



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

November 10, 2020

SMA #5E29133, BG72

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

**RE: LINER INSPECTION REPORT
SALADO DRAW 6 FEDERAL 1H (NRM2029656359)**

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 (N32.0657196 /W-103.5146942) Lea County, New Mexico, on Federal land.

Site Characterization

On October 6, 2020, a release occurred due to a leak in the fill-line coming from the heater treater. This resulted in a release of 513.83 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 513.83 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 November 10, 2020; 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 November 3, 2020 that the liner inspection was to occur, and the inspection was conducted on November 6, 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 contain the release in question. The location from which the release occurred was identified, and SMA

Devon Energy
Salado Draw 6 Federal 1H (NRM2029656359)

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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 NRM2029656359.

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 1A: NMOSE Depth to Groundwater
Figure 2: Surface Water Protection Map
Figure 3: Site and Photograph Location Map

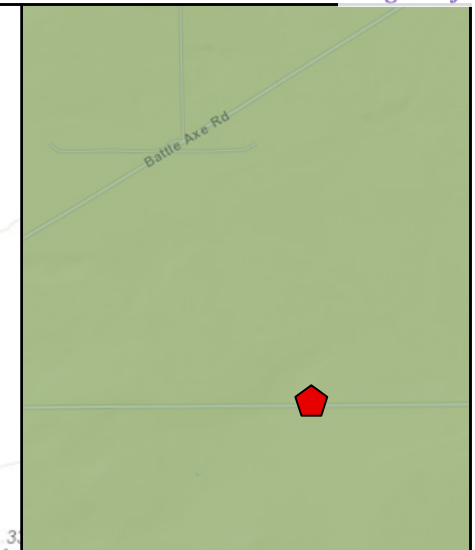
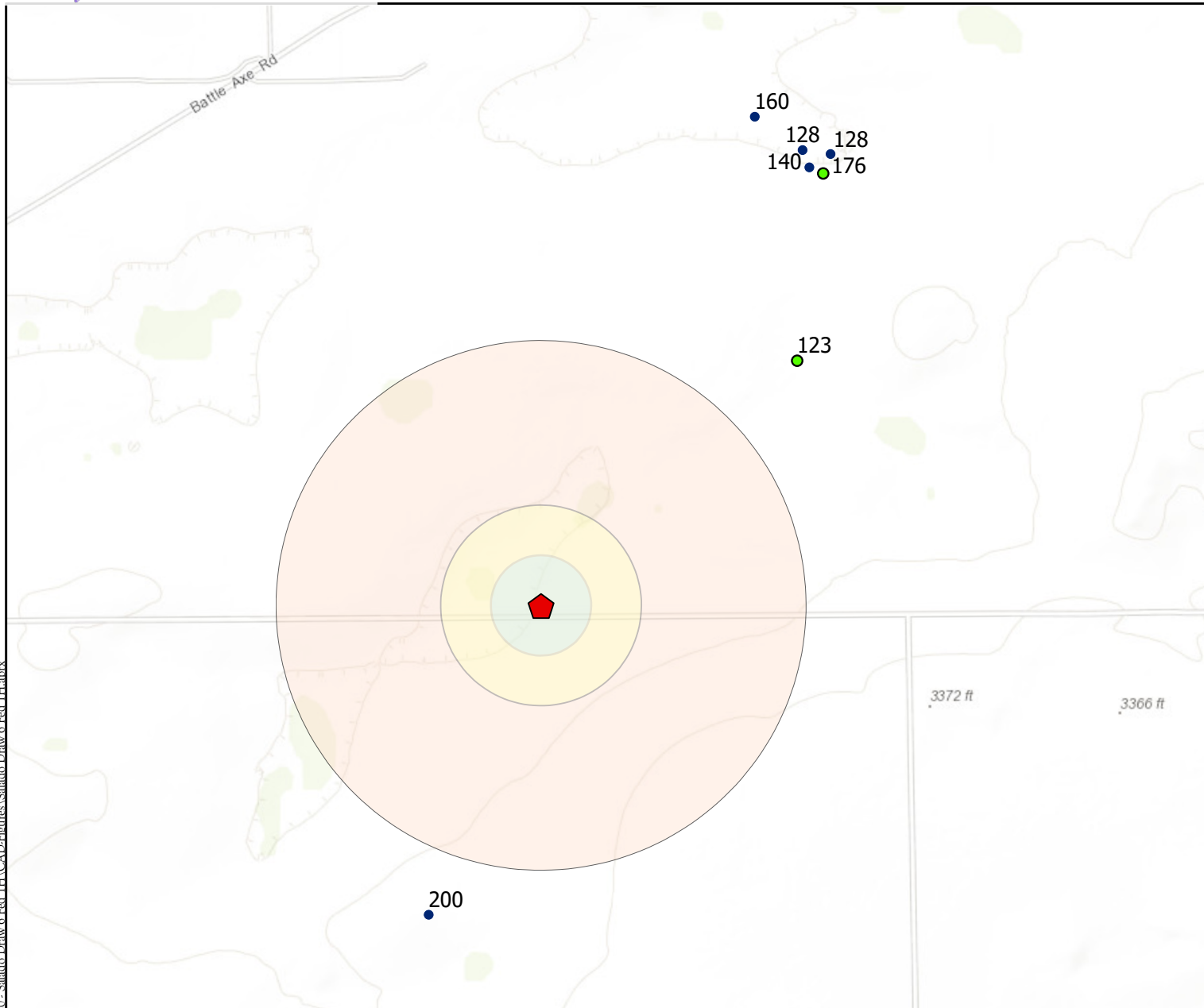
Appendices

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

Devon Energy
Salado Draw 6 Federal 1H (NRM2029656359)

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FIGURES



Legend

- .5 Mile
 - 1000 Feet
 - 500 Feet
 - Point of Release
 - USGS Depth to Water
 - OSE Depth to Water
 - Karst Potential**
 - Critical
 - High
 - Medium
 - Low
- 0 500 1,000 2,000 3,000
Feet
- N

Site Map
Salado Draw 6 Fed #001H- Devon Energy Production Company
UL: M S: 06 T: 26S R: 34E, Lea County, New Mexico

Figure 1

Revisions

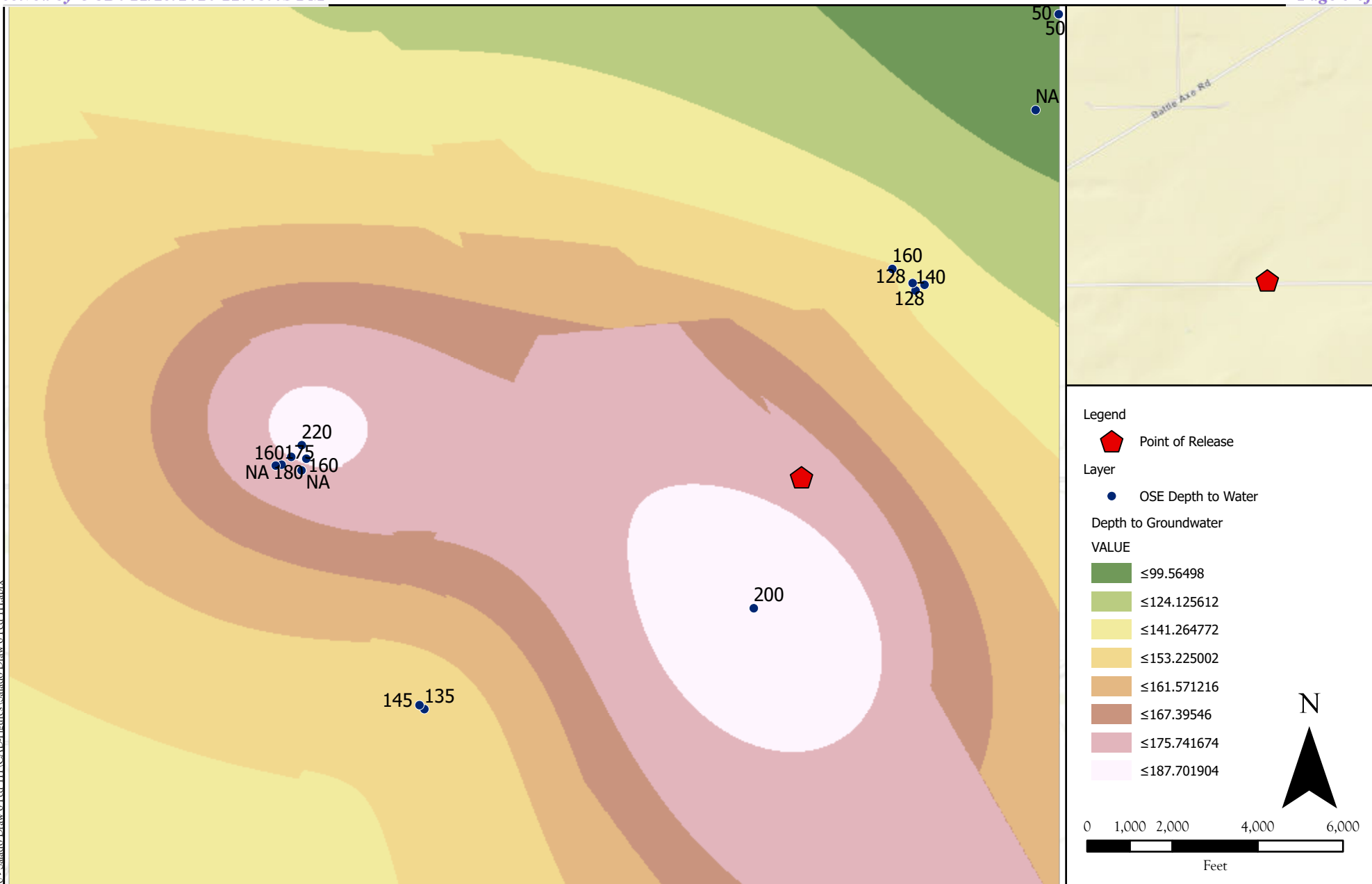
By: _____ Date: _____ Descr: _____
By: _____ Date: _____ Descr: _____

Drawn Lynn A. Acosta
Date 6/16/2020
Checked _____
Approved _____



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Site Map

Salado Draw 6 Fed #001H- Devon Energy Production Company

UL: M S: 06 T: 26S R: 34E, Lea County, New Mexico

Figure 1A

Revisions

By: _____ Date: _____ Descr: _____

By: _____ Date: _____ Descr: _____

Drawn
Date
Checked
Approved

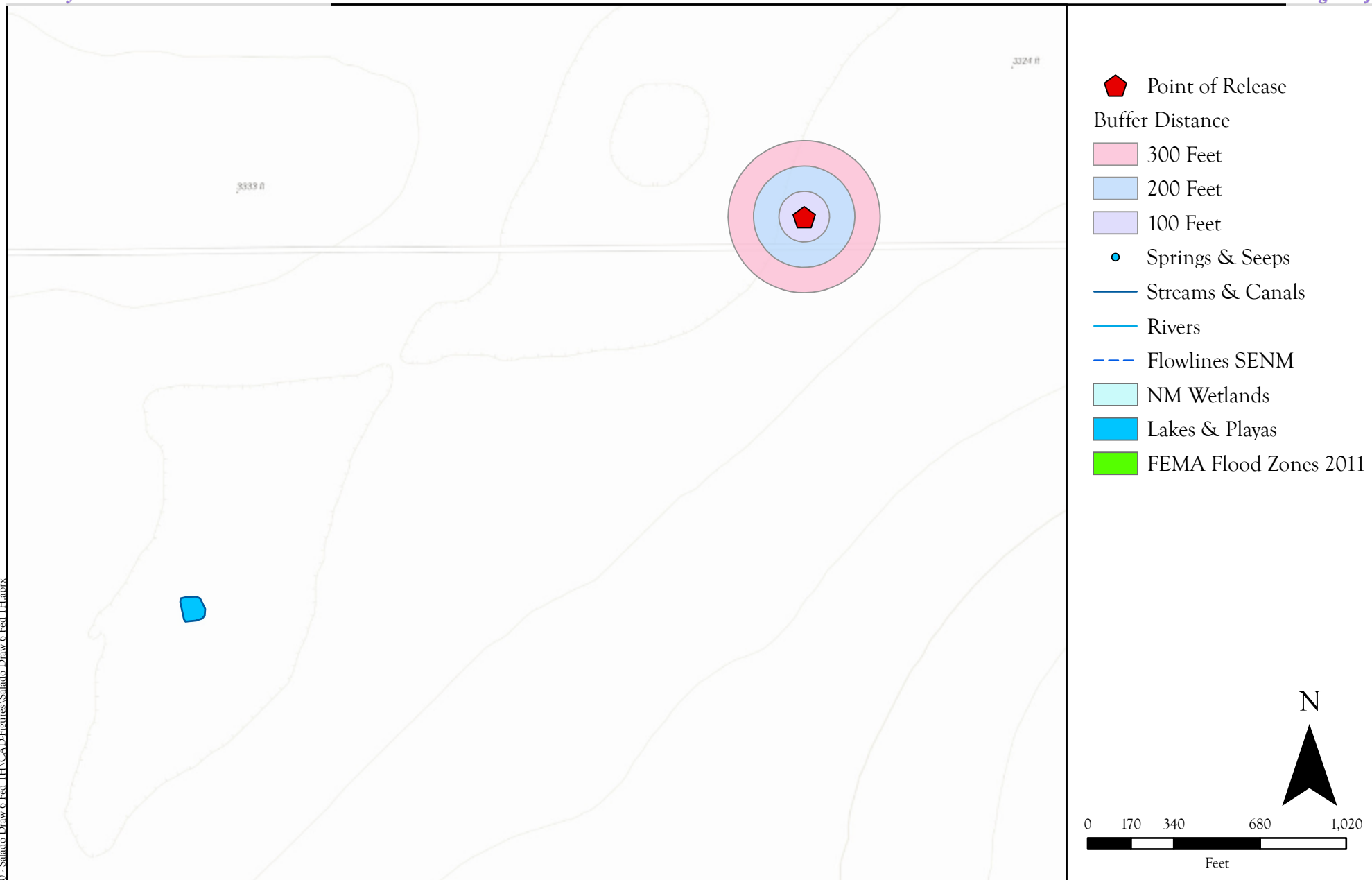
Lynn A. Acosta

6/16/2020



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Surface Water Protection Map
 Salado Draw 6 Fed #001H- Devon Energy Production Company
 UL: M S: 06 T: 26S R: 34E Lea County, New Mexico

Figure 2

Revisions

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

Drawn Lynn A. Acosta
 Date 7/8/2020
 Checked _____
 Approved _____



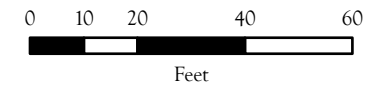
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Legend:

- Secondary Containment
- Photograph Location
- ⬠ Point of Release



Site and Photograph Location Map
 Salado Draw 6 Federal 1H - 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

11/10/2020



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Devon Energy
Salado Draw 6 Federal 1H (NRM2029656359)

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Appendix A
LINER INSPECTION FORM, FIELD NOTES & PHOTO LOG

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

Project Name: Susado Draw 6 Fea 1H Inspection Date: 11/6/20
Client Name: Duron Energy
Client Representative(s): Lepi Carasco
SMA Inspector(s): Phil Smith
Project Location: Rural Lea Latitude: 32.0657196 Longitude: -103.5146942

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: 11/3/20

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****CLIENT REPRESENTATIVE**

Phil Smith
Date: 11/6/20

Date: _____

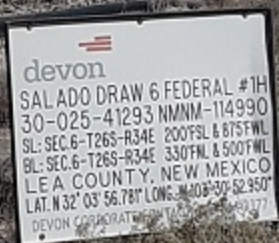
11/6/20

Sewer Draw 6
Feeder 1

OCD notified on 11/3/20 that
liner inspection was to occur on
11/6/20

- Arrived at scheduled time of 11am.
Waited 15 minutes before beginning inspection.
OCD did not arrive, began inspection.
- Initial observations: Facility was stable
and in operation. Notified a Devon representative
that was ~~on-site~~ on-site that a liner
inspection was to occur.
- Walked to POR on the west side of
the liner to examine if release was
fully contained. Release did stay in
secondary containment.
- Searched for tears and other potential
compromises throughout containment.
 - No failures
 - Liner remained intact
 - Verified that the outside perimeter
of containment was not compromised
- Took several photos of containment area
from different areas throughout liner.
- Mapped containment and photograph locations.

61°NE (T) 32.065293, -103.514053 ±7 m 979 m



87°E (T) 32.065348, -103.514898 ±2 m ▲ 986 m



☉ 147°SE (T) ● 32.065415, -103.514908 ±1 m ▲ 986 m



SE

S

SW

Received by OCD: 11/23/2020 Page 14 of 42

189°S (T) 32.065401, -103.51485 ±2 m 986 m



Released to Imaging: 1/29/2021 1:47:56 PM

03 Nov 2020, 11:46:09

SW

W

NW

Received by OCD: 11/23/2020 Page 15 of 42

☉ 282°W (T) ● 32.065374, -103.514482 ±2 m ▲ 984 m



Released to Imaging: 1/29/2021 1:47:56 PM

Geotitles 2020/01/29 1:47:56 PM

244°SW (T) 32.065433, -103.514458 ±2 m ▲ 983 m



195°S (T) 32.065389, -103.514617 ±2 m ▲ 985 m



NW

N

NE

Received by OCD: 11/23/2020 Page 18 of 42

☉ 354°N (T) ● 32.065357, -103.51469 ±2 m ▲ 987 m



Released to Imaging: 1/29/2021 1:47:56 PM

65 Nov 2020, 1:56:39

198°S (T) 32.065398, -103.514721 ±2 m ▲ 984 m



SW

W

NW

Received by OCD: 11/23/2020 Page 20 of 42

☉ 279°W (T) ● 32.065398, -103.514721 ±1 m ▲ 984 m



Released to Imaging: 1/29/2021 1:47:56 PM

THE STATE OF ARIZONA

SW

W

NW

Received by OCD: 11/23/2020 Page 21 of 42

330

☉ 273°W (T) ● 32.065365, -103.514724 ±2 m ▲ 986 m

*Released to Imaging: 1/29/2021 1:47:56 PM*

OCD NOV 2020, 11:55:07

307°NW (T) 32.065364, -103.514763 ±2 m ▲ 984 m



☉ 343°NW (T) ● 32.065369, -103.51482 ±1 m ▲ 985 m



Devon Energy
Salado Draw 6 Federal 1H (NRM2029656359)

SMA #5E29133, BG72

**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 | NRM2029656359 |
| 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 | NRM2029656359 |
| 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 <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: _____ | Title: _____ |
| Signature: <u>Kendra DeHoyos</u> | Date: _____ |
| email: _____ | Telephone: _____ |
| <u>OCD Only</u> Received by: <u>Ramona Marcus</u> Date: <u>10/22/2020</u> | |

| | |
|----------------|---------------|
| Incident ID | NRM2029656359 |
| 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>166</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.

| | |
|----------------|---------------|
| Incident ID | NRM2029656359 |
| 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: _____ 11/23/20 _____

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

OCD Only

Received by: _____ Cristina Eads _____ Date: _____ 11/23/2020 _____

| | |
|----------------|---------------|
| Incident ID | NRM2029656359 |
| 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: _____ 11/23/20 _____

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

OCD Only

Received by: _____ Cristina Eads _____ Date: _____ 11/23/2020 _____

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: _____ *Cristina Eads* _____ Date: _____ 01/29/2021 _____

Printed Name: _____ Cristina Eads _____ Title: _____ Environmental Specialist _____

NRM2029656359

| Spills In Lined Containment | |
|--|--------|
| Measurements Of Standing Fluid | |
| Length(Ft) | 132 |
| Width(Ft) | 28 |
| Depth(in.) | 13.5 |
| Total Capacity without tank displacements (bbls) | 740.57 |
| No. of 500 bbl Tanks In Standing Fluid | 6 |
| No. of Other Tanks In Standing Fluid | |
| OD Of Other Tanks In Standing Fluid(feet) | |
| Total Volume of standing fluid accounting for tank displacement. | 513.83 |

Devon Energy
Salado Draw 6 Federal 1H (NRM2029656359)

SMA #5E29133, BG72

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 Sub-Code | basin | County | Q 64 | Q 16 | Q 4 | Sec | Tws | Rng | X | Y | Distance | Depth Well | Depth Water | Water Column |
|------------------------------|--------------|-------|--------|------|------|-----|-----|-----|-----|--------|----------|----------|------------|-------------|--------------|
| C 02295 | CUB | LE | | 2 | 2 | 4 | 12 | 26S | 33E | 639865 | 3547624 | 1112 | 250 | 200 | 50 |
| C 02292 POD1 | CUB | LE | | 4 | 1 | 2 | 06 | 26S | 34E | 640992 | 3549987 | 1522 | 200 | 140 | 60 |
| C 03441 POD1 | C | LE | | 4 | 1 | 2 | 06 | 26S | 34E | 640971 | 3550039 | 1557 | 250 | | |
| C 02291 | CUB | LE | | 1 | 1 | 2 | 06 | 26S | 34E | 640825 | 3550140* | 1582 | 220 | 160 | 60 |
| C 03442 POD1 | C | LE | | 4 | 1 | 2 | 06 | 26S | 34E | 641056 | 3550028 | 1591 | 251 | | |

Average Depth to Water: **166 feet**

Minimum Depth: **140 feet**

Maximum Depth: **200 feet**

Record Count: 5

UTM NAD83 Radius Search (in meters):

Easting (X): 640201.814

Northing (Y): 3548685.154

Radius: 2500

*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.

11/6/20 2:50 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER


www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
200 MAY 17 4 11:12

| | | | | | | | | | |
|---|---|----------------------------|--|--|--|--|---|----------------|--|
| 1. GENERAL AND WELL LOCATION | POD NUMBER (WELL NUMBER) C-3441-POD1 | | | | OSE FILE NUMBER(S) C 03441 | | | | |
| | WELL OWNER NAME(S) Dinwiddie Cattle Company | | | | PHONE (OPTIONAL) | | | | |
| | WELL OWNER MAILING ADDRESS PO Box 963 | | | | CITY Capitan | | STATE NM | ZIP 88316 | |
| | WELL LOCATION (FROM GPS) | DEGREES LATITUDE N32 | MINUTES 04 | SECONDS 41.8 N | 40.224 * ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84 (OSE GPS) | | | | |
| DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS 22.867 | | | | | | | | | |
| 2. OPTIONAL | (2.5 ACRE) NW 1/4 | (10 ACRE) SE 1/4 | (40 ACRE) NW 1/4 | (160 ACRE) NE 1/4 | SECTION 6 | TOWNSHIP 26 | <input type="checkbox"/> NORTH <input checked="" type="checkbox"/> SOUTH | | RANGE 34 <input checked="" type="checkbox"/> EAST <input type="checkbox"/> WEST |
| | SUBDIVISION NAME | | | | LOT NUMBER | BLOCK NUMBER | UNIT/TRACT | | |
| | HYDROGRAPHIC SURVEY | | | | MAP NUMBER | | TRACT NUMBER | | |
| | | | | | | | | | |
| 3. DRILLING INFORMATION | LICENSE NUMBER WD1044 | | NAME OF LICENSED DRILLER Alan Eades | | | NAME OF WELL DRILLING COMPANY Eades Drilling & Pump Service | | | |
| | DRILLING STARTED 05-03-10 | | DRILLING ENDED 05-03-10 | | DEPTH OF COMPLETED WELL (FT) 250 | BORE HOLE DEPTH (FT) 250 | DEPTH WATER FIRST ENCOUNTERED (FT) | | |
| | COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED) | | | | | STATIC WATER LEVEL IN COMPLETED WELL (FT) | | | |
| | DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY: | | | | | | | | |
| | DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY: | | | | | | | | |
| | DEPTH (FT) | | BORE HOLE DIA. (IN) | CASING MATERIAL | CONNECTION TYPE (CASING) | INSIDE DIA. CASING (IN) | CASING WALL THICKNESS (IN) | SLOT SIZE (IN) | |
| | FROM | TO | | | | | | | |
| | 0 | 20 | 11 | PVC | slip joint | 6.166 | .255 | | |
| | 20 | 190 | 9.75 | PVC | slip joint | 6.166 | .255 | | |
| | 190 | 250 | 9.75 | PVC - screen | slip joint | 6.166 | .255 | .035 | |
| 4. WATER BEARING STRATA | DEPTH (FT) | | THICKNESS (FT) | FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES) | | | | YIELD (GPM) | |
| | FROM | TO | | | | | | | |
| | 128 | 189 | 61 | sandy red clay | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA | | | | | | TOTAL ESTIMATED WELL YIELD (GPM) | | | |

FOR OSE INTERNAL USE

| | | |
|------------------------------------|---------------------------|------------------------------------|
| FILE NUMBER C-3441 | POD NUMBER POD1 | WELL RECORD & LOG (Version 6/9/08) |
| LOCATION 26.34.6.2141122 | TRN NUMBER | PAGE 1 OF 2 |

| | | | | | | | |
|--------------------------------|---|---|---|--|------------------------------|-----------------------------|---------------------|
| 5. SEAL AND PUMP | TYPE OF PUMP: <input checked="" type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> JET <input type="checkbox"/> NO PUMP - WELL NOT EQUIPPED <input type="checkbox"/> TURBINE <input type="checkbox"/> CYLINDER <input type="checkbox"/> OTHER - SPECIFY: | | | | | | |
| | ANNULAR SEAL AND GRAVEL PACK | DEPTH (FT) | | BORE HOLE DIA. (IN) | MATERIAL TYPE AND SIZE | AMOUNT (CUBIC FT) | METHOD OF PLACEMENT |
| | | FROM | TO | | | | |
| | | 0 | 20 | | | | |
| | 20 | 250 | 9.75 | gravel | 84 | gravity fed | |
| | | | | | | | |
| 6. GEOLOGIC LOG OF WELL | DEPTH (FT) | | THICKNESS (FT) | COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES) | WATER BEARING? | | |
| | FROM | TO | | | | | |
| | 0 | 1 | 1 | top soil | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | 1 | 25 | 24 | sandy clay | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | 25 | 37 | 12 | caliche & sand | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | 37 | 85 | 48 | sand & sandstone stringers | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | 85 | 108 | 23 | red sandstone with red clay streaks | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | 108 | 128 | 20 | sandstone with yellow clay streaks | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | 128 | 189 | 61 | sandy red clay | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | 189 | 249 | 60 | white sandstone with red clay streaks | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | 249 | 250 | 1 | red clay | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | | | | | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | | | | | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | | | | | <input type="checkbox"/> YES | <input type="checkbox"/> NO | |
| | ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL | | | | | | |
| | 7. TEST & ADDITIONAL INFO | METHOD: <input type="checkbox"/> BAILER <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> OTHER - SPECIFY: | | | | | |
| | | WELL TEST | TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD. | | | | |
| | | ADDITIONAL STATEMENTS OR EXPLANATIONS: | | | | | |
| 8. SIGNATURE | THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING: | | | | | | |
| | <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  SIGNATURE OF DRILLER </div> <div style="text-align: center;"> May 14, 2010 DATE </div> </div> | | | | | | |

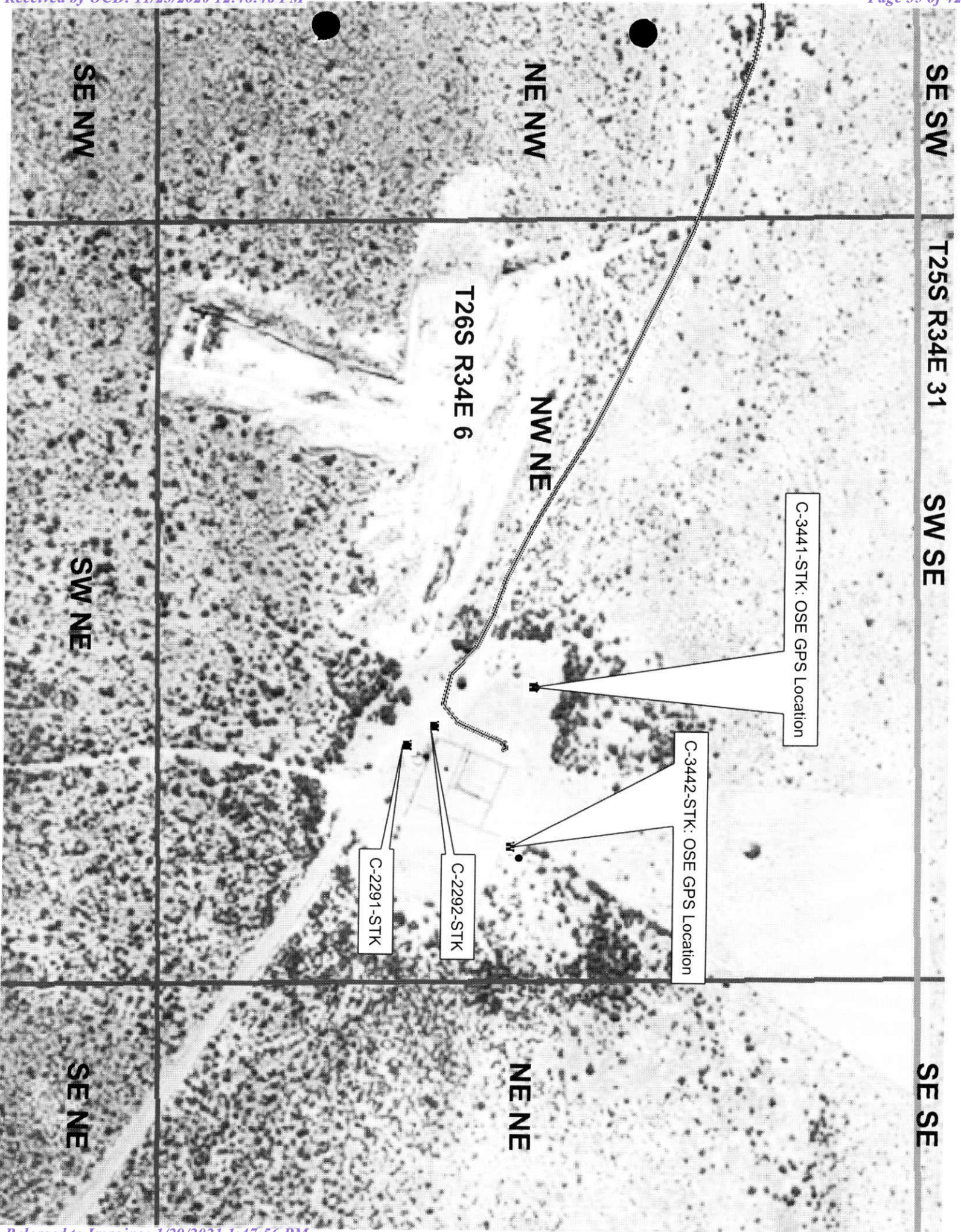
 STATE ENGINEER OF NEW MEXICO
 2010 MAY 17 A 11:11 AM

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

| | | |
|--------------------------------|------------------------|-------------|
| FILE NUMBER 2-3741 | POD NUMBER POD1 | TRN NUMBER |
| LOCATION 26-34-6-24-282 | | PAGE 2 OF 2 |

2141122



Locator Tool Report

General Information:

Application ID: 29 Date: 02-01-2011 Time: 11:32:20

WR File Number: C-03441-STK
Purpose: POINT OF DIVERSION

Applicant First Name: DINWIDDIE CATTLE CO
Applicant Last Name: NEW STOCK WELL (OSE FIELD GPS)

GW Basin: CARLSBAD
County: LEA

Critical Management Area Name(s): NONE
Special Condition Area Name(s): NONE
Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

NW 1/4 of SE 1/4 of NW 1/4 of NE 1/4 of Section 06, Township 26S, Range 34E.

Coordinate System Details:**Geographic Coordinates:**

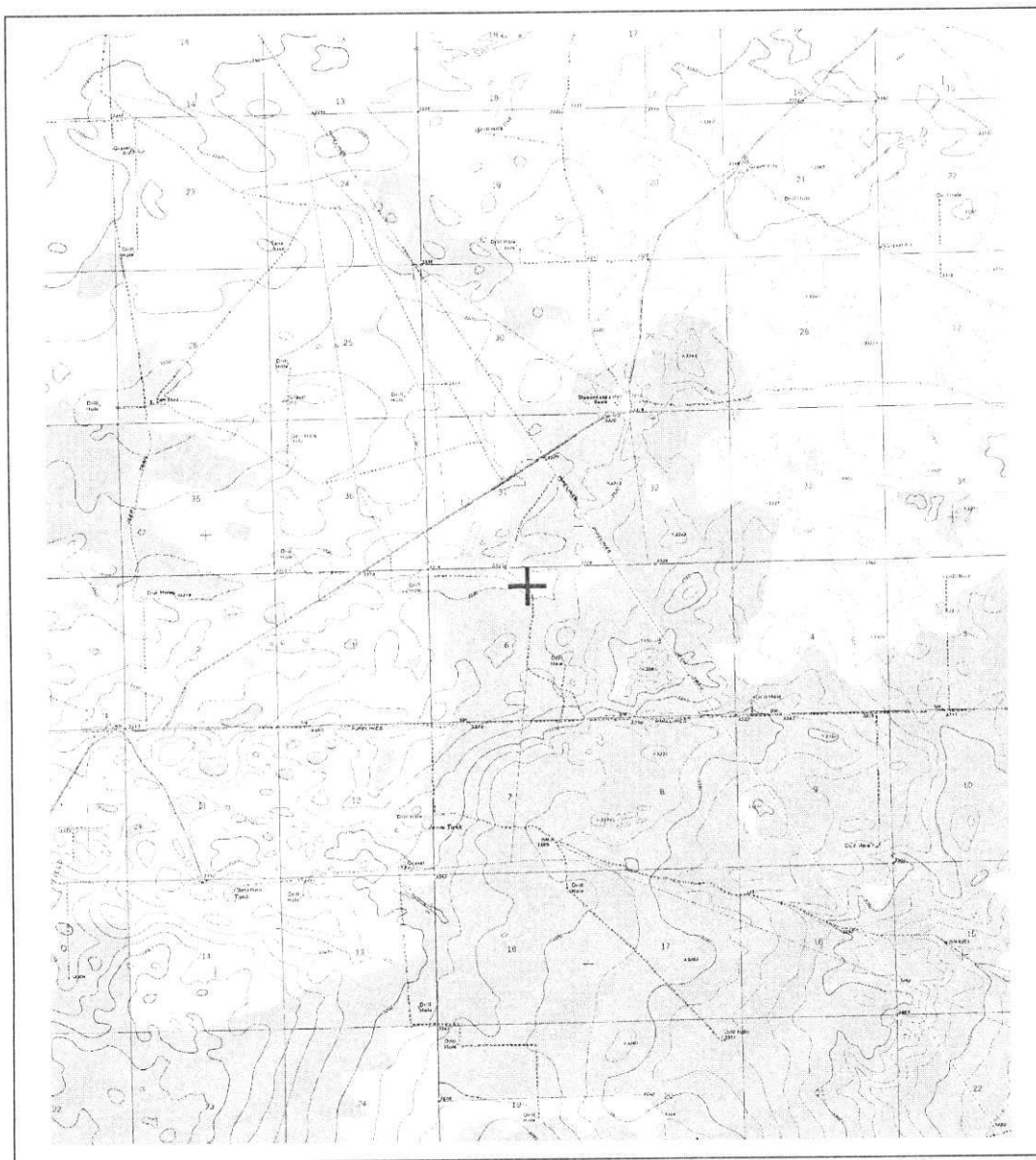
Latitude: 32 Degrees 4 Minutes 40.2 Seconds N
Longitude: 103 Degrees 30 Minutes 22.9 Seconds W

Universal Transverse Mercator Zone: 13N

| | | |
|----------------------------|---------------|--------------|
| NAD 1983(92) (Meters) | N: 3,550,040 | E: 640,971 |
| NAD 1983(92) (Survey Feet) | N: 11,647,089 | E: 2,102,918 |
| NAD 1927 (Meters) | N: 3,549,839 | E: 641,018 |
| NAD 1927 (Survey Feet) | N: 11,646,429 | E: 2,103,073 |

State Plane Coordinate System Zone: New Mexico East

| | | |
|----------------------------|------------|------------|
| NAD 1983(92) (Meters) | N: 119,798 | E: 243,072 |
| NAD 1983(92) (Survey Feet) | N: 393,037 | E: 797,479 |
| NAD 1927 (Meters) | N: 119,780 | E: 230,518 |
| NAD 1927 (Survey Feet) | N: 392,980 | E: 756,292 |

NEW MEXICO OFFICE OF STATE ENGINEER**Locator Tool Report**

WR File Number: C-03441-STK Scale: 1:77,058

Northing/Easting: UTM83(92) (Meter): N: 3,550,040 E: 640,971

Northing/Easting: SPCS83(92) (Feet): N: 393,037 E: 797,479

GW Basin: Carlsbad



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USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

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site_no list =

- 320419103302201

Minimum number of levels = 1

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

USGS 320419103302201 26S.34E.06.21414

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°04'37.9", Longitude 103°30'20.5" NAD83

Land-surface elevation 3,319.00 feet above NGVD29

The depth of the well is 360 feet below land surface.

This well is completed in the Chinle Formation (231CHNL) local aquifer.

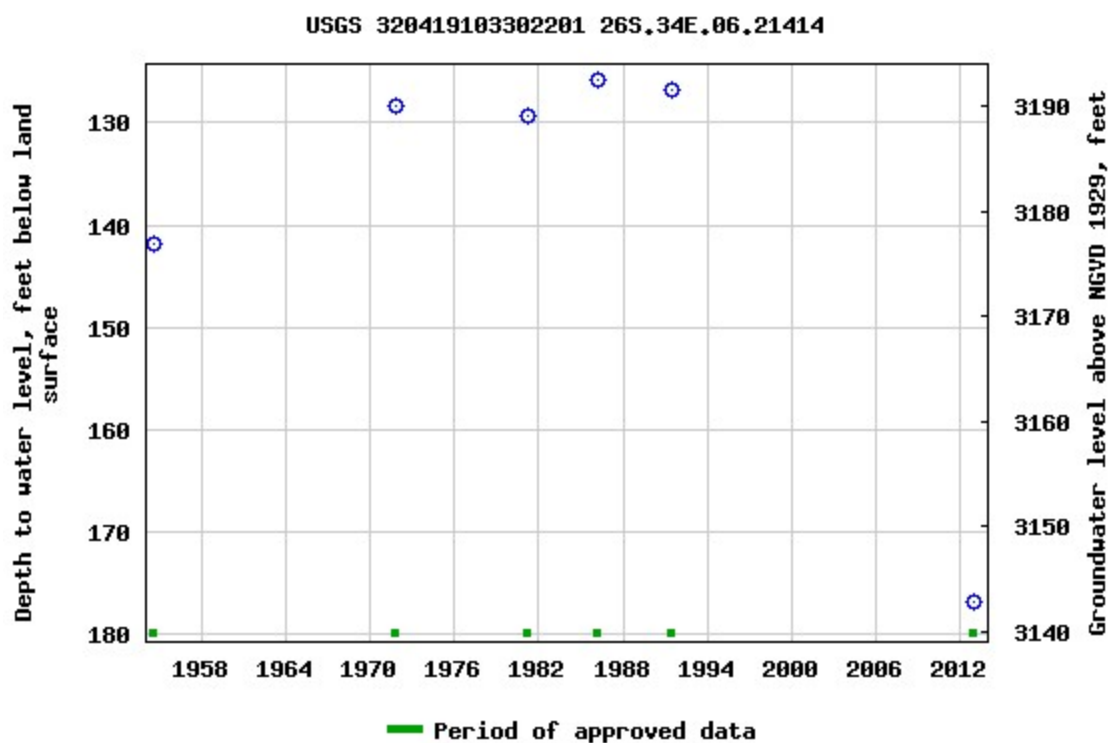
Output formats

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[Graph of data](#)

[Reselect period](#)



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

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2020-06-16 09:05:55 EDT

0.66 0.58 nadww01



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Geographic Area:

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Search Results -- 1 sites found

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- 320419103302202

Minimum number of levels = 1

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USGS 320419103302202 26S.34E.06.21414A

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°04'19", Longitude 103°30'22" NAD27

Land-surface elevation 3,329 feet above NAVD88

This well is completed in the Chinle Formation (231CHNL) local aquifer.

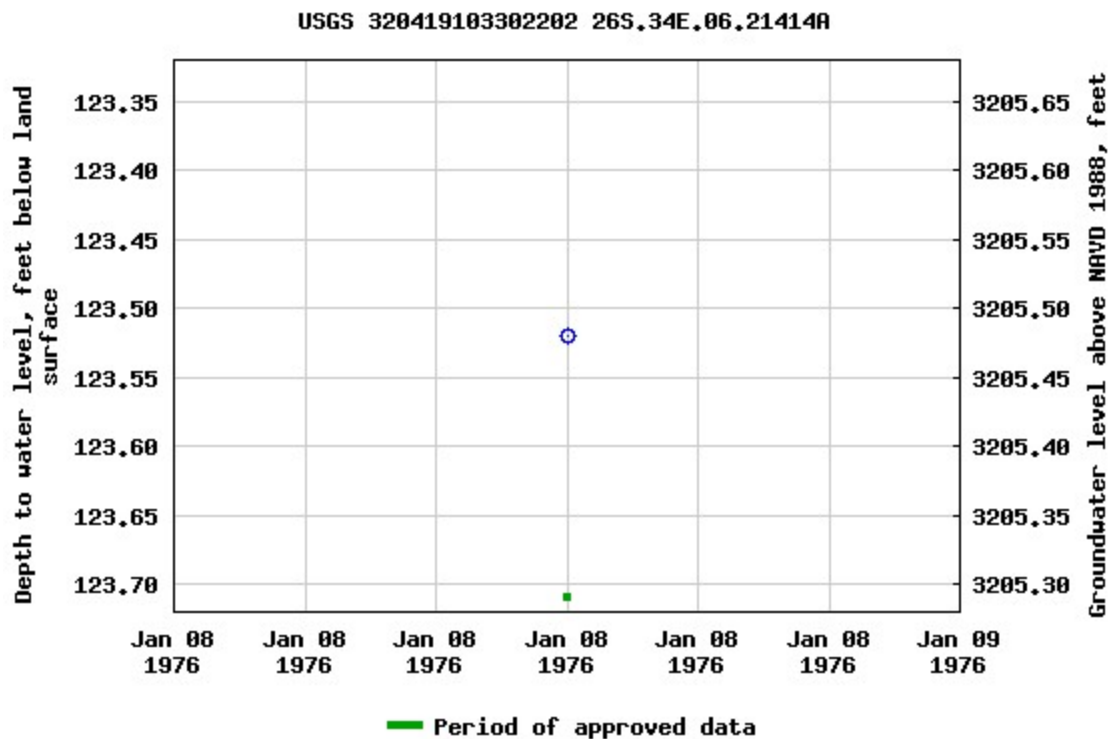
Output formats

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

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2020-06-16 09:04:13 EDT

0.67 0.55 nadww01

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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 11290

CONDITIONS OF APPROVAL

| | | | | | |
|--|--|--|-------------|----------------------|--------------------|
| Operator: DEVON ENERGY PRODUCTION COMPAN 333 West Sheridan Ave. Oklahoma City, OK73102 | | | OGRID: 6137 | Action Number: 11290 | Action Type: C-141 |
| OCD Reviewer | | | Condition | | |
| ceads | | | None | | |