



Souder, Miller & Associates ♦ 201 S. Halagueno St. ♦ Carlsbad, NM 88220  
(575) 689-7040

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July 21, 2020

SMA #5E29133, BG25

NMOCD District 1  
1625 N. French Drive  
Hobbs, New Mexico 88240

**RE: LINER INSPECTION REPORT  
CHILES 28 WELLPAD 1 (NRM2017058536)**

To Whom it May Concern:

Souder, Miller & Associates (SMA) is pleased to submit this letter report on behalf of Devon Energy Production Company (Devon) summarizing the liner inspection that occurred due to the Chiles 28 Wellpad 1 release. The site is located in Unit Letter O Section 28 , Township 21S, Range 34E (N32.443174/W-103.472999) Lea County, New Mexico, on private land.

**Site Characterization**

On June 7, 2020, the line on the transfer pump broke causing a fluid release into the lined containment at the Chiles 28 Wellpad 1 location. This caused a fluid release of 22.5 barrels of produced water inside the lined secondary containment of the tank battery. Initial response activities were conducted by the operator and included source elimination and site stabilization, which recovered approximately 22 barrels of produced water.

Based upon New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) well data, average depth to groundwater in the area is estimated to be at 138 feet below grade surface (bgs). There are five (5) water sources within ½-mile of the location, according to the NMOSE and USGS water well databases ([https://gis.ose.state.nm.us/gisapps/ose\\_pod\\_locations/](https://gis.ose.state.nm.us/gisapps/ose_pod_locations/); accessed July 16, 2020; Appendix C). The nearest significant watercourse is an unnamed intermittent stream, located approximately 433 feet to the north.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of >100 feet bgs.

**Liner Integrity**

At the request of Devon Energy, SMA conducted a liner integrity inspection per the requirements of 19.15.29.11.A(5)(a) NMAC on July 3, 2020. NMOCD was notified on June 30, 2020 that the liner inspection was to occur. After a thorough visual inspection of the liner within the tank battery containment, the liner appeared to be intact and had the ability to contain the leak in question. The transfer pump from which the release occurred was identified, and SMA verified that the release did not occur outside of the lined containment. A photo log and field notes of the inspection is included in Appendix A.

SMA recommends no further action for this release.

Devon Energy Production Company  
Chiles 28 CTB #1 (NRM2017058536)

5E29133 BG25

Souder, Miller and Associates appreciates the opportunity to provide environmental services to you. If you have any questions or comments concerning this report, please feel free to call Lynn A. Acosta at 505-516-7469.

Sincerely,  
Souder, Miller & Associates



Lynn A. Acosta  
Staff Geoscientist



Shawna Chubbuck  
Senior Scientist

## Attachments

### Figures

Figure 1: Site Map

Figure 2: Surface Water Protection Map

### Appendices

Appendix A: Photo Log & Field Notes

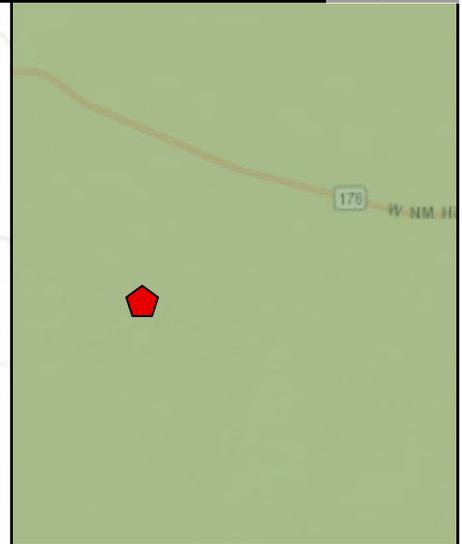
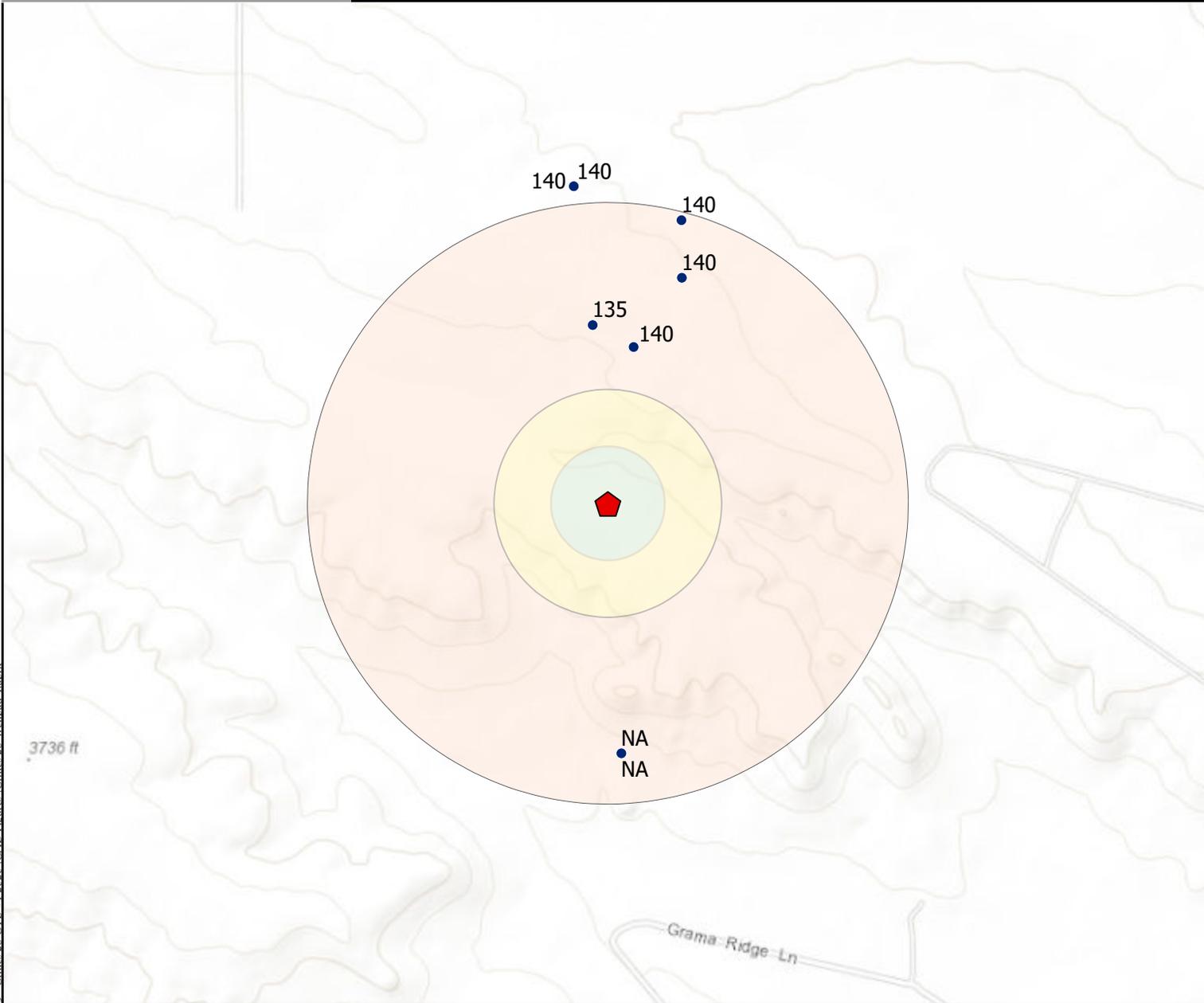
Appendix B: C141

Appendix C: Water Well Data

Devon Energy Production Company  
Chiles 28 CTB #1 (NRM2017058536)

5E29133 BG25

## FIGURES



**Buffer Distance**

- .5 Mile
- 1000 Feet
- 500 Feet

**OSE Depth to GW**

- OSE Depth to GW
- USGS GW Well

**Point of Release**

- ⬠ Point of Release

**Karst Potential**

- Critical
- High
- Medium
- Low

N  
↑

0    437.5    875    1,750    2,625  
Feet

**Site Map**  
 Chiles 28 Wellpad 1 - Devon Energy Production Company  
 UL: O S: 28 T: 21S R: 34E, Lea County, New Mexico

Figure 1

P:\5-Devon\MSA 2020\65E29133\FIG25 - Chiles 28 CTB # 12020\CAD\Figures\Chiles 28 Wellpad Layout

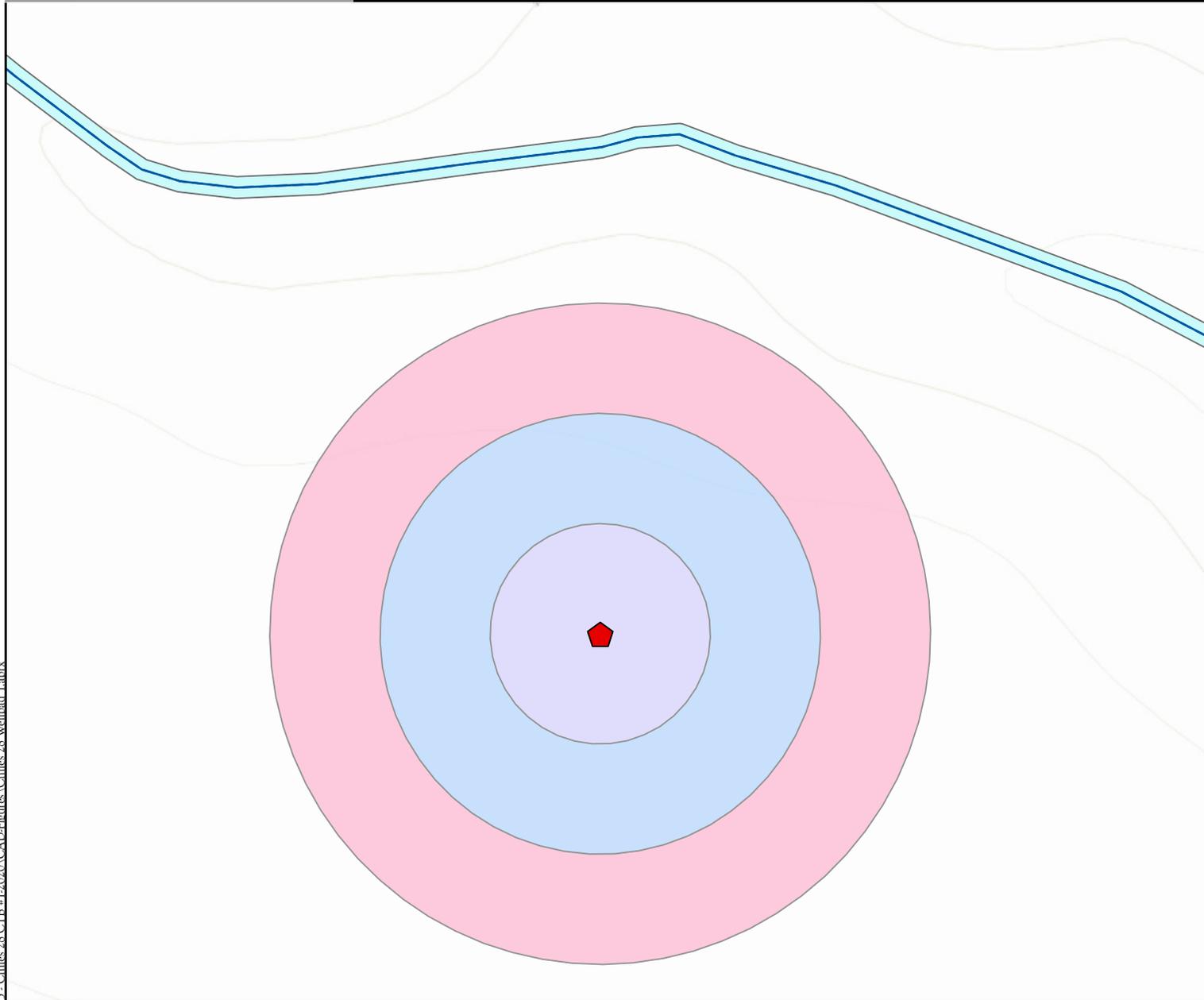
Revisions		
By: _____	Date: _____	Descr: _____
By: _____	Date: _____	Descr: _____

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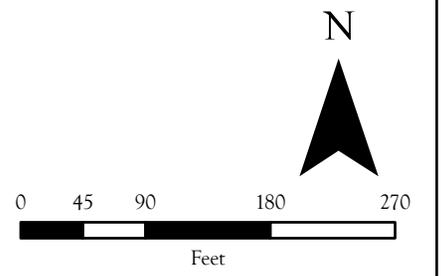
Drawn	Lynn A. Acosta
Date	7/17/2020
Checked	_____
Approved	_____



201 South Halaguena Street  
 Carlsbad, New Mexico 88221  
 (575) 689-7040  
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- Legend**
- 300 Feet
  - 200 Feet
  - 100 Feet
  - Springs & Seeps
  - Streams & Canals
  - Rivers
  - Flowlines SENM
  - NM Wetlands
  - Lakes & Playas
  - FEMA Flood Zones 2011
  - Point of Release



*Surface Water Protection Map*  
 Chiles 28 Wellpad 1- Devon Energy Production Company  
 UL: O S: 28 T: 21S R: 34E Lea County, New Mexico

Figure 2

P:\5-Devon\MSA 2020\65E29133\FIG25 - Chiles 28 CTB # 12020\CAD\Figures\Chiles 28 Wellpad Layout

Revisions		
By: _____	Date: _____	Descr: _____
By: _____	Date: _____	Descr: _____

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Drawn	Lynn A. Acosta
Date	7/17/2020
Checked	_____
Approved	_____



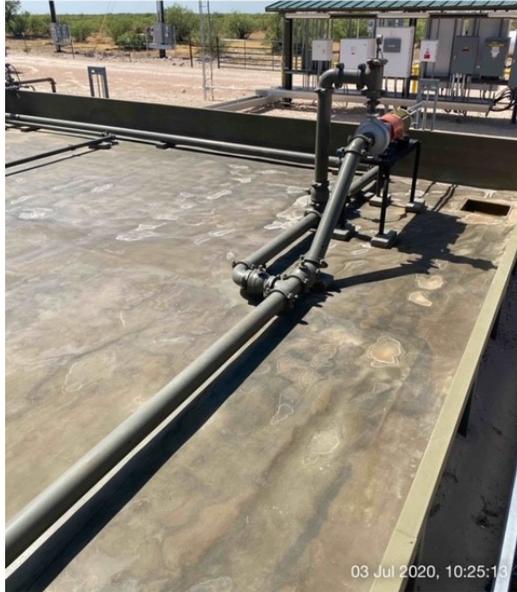
201 South Halaguena Street  
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Devon Energy Production Company  
Chiles 28 CTB #1 (NRM2017058536)

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**Appendix A**  
**PHOTO LOG & FIELD NOTES**

122°SE (T) ● 32°26'34"N, 103°28'22"W ±39ft ▲ 3719ft



74°E (T) ● 32°26'34"N, 103°28'22"W ±16ft ▲ 3719ft



31°NE (T) ● 32°26'34"N, 103°28'22"W ±16ft ▲ 3719ft



344°N (T) ● 32°26'34"N, 103°28'22"W ±16ft ▲ 3720ft



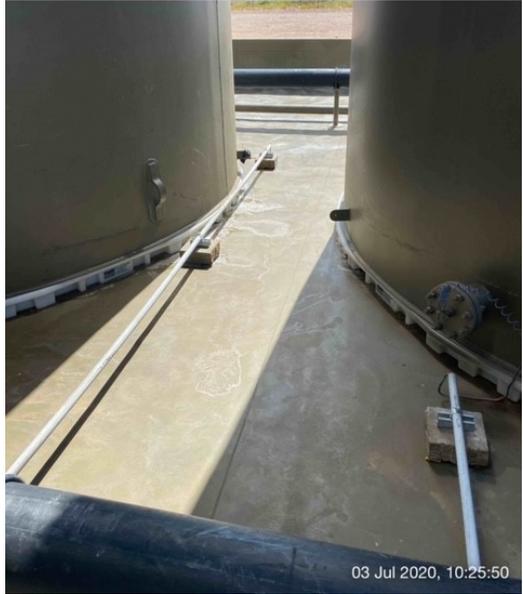
337°NW (T) ● 32°26'34"N, 103°28'22"W ±16ft ▲ 3721ft



108°E (T) ● 32°26'34"N, 103°28'22"W ±13ft ▲ 3721ft



49°NE (T) ● 32°26'34"N, 103°28'22"W ±13ft ▲ 3720ft



03 Jul 2020, 10:25:50

251°W (T) ● 32°26'35"N, 103°28'22"W ±13ft ▲ 3719ft



03 Jul 2020, 10:25:54

49°NE (T) ● 32°26'35"N, 103°28'22"W ±13ft ▲ 3719ft



03 Jul 2020, 10:26:03

265°W (T) ● 32°26'35"N, 103°28'22"W ±13ft ▲ 3723ft



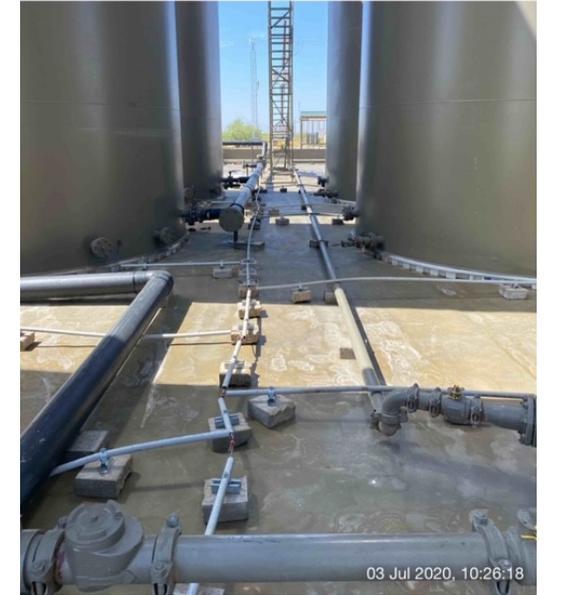
03 Jul 2020, 10:26:06

331°NW (T) ● 32°26'35"N, 103°28'22"W ±13ft ▲ 3722ft



03 Jul 2020, 10:26:09

152°SE (T) ● 32°26'35"N, 103°28'22"W ±13ft ▲ 3722ft



03 Jul 2020, 10:26:18

**Souder, Miller & Associates  
Liner Inspection Form**



Project Name: Chiles 28 Wellpad 1 Inspection Date: 7/3/2020  
Client Name: Devco Energy  
Client Representative(s): \_\_\_\_\_  
SMA Inspector(s): Sebastian Orozco  
Project Location: \_\_\_\_\_ Latitude: 32.443174 Longitude: -103.472499

**Inspection Parameters as Outlined in 19.15.29.11.A(5) NMAC**

**PRIOR TO INSPECTION:**

Two (2) Business Day Notification of Inspection to Appropriate Division Office (Y/N): Y  
Date of Notice: 6/30/2020

Material Covering Liner Removed by Client (Y/N): Y

Affected Areas Exposed by Client (Y/N): Y

**INSPECTION:**

Liner Thoroughly Inspected for Damage (Y/N): Y

All Damaged Areas Observed Marked in White Paint on Liner  
Photos and Field Notes Detailing Failures Attached to This Form

**To Be Completed by Client Representative:**

Can Responsible Party Demonstrate:  
Liner Integrity Was Maintained (per SMA Inspection) (Y/N): Y  
Release Was Contained to Lined Containment Area (Y/N): Y  
Liner Was Able to Contain the Leak (Y/N): Y

**If YES:**

Certify on Form C-141 That Liner Remains Intact

**If NO to Any of Above:**

Responsible Party Must Delineate Horizontal & Vertical Extent  
Depending on Release:  
See Table 1 19.15.29.12 NMAC  
See Subparagraph (e) Paragraph (5) of Subsection A 19.15.29.11 NMAC

**Additional Comments:**

**SMA INSPECTOR SIGNATURE**

Sebastian Orozco  
Date: 7/3/2020

**CLIENT REPRESENTATIVE**

[Signature]  
Date: 7/17/20

Devon Energy Production Company  
Chiles 28 CTB #1 (NRM2017058536)

5E29133 BG25

**APPENDIX B**  
**C141**

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	NRM2017058536
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

### Location of Release Source

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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 type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	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

State of New Mexico  
Oil Conservation Division

Incident ID	
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?
--	--

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

### Initial Response

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

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

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

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

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_  
 Signature: Kendra DeHoyos Date: \_\_\_\_\_  
 email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**  
 Received by: Ramona Marcus Date: 6/18/2020

Incident ID	NRM2017058536
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?	138 _____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	NRM2017058536
District RP	
Facility ID	
Application ID	

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

Printed Name: Lupe Carrasco Title: EHS Professional

Signature: *Lupe Carrasco* Date: 7/28/20

email: Lupe.Carrasco@dvn.com Telephone: 575-748-0165

**OCD Only**

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

Incident ID	NRM2017058536
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: Lupe Carrasco Title: EHS Professional  
 Signature: *Lupe Carrasco* Date: 7/28/20  
 email: Lupe.Carrasco@dvn.com Telephone: 575-725-0787

**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: \_\_\_\_\_

NRM2017058536

<b>Spills In Lined Containment</b>	
Measurements Of Standing Fluid	
Length(Ft)	118
Width(Ft)	61
Depth(in.)	0.25
Total Capacity without tank displacements (bbls)	26.71
No. of 500 bbl Tanks In Standing Fluid	6
No. of Other Tanks In Standing Fluid	0
OD Of Other Tanks In Standing Fluid(feet)	0
Total Volume of standing fluid accounting for tank displacement.	22.51

Devon Energy Production Company  
Chiles 28 CTB #1 (NRM2017058536)

5E29133 BG25

**APPENDIX C  
WATER WELL DATA**



## New Mexico Office of the State Engineer Water Column/Average Depth to Water

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

(R=POD has been replaced, O=orphaned,

C=the file is closed)

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">CP 01068 POD1</a>	CP	LE	4	1	4	28	21S	34E	643609	3591005	424	180	140	40	
<a href="#">CP 00571 POD1</a>	CP	LE	3	1	4	28	21S	34E	643499	3591063	479	170	135	35	
<a href="#">CP 01069 POD1</a>	CP	LE	2	1	4	28	21S	34E	643737	3591191	635	210	140	70	
<a href="#">CP 00588 POD1</a>	CP	LE		3	2	33	21S	34E	643583	3589918*	669	89			
<a href="#">CP 00589 POD1</a>	CP	LE		3	2	33	21S	34E	643583	3589918*	669	84			
<a href="#">CP 01066 POD1</a>	CP	LE	4	3	2	28	21S	34E	643735	3591345	782	210	140	70	

Average Depth to Water: **138 feet**  
Minimum Depth: **135 feet**  
Maximum Depth: **140 feet**

**Record Count:** 6

**UTM NAD83 Radius Search (in meters):**

**Easting (X):** 643543

**Northing (Y):** 3590586

**Radius:** 806

\*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.

7/21/20 4:20 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER