



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

March 1, 2021

SMA #5E29915, BG4

NMOCD District 1
1625 N. French Dr.
Hobbs, NM 88240

**RE: LINER INSPECTION REPORT
SALADO DRAW 6 CTB (NAPP2104140937)**

To Whom it May Concern:

Souder, Miller & Associates (SMA) is pleased to submit this letter report on behalf of Devon Energy Production (Devon) summarizing the liner inspection that occurred due to the Salado Draw 6 ~~Federal 1H~~ release. The site is located in Unit Letter M, Section 06, T26S, R34E (N32.065401, W103.514801) Lea County, New Mexico, on Federal land.

Site Characterization

On January 23, 2021, a release occurred due to a pin hole developing on a water line within the secondary containments. This resulted in a release of 240 bbls 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 240 bbls of produced water.

Depth to Groundwater

Based upon New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) well data, depth to groundwater in the area is estimated to be 166 feet below grade surface (bgs).

Wellhead Protection Area

There are no 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/; accessed March 1, 2021; Appendix C).

Distance to Nearest Significant Watercourse

The nearest significant watercourse is an unnamed playa, located approximately 2,818 feet to the southwest.

Due to a lack of supportable groundwater data, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of <50 feet bgs.

Liner Integrity

At the request of Devon, SMA conducted a liner integrity inspection per requirements of 19.15.29.11.A(5)(a) NMAC. NMOCD was notified on February 23, 2020, that the liner inspection was to occur, and the inspection was conducted on February 26, 2020. After a thorough visual inspection of the liner within the tank battery containment, the liner appeared to be intact and had the ability to

Devon Energy
Salado Draw 6 CTB (NAPP2104140937)

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contain the release in question. The location 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 and requests the closure of NAPP2104140937.

Souder, Miller and Associates appreciates the opportunity to provide environmental services to you. If you have any questions or comments concerning this report, please call Ashley Maxwell at (505) 325-7535.

Sincerely,
Souder, Miller & Associates

Reviewed by:



Ashley Maxwell
Project Scientist



Shawna Chubbuck
Senior Scientist

Attachments:

Figures

- Figure 1: Vicinity and Well Head Protection Map
- Figure 2: Surface Water Protection Map
- Figure 3: Site and Photograph Location Map

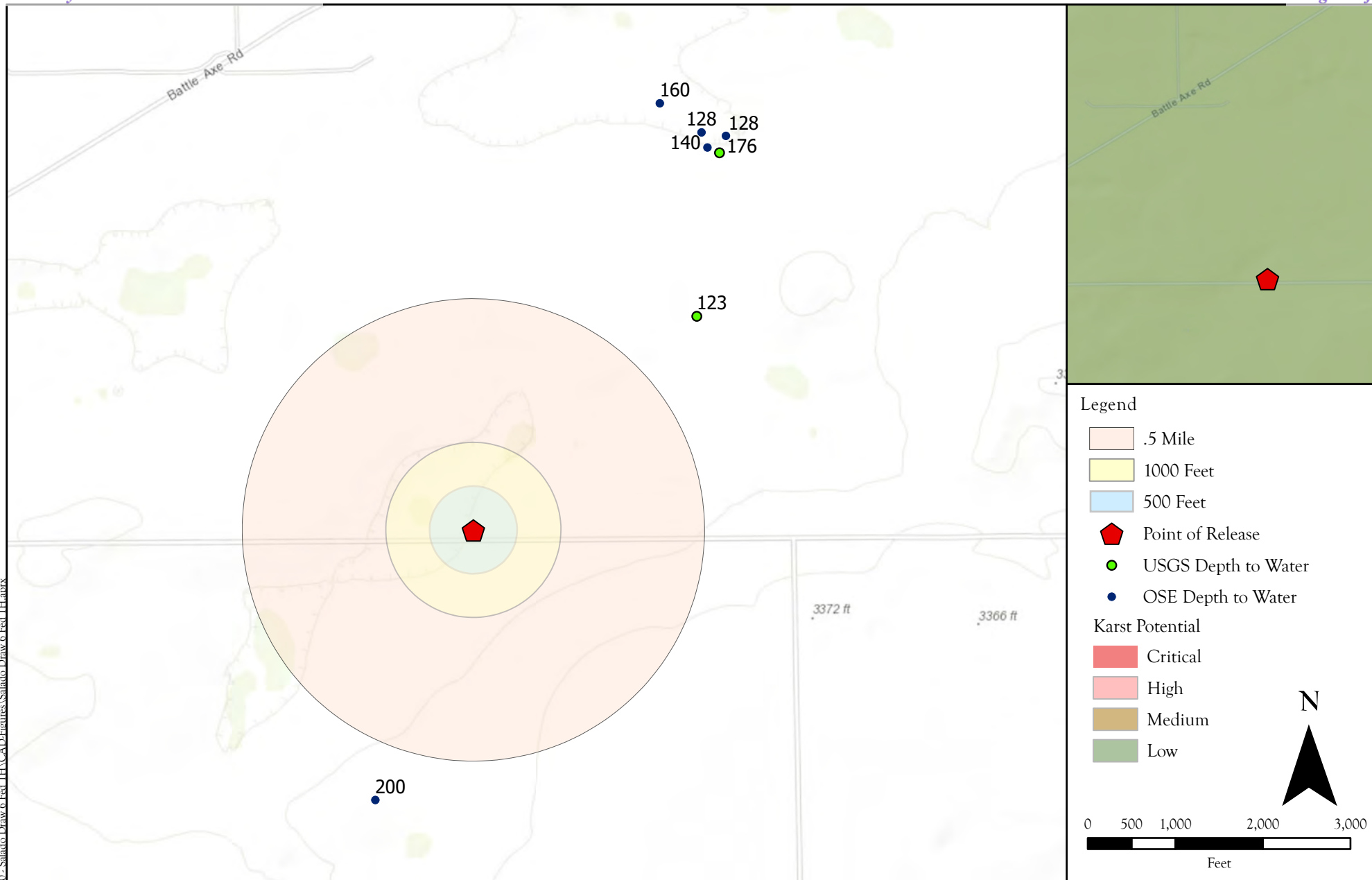
Appendices

- Appendix A: Liner Inspection Form, Field Notes & Photo Log
- Appendix B: C141
- Appendix C: NMOSE Well Report

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FIGURES



Vicinity and Wellhead Protection Map
 Salado Draw 6 CTB - Devon Energy Production Company
 UL: M S: 6 T: 26S R: 34E, Lea County, New Mexico

Figure 1

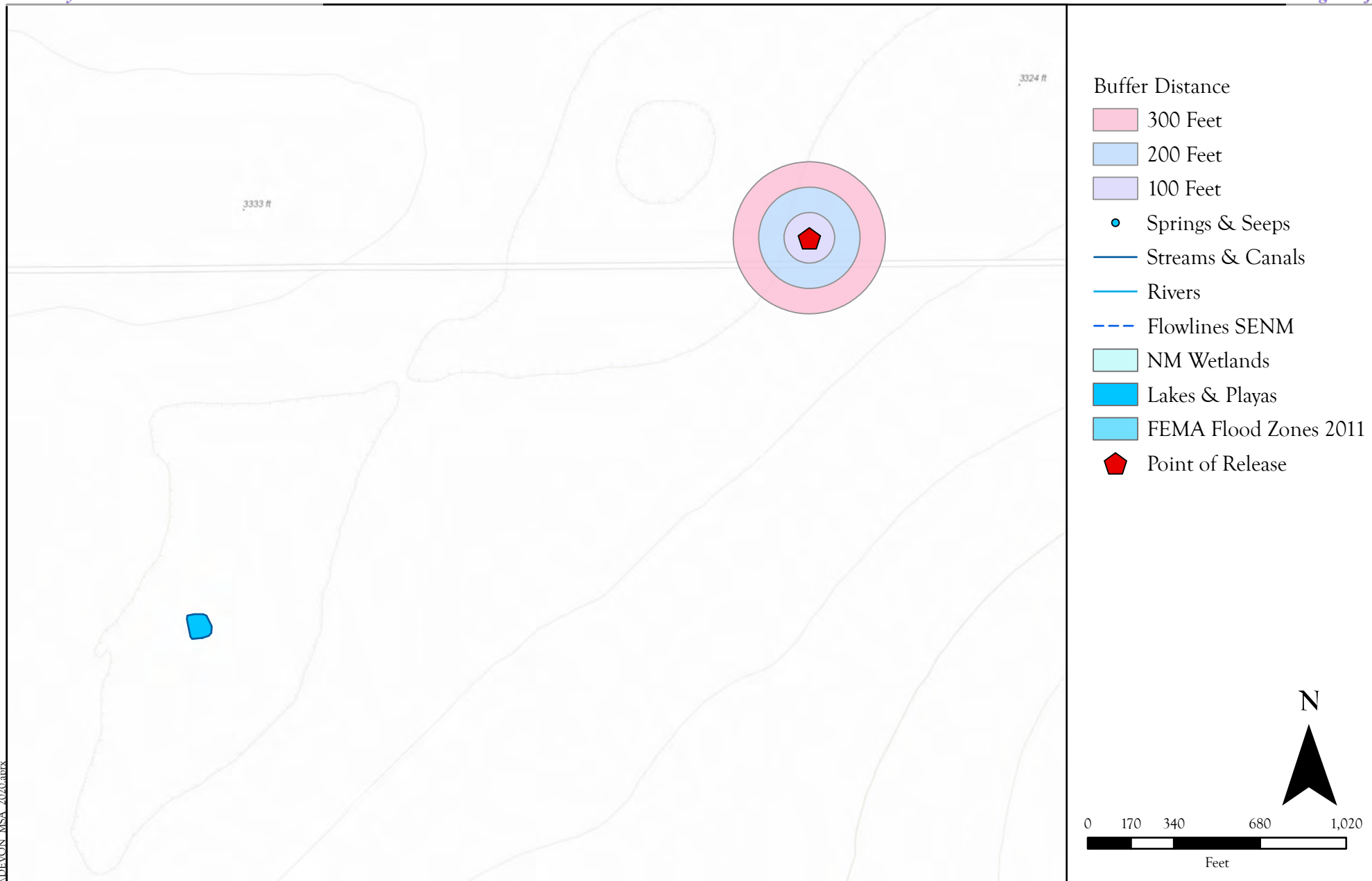
Revisions
 By: _____ Date: _____ Descr: _____
 By: _____ Date: _____ Descr: _____

Drawn P.R. Smith
 Date 3/5/2021
 Checked _____
 Approved _____



201 South Halaguena Street
 Carlsbad, New Mexico 88221
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Surface Water Protection Map
 Salado Draw 6 CTB - Devon Energy
 UL: M S: 6 T: 26S R: 34E, Lea County, New Mexico

Figure 2

P:\5 Devon MSA 2020\5E291131\GIS\DEVON MSA 2020.aprx
 Date Saved: 3/5/2021

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

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Drawn P.R. Smith
 Date 3/5/2021
 Checked _____
 Approved _____



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Legend:

- Electrical Lines
- Secondary Containment
- Equipment
- ⬠ Point of Release
- Photograph Location

N

0 5 10 20 30
Feet

Site and Photograph Location Map
Salado Draw 6 CTB - Devon Energy Production Company
UL: M S: 6 T: 26S R: 34E, Lea County, New Mexico

Figure 3

Revisions

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

Drawn
Date
Checked
Approved

P.R. Smith
3/5/2021



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Appendix A

LINER INSPECTION FORM, FIELD NOTES & PHOTO LOG

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

Project Name: Salento Draw 6 CTB Inspection Date: 2/26/21
Client Name: Devon Energy
Client Representative(s): Life Comco
SMA Inspector(s): JR Smith
Project Location: Punk Lee Conty Latitude: 32.665401 Longitude: -103.514801

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: 2/23/21

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**

JR Smith
Date: 2/26/21

CLIENT REPRESENTATIVE

Date: _____

SUBJECT Line InspectionPROJECT Salado Draw PAGECLIENT Perm EngDATE 2/26/21 BY

CHECKED

BY

- o Walked to POR and examined if release was fully contained.
- o Release did stay in Secondary Containment.
- o Searched for tears and other potential compromises throughout containment.
 - Δ No Failures
 - Δ Liner remained intact
 - Δ Verified that outside of containment was not compromised.
- o Took photos of Containment with GPS coordinates and date / time.
- o Mapped Containment and photograph location sites.
- o Left Site

240 210 300
☉ 271°W (T) ● 32.065386, -103.514498 ±2 m ▲ 984 m



210

240

270

300

☉ 261°W (T) ● 32.065434, -103.514501 ±1 m ▲ 982 m



330 0 30 60
☉ 358°N (T) ● 32.065373, -103.514613 ±2 m ▲ 983 m



150

180

210

240

188°S (T) 32.065415, -103.514619 ±2 m ▲ 985 m



300 300 0 30
● 355°N (T) ● 32.065378, -103.514646 ±1 m ▲ 986 m



150

180

210

240

☉ 190°S (T) ● 32.065407, -103.514647 ±1 m ▲ 987 m



300

330

0

30

☉ 347°NW (T) ● 32.065376, -103.514716 ±1 m ▲ 987 m



150 100 210 240
☉ 184°S (T) ● 32.065417, -103.51472 ±1 m ▲ 987 m



300

330

0

30

☉ 346°NW (T) ● 32.065369, -103.514807 ±1 m ▲ 985 m



150

180

210

240

184°S (T) 32.065443, -103.514851 ±2 m 982 m



0°N (T) 32.065372, -103.514878 ±1 m ▲ 983 m



99°E (T) 32.065411, -103.514905 ±1 m 984 m



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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	NAPP2104140937
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Devon Energy	OGRID 6137
Contact Name Lupe Carrasco	Contact Telephone 575-748-0165
Contact email lupe.carrasco@dvn.com	Incident # (assigned by OCD)
Contact mailing address 6488 Seven Rivers Highway Artesia, NM 88210	

Location of Release Source

Latitude 32.065401 Longitude -103.514801
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Salado Draw 6 CTB	Site Type Battery
Date Release Discovered 1/23/21	API# (if applicable) 30-025-41293

Unit Letter	Section	Township	Range	County
M	6	26S	34E	Lea

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) 240	Volume Recovered (bbls) 240
	Is the concentration of dissolved chloride 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 The release was caused by a pin hole on a water line within the secondary containment.
All fluid was contained within the secondary containment.

Incident ID	NAPP2104140937
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? >25 barrels
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given to the OCD and BLM per email portal by Wes Mathews on 1/23/21.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Lupe Carrasco</u>	Title: <u>EHS Professional</u>
Signature: <u>Lupe Carrasco</u>	Date: <u>2/10/21</u>
email: <u>Lupe.Carrasco@dvn.com</u>	Telephone: <u>575-748-0165</u>
<u>OCD Only</u> Received by: <u>Ramona Marcus</u> Date: <u>2/16/2021</u>	

Incident ID	NAPP2104140937
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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>166 (Estimate)</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.

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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: Wes Mathews Title: EHS Professional

Signature: Wesley Mathews Date: 4/27/2021

email: wesley.mathews@dvn.com Telephone: 575-513-8608

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2104140937
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: Wes Mathews Title: EHS Professional
Signature: Wesley Mathews Date: 4/27/2021
email: wesley.mathews@dvn.com Telephone: 575-513-8608

OCD Only

Received by: Chad Hensley Date: 07/30/2021

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: Chad Hensley Date: 07/30/2021
Printed Name: Chad Hensley Title: Environmental Specialist Advanced

Devon Energy
Salado Draw 6 CTB (NAPP2104140937)

SMA #5E29915, BG4

APPENDIX C NMOSE WELL REPORT



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
C_02295		CUB	LE	2	2	4	12	26S	33E	639865	3547624	1076	250	200	50
C_02292 POD1		CUB	LE	4	1	2	06	26S	34E	640992	3549987	1558	200	140	60
C_03441 POD1		C	LE	4	1	2	06	26S	34E	640971	3550039	1593	250		
C_02291		CUB	LE	1	1	2	06	26S	34E	640825	3550140*	1619	220	160	60
C_03442 POD1		C	LE	4	1	2	06	26S	34E	641056	3550028	1626	251		

Average Depth to Water: **166 feet**

Minimum Depth: **140 feet**

Maximum Depth: **200 feet**

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 640192.22

Northing (Y): 3548649.69

Radius: 2000

*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.

3/1/21 11:44 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

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 26469

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 26469
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	7/30/2021