

Incident ID	nAPP2218625686, nAPP2226926129
District RP	
Facility ID	30-015-45643
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.*

N/A 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: Dale Woodall Title: Environmental Professional
 Signature: Dale Woodall Date: 2/24/2023
 email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 02/24/2023

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: Robert Hamlet Date: 6/28/2023
 Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

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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?	65 (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.*

- N/A Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- N/A Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- N/A Boring or excavation logs
- Photographs including date and GIS information
- N/A Topographic/Aerial maps
- N/A Laboratory data including chain of custody

State of New Mexico
Oil Conservation Division

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

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

Printed Name: Dale Woodall Title: Env. Professional

Signature: Dale Woodall Date: 2/24/2023

email: Dale.Woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 02/24/2023

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Printed Name: Dale Woodall Title: Environmental Professional
 Signature: Dale Woodall Date: 2/24/2023
 email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 02/24/2023

Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: _____ Date: _____

Incident ID	nAPP2218625686, nAPP2226926129
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Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

N/A A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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 Signature: Dale Woodall Date: 2/24/2023
 email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 02/24/2023

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: _____



February 23, 2023

Vertex Project #: 22E-02178

Spill Closure Report: Collie 35 34 22 27 Fee #401H
Unit A, Section 35, Township 22 South, Range 27 East
County: Eddy
Incident ID: nAPP2218625686, nAPP2226926129

Prepared For: **Devon Energy Production Company**
6488 Seven Rivers Highway
Artesia, New Mexico 88220

New Mexico Oil Conservation Division – District 2 – Artesia
811 South 1st Street
Artesia, New Mexico 88210

Devon Energy Production Company (Devon) retained Vertex Resource Services Inc. (Vertex) to conduct spill assessment and liner inspections for produced water releases that occurred at Collie 35 34 22 27 Fee #401H, incidents nAPP2218625686 and nAPP2226926129 (hereafter referred to as “Collie”). Devon provided spill notification to the New Mexico Oil Conservation Division (NMOCD) District 2, via submission of initial C-141 Release Notifications (Attachment 1). This letter provides a description of the Spill Assessment and includes a request for Spill Closure. The spill area is located at N 32.351409, W -104.152920.

Background

The site is located approximately 1.06 miles east of Otis, New Mexico (Google Inc., 2022). The legal location for the site is Unit A, Section 35, Township 22 South and Range 27 East in Eddy County, New Mexico. The spill area is located on private property.

The *Geological Map of New Mexico* indicates the surface geology at Collie is comprised of Qa – Alluvium (Holocene to upper Pleistocene; New Mexico Bureau of Geology and Mineral Resources, 2022). The Natural Resources Conservation Service *Web Soil Survey* characterizes the soil at the site as Reagan loam, which is characterized as loam material. It tends to be well-drained with a low runoff (United States Department of Agriculture, Natural Resources Conservation Service, 2022). There is medium potential for karst geology at Collie (United States Department of the Interior, Bureau of Land Management, 2018).

The surrounding landscape is associated with fan remnants and alluvial fans typical of elevations of 1,100 to 5,300 feet above sea level. The climate is semi-arid, with average annual precipitation ranging between 7 and 15 inches. Limited to no vegetation is allowed to grow on the compacted facility pad. Historically, the plant community consists of black grama, tobosa, bunch grasses, soap tree yucca, ephedra, fourwing saltbush, broom snakeweed, and prickly pear. The surrounding land is farmland of statewide importance.

There is no surface water located on-site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 vertex.ca

Devon Energy Production Company

Collie 35 34 22 27 Fee #401H, nAPP2218625686, nAPP2226926129

2022 Spill Assessment and ClosureFebruary 2023

Mexico Administrative Code (NMAC; New Mexico Oil Conservation Division, 201), is the Pecos River located approximately 1.77 miles northeast of the site (United States Fish and Wildlife Service, 2022). There are no continuous flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes, or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

Incident Description

nAPP2218625686

The release occurred on July 4, 2022, when the tanks overflowed due to an equipment failure. The spill was reported on July 4, 2022, and involved the release of approximately 553 barrels (bbl) of produced water into the lined containment of the tank battery. The release volume was initially reported as 633 bbl based on the depth of produced water in the containment; however, the initial calculation did not take the volume of equipment and tanks within the containment into account and the corrected calculated release volume was determined to be 552.78 bbl. Approximately 550 bbl of free fluid were recovered during initial spill clean-up. No produced water was released into undisturbed areas or waterways. The daily field reports (DFRs) and site photographs are included in Attachment 2.

nAPP2226926129

The release occurred on September 25, 2022, due to a broken nipple fitting on the top of the water transfer pump. The spill was reported on September 25, 2022, and involved the release of approximately 5 bbl of produced water into the lined containment of the tank battery. Approximately 5 bbl of free fluid was recovered during initial spill clean-up. No produced water was released into undisturbed areas or waterways. The DFRs and site photographs are included in Attachment 2.

Closure Criteria Determination

The depth to groundwater was determined using information from the New Mexico Office of the State Engineer Water Rights Reporting System. A 0.5-mile search radius was used to determine groundwater depth. The closest recorded depth to groundwater was determined to be 65 feet below ground surface (bgs) and 0.44 miles from the site (New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System, 2022). Documentation used in Closure Criteria Determination research is included in Attachment 3 and summarized in Table 1.

Devon Energy Production Company

2022 Spill Assessment and Closure

Collie 35 34 22 27 Fee #401H, nAPP2218625686, nAPP2226926129

February 2023

Table 1. Closure Criteria Worksheet			
Site Name: Collie 35-34-22-27 Fee #401H			
Spill Coordinates:		X: 32.351409	Y: -104.152920
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	65	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	9,334	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	11,529	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	2,410	feet
5	i) 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, or	2,323	feet
	ii) Within 1000 feet of any fresh water well or spring	2,323	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	1,330	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)	Medium	Critical High Medium Low
10	Within a 100-year Floodplain	Undetermined	year
11	Soil Type	Reagan loam	
12	Ecological Classification	Loamy	
13	Geology	Qa	
NMAC 19.15.29.12 E (Table 1) Closure Criteria		51-100'	<50' 51-100' >100'

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Collie 35 34 22 27 Fee #401H, nAPP2218625686, nAPP2226926129

2022 Spill Assessment and Closure

February 2023

Based on data included in the closure criteria determination worksheet, the release at Collie would not be subject to the requirements of Paragraph (4) of Subsection C of 19.15.29.12 of NMAC and the closure criteria for the site would be determined to be associated with the following constituent concentration limits based on depth to groundwater. The criteria fall under the "51-100 feet to ground water". The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
51 - 100 feet	Chloride	10,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – total dissolved solids

TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics, BTEX – benzene, toluene, ethylbenzene and xylenes

Remedial Actions Taken

On July 11 and November 8, 2022, Vertex provided 48-hour notification of the liner inspections to NMOCD District 2, as required by Subparagraph (a) of Paragraph (5) of Subsection A 19.15.29.11 NMAC (Attachment 4). On July 14 and November 11, 2022, Vertex was on-site to conduct inspections of the lined containment and verify that the liner was intact and had the ability to contain the release. The inspections confirmed the liner remained intact and had the ability to contain the release. The dimensions of the containment, and respective tanks and equipment inside were measured and the calculated volume checked against the reported fluid volume released for incident nAPP2218625686. The reported volume released of 552.78 bbl for incident nAPP2218625686 was determined to be correct. The liner integrity was confirmed and documented in the DFRs for the respective inspections (Attachment 2).

Closure Request

Vertex recommends no additional remediation action to address the release at Collie. The secondary containment liner was intact and contained the release. There are no anticipated risks to human, ecological, or hydrological receptors associated with the release site.

Vertex requests that these incidents (nAPP2218625686 and nAPP2226926129) be closed as all closure requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. Devon certifies that all information in this report and the attachments are correct and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain closure on the July 11 and November 8, 2022, releases at Collie 35 34 22 27 Fee #401H.

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Devon Energy Production Company
Collie 35 34 22 27 Fee #401H, nAPP2218625686, nAPP2226926129

2022 Spill Assessment and Closure
February 2023

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 346.814.1413 or kstallings@vertex.ca.



2/23/2023

Lakin Pullman, B.Sc.
ENVIRONMENTAL SPECIALIST, REPORTING

Date



2/23/2023

Kent Stallings, P.G.
PROJECT MANAGER, REPORT REVIEW

Date

Attachments

- Attachment 1. NMOCD C-141 Reports
- Attachment 2. Daily Field Reports with Photographs
- Attachment 3. Closure Criteria for Soils Impacted by a Release Research Determination Documentation
- Attachment 4. Required 48-hr Notification of Liner Inspection to Regulatory Agencies

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Devon Energy Production Company

Collie 35 34 22 27 Fee #401H, nAPP2218625686, nAPP2226926129

2022 Spill Assessment and ClosureFebruary 2023

References

Google Inc. (2022). *Google Earth Pro (Version 7.3.4)* [Software]. Retrieved from <http://google.com/earth>.

New Mexico Bureau of Geology and Mineral Resources. (2022). *Interactive Geologic Map*. Retrieved from <https://maps.nmt.edu/>.

New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2022). *Water Column/Average Depth to Water Report*. Retrieved from <http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html>.

New Mexico Oil Conservation Division. (2018). *New Mexico Administrative Code – Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.

United States Department of Agriculture, Natural Resources Conservation Service. (2022). *Web Soil Survey*. Retrieved from <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

United States Department of the Interior, Bureau of Land Management. (2018). *CFO Karst Public*. https://www.nm.blm.gov/shapeFiles/cfo/carlsbad_spatial_data.html

United States Fish and Wildlife Service. (2022). *National Wetlands Inventory*. Retrieved from <https://www.fws.gov/wetlands/data/Mapper.html>.

Devon Energy Production Company

Collie 35 34 22 27 Fee #401H, nAPP2218625686, nAPP2226926129

2022 Spill Assessment and Closure

February 2023

Limitations

This report has been prepared for the sole benefit of Devon Energy Production Company (Devon). This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division without the express written consent of Vertex Resource Services Inc. (Vertex) and Devon. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

ATTACHMENT 1

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Incident ID	nAPP2218625686
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Release Notification

Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Dale Woodall	Contact Telephone
Contact email Dale.Woodall@dvn.com	Incident # (assigned by OCD)
Contact mailing address 6488 Seven Rivers Hwy Artesia, NM 88210	

Location of Release Source

Latitude 32.352553 Longitude -104.152988
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Collie Pad	Site Type Oil
Date Release Discovered 07/04/2022	API# (if applicable)

Unit Letter	Section	Township	Range	County
A	35	22S	27E	Eddy

Surface Owner: State Federal Tribal Private (Name: William J Walterscheid)

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) 553 BBLs	Volume Recovered (bbls) 550 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 Tank over flowed into lined containment.

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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? Spill is over 25 BBLS.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice given to OCD by Dale Woodall by email on 07/04/2022.	

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>Kendra Ruiz</u>	Title: <u>EHS Associate</u>
Signature: <u>Kendra Ruiz</u>	Date: <u>07/18/2022</u>
email: <u>Kendra.Ruiz@dvn.com</u>	Telephone: <u>575-748-0167</u>
<u>OCD Only</u>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>07/26/2022</u>

Spills In Lined Containment	
Measurements Of Standing Fluid	
Length(Ft)	120
Width(Ft)	50
Depth(in.)	7.1
Total Capacity without tank displacements (bbls)	632.28
No. of 500 bbl Tanks In Standing Fluid	4
No. of Other Tanks In Standing Fluid	
OD Of Other Tanks In Standing Fluid(feet)	
Total Volume of standing fluid accounting for tank displacement.	552.78

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720
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 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 126217

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 126217
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	7/26/2022

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Contact email Dale.Woodall@dvn.com	Incident # (assigned by OCD)
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Location of Release Source

Latitude 32.352244 Longitude -104.152960
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Collie Pad	Site Type Oil
Date Release Discovered 9/25/2022	API# (if applicable)

Unit Letter	Section	Township	Range	County
H	35	22S	27E	Eddy

Surface Owner: State Federal Tribal Private (Name: William J Walterscheid)

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) 5 BBLS	Volume Recovered (bbls) 5 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 Leak from water transfer pump. Fluid stayed within lined containment.

State of New Mexico
Oil Conservation Division

Page 2

Incident ID	NAPP2226926129
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 checked="" 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 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>Kendra Ruiz</u> Title: <u>EHS Associate</u> Signature: <u>Kendra Ruiz</u> Date: <u>10/6/2022</u> email: <u>Kendra.Ruiz@dvn.com</u> Telephone: <u>575-748-0167</u>
<u>OCD Only</u> Received by: <u>Jocelyn Harimon</u> Date: <u>10/06/2022</u>

Spills In Lined Containment	
Measurements Of Standing Fluid	
Length(Ft)	47
Width(Ft)	50
Depth(in.)	0.18
Total Capacity without tank displacements (bbls)	6.28
No. of 500 bbl Tanks In Standing Fluid	2
No. of Other Tanks In Standing Fluid	
OD Of Other Tanks In Standing Fluid(feet)	
Total Volume of standing fluid accounting for tank displacement.	5.27

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 149279

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 149279
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	10/6/2022

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	nAPP2218625686, nAPP2226926129
District RP	
Facility ID	30-015-45643
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?	65 (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.*

- N/A Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- N/A Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- N/A Boring or excavation logs
- Photographs including date and GIS information
- N/A Topographic/Aerial maps
- N/A Laboratory data including chain of custody

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2218625686, nAPP2226926129
District RP	
Facility ID	30-015-45643
Application ID	

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

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

Printed Name: Dale Woodall Title: Env. Professional

Signature: Dale Woodall Date: 2/24/2023

email: Dale.Woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2218625686, nAPP2226926129
District RP	
Facility ID	30-015-45643
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: Dale Woodall Title: Environmental Professional

Signature: Dale Woodall Date: 2/24/2023

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2218625686, nAPP2226926129
District RP	
Facility ID	30-015-45643
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.*

N/A 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: Dale Woodall Title: Environmental Professional

Signature: Dale Woodall Date: 2/24/2023

email: dale.woodall@dvn.com Telephone: 575-748-1838

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: _____

ATTACHMENT 2



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	7/14/2022
Site Location Name:	Collie Fee #401 H	Report Run Date:	7/14/2022 10:47 PM
Client Contact Name:	Wes Matthews	API #:	
Client Contact Phone #:	(575) 748-0176	Project Owner:	
Unique Project ID		Project Manager:	
Project Reference #			

Summary of Times

Arrived at Site	7/14/2022 8:04 AM
Departed Site	7/14/2022 9:52 AM

Field Notes

- 8:16** Arrived at site and filled out safety paperwork.
- 8:17** Will conduct a liner inspection around and near equipment where the reported spill happened.
- 8:19** This includes areas around the containment, between equipment, down each wall of the containment, and areas where the release occurred.
- 9:07** Liner inspection has been completed. Overall the liner is in good condition even after the release. Within the containment, no apparent tears or holes, that could lead to a breach in the liner, were observed.
- 9:11** No significant staining was observed outside the containment wall.

Next Steps & Recommendations

- 1 Delineate the release area



Daily Site Visit Report

Site Photos

Viewing Direction: Southeast



Descriptive Photo - 8
Viewing Direction: Southeast
Date: Northwest corner of containment wall
Created: 7/14/2022 8:35:37 AM
Lat:32.381635, Long:-104.152718

Northwest corner of containment wall

Viewing Direction: Northwest



Descriptive Photo - 10
Viewing Direction: Northwest
Date: Southeast corner of containment wall
Created: 7/14/2022 8:48:11 AM
Lat:32.381375, Long:-104.152718

Southeast corner of containment wall

Viewing Direction: Northwest



Descriptive Photo - 11
Viewing Direction: Northwest
Date: Liner inside containment (southeast portions)
Created: 7/14/2022 8:47:37 AM
Lat:32.381585, Long:-104.152721

Liner inside containment (southeast portions)

Viewing Direction: Southeast

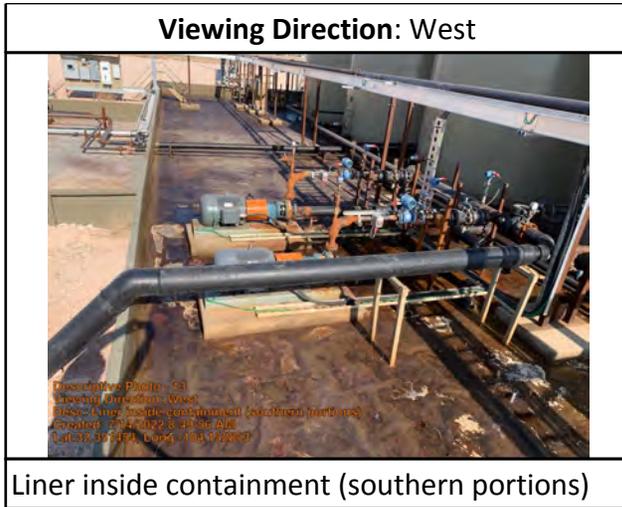


Descriptive Photo - 12
Viewing Direction: Southeast
Date: Liner inside containment (southeast portions)
Created: 7/14/2022 8:48:36 AM
Lat:32.381648, Long:-104.152739

Liner inside containment (southeast portions)



Daily Site Visit Report



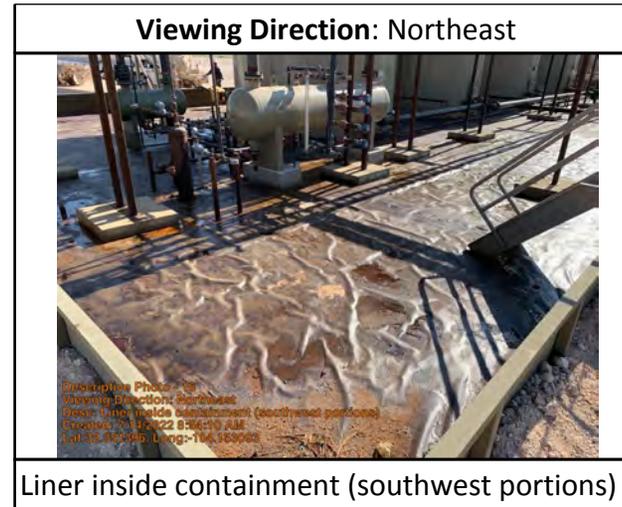
Liner inside containment (southern portions)



Liner inside containment (southern portions)



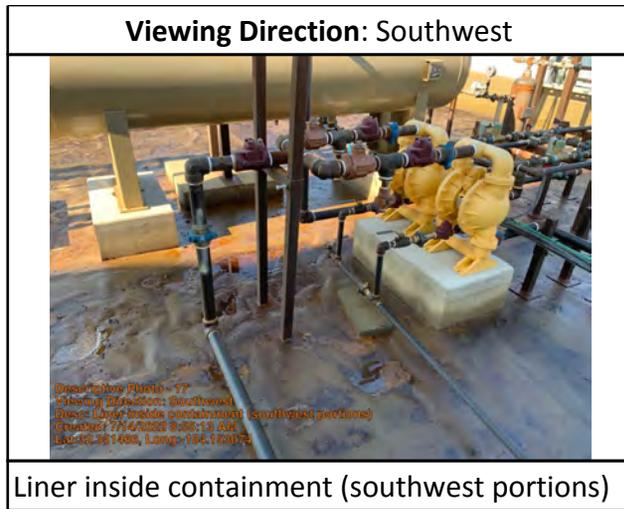
Southwest corner of containment wall



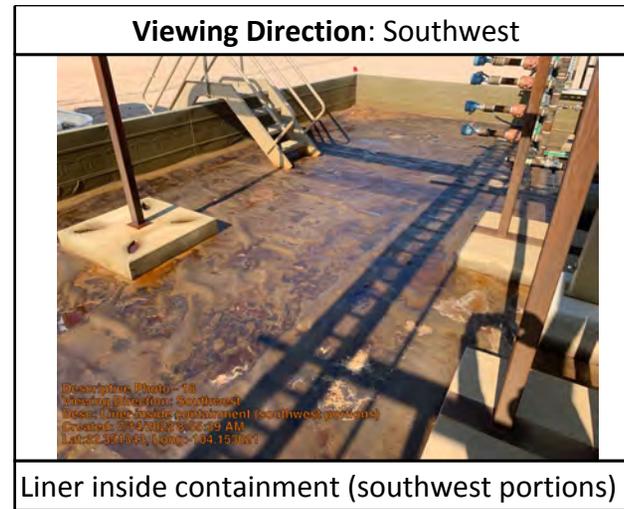
Liner inside containment (southwest portions)



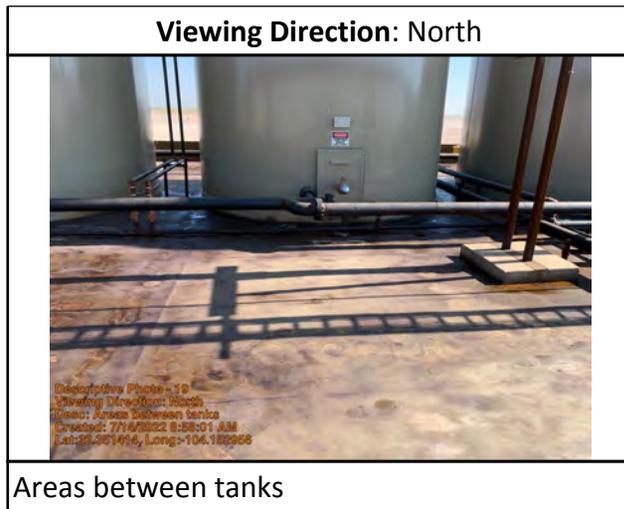
Daily Site Visit Report



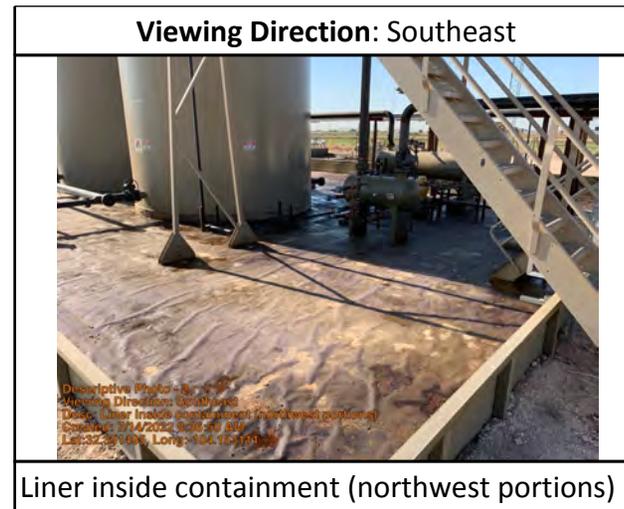
Liner inside containment (southwest portions)



Liner inside containment (southwest portions)



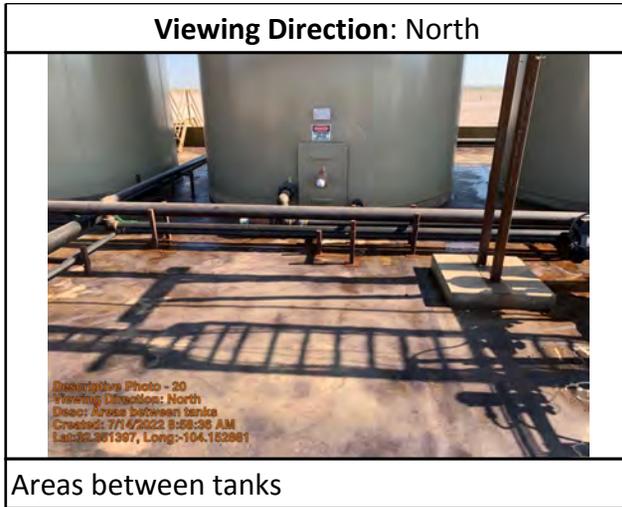
Areas between tanks



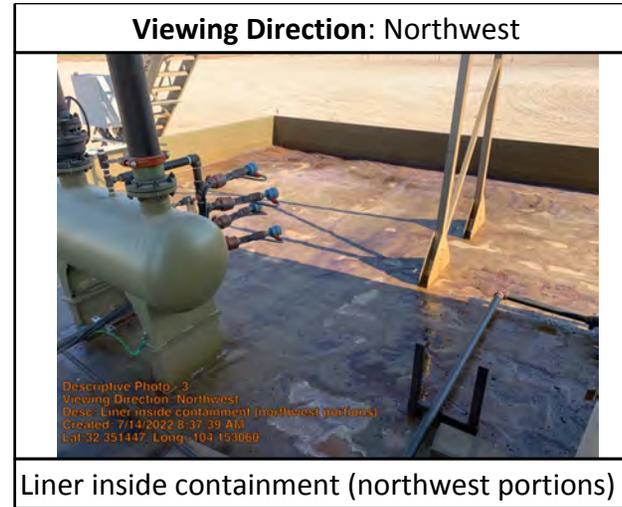
Liner inside containment (northwest portions)



Daily Site Visit Report



Areas between tanks



Liner inside containment (northwest portions)



Northern containment wall



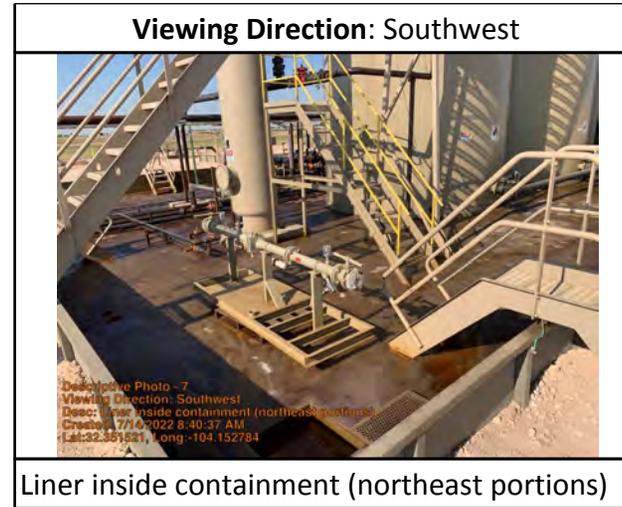
Liner inside containment (northern portions)



Daily Site Visit Report



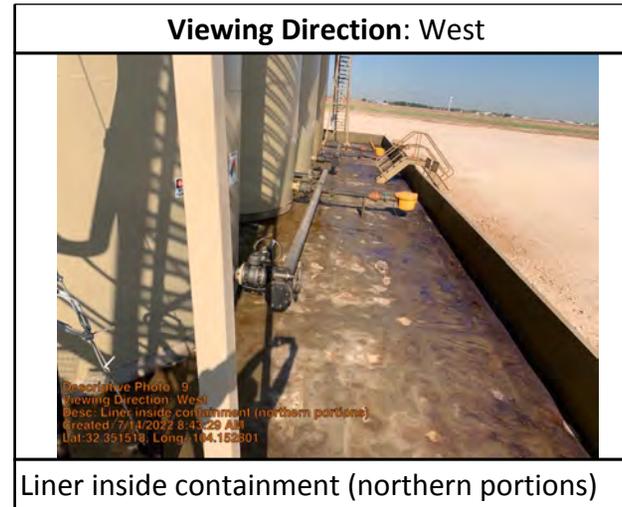
Northeast corner of containment wall



Liner inside containment (northeast portions)



Liner inside containment (northeast portions)



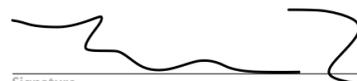
Liner inside containment (northern portions)

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Fernando Rodriguez

Signature: 
Signature



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	11/11/2022
Site Location Name:	Collie Fee #401 H	Report Run Date:	11/11/2022 11:08 PM
Client Contact Name:	Wes Matthews	API #:	
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	11/11/2022 9:47 AM
Departed Site	11/11/2022 1:30 PM

Field Notes

- 9:47** Completed safety paperwork
- 9:48** On site to conduct liner inspection and take measurements of inside of liner (L x W x H) as well as any other object taking up significant volume within containment.
- 12:42** Tank battery containment:
 - 115' long
 - 50 ' wide
 - 26 & 3/8 " Inside bottom containment to top edge
- 12:44** Small scrubber within containment:
 - 40" tall
 - 27" circumference
 - 8.5" diameter
- 13:20** There are sixty-six 2"x2" square pipe supports within containment at various heights.
- 12:48** Twenty-one. 3"x3" square pipe supports within containment exceeding internal containment height

Next Steps & Recommendations

Daily Site Visit Report

1 Send report





Daily Site Visit Report

Site Photos

Viewing Direction: North



Descriptive Photo - 1
Viewing Direction: North
Desc: Northeast corner
Created: 11/11/2022 10:28:54 AM
Lat:32.361608, Long:-104.162782

Northeast corner

Viewing Direction: Northwest



Descriptive Photo - 10
Viewing Direction: Northwest
Desc: Northwest corner of containment
Created: 11/11/2022 10:46:27 AM
Lat:32.361824, Long:-104.163078

Northwest corner of containment

Viewing Direction: South



Descriptive Photo - 11
Viewing Direction: South
Desc: Far West edge of containment
Created: 11/11/2022 10:43:68 AM
Lat:32.361472, Long:-104.163081

Far West edge of containment

Viewing Direction: Southwest



Descriptive Photo - 12
Viewing Direction: Southwest
Desc: Southwest corner of containment
Created: 11/11/2022 10:44:23 AM
Lat:32.361431, Long:-104.163083

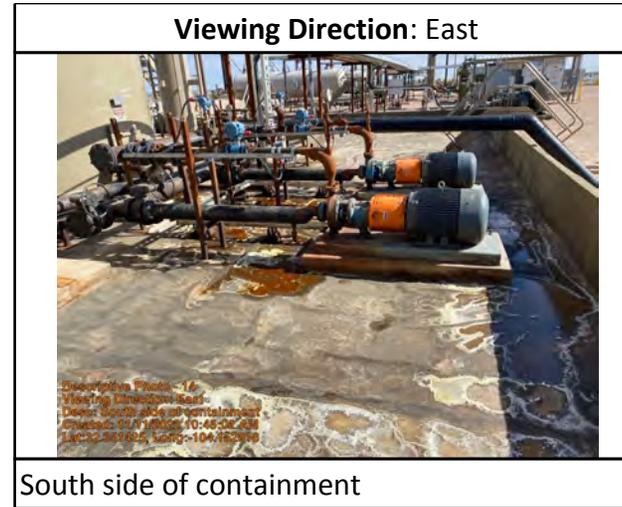
Southwest corner of containment



Daily Site Visit Report



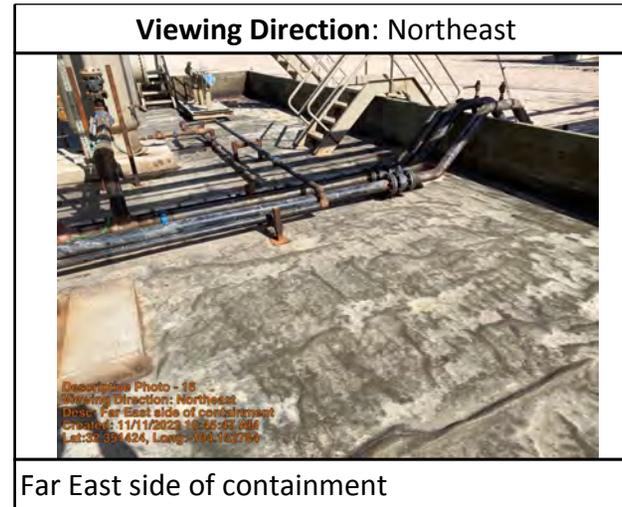
South side of containment



South side of containment



Southeast corner of containment



Far East side of containment



Daily Site Visit Report

Viewing Direction: West



Descriptive Photo - 17
Viewing Direction: West
Desc: Separated containment on South side of tank battery
Created: 11/11/2022 10:46:54 AM
Lat:32.381408, Long:-104.182872

Separated containment on South side of tank battery

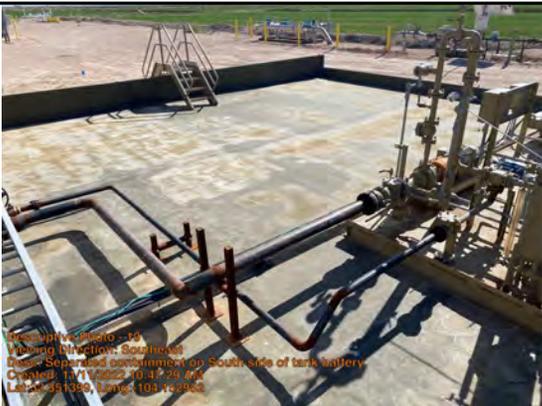
Viewing Direction: Northeast



Descriptive Photo - 18
Viewing Direction: Northeast
Desc: Separated containment on South side of tank battery
Created: 11/11/2022 10:48:59 AM
Lat:32.381337, Long:-104.182872

Separated containment on South side of tank battery

Viewing Direction: Southeast



Descriptive Photo - 19
Viewing Direction: Southeast
Desc: Separated containment on South side of tank battery
Created: 11/11/2022 10:47:29 AM
Lat:32.381408, Long:-104.182872

Separated containment on South side of tank battery

Viewing Direction: West



Descriptive Photo - 20
Viewing Direction: West
Desc: Vessel concrete base 5.00 wide by 5.00 long by 6.00
Created: 11/11/2022 10:32:12 AM
Lat:32.381408, Long:-104.182725

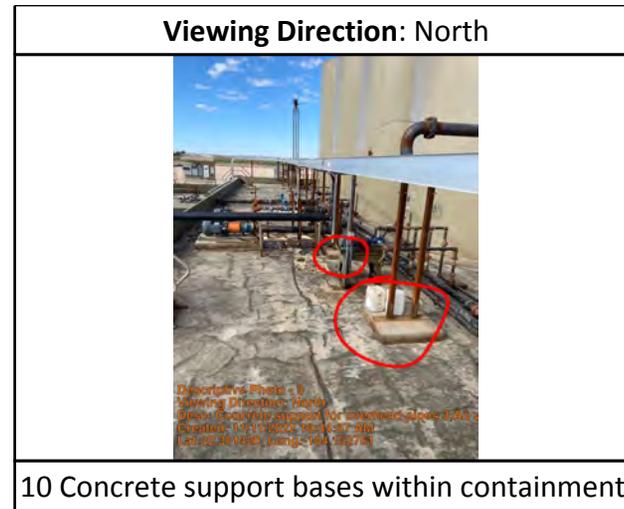
Vessel concrete base 5' wide by 5' long by 6" tall



Daily Site Visit Report



Concrete support bases within containment



10 Concrete support bases within containment for overhead pipes 3' wide by 3' long by 6" tall



10 Concrete support bases within containment for overhead pipes 3' wide by 3' long by 6" tall



Three Concrete base support for scrubber vessel and yellow pneumatic pump. 3' long by 20" wide by 1' tall



Daily Site Visit Report

Viewing Direction: East



Descriptive Photo - 6
Viewing Direction: East
Eyes: Two concrete base supports for transfer pumps
3.0 wide by 6.0 long by 6
Created: 11/11/2022 10:40:40 AM
Lat:32.361448, Long:-104.182859

Two concrete base supports for transfer pumps.
3' wide by 6' long by 6" tall.

Viewing Direction: West



Descriptive Photo - 7
Viewing Direction: West
Eyes: Four storage tanks of 1000 bbl capacity
Created: 11/11/2022 10:42:16 AM
Lat:32.361891, Long:-104.182810

Four storage tanks of 1000 bbl capacity.
52 ft circumference.
15.5 ft diameter.
30 ft tall

Viewing Direction: West



Descriptive Photo - 8
Viewing Direction: West
Eyes: North edge of containment
Created: 11/11/2022 10:42:41 AM
Lat:32.361826, Long:-104.182813

North edge of containment

Viewing Direction: West



Descriptive Photo - 9
Viewing Direction: West
Eyes: North edge of containment
Created: 11/11/2022 10:43:04 AM
Lat:32.361826, Long:-104.182827

North edge of containment

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Austin Harris

Signature:

A handwritten signature in black ink, appearing to be 'AH' or similar initials, written over a horizontal line.

Signature

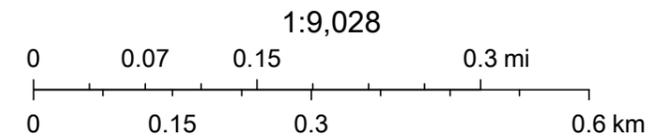
ATTACHMENT 3

Collie Pad



11/4/2022, 11:48:53 AM

- Override 1
- OSE District Boundary
- New Mexico State Trust Lands
- SiteBoundaries
- GIS WATERS PODs
- Water Right Regulations
- Subsurface Estate
- Active
- Pending
- Negative Easement Area
- Conveyances
- Ditch



Esri, HERE, GeoTechnologies, Inc., Esri, HERE, Garmin, GeoTechnologies, Inc., U.S. Department of Energy Office of Legacy Management, Maxar



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64 Q16 Q4	Sec	Tws	Rng	X	Y
C	01312	3	1	35	22S 27E	578373	3579593*

Driller License:	108	Driller Company:	SMITH, SAM S.				
Driller Name:	SAM SMITH						
Drill Start Date:	12/28/1966	Drill Finish Date:	01/23/1967	Plug Date:			
Log File Date:	03/03/1967	PCW Rev Date:	04/07/1967	Source:	Shallow		
Pump Type:	TURBIN	Pipe Discharge Size:			Estimated Yield:	1800 GPM	
Casing Size:	16.00	Depth Well:	203 feet	Depth Water:	65 feet		

Water Bearing Stratifications:	Top	Bottom	Description
	140	162	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	68	188

Meter Number:	5422	Meter Make:	MCC
Meter Serial Number:	010591010	Meter Multiplier:	1.0000
Number of Dials:	6	Meter Type:	Diversion
Unit of Measure:	Acre-Feet	Return Flow Percent:	
Usage Multiplier:		Reading Frequency:	

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
04/09/2002	2002	0	A	MB	No electric meter	0
05/07/2002	2002	26	A	ms		26.496
06/13/2002	2002	61	A	CID		34.257
09/04/2002	2002	89	A	ms		28.270
01/16/2003	2002	93	A	ms		3.508
04/03/2003	2003	120	A	ms		27.218
06/05/2003	2003	208	A	ms		88.310
08/21/2003	2003	325	A	ab		117.247
01/07/2004	2003	377	A	ab		51.517
05/11/2004	2004	410	A	RM		33.534
07/15/2004	2004	473	A	TW		63.012
10/21/2004	2004	500	A	TW		26.621
01/03/2005	2004	500	A	TW		0
03/31/2005	2005	500	A	JW		0
07/07/2005	2005	500	A	JW	meter off	0
01/02/2012	2012	0	A	tw		0
07/24/2012	2012	370	A	tw		369.947
02/28/2013	2012	496	A	tw		125.585
10/29/2013	2013	764	A	tw		268.276
02/11/2014	2014	764	A	tw		0

12/09/2014	2014	780	A	tw	16.137
07/21/2015	2015	780	A	tw	0
09/18/2015	2015	780	A	tw	0
08/10/2016	2016	780	A	tw	0
12/08/2016	2016	780	A	tw	0.064
05/28/2017	2017	780	A	tw	0
12/28/2017	2017	780	A	tw	0

x

**YTD Meter Amounts:	Year	Amount
	2002	92.531
	2003	284.292
	2004	123.167
	2005	0
	2012	495.532
	2013	268.276
	2014	16.137
	2015	0
	2016	0.064
	2017	0

*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.

7/11/22 4:16 PM

POINT OF DIVERSION SUMMARY



Collie 35-34-22-27 Fee #401H



July 11, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

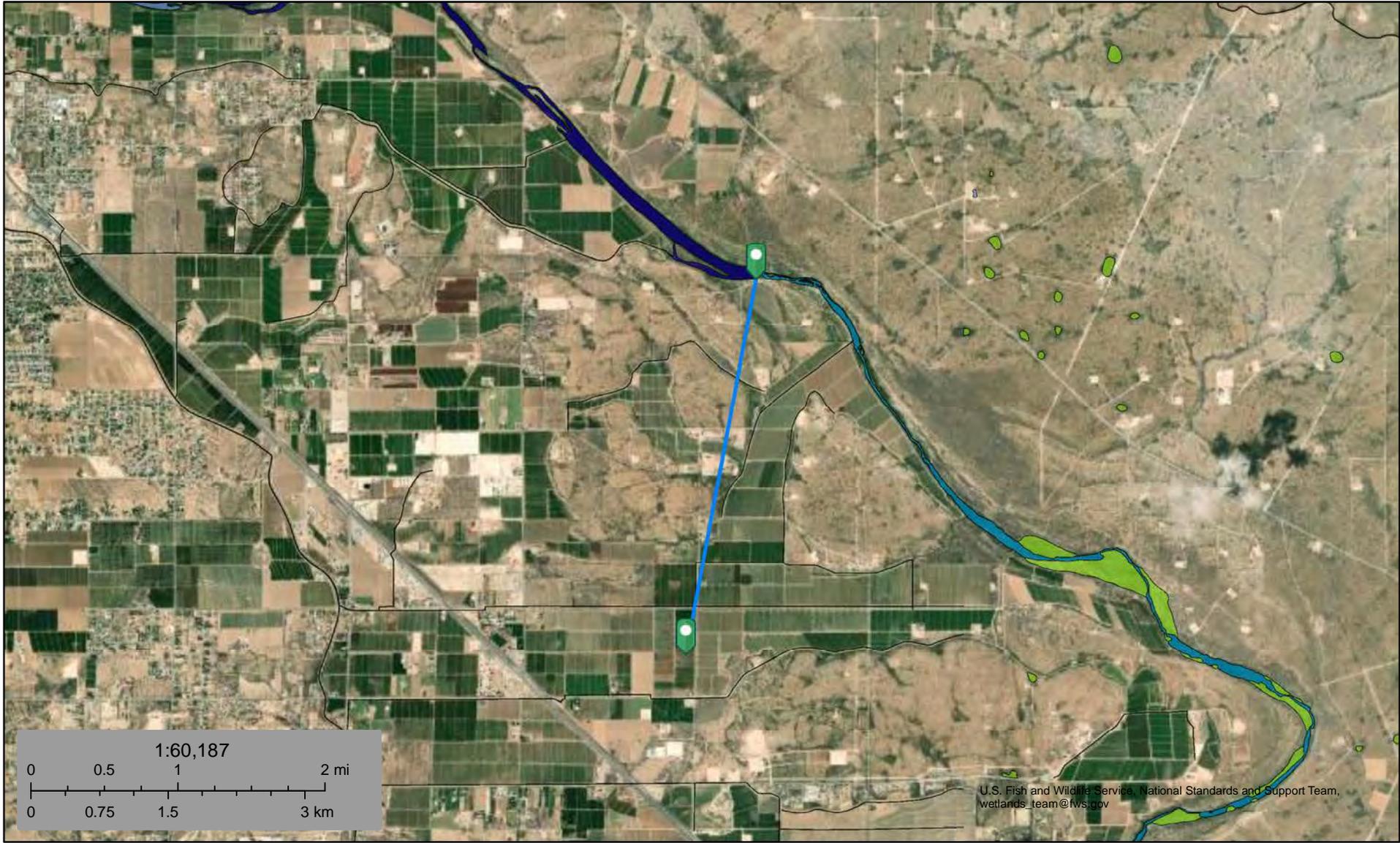
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



Collie 35-34-22-27 Fee #401H



July 11, 2022

Wetlands

- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Lake
- Estuarine and Marine Wetland
- Freshwater Pond
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Collie 35-34-22-27 Fee #401H

Nearest Residence: 0.46 miles (2,410 feet)

Feature 1

Collie 35-34-22-27 Fee #401H

Residence

M & J Oilfield Services

705

708

1000 ft





New Mexico Office of the State Engineer Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE)				(NAD83 UTM in meters)			
		Q64	Q16	Q4	Sec	Tw	Rng	X	Y
C	03282	3	3	2	35	22S	27E	579082	3579508*

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

Depth Water:

*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.

7/11/22 4:16 PM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer Water Right Summary



[get image list](#)

WR File Number: C 03282 **Subbasin:** C **Cross Reference:** -
Primary Purpose: DOL 72-12-1 DOMESTIC AND LIVESTOCK WATERING
Primary Status: PMT PERMIT
Total Acres: **Subfile:** - **Header:** -
Total Diversion: 3 **Cause/Case:** -
Owner: JAMES WALTERSCHEID

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
468596	72121	2006-05-19	PMT	APR	C 03282	T		3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q	64Q16Q4Sec	Tws	Rng	X	Y	Other Location Desc
C 03282			3	3	2	35 22S 27E	579082	3579508*	

An () after northing value indicates 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.

7/11/22 4:15 PM

WATER RIGHT SUMMARY

Collie 35-34-22-27 Fee #401H

Nearest Town: Otis, New Mexico
Distance: 1.06 miles (5,576 feet)



Collie 35-34-22-27 Fee #401H

Lightning Oilfield Services

Guadalupe Mountain Farm, Ranch & Show...

Jet Specialty, Inc

Senergy Petroleum - Bulk Plant

704

708

285

705

706

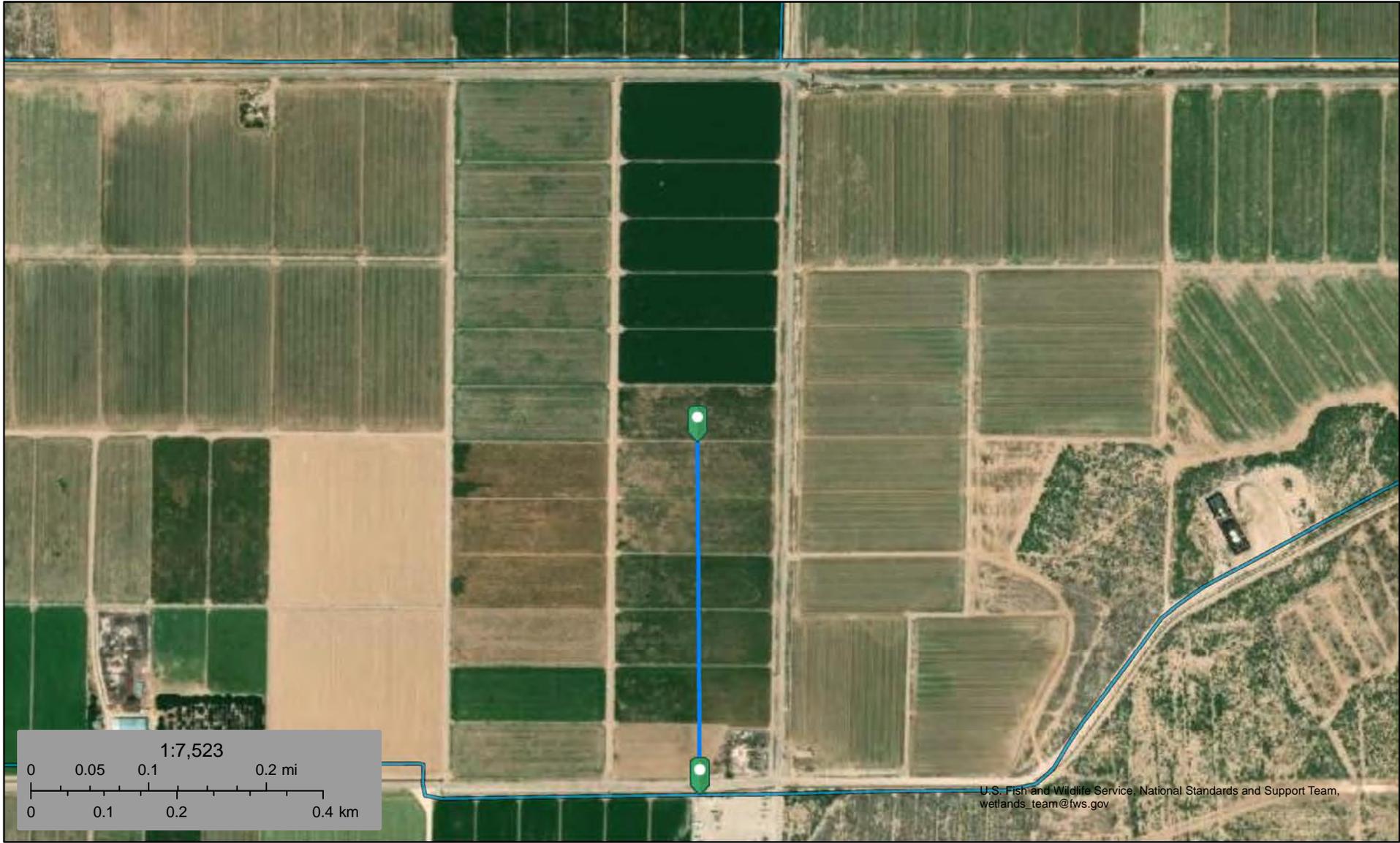
707

3000 ft





Collie 35-34-22-27 Fee #401H



July 11, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Ecological Reference Worksheet

Author(s) / participant(s): John Tunberg,

Contact for lead author : 505-761-4488

Reference site used? Yes/No

No

Date: 2/12/2010 **MLRA:** 42.3 **Ecological Site:** Loamy This *must* be verified based on soils and climate (see Ecological Site Description). Current plant community *cannot* be used to identify the ecological site.

Indicators: For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above and below average years for **each** community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.

1. Number and extent of rills | There should not be any rills.

After wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances rills may double in number on steeper slopes at the margins of this site after high-intensity summer thunderstorms. Any rills formed should not be long lived or interconnected and should heal rapidly.

2. Presence of water flow patterns: | There can be evidence of sheet flow.

There can be a few flow patterns that should be short and discontinuous. There can be some sheet flow. Water flow patterns should only be present following intense storm events on upper slope limits at the margins of this site. Numerous obstructions alter flow paths. Flow pattern length and numbers may double after wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances.

3. Number and height of erosional pedestals or terracettes: | Pedestals should be rare. Terracettes can occur and should be discontinuous.

There can be a few pedestals that should be less than 1 inch high. Terracettes can be common and should be discontinuous. If present plant or rock pedestals and terracettes are almost always in flow patterns. Wind caused pedestals are rare and only would be on the site following after wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances. These would show signs of healing within 1 year after event.

4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) :

Bare ground can make up to 50% of the ground cover on this site according to the ESD. Bare patch size should be small.

5. Number of gullies and erosion associated with gullies: |

Gullies and erosion associated with gullies should be rare are infrequent. Typically, gullies if present will only follow the micro topography. Natural drainages with little to no active cutting are common on this site. There should not be any accelerated erosion. After high-intensity summer thunderstorms or after wildfire, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances then gully formation would be accelerated for a year or two. Evidence of healing within 1 year of event and continuing after that.

6. Extent of wind scoured, blowouts and/or depositional areas |

There should not be any wind scoured, blowouts and/or depositional areas. However there can be potential for depositional areas. Wind erosion is minimal when the site is in a well vegetated condition. Significant wind erosion would only be present following high-intensity summer thunderstorms, after wildfire, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances. After rain events, exposed soil surfaces form physical crusts that tend to reduce wind erosion. Deposition from off site sources can be common on this site and is in fact a primary soil forming process. This site is susceptible to wind erosion when vegetation is removed or significantly decreased.

7. Amount of litter movement (describe size and distance expected to travel) : |

Litter should be small (less than "1 in diameter) and its movement should be minimal. This site has adequate vegetation to stop litter movement after short distances. Most of the litter movement on this site will be litter that has been transported onto the site from adjacent sites. Litter produced on this site stays on the site and only travels short distances.

8. Soil surface (top few mm) resistance to erosion (stability) values are averages - most sites will show a range of values for both plant canopy and interspaces, if different) : |

This site can be susceptible to alluvial erosion. Stability values are estimated to be 1-2 in interspaces and 3-5 at bases of vegetation. This would be

9. Soil surface structures and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different) : |

The SOM content should be less than 1%. A--0 to 6 inches; grayish brown (10YR 5/2) loam, dark grayish brown (10YR 4/2) moist; weak fine subangular blocky structure; hard, friable, slightly sticky; surface 1/2 to 2 inches has weak thin to medium platy structure; common very fine and fine pores; common very fine, fine and medium roots; strongly calcareous; slightly alkaline (pH 7.6); clear smooth boundary. (4 to 8 inches thick)

10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff: |

Overall, infiltration rates should be slow for this site but can be higher around bases of grasses than in interspaces and around bases of shrubs. The soils of this site are deep to moderately deep. The moderately deep soils have either a petrocalcic, petrogypsic or gypsum horizon between 30 and 40 inches. Surface textures are loam, silt loam, very fine sandy loam, or clay loam. Substratum textures are loam, silty clay loam, clay loam, or silt loams. Subsoil textures are silt loam, clay loam silty clay loam, gravelly loam, gravelly clay loam or very gravelly loam. Permeability is moderate to slow and the available water holding capacity is high to moderate.

11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction):

There should not be any compaction layers on this site. There are soil profile features in the top 9 inches of the soil profile that would be mistaken for a management induced soil compaction layer. Management induced compaction layers will be more difficult to penetrate than clay lenses.

12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (>>), greater than (>), and equal to (=) :

black grama >> tobosa > C 4 bunch grasses (dropseeds) > C4 midgrasses (threeawns) >= soap tree yucca, ephedra, fourwing saltbush >= forbs (croton, desert marigold, globemallow, > broom snakeweed, prickly pear, = other forbs.

13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) :

Black grama and bunchgrasses can show decadence in centers of plants.

14. Average percent litter cover (_____%) and depth (_____ inches).

Average 15% cover and 0.75 inch deep. (As per ESD)

15. Expected annual production (this is TOTAL above-ground production, not just forage production):

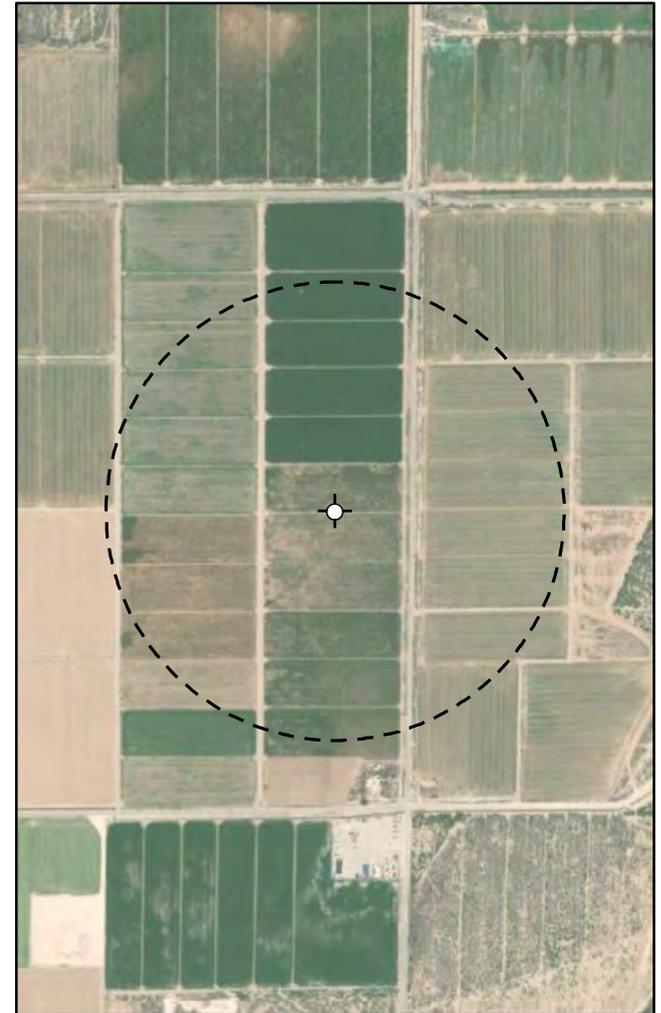
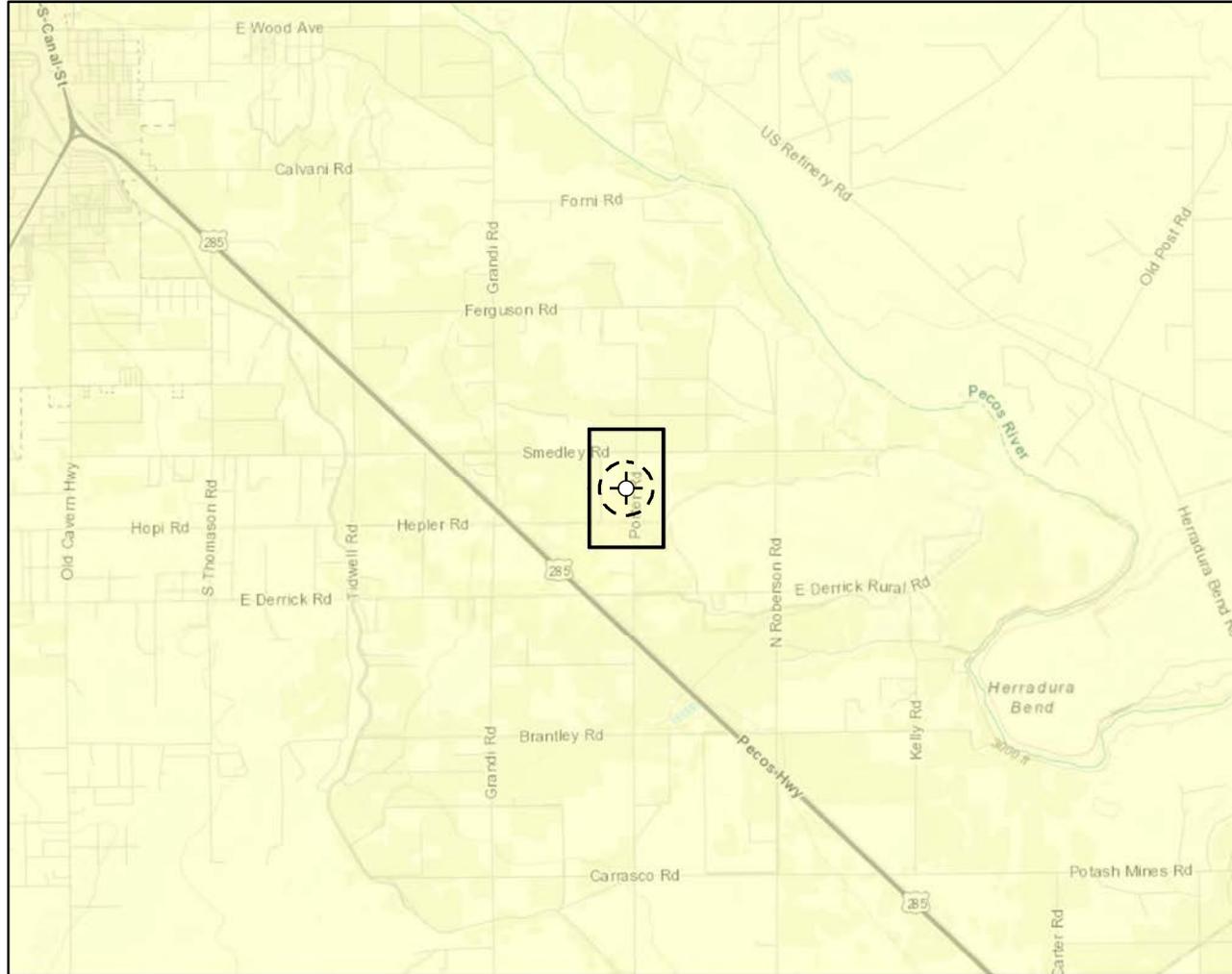
(Low Production 650 lbs./ac.) (Average RV Production 925 lbs./ac.) (High Production 1200 lbs./ac.) After wildfires, high herbivore impacts, extended drought, or combinations of these disturbances, can cause production to be significantly reduced (100-200 lbs per ac. the first growing season following a wildfire) and recover slowly under below average precipitation regimes.

16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, "can, and often do, continue to increase regardless of the management of the site and may eventually dominate

Tarbush, creosote and mesquite can be invaders to this site. Invasive plants should not occur in reference plant community. However, lovegrass, Russian thistle, kochia, and other nonnative annuals may initially invade following extended disturbance. Mesquite and tarbush and creosote and lovegrass are the greatest threat to dominate this site in the long term after disturbance (primarily following wildfire exclusion but also includes high human or herbivore impacts and extended drought). Mesquite and tarbush and creosote and lovegrass are most likely to retain dominance if allowed to alter natural fire regime (this alteration may require poor land management combined with years of wet winter-spring; dry summer-fall conditions). Any of these invaded communities represent a departure from the reference state.

17. Perennial plant reproductive capability :

Black grama reproduces by seed sporadically and reproduction by tiller and stolon can be common. The C4 midgrasses should have high reproductive potential and rapidly recover from drought in the absence of additional stresses (grazing).



Karst Potential

- Critical
- High
- Medium
- Low

- Site Location
- Site Buffer (1,000 ft.)

Overview Map

0 0.25 0.5 1 1.5 mi

Detail Map

0 150 300 600 ft.



Map Center:
Lat/Long: 32.352552, -104.152891

NAD 1983 UTM Zone 13N
Date: Jul 12/22



Karst Potential
Collie 35-34-22-27 Fee #401H

FIGURE:

X



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

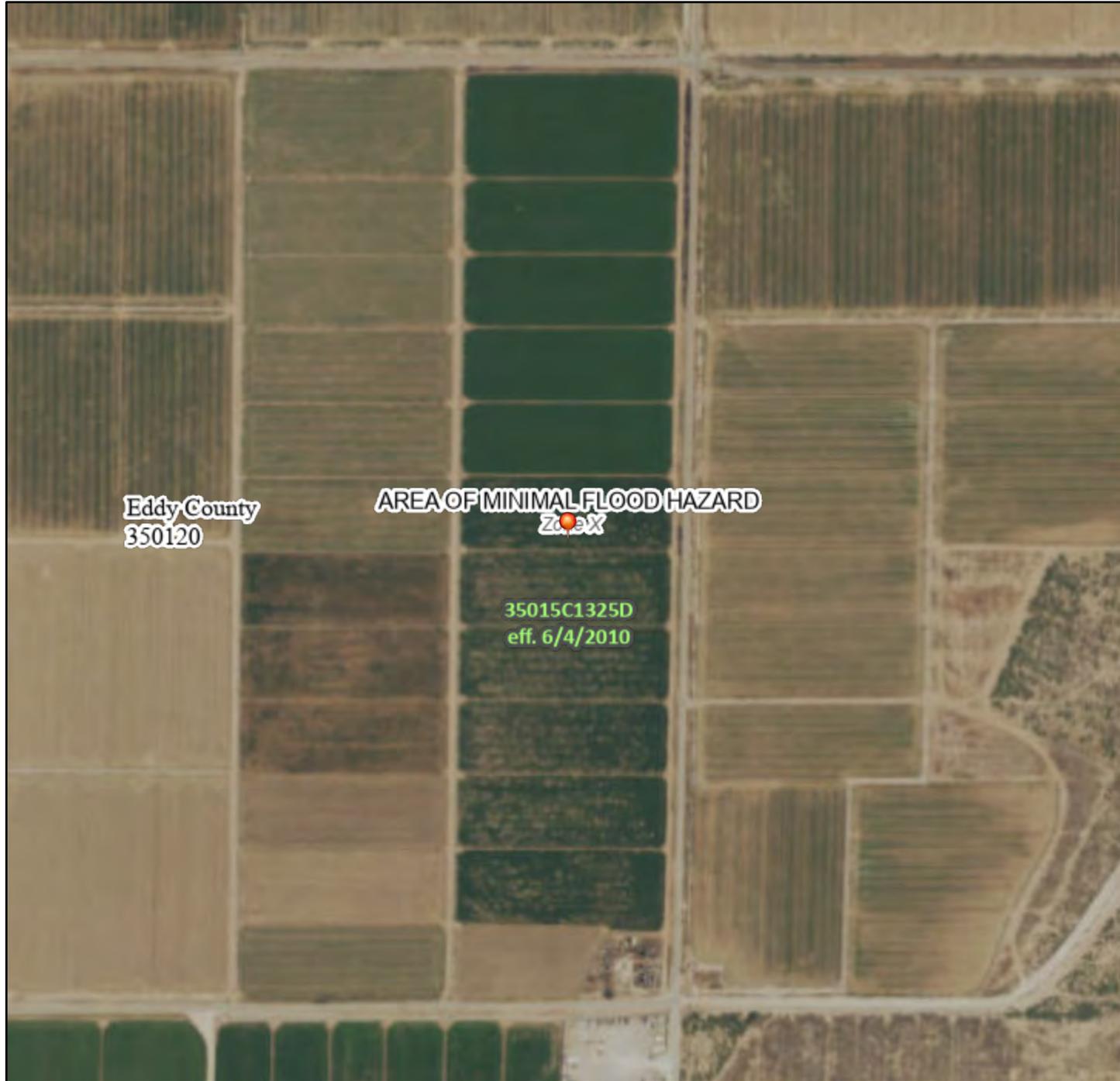
Note: Inset Map, ESRI 2018; Overview Map: ESRI World Topographic. Karst potential data sourced from Rosswell Field Office, Bureau of Land Management, 2020 or United States Department of the Interior, Bureau of Land Management. (2018). Karst Potential.

VERSATILITY. EXPERTISE.

National Flood Hazard Layer FIRMette



104°9'29"W 32°21'24"N



Legend

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

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone A, V, A99
 - With BFE or Depth Zone AE, AO, AH, VE, AR
 - Regulatory Floodway
- 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
- OTHER AREAS**
 - NO SCREEN Area of Minimal Flood Hazard Zone X
 - Effective LOMRs
 - Area of Undetermined Flood Hazard Zone D
- GENERAL STRUCTURES**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- OTHER FEATURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transect
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
 - Coastal Transect Baseline
 - Profile Baseline
 - Hydrographic Feature
- MAP PANELS**
 - Digital Data Available
 - No Digital Data Available
 - Unmapped



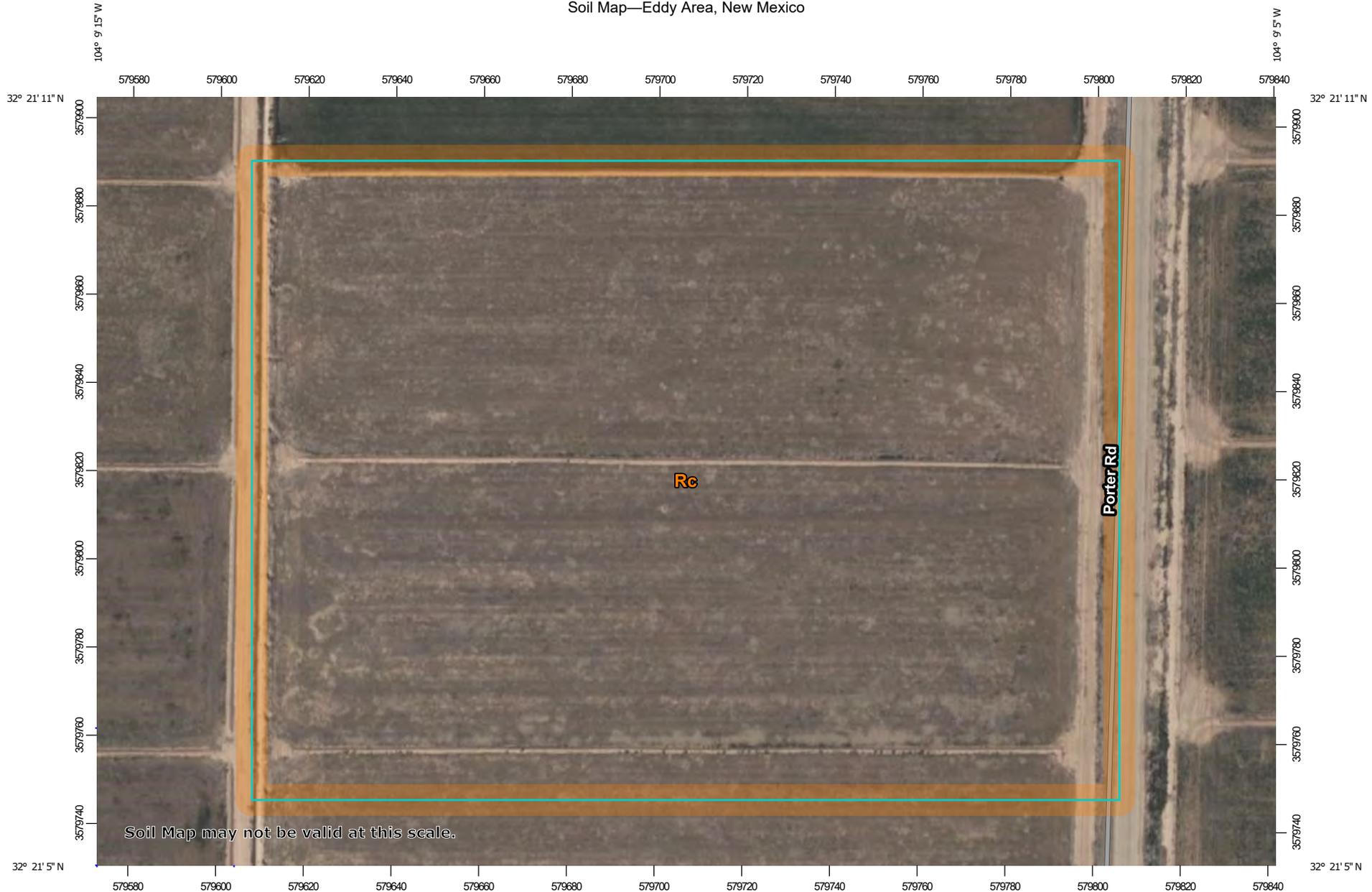
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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

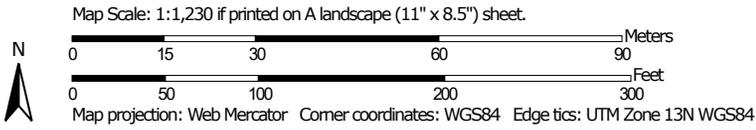
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/11/2022 at 6:20 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by 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.

Soil Map—Eddy Area, New Mexico



Soil Map may not be valid at this scale.



Soil Map—Eddy Area, New Mexico

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
 Survey Area Data: Version 17, Sep 12, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2020—Feb 28, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Soil Map—Eddy Area, New Mexico

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Rc	Reagan loam, 0 to 1 percent slopes	7.1	100.0%
Totals for Area of Interest		7.1	100.0%

Map Unit Description: Reagan loam, 0 to 1 percent slopes---Eddy Area, New Mexico

Eddy Area, New Mexico

Rc—Reagan loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 1w5l

Elevation: 1,100 to 5,300 feet

Mean annual precipitation: 7 to 15 inches

Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 200 to 240 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Reagan and similar soils: 97 percent

Minor components: 3 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan

Setting

Landform: Fan remnants, alluvial fans

Landform position (three-dimensional): Rise

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam

H2 - 8 to 82 inches: loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

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 content: 40 percent

Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e

Land capability classification (nonirrigated): 6c

Hydrologic Soil Group: B

Map Unit Description: Reagan loam, 0 to 1 percent slopes---Eddy Area, New Mexico

Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Minor Components

Reeves

Percent of map unit: 1 percent
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Reagan

Percent of map unit: 1 percent
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Upton

Percent of map unit: 1 percent
Ecological site: R042XC025NM - Shallow
Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 17, Sep 12, 2021

Ecological Reference Worksheet

Author(s) / participant(s): John Tunberg,

Contact for lead author : 505-761-4488

Reference site used? Yes/No

No

Date: 2/12/2010 **MLRA:** 42.3 **Ecological Site:** Loamy This *must* be verified based on soils and climate (see Ecological Site Description). Current plant community *cannot* be used to identify the ecological site.

Indicators: For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above and below average years for **each** community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.

1. Number and extent of rills | There should not be any rills.

After wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances rills may double in number on steeper slopes at the margins of this site after high-intensity summer thunderstorms. Any rills formed should not be long lived or interconnected and should heal rapidly.

2. Presence of water flow patterns: | There can be evidence of sheet flow.

There can be a few flow patterns that should be short and discontinuous. There can be some sheet flow. Water flow patterns should only be present following intense storm events on upper slope limits at the margins of this site. Numerous obstructions alter flow paths. Flow pattern length and numbers may double after wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances.

3. Number and height of erosional pedestals or terracettes: | Pedestals should be rare. Terracettes can occur and should be discontinuous.

There can be a few pedestals that should be less than 1 inch high. Terracettes can be common and should be discontinuous. If present plant or rock pedestals and terracettes are almost always in flow patterns. Wind caused pedestals are rare and only would be on the site following after wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances. These would show signs of healing within 1 year after event.

4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) :

Bare ground can make up to 50% of the ground cover on this site according to the ESD. Bare patch size should be small.

5. Number of gullies and erosion associated with gullies: |

Gullies and erosion associated with gullies should be rare are infrequent. Typically, gullies if present will only follow the micro topography. Natural drainages with little to no active cutting are common on this site. There should not be any accelerated erosion. After high-intensity summer thunderstorms or after wildfire, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances then gully formation would be accelerated for a year or two. Evidence of healing within 1 year of event and continuing after that.

6. Extent of wind scoured, blowouts and/or depositional areas |

There should not be any wind scoured, blowouts and/or depositional areas. However there can be potential for depositional areas. Wind erosion is minimal when the site is in a well vegetated condition. Significant wind erosion would only be present following high-intensity summer thunderstorms, after wildfire, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances. After rain events, exposed soil surfaces form physical crusts that tend to reduce wind erosion. Deposition from off site sources can be common on this site and is in fact a primary soil forming process. This site is susceptible to wind erosion when vegetation is removed or significantly decreased.

7. Amount of litter movement (describe size and distance expected to travel) : |

Litter should be small (less than "1 in diameter) and its movement should be minimal. This site has adequate vegetation to stop litter movement after short distances. Most of the litter movement on this site will be litter that has been transported onto the site from adjacent sites. Litter produced on this site stays on the site and only travels short distances.

8. Soil surface (top few mm) resistance to erosion (stability) values are averages - most sites will show a range of values for both plant canopy and interspaces, if different) : |

This site can be susceptible to alluvial erosion. Stability values are estimated to be 1-2 in interspaces and 3-5 at bases of vegetation. This would be

9. Soil surface structures and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different) : |

The SOM content should be less than 1%. A--0 to 6 inches; grayish brown (10YR 5/2) loam, dark grayish brown (10YR 4/2) moist; weak fine subangular blocky structure; hard, friable, slightly sticky; surface 1/2 to 2 inches has weak thin to medium platy structure; common very fine and fine pores; common very fine, fine and medium roots; strongly calcareous; slightly alkaline (pH 7.6); clear smooth boundary. (4 to 8 inches thick)

10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff: |

Overall, infiltration rates should be slow for this site but can be higher around bases of grasses than in interspaces and around bases of shrubs. The soils of this site are deep to moderately deep. The moderately deep soils have either a petrocalcic, petrogypsic or gypsum horizon between 30 and 40 inches. Surface textures are loam, silt loam, very fine sandy loam, or clay loam. Substratum textures are loam, silty clay loam, clay loam, or silt loams. Subsoil textures are silt loam, clay loam silty clay loam, gravelly loam, gravelly clay loam or very gravelly loam. Permeability is moderate to slow and the available water holding capacity is high to moderate.

11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction):

There should not be any compaction layers on this site. There are soil profile features in the top 9 inches of the soil profile that would be mistaken for a management induced soil compaction layer. Management induced compaction layers will be more difficult to penetrate than clay lenses.

12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (>>), greater than (>), and equal to (=) :

black grama >> tobosa > C 4 bunch grasses (dropseeds) > C4 midgrasses (threeawns) >= soap tree yucca, ephedra, fourwing saltbush >= forbs (croton, desert marigold, globemallow, > broom snakeweed, prickly pear, = other forbs.

13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) :

Black grama and bunchgrasses can show decadence in centers of plants.

14. Average percent litter cover (_____%) and depth (_____ inches).

Average 15% cover and 0.75 inch deep. (As per ESD)

15. Expected annual production (this is TOTAL above-ground production, not just forage production):

(Low Production 650 lbs./ac.) (Average RV Production 925 lbs./ac.) (High Production 1200 lbs./ac.) After wildfires, high herbivore impacts, extended drought, or combinations of these disturbances, can cause production to be significantly reduced (100-200 lbs per ac. the first growing season following a wildfire) and recover slowly under below average precipitation regimes.

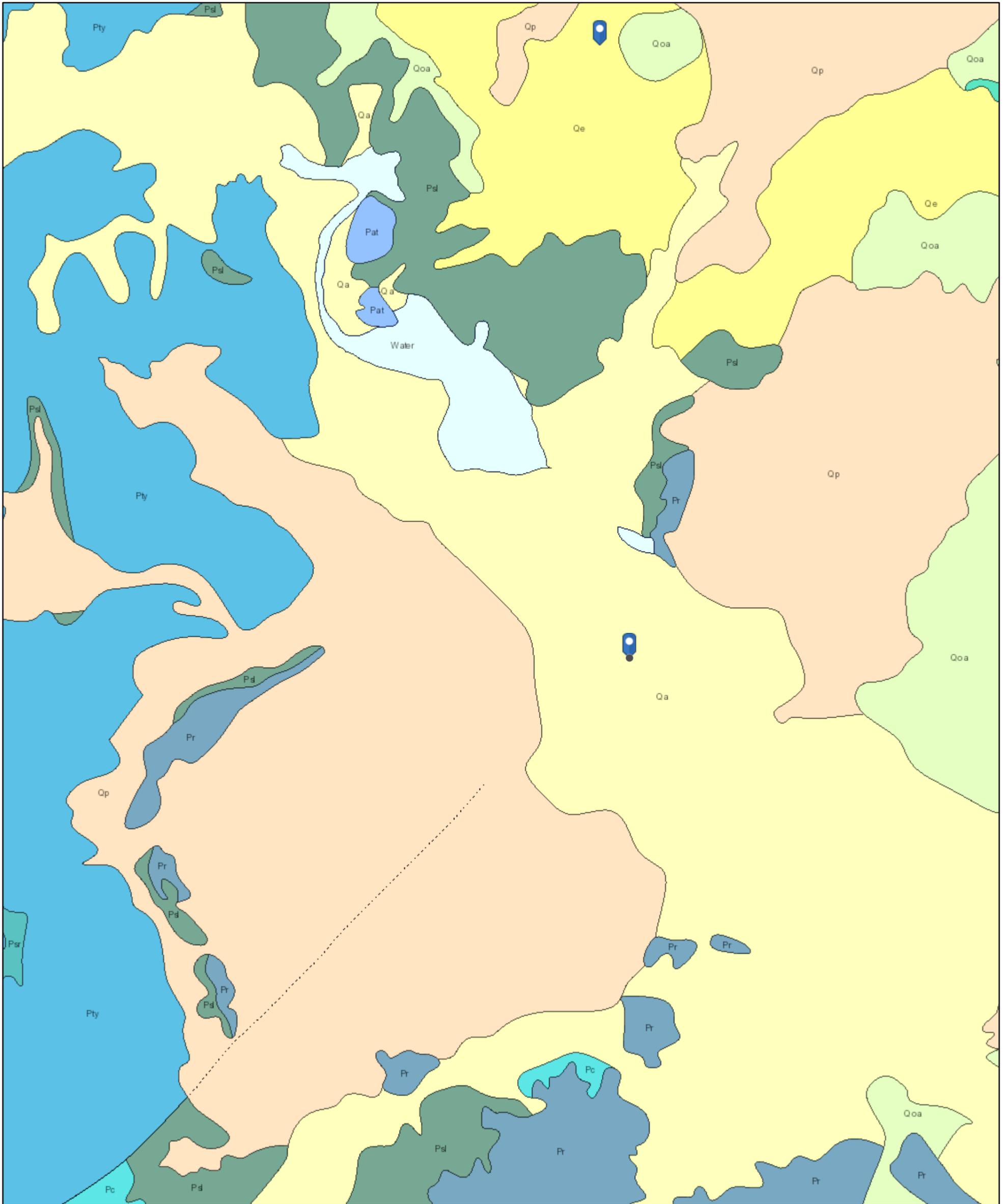
16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, "can, and often do, continue to increase regardless of the management of the site and may eventually dominate

Tarbush, creosote and mesquite can be invaders to this site. Invasive plants should not occur in reference plant community. However, lovegrass, Russian thistle, kochia, and other nonnative annuals may initially invade following extended disturbance. Mesquite and tarbush and creosote and lovegrass are the greatest threat to dominate this site in the long term after disturbance (primarily following wildfire exclusion but also includes high human or herbivore impacts and extended drought). Mesquite and tarbush and creosote and lovegrass are most likely to retain dominance if allowed to alter natural fire regime (this alteration may require poor land management combined with years of wet winter-spring; dry summer-fall conditions). Any of these invaded communities represent a departure from the reference state.

17. Perennial plant reproductive capability :

Black grama reproduces by seed sporadically and reproduction by tiller and stolon can be common. The C4 midgrasses should have high reproductive potential and rapidly recover from drought in the absence of additional stresses (grazing).

Collie 35-34-22-27 Fee #401H

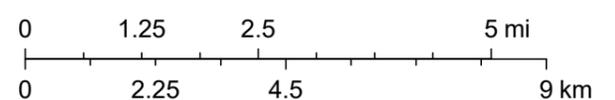


7/11/2022, 3:42:40 PM

Lithologic Units

- Playa—Alluvium and evaporite deposits (Holocene)
- Water—Perennial standing water
- Qa—Alluvium (Holocene to upper Pleistocene)

1:144,448



Esri, NASA, NGA, USGS, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census

ATTACHMENT 4

Monica Peppin

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
Sent: Monday, July 11, 2022 12:07 PM
To: Enviro, OCD, EMNRD; spills@slo.state.nm.us
Cc: Monica Peppin; dale.woodall@dvn.com
Subject: nAPP2216427127 Collie Fee 401H 48-HR Notification Liner Inspection

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled a liner inspection to be conducted for the following releases:

nAPP2216427127 DOR: 06/10/2022 Site Name: Collie 35-34-22-27 Fee #401H

This work will be completed on behalf of Devon Energy Production Company.

On Thursday, July 14, 2022 at approximately 11:00 a.m., Fernando Rodriguez will be on site to conduct a liner inspection for the above release. He can be reached at 575-361-4509. If you need directions to the site, please do not hesitate to contact him.

Thank you,

Monica Peppin
Project Manager

Vertex Resource Services Inc.
3101 Boyd Drive,
Carlsbad, NM 88220

P 575.725.5001 Ext. 711
C 575.361.9880
F

www.vertex.ca

Confidentiality Notice: This message and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use, or distribution of the information included in this message and any attachment is prohibited. If you have received this communication in error, please notify us by reply email and immediately and permanently delete this message and any attachments. Thank you.



Dhugal Hanton <vertexresourcegroupusa@gmail.com>

Liner Inspection Scheduled-48 hour notification Collie Fee 401H

2 messages

Dhugal Hanton <vertexresourcegroupusa@gmail.com>

Tue, Nov 8, 2022 at 9:22 AM

To: "Enviro, OCD, EMNRD" <OCD.Enviro@state.nm.us>, "CFO_Spill, BLM_NM" <blm_nm_cfo_spill@blm.gov>

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled a liner inspection to be conducted for the following releases:

nAPP2226926129 DOR: 09/25/2022

nAPP2218625686 DOR: 07/04/2022

This work will be completed on behalf of Devon Energy Corporation.

On Friday, November 11, 2022 at approximately 9:30 a.m., Austin Harris will be onsite to conduct a liner inspection. He can be reached at 432-250-5003. If you need directions to the site, please do not hesitate to contact him. If you have any questions or concerns regarding this notification, please give me a call at 346-814-1413.

Thank you,

Kent Stallings P.G.

Project Manager

Vertex Resource Services Inc.

3101 Boyd Drive,

Carlsbad, NM 88220

P 575.725.5001

C 346.814.1413

F

www.vertex.ca

Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>

Tue, Nov 8, 2022 at 10:44 AM

To: Dhugal Hanton <vertexresourcegroupusa@gmail.com>

Cc: "Hamlet, Robert, EMNRD" <Robert.Hamlet@emnrd.nm.gov>, "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Jocelyn Harimon • Environmental Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

1220 South St. Francis Drive | Santa Fe, NM 87505

(505)469-2821 | Jocelyn.Harimon@state.nm.us

[http:// www.emnrd.nm.gov](http://www.emnrd.nm.gov)



From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>

Sent: Tuesday, November 8, 2022 9:22 AM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; CFO_Spill, BLM_NM <blm_nm_cfo_spill@blm.gov>

Subject: [EXTERNAL] Liner Inspection Scheduled-48 hour notification Collie Fee 401H

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

[Quoted text hidden]

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 190476

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 190476
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2218625686 COLLIE 35 34 22 27 FEE #401H, thank you. This closure is approved.	6/28/2023