



**Pima Environmental Services, LLC**  
1601 N. Turner Ste 500  
Hobbs, NM 88240  
575-964-7740

July 7, 2020

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

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

Dear Mr. Amos and Mr. Bratcher,

Pima Environmental Services, LLC (Pima) has conducted a site assessment, soil sampling and has prepared this Closure Report on behalf of Devon Energy Production Company (Devon) for the Regulus 26 Federal #4H. These incidents were assigned 2RP-5166 and NRM2015053388 by the New Mexico Oil Conservation Division (NMOCD).

**Site Information and Site Characterization**

The Regulus 26 Fed 4 is located approximately sixteen (16) miles southeast of Loco Hills, NM. This site is in Unit P, Section 26, Township 19S, Range 31E, Latitude 32.6253166, Longitude - 103.8323898, Eddy County, NM. Figure 1 references a location map.

Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology are eolian and piedmont deposits, Holocene to middle Pleistocene in age. The soil in this area is made up of Winky loamy fine sands, 0 to 3 percent slopes according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage courses in this area are well-drained.

Based upon well water data, depth to the nearest groundwater in this area is greater than 130 feet below grade surface (BGS). There are no known water wells within ½ mile of this location, according to the New Mexico Office of the State Engineer. According to the United States

Geological Survey (USGS), the nearest significant watercourse is a saltwater pond located approximately 2.5 miles to the south. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29					
Depth to Groundwater (Appendix B)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
130'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
<50	600 mg/kg	100 mg/kg	100 mg/kg	50 mg/kg	10mg/kg
If the release occurred within any of the following areas, the responsible party would treat the release as if the groundwater was less than 50 feet per Rule 19.15.29					
Water Issues				Yes	No
Within <b>300</b> feet of any continuously flowing watercourse or any other significant watercourse					x
Within <b>200</b> feet of any lakebed, sinkhole or playa lake (measures from the ordinary high-water mark)					x
Within <b>300</b> feet from an occupied permanent residence, school, hospital, institution or church					x
Within <b>500</b> feet of a spring or a private, domestic freshwater well used by less than five households for domestic or stock water purposes					x
Within <b>1000</b> feet of any freshwater well or spring					x
Within incorporated municipal boundaries or within a defined municipal freshwater well field					x
Within <b>300</b> feet of a wetlands					x
Within the area overlying a subsurface mine					x
Within an unstable area (Karst)					x
Within a 100-year floodplain					x

Reference Figure 2 for a TOPO Map and Figure 3 for a Karst Map.

**Release Information**

2RP-5166: On November 5, 2018, a produced water pump line from equipment developed a pin hole inside the engineer lined containment. A release of 12 barrels (bbls) of produced water was released staying inside the containment. The line was isolated and repairs were made. Initial response activities were conducted by the operator and included source elimination and site containment and the recovery of the 12 bbls of produced water was recovered.

NRM2015053388: On May 12, 2020, the fill line to the tank developed some holes releasing produced water into the engineered steel and poly-lined containment, resulting in the release of approximately 222 bbls of produced water. The initial response activities were conducted by the operator and included source elimination and site containment and the recovery of approximately 222 bbls of produced water. Figure 4 references a site map illustrating spill area and sample points.

### Site Assessment and Soil Sampling Results

On June 8, 2020, composite samples were collected outside the containment walls to verify that the liner had not been breached, and the integrity was still intact. The laboratory results of this sampling event can be found in the following data table.

#### 6-8-20 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is >100')											
Sample Date 6-8-20		Field Screening Utilizing PID Meter, Chloride Strips and S300 Method			NM Approved Laboratory Results						
Sample ID	Depth (BGS)	VOC	Benzene	Chlorides	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S-1 N. Composite	0-6"				ND	ND	ND	16	ND	16	6300
S-2 E. Composite	0-6"				ND	ND	ND	220	ND	220	4100
S-3 S. Composite	0-6"				ND	ND	ND	12	ND	12	340
S-4 W. Composite	0-6"				ND	ND	ND	ND	ND	ND	5400

ND- Analyte Not Detected

A Complete Laboratory Report is attached in Appendix C.

### Remediation Activities

The sample results were below NMOCD Closure Criteria 19.15.29 NMAC; the visual liner inspection shows no evidence that the integrity was compromised. Based on these findings, no remediation activities were needed at this location.

## **Closure Request**

After careful review, Pima, on behalf of Devon Energy, is requesting that no further action be required, and closure in regards to these incidents be granted.

If you have any questions or need additional information, please feel free to contact Chris Jones by phone or email.

Respectfully,



Chris Jones  
Environmental Professional  
Pima Environmental Services, LLC

## **Attachments**

Figures:

- 1- Location Map
- 2- TOPO Map
- 3- Karst Map
- 4- Site Map

Appendices:

- Appendix A- Referenced Water Surveys
- Appendix B- Soil Survey and Geological Data
- Appendix C- C-141's
- Appendix D- Laboratory Reports
- Appendix E- Photographic Documentation



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Figures:

1-Location Map

2- TOPO Map

3- Karst Map

4- Site Map

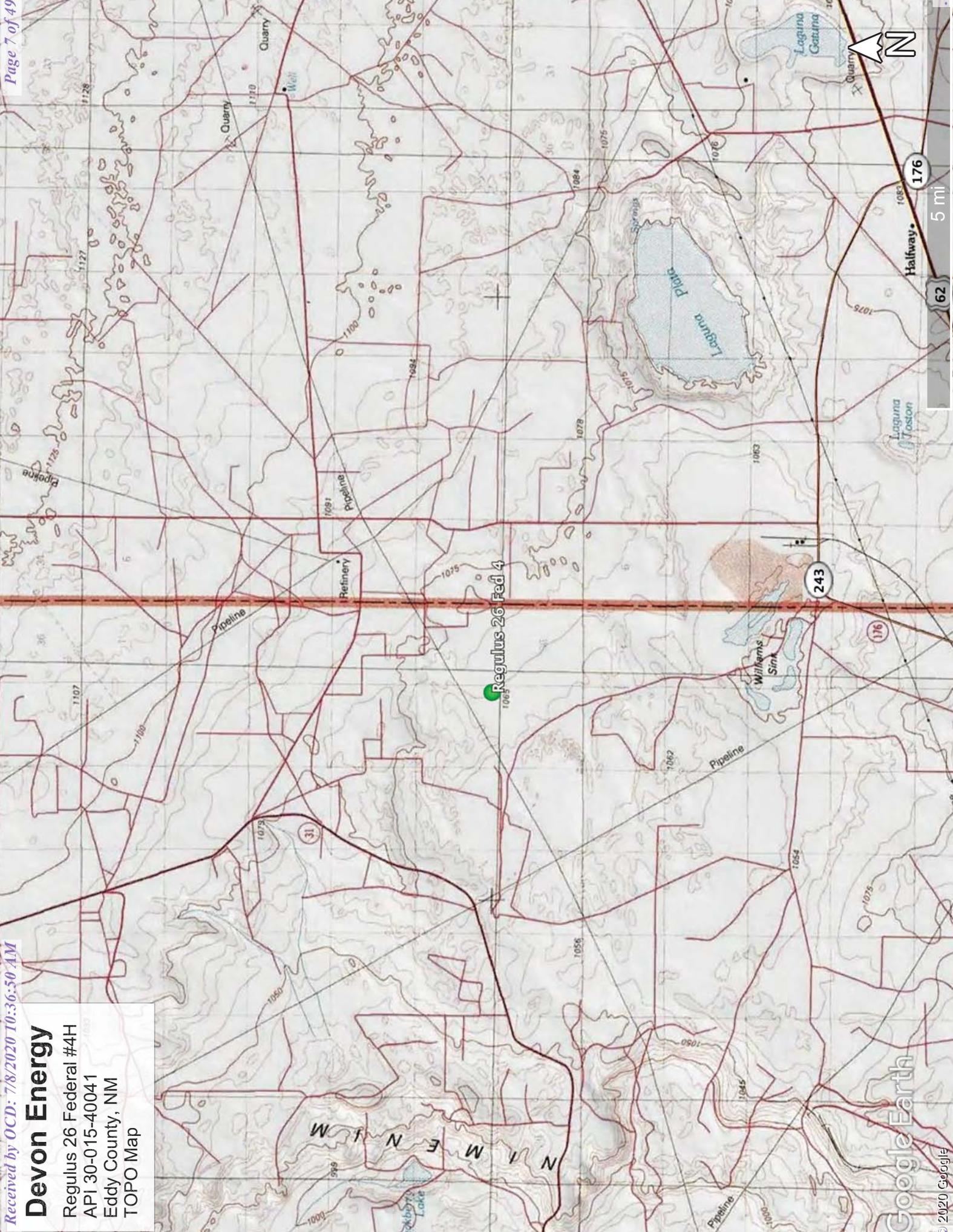
**Devon Energy**  
Regulus 26 Federal #4H  
API 30-015-40041  
Eddy County, NM  
Location Map

**Legend**

● Regulus 26 Fed 4



**Devon Energy**  
 Regulus 26 Federal #4H  
 API 30-015-40041  
 Eddy County, NM  
 TOPO Map



**Legend**

-  High
-  Low
-  Medium

**Devon Energy**  
 Regulus 26 Federal #4H  
 API 30-015-40041  
 Eddy County, NM  
 TOPO Map

Regulus 26 Fed 4

243

176

5 mi

62



**Legend**

- Composite Samples
- Regulus 26 Fed 4
- Spill Area



**Devon Energy**

Regulus 26 Federal #4H  
 API 30-015-40041  
 Eddy County, NM  
 Site Map



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Appendix A  
Water Surveys:  
OSE  
USGS  
FEMA



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth	WellDepth	Water Column
<a href="#">CP00641 POD1</a>		CP	ED	4	1	36	19S	31E		610247	3609634*	1010	300	130	170
<a href="#">CP00642 POD1</a>		CP	ED	2	2	25	19S	31E		611025	3611657*	1979	250		

Average Depth to Water: **130 feet**

Minimum Depth: **130 feet**

Maximum Depth: **130 feet**

**Record Count:** 2

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 609536

**Northing (Y):** 3610351.953

**Radius:** 3000

\*UTM location was derived from PLSS - see Help

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

6/3/20 10:14 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



National Water Information System: Mapper

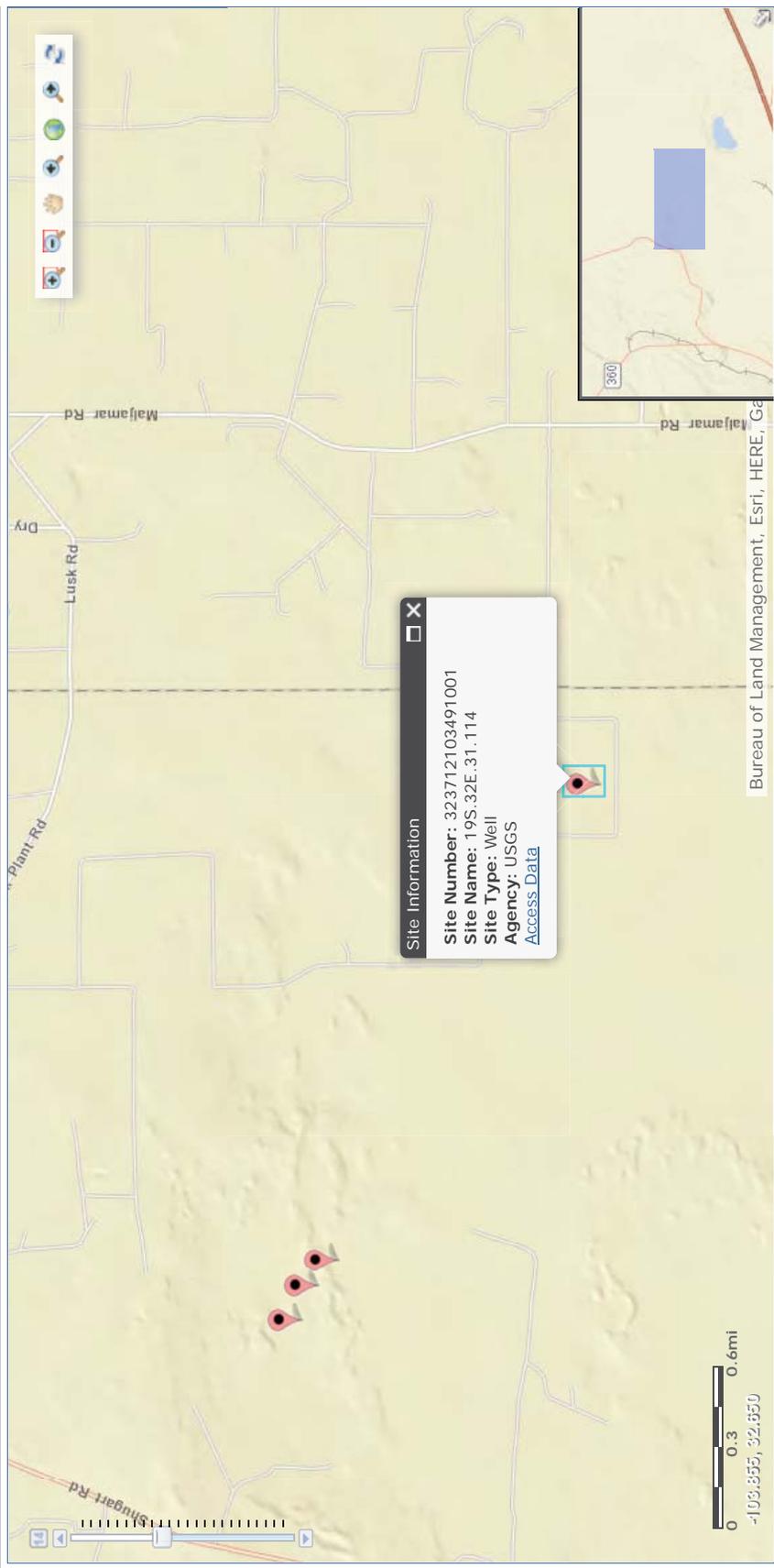
Sites Map

Search

Surface-Water Sites

Groundwater Sites

- Active Sites
  - Any data
  - Instantaneous data
  - Daily data
  - Water-quality data
  - Measurements
  - Annual Report
- Inactive Sites
  - Any data
  - Instantaneous data
  - Daily data
  - Water-quality data
  - Measurements
  - Annual Report
- Springs
- Atmospheric Sites
- Other Sites





Click to hide News Bulletins

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

## Groundwater levels for the Nation

Search Results -- 1 sites found

site\_no list =

- 323712103491001

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

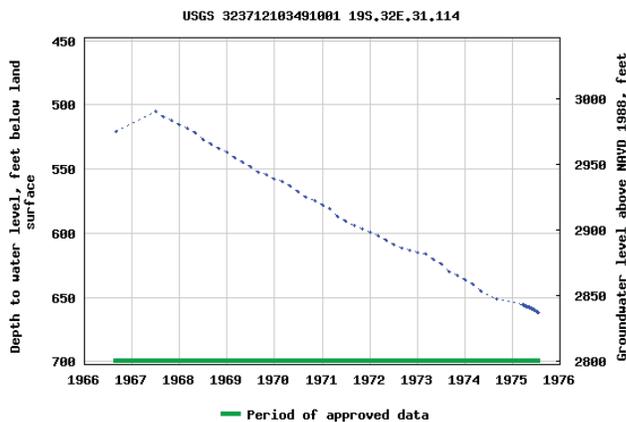
### USGS 323712103491001 19S.32E.31.114

Available data for this site Groundwater: Field measurements GO

Lea County, New Mexico  
Hydrologic Unit Code 13060011  
Latitude 32°37'12", Longitude 103°49'10" NAD27  
Land-surface elevation 3,497 feet above NAVD88

#### Output formats

Table_of_data
Tab-separated_data
Graph_of_data
Reselect_period



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)  
[Feedback on this web site](#)  
[Automated retrievals](#)  
[Help](#)

[Data Tips](#)  
[Explanation of terms](#)  
[Subscribe for system changes](#)  
[News](#)



## National Water Information System: Mapper

Sites
Map

---

Search

Surface-Water Sites

- Active Sites
  - Any data
  - Instantaneous data
  - Daily data
  - Water-quality data
  - Peak data
  - Measurements
  - Annual Report
- Inactive Sites
  - Any data
  - Instantaneous data
  - Daily data
  - Water-quality data
  - Peak data
  - Measurements
  - Annual Report

---

- Groundwater Sites
- Springs
- Atmospheric Sites
- Other Sites

Shulgart Rd

3000

0 0.5 1 mi

-103.393, 32.542

Bureau of Land Management, Esri, HERE, Ga

12

Site Information

?

# National Flood Hazard Layer FIRMette



## 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

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile  
*Zone X*

Future Conditions 1% Annual Chance Flood Hazard  
*Zone X*

Area with Reduced Flood Risk due to Levee. See Notes.  
*Zone X*

Area with Flood Risk due to Levee  
*Zone D*

Area of Minimal Flood Hazard  
*Zone X*

Effective LOMRs  
*Zone D*

Area of Undetermined Flood Hazard  
*Zone D*

Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall

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

Digital Data Available

No Digital Data Available

Unmapped

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/3/2020 at 12:17:41 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

103°49'37.87"W



USGS The National Map: Orthoimagery, Data refreshed April, 2019.

32°37'15.99"N





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Appendix B  
Soil Survey & Geological Data:  
USDA

Map Unit Description: Wink loamy fine sand, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

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## Eddy Area, New Mexico

### WK—Wink loamy fine sand, 0 to 3 percent slopes, eroded

#### Map Unit Setting

*National map unit symbol:* 1w6c  
*Elevation:* 2,700 to 5,000 feet  
*Mean annual precipitation:* 5 to 14 inches  
*Mean annual air temperature:* 57 to 70 degrees F  
*Frost-free period:* 180 to 250 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Wink and similar soils:* 98 percent  
*Minor components:* 2 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Wink

##### Setting

*Landform:* Depressions, swales  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Mixed alluvium and/or eolian sands

##### Typical profile

*H1 - 0 to 8 inches:* loamy fine sand  
*H2 - 8 to 38 inches:* fine sandy loam  
*H3 - 38 to 60 inches:* fine sandy loam

##### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 30 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 1.0  
*Available water storage in profile:* Low (about 5.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A

Map Unit Description: Wink loamy fine sand, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

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*Ecological site:* Loamy Sand (R042XC003NM)  
*Hydric soil rating:* No

#### **Minor Components**

##### **Simona**

*Percent of map unit:* 1 percent  
*Ecological site:* Shallow Sandy (R042XC002NM)  
*Hydric soil rating:* No

##### **Wink**

*Percent of map unit:* 1 percent  
*Ecological site:* Sandy (R042XC004NM)  
*Hydric soil rating:* No

### **Data Source Information**

Soil Survey Area: Eddy Area, New Mexico  
Survey Area Data: Version 15, Sep 15, 2019



Eolian and piedmont deposits (Holocene to middle Pleistocene)—  
Interlayered eolian sands and piedmont–slope deposits along the eastern  
flank of the Pecos River valley, primarily between Roswell and Carlsbad.  
Typically capped by thin eolian deposits



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Appendix C

C-141's:

Initial

Final

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	NAB1900956626
District RP	2RP-5166
Facility ID	
Application ID	pAB1900956353

### Release Notification

#### Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Amanda T. Davis	Contact Telephone 575-748-3371
Contact email amanda.davis@dvn.com	Incident # (assigned by OCD) NAB1900956626
Contact mailing address 6488 Seven Rivers Hwy	

#### Location of Release Source

Latitude 32.6252 Longitude -103.83193  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name Regulus 26 Fed 4H	Site Type Oil
Date Release Discovered 11/05/2018	API# (if applicable) 3001540041

Unit Letter	Section	Township	Range	County
P	26	19S	31E	Eddy

Surface Owner:  State  Federal  Tribal  Private (Name: \_\_\_\_\_)

#### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 12	Volume Recovered (bbls) 12
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release PW pump line from equipment developed pin hole leak inside tank containment. 12BBLS of PW was released inside lined containment. All 12 BBLS were recovered.

State of New Mexico  
Oil Conservation Division

Incident ID	NAB1900956626
District RP	2RP-5166
Facility ID	
Application ID	pAB1900956353

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?   
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?   	

### Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:   
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
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: <u>Kendra DeHoyos</u> Title: <u>EHS Associate</u> Signature: <u>Kendra DeHoyos</u> Date: <u>11/12/2018</u> <small>Digitally signed by Kendra DeHoyos DN: cn=Kendra DeHoyos, o, ou, email=kendra.dehoyos@dmn.com, c=US Date: 2018.11.20 12:58:28 -0700</small> email: <u>kendra.dehoyos@dmn.com</u> Telephone: <u>575-748-3371</u>
<b>OCD Only</b> Received by: <u></u> Date: <u>1/09/2019</u>

## 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?	_____ 140 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico  
Oil Conservation Division

Page 2

Incident ID	NAB1900956626
District RP	2RP-5166
Facility ID	
Application ID	pAB1900956353

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: Chris Jones

Title: Project Manager

Signature: 

Date: 7-7-20

email: [chris@pimaoil.com](mailto:chris@pimaoil.com)

Telephone: 575-964-7740

**OCD Only**

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

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

Incident ID	NAB1900956626
District RP	2RP-5166
Facility ID	
Application ID	pAB1900956353

## Remediation Plan

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

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

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

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

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

Printed Name: Chris Jones

Title: Project Manager

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

Date: 7-7-20 Telephone:

email: [chris@pimaoil.com](mailto:chris@pimaoil.com)

575-964-7740

**OCD Only**

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

- Approved
  Approved with Attached Conditions of Approval
  Denied
  Deferral Approved

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

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

Incident ID	NAB1900956626
District RP	2RP-5166
Facility ID	
Application ID	pAB1900956353

## 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: Chris Jones

Title: Project Manager

Signature: 

Date: 7-7-20

email: [chris@pimaoil.com](mailto:chris@pimaoil.com)

Telephone: 575-964-7740

**OCD Only**

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

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

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

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

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

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

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

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

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

Incident ID	NRM2015053388
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Wesley Mathews	Contact Telephone 575-578-6195
Contact email Wesley.Mathews@dvn.com	Incident # (assigned by OCD)
Contact mailing address 6488 Seven Rivers Hwy	

### Location of Release Source

Latitude 32.625406 Longitude -103.832330  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name Regulus 26 Fed 4H	Site Type Central Tank Battery
Date Release Discovered 5/12/2020	API# (if applicable)

Unit Letter	Section	Township	Range	County
P	26	19S	31E	Eddy

Surface Owner:  State  Federal  Tribal  Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 222.19	Volume Recovered (bbls) 220
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Pin hole leak from piping. All fluid stayed within containment.

State of New Mexico  
Oil Conservation Division

Page 2

Incident ID	NRM2015053388
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? <b>This is considered a major release because it is over 25 BBLs.</b>
--	---

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  
**Wes Mathews sent a notification to OCD, but it was late due to investigation reasons for data for C-141.**

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
--

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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: <b>Kendra DeHoyos</b>	Title: <b>EHS Associate</b>
Signature: <u>Kendra DeHoyos</u>	Date: <u>5/27/2020</u>
email: <u>Kendra.DeHoyos@dvn.com</u>	Telephone: <u>575-748-0167</u>

**OCD Only**

Received by: Ramona Marcus Date: 5/29/2020

NRM2015053388

Spills In Lined Containment	
Measurements Of Standing Fluid	
Length(Ft)	150
Width(Ft)	30
Depth(in.)	4
Total Capacity without tank displacements (bbls)	267.16
No. of 500 bbl Tanks In Standing Fluid	4
No. of Other Tanks In Standing Fluid	1
OD Of Other Tanks In Standing Fluid(feet)	2
Total Volume of standing fluid accounting for tank displacement.	222.19

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

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	NRM2015053388
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	140 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-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

Incident ID	NRM2015053388
District RP	
Facility ID	
Application ID	

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.

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: Tom Bynum Title: EHS Consultant

Signature: *Tom Bynum* Date: 7/8/2020

email: tom.bynum@dvn.com Telephone: 575-748-0176

**OCD Only**

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

Incident ID	NRM2015053388
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

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

Printed Name: Tom Bynum Title: EHS Consultant

Signature: Tom Bynum Date: 7/8/2020

email: tom.bynum@dvn.com Telephone: 575-748-0176

**OCD Only**

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

- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

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

Incident ID	NRM2015053388
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Tom Bynum Title: EHS Consultant

Signature: Tom Bynum Date: 7/8/2020

email: tom.bynum@dvn.com Telephone: 575-748-0176

**OCD Only**

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

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

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

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



Pima Environmental Services

Appendix D:  
Laboratory Reports



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

June 17, 2020

Chris Jones  
Pima Environmental Services LLC  
1601 N. Turner Ste 500  
Hobbs, NM 88240  
TEL: (575) 631-6977  
FAX

RE: Regulus 26 Fed 4H

OrderNo.: 2006425

Dear Chris Jones:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/9/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2006425

Date Reported: 6/17/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-1 N. Composite

Project: Regulus 26 Fed 4H

Collection Date: 6/8/2020 8:30:00 AM

Lab ID: 2006425-001

Matrix: SOIL

Received Date: 6/9/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	16	9.8		mg/Kg	1	6/12/2020 2:22:30 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/12/2020 2:22:30 PM
Surr: DNOP	105	55.1-146		%Rec	1	6/12/2020 2:22:30 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/10/2020 6:27:30 PM
Surr: BFB	81.4	66.6-105		%Rec	1	6/10/2020 6:27:30 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	6/10/2020 6:27:30 PM
Toluene	ND	0.050		mg/Kg	1	6/10/2020 6:27:30 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/10/2020 6:27:30 PM
Xylenes, Total	ND	0.099		mg/Kg	1	6/10/2020 6:27:30 PM
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/10/2020 6:27:30 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	6300	300		mg/Kg	100	6/16/2020 10:29:48 AM

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

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

## Analytical Report

Lab Order 2006425

Date Reported: 6/17/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-2 E. Composite

Project: Regulus 26 Fed 4H

Collection Date: 6/8/2020 8:40:00 AM

Lab ID: 2006425-002

Matrix: SOIL

Received Date: 6/9/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	220	9.5		mg/Kg	1	6/12/2020 2:46:35 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/12/2020 2:46:35 PM
Surr: DNOP	120	55.1-146		%Rec	1	6/12/2020 2:46:35 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/10/2020 6:50:59 PM
Surr: BFB	83.8	66.6-105		%Rec	1	6/10/2020 6:50:59 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	6/10/2020 6:50:59 PM
Toluene	ND	0.048		mg/Kg	1	6/10/2020 6:50:59 PM
Ethylbenzene	ND	0.048		mg/Kg	1	6/10/2020 6:50:59 PM
Xylenes, Total	ND	0.096		mg/Kg	1	6/10/2020 6:50:59 PM
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	6/10/2020 6:50:59 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	4100	150		mg/Kg	50	6/16/2020 10:42:08 AM

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

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

## Analytical Report

Lab Order 2006425

Date Reported: 6/17/2020

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-3 S. Composite

Project: Regulus 26 Fed 4H

Collection Date: 6/8/2020 8:50:00 AM

Lab ID: 2006425-003

Matrix: SOIL

Received Date: 6/9/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	12	9.8		mg/Kg	1	6/12/2020 3:10:50 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/12/2020 3:10:50 PM
Surr: DNOP	97.6	55.1-146		%Rec	1	6/12/2020 3:10:50 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/10/2020 7:14:29 PM
Surr: BFB	83.5	66.6-105		%Rec	1	6/10/2020 7:14:29 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	6/10/2020 7:14:29 PM
Toluene	ND	0.049		mg/Kg	1	6/10/2020 7:14:29 PM
Ethylbenzene	ND	0.049		mg/Kg	1	6/10/2020 7:14:29 PM
Xylenes, Total	ND	0.097		mg/Kg	1	6/10/2020 7:14:29 PM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	6/10/2020 7:14:29 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	340	60		mg/Kg	20	6/15/2020 10:50:08 AM

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

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

## Analytical Report

Lab Order 2006425

Date Reported: 6/17/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-4 W. Composite

Project: Regulus 26 Fed 4H

Collection Date: 6/8/2020 9:00:00 AM

Lab ID: 2006425-004

Matrix: SOIL

Received Date: 6/9/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/12/2020 1:14:56 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/12/2020 1:14:56 PM
Surr: DNOP	121	55.1-146		%Rec	1	6/12/2020 1:14:56 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/10/2020 7:37:58 PM
Surr: BFB	82.5	66.6-105		%Rec	1	6/10/2020 7:37:58 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	6/10/2020 7:37:58 PM
Toluene	ND	0.048		mg/Kg	1	6/10/2020 7:37:58 PM
Ethylbenzene	ND	0.048		mg/Kg	1	6/10/2020 7:37:58 PM
Xylenes, Total	ND	0.096		mg/Kg	1	6/10/2020 7:37:58 PM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	6/10/2020 7:37:58 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JMT</b>
Chloride	5400	300		mg/Kg	100	6/16/2020 10:54:29 AM

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006425

17-Jun-20

**Client:** Pima Environmental Services LLC

**Project:** Regulus 26 Fed 4H

Sample ID: <b>MB-53078</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53078</b>	RunNo: <b>69667</b>								
Prep Date: <b>6/15/2020</b>	Analysis Date: <b>6/15/2020</b>	SeqNo: <b>2418561</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-53078</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53078</b>	RunNo: <b>69667</b>								
Prep Date: <b>6/15/2020</b>	Analysis Date: <b>6/15/2020</b>	SeqNo: <b>2418562</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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

WO#: 2006425

17-Jun-20

**Client:** Pima Environmental Services LLC**Project:** Regulus 26 Fed 4H

Sample ID: <b>LCS-53019</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>53019</b>		RunNo: <b>69585</b>							
Prep Date: <b>6/11/2020</b>	Analysis Date: <b>6/12/2020</b>		SeqNo: <b>2415665</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	5.2		5.000		104	55.1	146			

Sample ID: <b>MB-53019</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>53019</b>		RunNo: <b>69585</b>							
Prep Date: <b>6/11/2020</b>	Analysis Date: <b>6/12/2020</b>		SeqNo: <b>2415666</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		127	55.1	146			

**Qualifiers:**

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006425

17-Jun-20

**Client:** Pima Environmental Services LLC

**Project:** Regulus 26 Fed 4H

Sample ID: <b>mb-52971</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>52971</b>		RunNo: <b>69544</b>							
Prep Date: <b>6/9/2020</b>	Analysis Date: <b>6/10/2020</b>		SeqNo: <b>2413782</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	800		1000		79.8	66.6	105			

Sample ID: <b>ics-52971</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>52971</b>		RunNo: <b>69544</b>							
Prep Date: <b>6/9/2020</b>	Analysis Date: <b>6/10/2020</b>		SeqNo: <b>2413783</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.2	80	120			
Surr: BFB	930		1000		93.5	66.6	105			

**Qualifiers:**

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

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

WO#: 2006425

17-Jun-20

**Client:** Pima Environmental Services LLC**Project:** Regulus 26 Fed 4H

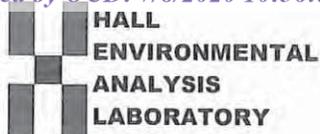
Sample ID: <b>mb-52971</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52971</b>	RunNo: <b>69544</b>								
Prep Date: <b>6/9/2020</b>	Analysis Date: <b>6/10/2020</b>	SeqNo: <b>2413808</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.6	80	120			

Sample ID: <b>LCS-52971</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52971</b>	RunNo: <b>69544</b>								
Prep Date: <b>6/9/2020</b>	Analysis Date: <b>6/10/2020</b>	SeqNo: <b>2413809</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.9	80	120			
Toluene	0.97	0.050	1.000	0	97.0	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

**Qualifiers:**

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

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



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

# Sample Log-In Check List

Client Name: **PIMA ENVIRONMENTAL**      Work Order Number: **2006425**      RcptNo: **1**

Received By: **Isaiah Ortiz**      6/9/2020 9:30:00 AM      *I-Ox*  
 Completed By: **Isaiah Ortiz**      6/9/2020 9:37:54 AM      *I-Ox*  
 Reviewed By: *DAD 6/9/20*

**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?      Yes       No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody?      Yes       No   
 13. Is it clear what analyses were requested?      Yes       No   
 14. Were all holding times able to be met?      Yes       No   
 (If no, notify customer for authorization.)

*JO*  
*6/9/20*  
 # of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	Not Present			

### Chain-of-Custody Record

Client: Pima Environmental Services, LLC

Mailing Address: 1601 N. Turner St 500

Phone #: 575-631-4977

email or Fax#: Chris@pimaoil.com

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

Accreditation:  Az Compliance

NELAC  Other

EDD (Type) \_\_\_\_\_

Turn-Around Time: 5 Day Turn  
 Standard  Rush

Project Name: Regulus 26 Fed 4H

Project #: 1

Project Manager: Chris Jones

Sampler: \_\_\_\_\_

On Ice:  Yes  No

# of Coolers: \_\_\_\_\_

Cooler Temp (including CF): 17-0(CF) 17.1 (°C)

Container Type and #

Preservative Type

HEAL No.

TPH:8015D(GRO / DRO / MRO)

BTEX / MTBE / TMB's (8021)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Chlorides

Analysis Request

Remarks:

Received by: [Signature] Date: 6/8/20 Time: 12:50

Relinquished by: [Signature] Date: 6/8/20 Time: 19:10

Received by: [Signature] Date: 6/9/20 Time: 09:30

Relinquished by: [Signature]

Received by: [Signature] Date: 6/9/20 Time: 09:30

Relinquished by: [Signature]

Received by: [Signature] Date: 6/9/20 Time: 09:30

Relinquished by: [Signature]

Received by: [Signature] Date: 6/9/20 Time: 09:30

Relinquished by: [Signature]

Received by: [Signature] Date: 6/9/20 Time: 09:30

Relinquished by: [Signature]

Received by: [Signature] Date: 6/9/20 Time: 09:30

Relinquished by: [Signature]

Received by: [Signature] Date: 6/9/20 Time: 09:30



Pima Environmental Services

Appendix E:  
Photographic Documentation

## Regulus 26 Fed #4H Liner Photos

