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Site Assessment and Closure Report

Boundry Raider 6 7 Fed Com #212H
Lea County, New Mexico
API 30-025-44146
*1RP-4996

Prepared For:

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

Prepared By:

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

April 1, 2020

talonlpe.com • Toll Free: (866) 742-0742

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

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

Subject: **Site Assessment and Closure Report**
Boundry Raider 6 7 Fed Com #212H
Lea County, New Mexico
API 30-025-44146
*1RP-4996

Dear Mr. Amos & Mr. Bratcher,

Devon Energy Production Company (Devon) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above-referenced location. The incident description, soil sampling results, liner inspection, and closure requests are presented herein.

Site Information

The Boundry Raider 6 7 Fed Com #212H is located approximately thirty (30) miles southeast of Carlsbad, New Mexico. The legal location for this release is Unit Letter C, Section 6, Township 23 South and Range 32 East in Lea County, New Mexico. More specifically, the latitude and longitude for the release are 32.339223 North and -103.715073 West. A Site Map is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Maljamar and palomas fine sand, 0 to 3 percent slopes. See [Appendix II](#) for the referenced soil survey. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is eloian and piedmont deposits, Holocene to middle Pleistocene in age. Drainage courses in this area are well-drained.

Ground Water and Site Characterization

The New Mexico Office of the State Engineer Database indicates the nearest reported depth to groundwater is 639-feet below ground surface (BGS). See [Appendix II](#) for the referenced groundwater depth. This site is located within a low potential Karst area.

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

Approximate Depth to Groundwater	639 Feet/BGS
---	---------------------

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

Because the release did not occur in any of these areas and the depth to groundwater is greater than 100-feet in-depth, based on the site characterization data, the cleanup criteria for this site are as follows.

Table I Closure Criteria for Soils Impacted by a Release			
Depth below horizontal extents of release to ground water less than 10,000 mg/l TDS	Constituent	Method	Limit
>100 feet	Total Chlorides	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

Incident Description

*1RP-4996. On March 5, 2018, a contractor was removing a frac tank from the location and failed to install the end cap back onto the manifolded line connected to additional tanks on location. This resulted in a release of approximately 30 barrels (bbls), 29.5 bbls of KCL water and 0.5 bbls of oil. All fluids stayed on location, and 19.5 bbls of KCL water and 0.5 bbls of oil were recovered. The site map is presented in [Appendix I](#).

On March 5, 2020, Talon mobilized personnel to the site conducting a site assessment and collecting soil samples. Sample locations are shown on the attached site map and the results of our sampling event are presented in the following data table.

Soil Sampling

3-5-20 Soil Sample Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	DRO + GRO combined = 1000 mg/kg			2500 mg/kg	20,000 mg/kg
S-1	3/5/2020	0-1'	ND	ND	ND	ND	ND	ND	32
		1-2'	ND	ND	ND	ND	ND	ND	1220
S-2		0-1'	ND	ND	ND	ND	ND	ND	2480
		1-2'	ND	ND	ND	ND	ND	ND	1410
S-3		0-1 R	ND	ND	ND	ND	ND	ND	688
S-4		0-1 R	ND	ND	ND	ND	ND	ND	2520

ND-Analyte Not Detected, R-Refusal

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

Remedial Actions

- Based upon the results of our sampling event, none of the analytical results exceeded the NMOCD clean up criteria for this site. Therefore there was no need for soil remediation activities.
- Based upon the photo documentation provided and the results of our sampling event, it is apparent the integrity of the battery liner is intact.

Closure

Based on this site characterization, liner inspection, and analytical results, we request that no further actions be required, and that closure with regard to the attached incident be granted.

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

Respectfully submitted,

TALON/LPE

Chris Jones
Project Manager

Attachments:

- Appendix I Site Maps, Karst Map, TOPO Map & Location Map
- Appendix II Groundwater Data, FEMA Flood Zone, Soil Survey
- Appendix III Initial and Final C-141's
- Appendix IV Photographic Documentation
- Appendix V Laboratory Results



APPENDIX I

SITE MAP

KARST MAP

TOPO MAP

LOCATION MAP

Boundary Raider 6 7 Fed Com #212H

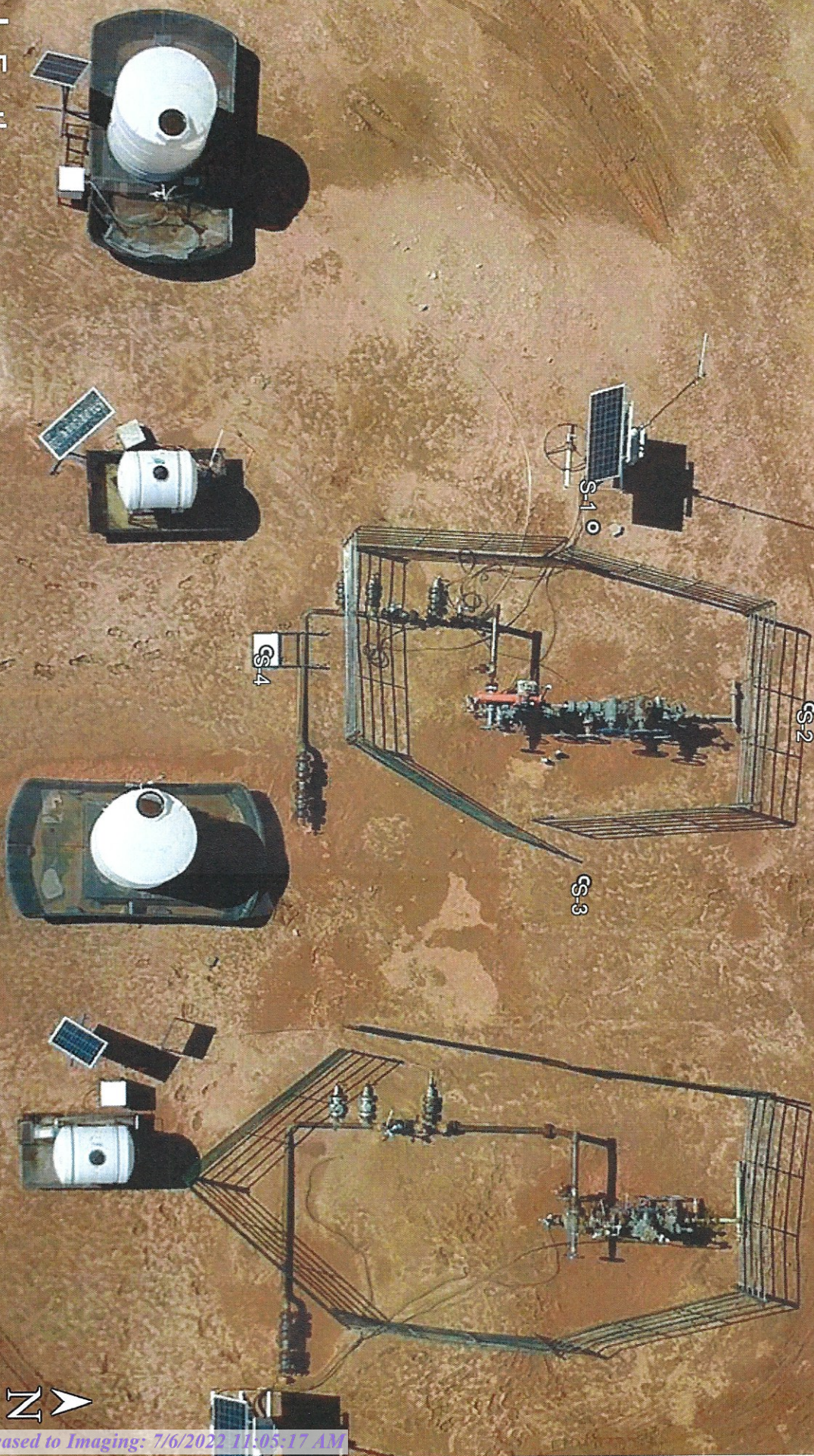
Devon Energy Production Company
API # 30-025-44146
Lea County, NM
Site Map

Legend
● Soil Sample

Received by OCD: 5/8/2020 9:17:28 AM

Google Earth

20 ft



Released to Imaging: 7/6/2022 11:05:17 AM

Boundry Raider 6 7 Fed Com #212H

Devon Energy Production Company
API 30-015-44146
Lea County, NM
Karst Map

Legend

	High
	Low
	Medium

Google Earth
2020 Google
Image Landsat / Copernicus

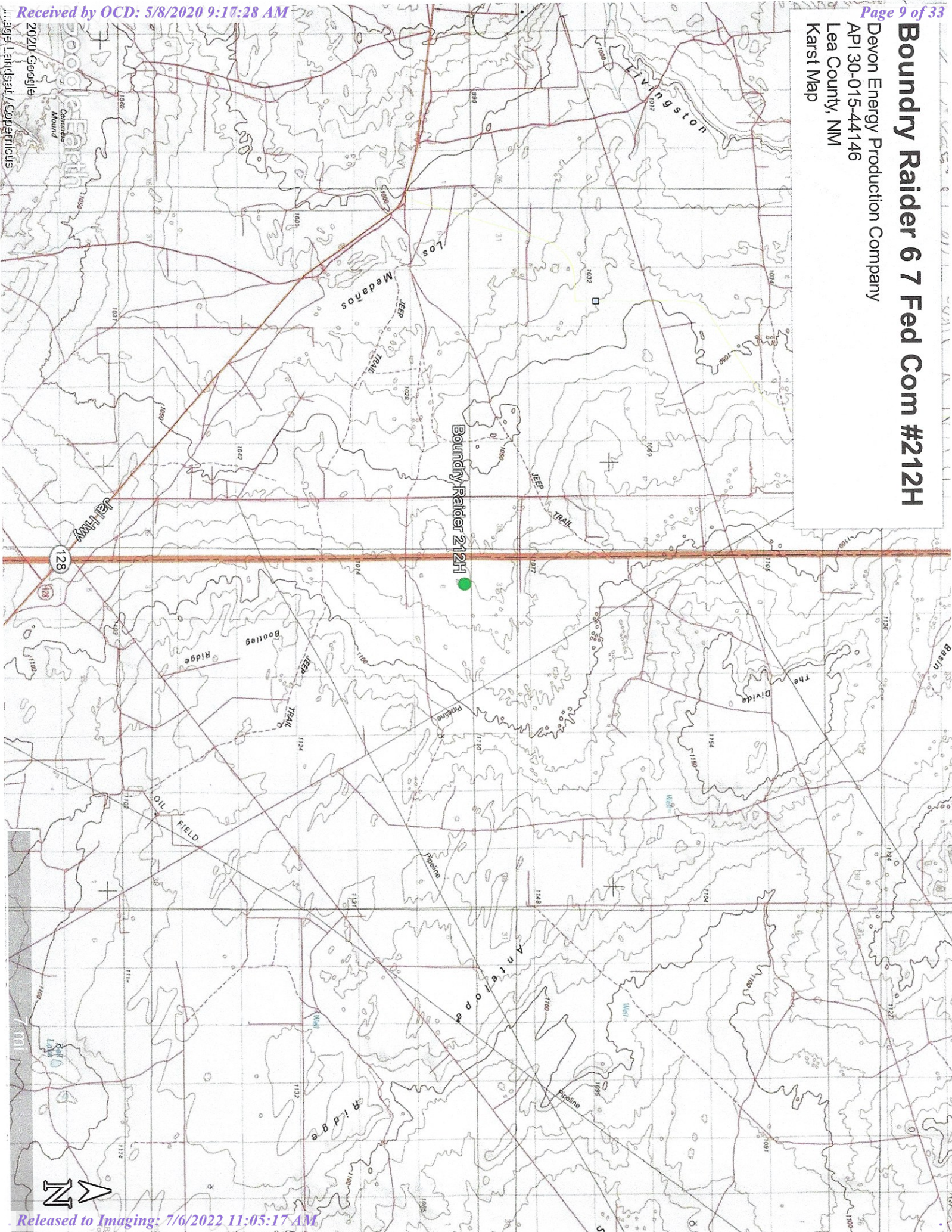
Boundry Raider 212H

Del Hwy
128

7 mi



Devon Energy Production Company
API 30-015-44146
Lea County, NM
Karst Map

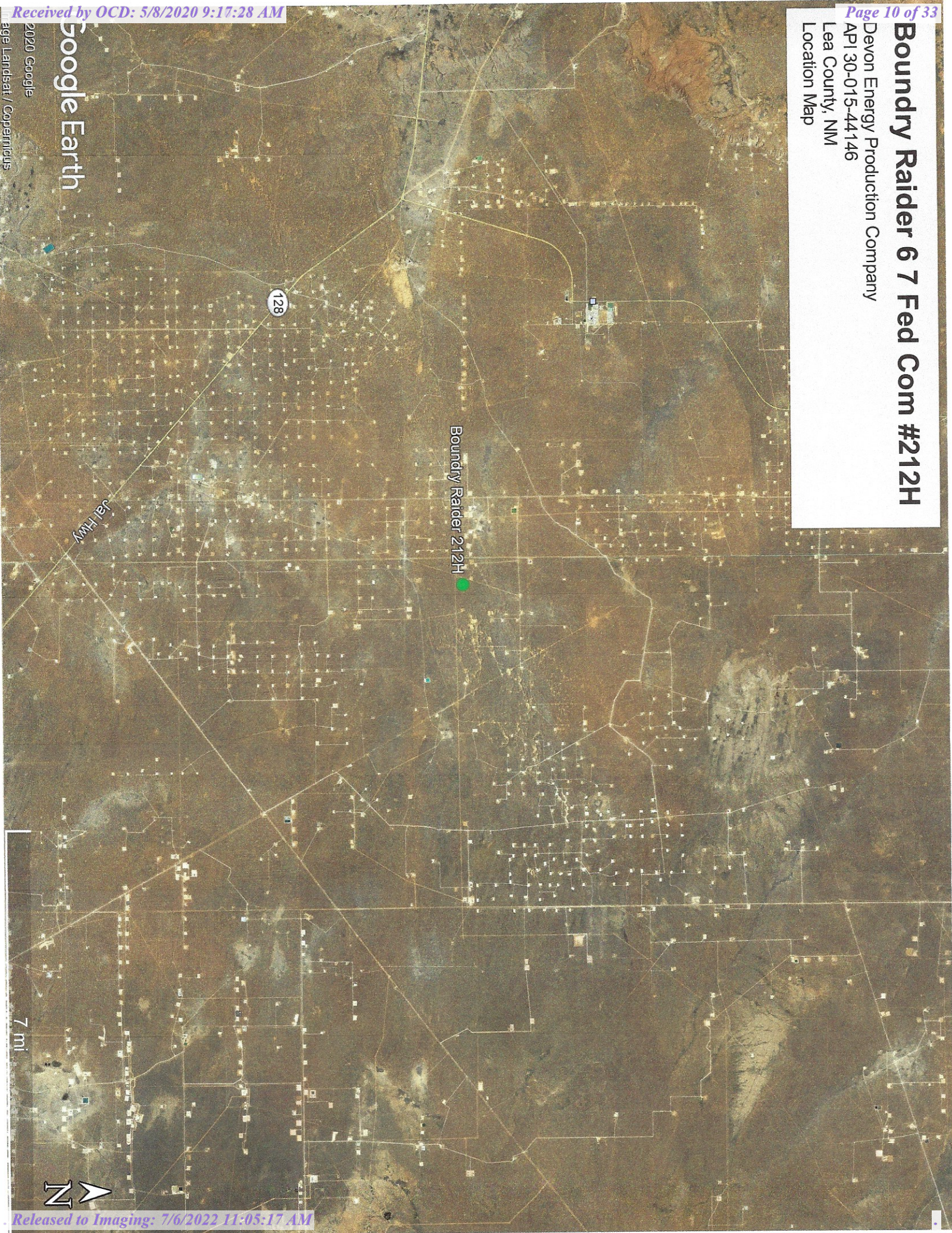


Boundry Raider 6 7 Fed Com #212H

Devon Energy Production Company
API 30-015-44146
Lea County, NM
Location Map

Received by OCD: 5/8/2020 9:17:28 AM

Google Earth
2020 Google
Image Landsat / Copernicus





APPENDIX II

GROUNDWATER DATA

SOIL SURVEY

FEMA FLOOD ZONE



(In feet)

Average Depth to Water:	533 feet
Minimum Depth:	428 feet
Maximum Depth:	639 feet

Radius: 6000

*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.

WATER COLUMN/ AVERAGE DEPTH TO WATER

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

Lea County, New Mexico

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

Map Unit Setting

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

Map Unit Composition

Palomas and similar soils: 45 percent
Maljamar and similar soils: 45 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Palomas

Setting

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

Typical profile

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

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 45 percent
Gypsum, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 2.0
Available water storage in profile: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

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

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Ecological site: Loamy Sand (R042XC003NM)

Hydric soil rating: No

Description of Maljamar

Setting

Landform: Plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

*Parent material: Sandy eolian deposits derived from sedimentary
rock*

Typical profile

A - 0 to 24 inches: fine sand

Bt - 24 to 50 inches: sandy clay loam

Bkm - 50 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 40 to 60 inches to petrocalcic

Natural drainage class: Well drained

Runoff class: Very low

*Capacity of the most limiting layer to transmit water (Ksat): Very
low to moderately low (0.00 to 0.06 in/hr)*

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 5 percent

*Salinity, maximum in profile: Nonsaline to very slightly saline (0.0
to 2.0 mmhos/cm)*

Sodium adsorption ratio, maximum in profile: 2.0

Available water storage in profile: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 7e

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Ecological site: Loamy Sand (R042XC003NM)

Hydric soil rating: No

Minor Components

Wink

Percent of map unit: 5 percent

Ecological site: Loamy Sand (R042XC003NM)

Hydric soil rating: No

Kermit

Percent of map unit: 5 percent

Ecological site: Sandhills (R042XC022NM)

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

Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 16, Sep 15, 2019



National Flood Hazard Layer FIRMette



Legend

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

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, AE, AH, VE, AR With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway
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OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X Future Conditions 1% Annual Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee, See Notes, Zone X Area with Flood Risk due to Levee Zone D
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OTHER AREAS	NO SCREEN Effective LOMRs Area of Minimal Flood Hazard Zone X Area of Undetermined Flood Hazard Zone X
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall

OTHER FEATURES	Cross Sections with 1% Annual Chance Water Surface Elevation Coastal Transsect Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transsect Baseline Profile Baseline Hydrographic Feature
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MAP PANELS	Digital Data Available No Digital Data Available Unmapped
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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 3/27/2020 at 4:14:38 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.

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

250 500 1,000 1,500 2,000 Feet 1:6,000

103°42'35.54"W

32°20'6.00"N



APPENDIX III

INITIAL C-141 & FINAL C-141

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

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Devon Energy Production Co LP	Contact: Danny Velo, Devon Completions Foreman
Address: 6488 Seven Rivers Hwy, Artesia, NM 88210	Telephone No.: 575-703-3360
Facility Name: Boundary Raider 6 7 Fed Com #212H	Facility Type: Oil

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-025-44146
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LOCATION OF RELEASE

Unit Letter C	Section 6	Township 23S	Range 32E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude 32.339223 Longitude 103.715073 NAD83

NATURE OF RELEASE

Type of Release: KCl Water / Oil circulated through wellbore	Volume of Release: 30 bbls	Volume Recovered: 20 bbls
Source of Release: Frac Tank	Date and Hour of Occurrence 3/5/18, 10:03 AM MST	Date and Hour of Discovery 3/5/18, 10:03 AM MST
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu / OCD Shelly Tucker / BLM	
By Whom? Mike Shoemaker / EHS	Date and Hour: 3/6/18, 8:45 AM MST	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

NA

RECEIVED

By Olivia Yu at 12:48 pm, Mar 21, 2018

Describe Cause of Problem and Remedial Action Taken.*

A contractor was removing a Frac tank from the location and failed to install the end cap back onto the line that was manifolded to additional tanks at the location. The end cap was installed and a vac truck was called to assist with fluid recovery.

Describe Area Affected and Cleanup Action Taken.*

Approximately 30 bbls (29.5 bbls of KCl water and 0.5 bbls oil) that were circulated through the wellbore were released to the pad surface. Approximately 20 bbls was recovered (19.5 bbls KCl water and 0.5 bbls oil). An environmental contractor will be contacted to assist with delineation and remediation efforts.

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

Signature: <i>Denise Menoud</i>		OIL CONSERVATION DIVISION	
Printed Name: Denise Menoud		Approved by Environmental Specialist: <i>gy</i>	
Title: Field Admin Support	Approval Date: 3/21/2018	Expiration Date:	
E-mail Address: Denise.Menoud@dmv.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>	
Date: 3/6/2018	Phone: 575-746-5544		

* Attach Additional Sheets If Necessary

1RP-4996

nOY1808046334

pOY1808047439

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

Initial Report ☐ Final Report ☒

Name of Company: Devon Energy Production Co LP	Contact: Amanda Davis, Environmental Representative
Address: 6488 Seven Rivers Hwy, Artesia, NM 88210	Telephone No.: 575-748-0176
Facility Name: Boundary Raider 6 7 Fed Com #212H	Facility Type: Oil

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-025-44146
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LOCATION OF RELEASE

Unit Letter C	Section 6	Township 23S	Range 32E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude 32.339223 Longitude 103.715073 NAD83

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Source of Release: Frac Tank	Date and Hour of Occurrence 3/5/18, 10:03 AM MST	Date and Hour of Discovery 3/5/18, 10:03 AM MST
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu / OCD Shelly Tucker / BLM	
By Whom? Mike Shoemaker / EHS	Date and Hour: 3/6/18, 8:45 AM MST	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

NA

Describe Cause of Problem and Remedial Action Taken.*


A contractor was removing a Frac tank from the location and failed to install the end cap back onto the line that was manifolded to additional tanks at the location. The end cap was installed and a vac truck was called to assist with fluid recovery.

Describe Area Affected and Cleanup Action Taken.*

Approximately 30 bbls (29.5 bbls of KCl water and 0.5 bbls oil) that were circulated through the wellbore were released to the pad surface. A site assessment and soil samples were collected, the laboratory results showed levels below clean up criteria.

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

OIL CONSERVATION DIVISION

Signature: 	Approved by Environmental Specialist:	
Printed Name: Chris Jones	Jocelyn Harimon	
Title: Environmental Project Manager	Approval Date: 07/06/2022	Expiration Date:
E-mail Address: cjones@talonlpe.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 4-1-20 Phone: 575-631-6977		

* Attach Additional Sheets If Necessary



APPENDIX IV

PHOTOGRAPHIC DOCUMENTATION

Location Photos



Location Photos





APPENDIX V

LABORATORY DATA



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

March 11, 2020

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: BOUNDARY RAIDER 6 7 FED COM 212H

Enclosed are the results of analyses for samples received by the laboratory on 03/09/20 14:15.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	03/09/2020	Sampling Date:	03/05/2020
Reported:	03/11/2020	Sampling Type:	Soil
Project Name:	BOUNDARY RAIDER 6 7 FED COM 212H	Sampling Condition:	Cool & Intact
Project Number:	700794.331.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-1 0-1' (H000739-01)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/10/2020	ND	1.79	89.4	2.00	10.3		
Toluene*	<0.050	0.050	03/10/2020	ND	1.78	89.0	2.00	10.2		
Ethylbenzene*	<0.050	0.050	03/10/2020	ND	1.81	90.5	2.00	10.2		
Total Xylenes*	<0.150	0.150	03/10/2020	ND	5.30	88.4	6.00	10.4		
Total BTEX	<0.300	0.300	03/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/10/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2020	ND	198	99.1	200	6.26	
DRO >C10-C28*	<10.0	10.0	03/10/2020	ND	202	101	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	03/10/2020	ND					

Surrogate: 1-Chlorooctane 93.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 100 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	03/09/2020	Sampling Date:	03/05/2020
Reported:	03/11/2020	Sampling Type:	Soil
Project Name:	BOUNDARY RAIDER 6 7 FED COM 212H	Sampling Condition:	Cool & Intact
Project Number:	700794.331.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-1 1-2' (H000739-02)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/10/2020	ND	1.79	89.4	2.00	10.3		
Toluene*	<0.050	0.050	03/10/2020	ND	1.78	89.0	2.00	10.2		
Ethylbenzene*	<0.050	0.050	03/10/2020	ND	1.81	90.5	2.00	10.2		
Total Xylenes*	<0.150	0.150	03/10/2020	ND	5.30	88.4	6.00	10.4		
Total BTEX	<0.300	0.300	03/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 100 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1220	16.0	03/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2020	ND	198	99.1	200	6.26	
DRO >C10-C28*	<10.0	10.0	03/10/2020	ND	202	101	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	03/10/2020	ND					

Surrogate: 1-Chlorooctane 91.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 101 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	03/09/2020	Sampling Date:	03/05/2020
Reported:	03/11/2020	Sampling Type:	Soil
Project Name:	BOUNDARY RAIDER 6 7 FED COM 212H	Sampling Condition:	Cool & Intact
Project Number:	700794.331.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-2 0-1' (H000739-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2020	ND	1.79	89.4	2.00	10.3	
Toluene*	<0.050	0.050	03/10/2020	ND	1.78	89.0	2.00	10.2	
Ethylbenzene*	<0.050	0.050	03/10/2020	ND	1.81	90.5	2.00	10.2	
Total Xylenes*	<0.150	0.150	03/10/2020	ND	5.30	88.4	6.00	10.4	
Total BTEX	<0.300	0.300	03/10/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	03/10/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2020	ND	198	99.1	200	6.26	
DRO >C10-C28*	<10.0	10.0	03/10/2020	ND	202	101	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	03/10/2020	ND					

Surrogate: 1-Chlorooctane 90.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 103 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	03/09/2020	Sampling Date:	03/05/2020
Reported:	03/11/2020	Sampling Type:	Soil
Project Name:	BOUNDARY RAIDER 6 7 FED COM 212H	Sampling Condition:	Cool & Intact
Project Number:	700794.331.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-2 1-2' (H000739-04)

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/10/2020	ND	1.79	89.4	2.00	10.3		
Toluene*	<0.050	0.050	03/10/2020	ND	1.78	89.0	2.00	10.2		
Ethylbenzene*	<0.050	0.050	03/10/2020	ND	1.81	90.5	2.00	10.2		
Total Xylenes*	<0.150	0.150	03/10/2020	ND	5.30	88.4	6.00	10.4		
Total BTEX	<0.300	0.300	03/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1410	16.0	03/10/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2020	ND	198	99.1	200	6.26	
DRO >C10-C28*	<10.0	10.0	03/10/2020	ND	202	101	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	03/10/2020	ND					

Surrogate: 1-Chlorooctane 89.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 98.9 % 42.2-156

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Analytical Results For:

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

Received:	03/09/2020	Sampling Date:	03/05/2020
Reported:	03/11/2020	Sampling Type:	Soil
Project Name:	BOUNDARY RAIDER 6 7 FED COM 212H	Sampling Condition:	Cool & Intact
Project Number:	700794.331.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-3 0-1' R (H000739-05)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/10/2020	ND	1.79	89.4	2.00	10.3		
Toluene*	<0.050	0.050	03/10/2020	ND	1.78	89.0	2.00	10.2		
Ethylbenzene*	<0.050	0.050	03/10/2020	ND	1.81	90.5	2.00	10.2		
Total Xylenes*	<0.150	0.150	03/10/2020	ND	5.30	88.4	6.00	10.4		
Total BTEX	<0.300	0.300	03/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PIB) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	688	16.0	03/10/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2020	ND	198	99.1	200	6.26	
DRO >C10-C28*	<10.0	10.0	03/10/2020	ND	202	101	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	03/10/2020	ND					

Surrogate: 1-Chlorooctane 94.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 104 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	03/09/2020	Sampling Date:	03/05/2020
Reported:	03/11/2020	Sampling Type:	Soil
Project Name:	BOUNDARY RAIDER 6 7 FED COM 212H	Sampling Condition:	Cool & Intact
Project Number:	700794.331.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-4 0-1' R (H000739-06)

BTEX 8021B			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/10/2020	ND	1.79	89.4	2.00	10.3		
Toluene*	<0.050	0.050	03/10/2020	ND	1.78	89.0	2.00	10.2		
Ethylbenzene*	<0.050	0.050	03/10/2020	ND	1.81	90.5	2.00	10.2		
Total Xylenes*	<0.150	0.150	03/10/2020	ND	5.30	88.4	6.00	10.4		
Total BTEX	<0.300	0.300	03/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 100 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2520	16.0	03/10/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2020	ND	198	99.1	200	6.26	
DRO >C10-C28*	<10.0	10.0	03/10/2020	ND	202	101	200	5.36	
EXT DRO >C28-C36	<10.0	10.0	03/10/2020	ND					

Surrogate: 1-Chlorooctane 86.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.2 % 42.2-156

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Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

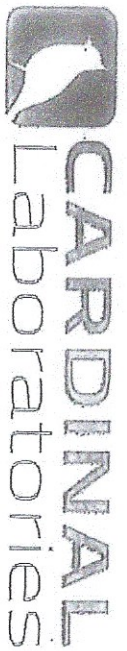
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Celey D. Keene, Lab Director/Quality Manager

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Tolon LPE

Project Manager: Chris Jones

Address: 408 W Texas Ave

City: Artesia

State: NM Zip: 88210

Phone #: 575-746-8768 Fax #:

Project #: 700794.331.01

Project Owner: Devon Energy

Project Location: Lea County

Sampler Name: Brandon Sinclair

FOR LAB USE ONLY

P.O. # 700794.331.01
Company: Tolon LPE
Attn: Chris Jones
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

Lab I.D.

Sample I.D.

H000739

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

ICE / COOL

OTHER:

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

Total Chlorides

BTEX

TPH EXT

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Relinquished By:

Date: 3-9-20

Received By:

Phone Result:

Fax Result:

Yes

No

Add'l Phone #:

Add'l Fax #:

REMARKS:

Relinquished By:

Date: 3-9-20

Received By:

Phone Result:

Fax Result:

Yes

No

Add'l Phone #:

Add'l Fax #:

REMARKS:

Delivered By: (Circle One)

Date: 3-9-20

Received By:

Phone Result:

Fax Result:

Yes

No

Add'l Phone #:

Add'l Fax #:

REMARKS:

Sampler - UPS - Bus - Other:

Date: 3-9-20

Received By:

Phone Result:

Fax Result:

Yes

No

Add'l Phone #:

Add'l Fax #:

REMARKS:

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

P9 1061

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 8162

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 8162
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	Please note that, when the well or facility is plugged or abandoned, the final remediation and reclamation shall take place in accordance with 19.15.29.12 and 19.15.29.13 NMAC once the site is no longer being used for oil and gas operations.	7/6/2022