0.5 - 1 ft	683645-001

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CASE NARRATIVE

Client Name: Talon LPE-Artesia

Project Name: Devon Energy Arabian 3019 Federal

Project ID: *700794.333.01*
Work Order Number(s): *683645*

Report Date: *01.07.2021*
Date Received: *01.06.2021*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 683645

Talon LPE-Artesia, Artesia, NM

Devon Energy Arabian 3019 Federal

Sample Id:	**B-9 A**	Matrix:	Soil	Date Received:	01.06.2021 14:26
Lab Sample Id:	683645-001	Date Collected:	01.06.2021 12:22	Sample Depth:	0.5 - 1 ft
Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.06.2021 18:06	% Moisture:	
Seq Number:	3146947			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.07.2021 00:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.07.2021 00:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.07.2021 00:18	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	01.07.2021 00:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	01.07.2021 00:18	
o-Terphenyl	84-15-1	98	%	70-135	01.07.2021 00:18	

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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QC Summary 683645

Talon LPE-Artesia

Devon Energy Arabian 3019 Federal

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146947 — Matrix: Solid — Date Prep: 01.06.2021
MB Sample Id: 7718580-1-BLK — LCS Sample Id: 7718580-1-BKS — LCSD Sample Id: 7718580-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	992	99	1140	114	70-135	14	35	mg/kg	01.06.2021 17:54	
Diesel Range Organics (DRO)	<50.0	1000	927	93	1120	112	70-135	19	35	mg/kg	01.06.2021 17:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		108		112		70-135	%	01.06.2021 17:54
o-Terphenyl	106		109		104		70-135	%	01.06.2021 17:54

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146947 — Matrix: Solid — Date Prep: 01.06.2021
MB Sample Id: 7718580-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.06.2021 17:34	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146947 — Matrix: Soil — Date Prep: 01.06.2021
Parent Sample Id: 683632-001 — MS Sample Id: 683632-001 S — MSD Sample Id: 683632-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	1130	113	1170	117	70-135	3	35	mg/kg	01.06.2021 18:55	
Diesel Range Organics (DRO)	<50.1	1000	1160	116	1030	103	70-135	12	35	mg/kg	01.06.2021 18:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		112		70-135	%	01.06.2021 18:55
o-Terphenyl	107		115		70-135	%	01.06.2021 18:55

MS/MSD Percent Recovery — [D] = 100*(C-A) / B
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery — [D] = 100 * (C) / [B]
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

XENCO LABORATORIES

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Work Order No: 6883645

www.xenco.com Page 1 of 1

Project Manager:	Brandon Sinclair	Bill to: (if different)	
Company Name:	Talon LPE	Company Name:	COG
Address:	408 W. Texas Ave	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	(575) 441-6960	Email:	bsinclair@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Devon Energy Arabian 3019 Federal	Turn Around	
Project Number:	700794.333.01	Routine	☒
Project Location		Rush:	
Sampler's Name:	David McInnis	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temperature (°C):	0.6 / 0.4	Temp Blank:	Yes No
Received Intact:	Yes No	Wet Ice:	Yes No
Cooler Custody Seals:	Yes No N/A	Thermometer ID	T-NM-007
Sample Custody Seals:	Yes No N/A	Correction Factor:	-0.2
		Total Containers:	1

ANALYSIS REQUEST

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	TPH 8015M																Sample Comments
	B-9A	S	1-6-21	1222	0.5-1'	1		X																

Preservative Codes
MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed
8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U
1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	Dee Griffin	1-6-21 1426	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

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 18998

CONDITIONS

Operator: Talon LPE 408 W Texas Artesia, NM 88210	OGRID: 329944
	Action Number: 18998
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	9/20/2022