



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 300 feet of any continuously flowing watercourse or any other significant watercourse | | | | | x |
| Within 200 feet of any lakebed, sinkhole or playa lake (measures from the ordinary high-water mark | | | | | x |
| Within 300 feet from an occupied permanent residence, school, hospital, institution or church | | | | | x |
| Within 500 feet of a spring or a private, domestic freshwater well used by less than five households for domestic or stock water purposes | | | | | x |
| Within 1000 feet of any freshwater well or spring | | | | | x |
| Within incorporated municipal boundaries or within a defined municipal freshwater well field | | | | | x |
| Within 300 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



Pima Environmental Services

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

Regulus 26 Fed 4



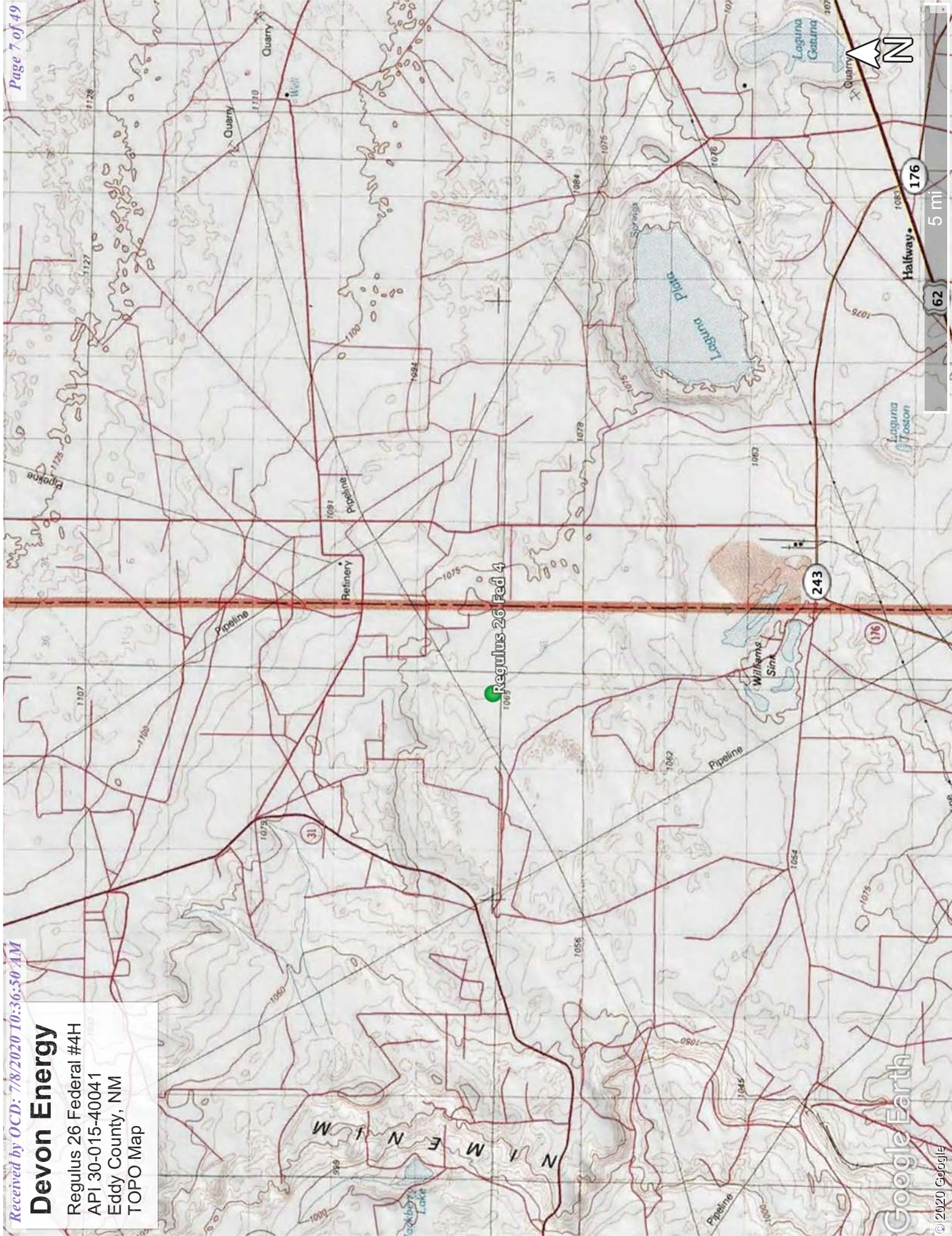
176

5 mi

62

243

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



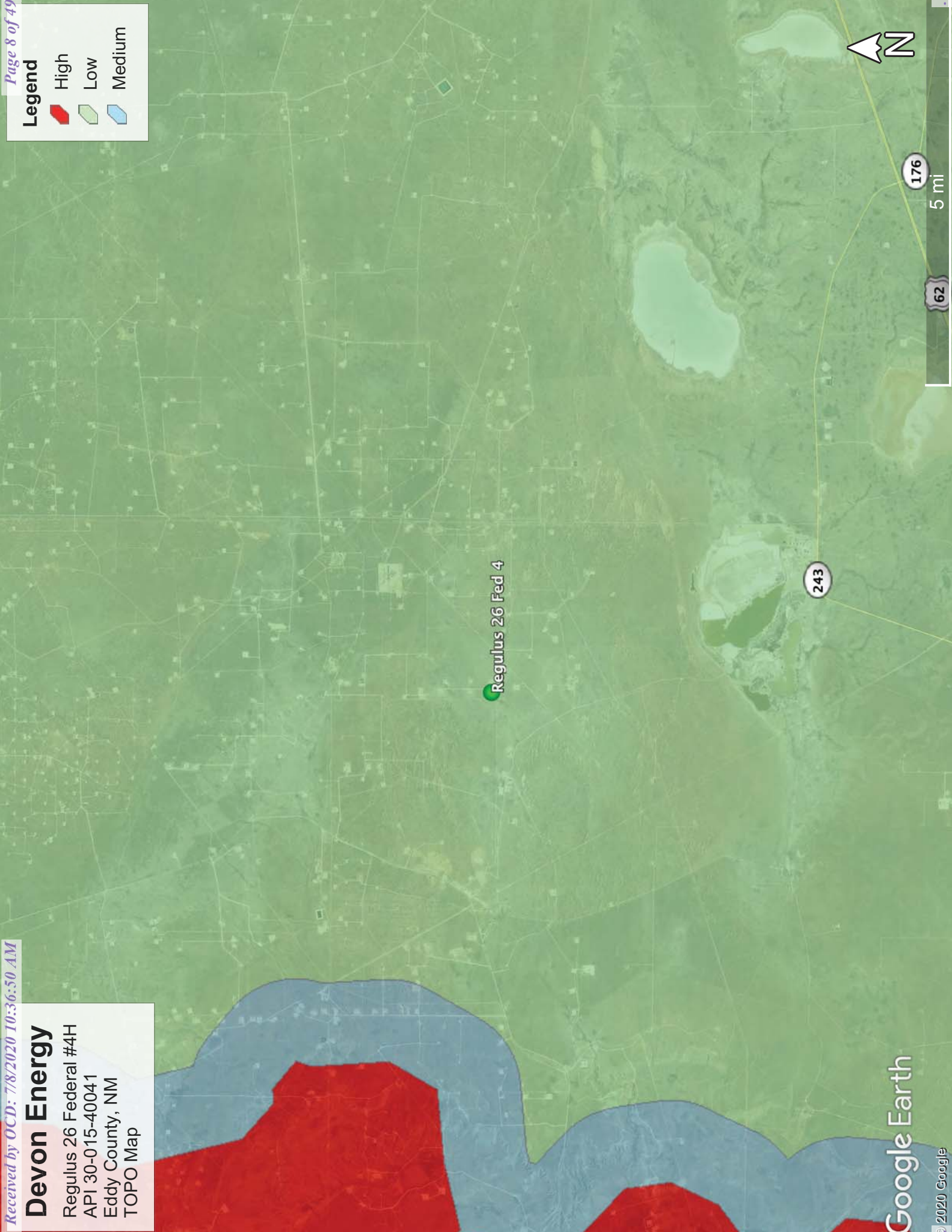
Devon Energy

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

Legend

- High
- Low
- Medium


Regulus 26 Fed 4




Devon Energy


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

Legend

 Composite Samples



Regulus 26 Fed 4



Spill Area





Pima Environmental Services

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 | DepthWell | DepthWater | Water Column |
|------------------------------|------|---------------|--------|------|------|-----|-----|-----|-----|--------|----------|----------|-----------|------------|--------------|
| CP00641 POD1 | | CP | ED | 4 | 1 | 36 | 19S | 31E | | 610247 | 3609634* | 1010 | 300 | 130 | 170 |
| CP00642 POD1 | | 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

The map displays a geographical area with several roads labeled: Shugart Rd, Plant Rd, Lusk Rd, and Maljamar Rd. A scale bar at the bottom indicates distances of 0, 0.3, and 0.6 miles. A coordinate pair -103.355, 32.550 is shown. A pop-up window titled "Site Information" provides details for a specific site: Site Number: 323712103491001, Site Name: 19S.32E.31.114, Site Type: Well, Agency: USGS, and a link to Access Data. The map also features a legend on the left and a "Site Information" panel on the right.

Site Information

Site Number: 323712103491001
Site Name: 19S.32E.31.114
Site Type: Well
Agency: USGS
[Access Data](#)

Site Information

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

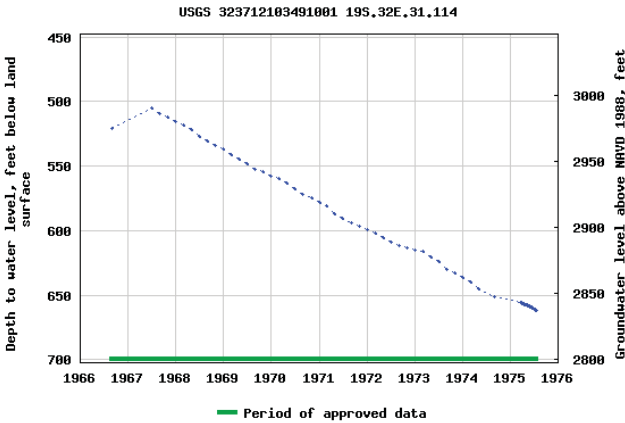
Groundwater: Field measurements

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

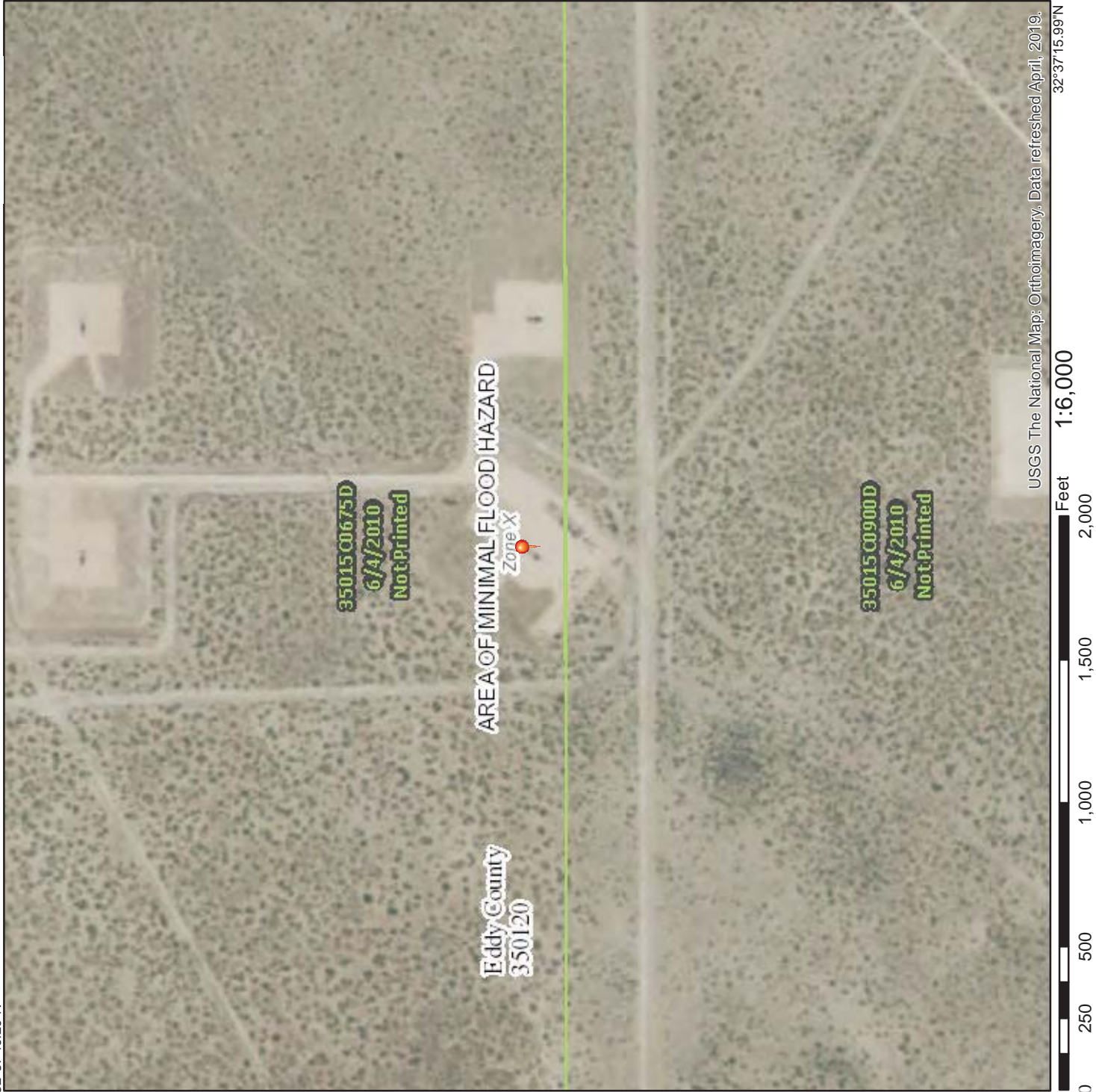
Subscribe for system changes

News

Legend

32°37'46.29"N

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





Pima Environmental Services

Appendix B
Soil Survey & Geological Data:
USDA

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

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

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



Pima Environmental Services

Appendix C

C-141's:

Initial

Final

Page 21 of 49
Received by OCD: 7/8/2020 10:36:50 AM

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.

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

Initial Response

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

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.

Telephone: 575-748-3371

Date: 1/09/2019

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? | <u>140</u> (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 not 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

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

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

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

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 | |

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.

| | |
|----------------|---------------|
| 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? This is considered a major release because it is over 25 BBLS. |
| 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 <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: Kendra DeHoyos | Title: EHS Associate |
| Signature: <u>Kendra DeHoyos</u> | Date: <u>5/27/2020</u> |
| email: Kendra.DeHoyos@dvn.com | Telephone: 575-748-0167 |
| <u>OCD Only</u> Received by: <u>Ramona Marcus</u> Date: <u>5/29/2020</u> | |

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? | <u>140</u> (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 not 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

| | |
|----------------|---------------|
| 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

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 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 |
|--|--------|----------|------|-------|-----|-----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | Analyst: BRM |
| 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 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | Analyst: NSB |
| 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 |
| EPA METHOD 8021B: VOLATILES | | | | | | Analyst: NSB |
| 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 |
| EPA METHOD 300.0: ANIONS | | | | | | Analyst: JMT |
| 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.

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

Analytical Report

Lab Order 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 |
|--|--------|----------|------|-------|----|-----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | Analyst: BRM |
| 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 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | Analyst: NSB |
| 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 |
| EPA METHOD 8021B: VOLATILES | | | | | | Analyst: NSB |
| 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 |
| EPA METHOD 300.0: ANIONS | | | | | | Analyst: JMT |
| 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.

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

Analytical Report

Lab Order 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 |
|--|--------|----------|------|-------|----|-----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | Analyst: BRM |
| 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 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | Analyst: NSB |
| 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 |
| EPA METHOD 8021B: VOLATILES | | | | | | Analyst: NSB |
| 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 |
| EPA METHOD 300.0: ANIONS | | | | | | Analyst: MRA |
| 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.

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

Analytical Report

Lab Order 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 |
|--|--------|----------|------|-------|-----|-----------------------|
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | Analyst: BRM |
| 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 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | Analyst: NSB |
| 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 |
| EPA METHOD 8021B: VOLATILES | | | | | | Analyst: NSB |
| 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 |
| EPA METHOD 300.0: ANIONS | | | | | | Analyst: JMT |
| 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.

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

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

| | | | | | | | | | | |
|-----------------------------|--------|---------------------------------|-----------|---|------|---------------------|-----------|------|----------|------|
| Sample ID: LCS-53078 | | SampType: lcs | | TestCode: EPA Method 300.0: Anions | | | | | | |
| Client ID: LCSS | | Batch ID: 53078 | | RunNo: 69667 | | | | | | |
| Prep Date: 6/15/2020 | | Analysis Date: 6/15/2020 | | SeqNo: 2418562 | | Units: mg/Kg | | | | |
| 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 | | | |

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: LCS-53019 | SampType: LCS | | TestCode: EPA Method 8015M/D: Diesel Range Organics | | | | | | | |
|-----------------------------|---------------------------------|-----|--|-------------|---------------------|----------|-----------|------|----------|------|
| Client ID: LCSS | Batch ID: 53019 | | RunNo: 69585 | | | | | | | |
| Prep Date: 6/11/2020 | Analysis Date: 6/12/2020 | | SeqNo: 2415665 | | Units: mg/Kg | | | | | |
| 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: MB-53019 | SampType: MBLK | | TestCode: EPA Method 8015M/D: Diesel Range Organics | | | | | | | |
|--------------------------------|---------------------------------|-----|--|-------------|---------------------|----------|-----------|------|----------|------|
| Client ID: PBS | Batch ID: 53019 | | RunNo: 69585 | | | | | | | |
| Prep Date: 6/11/2020 | Analysis Date: 6/12/2020 | | SeqNo: 2415666 | | 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 | 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: mb-52971 | SampType: MBLK | TestCode: EPA Method 8015D: Gasoline Range | | | | | | | | |
| Client ID: PBS | Batch ID: 52971 | RunNo: 69544 | | | | | | | | |
| Prep Date: 6/9/2020 | Analysis Date: 6/10/2020 | SeqNo: 2413782 | | 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 | 800 | | 1000 | | 79.8 | 66.6 | 105 | | | |

| | | | | | | | | | | |
|-------------------------------|--------------------------|--|-----------|--------------|------|----------|-----------|------|----------|------|
| Sample ID: lcs-52971 | SampType: LCS | TestCode: EPA Method 8015D: Gasoline Range | | | | | | | | |
| Client ID: LCSS | Batch ID: 52971 | RunNo: 69544 | | | | | | | | |
| Prep Date: 6/9/2020 | Analysis Date: 6/10/2020 | SeqNo: 2413783 | | 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 | 92.2 | 80 | 120 | | | |
| Surr: BFB | 930 | | 1000 | | 93.5 | 66.6 | 105 | | | |

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

WO#: 2006425

17-Jun-20

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

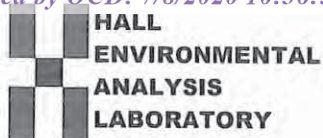
| Sample ID: mb-52971 | SampType: MBLK | TestCode: EPA Method 8021B: Volatiles | | | | | | | | |
|----------------------------|---------------------------------|--|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: PBS | Batch ID: 52971 | RunNo: 69544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

| Sample ID: LCS-52971 | SampType: LCS | TestCode: EPA Method 8021B: Volatiles | | | | | | | | |
|-----------------------------|---------------------------------|--|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: LCSS | Batch ID: 52971 | RunNo: 69544 | | | | | | | | |
| Prep Date: 6/9/2020 | Analysis Date: 6/10/2020 | SeqNo: 2413809 | 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 | 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 $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

| Cooler No | Temp $^{\circ}\text{C}$ | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|-------------------------|-----------|-------------|---------|-----------|-----------|
| 1 | 1.7 | Good | Not Present | | | |



Pima Environmental Services

Appendix E:
Photographic Documentation

Regulus 26 Fed #4H Liner Photos

