

Incident ID	nAPP2035138293
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<50 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

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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: 5/20/2023

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

OCD Only

Received by: Jocelyn Harimon Date: 05/22/2023

Incident ID	nAPP2035138293
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Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dale Woodall Title: Environmental Professional

Signature: Dale Woodall Date: 5/20/2023

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

OCD Only

Received by: Jocelyn Harimon Date: 05/22/2023

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: _____

Devon Energy Production Company

Green Wave 20 CTB 1

Closure Report

**UL M Section 20, T26S, R34E
Lea County, New Mexico**

NAPP2035138293

May 25, 2021



Prepared for:

**Devon Energy Production Co
6488 Seven Rivers Hwy
Artesia, NM**

By:

**Safety & Environmental Solutions, Inc.
703 East Clinton
Hobbs, New Mexico 88240
(575) 397-0510**

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Green Wave 20 CTB 1
May 25, 2021

Devon Energy Production Co
Lea County, New Mexico

I. Company Contacts

Representative	Company	Telephone	E-mail
Lupe Carrasco	Devon	575-748-0165	Lupe.Carrasco@dvn.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

II. Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was engaged by Devon Energy Production Company to assess a spill in the Green Wave 20 CTB containment location. This site is situated in Unit Letter M, Section 20, Township 26S and Range 34E, in Lea county New Mexico.

According to the C-141: a leak on a vic clamp caused the fluid to release into the lined containment area.

II. Surface and Ground Water

According to research of the website for the New Mexico Office of the State Engineer records; there is no record of groundwater in the immediate vicinity of the site location. However, the records indicated an average depth to water of 125' bgs. for Township 26S and Range 34E.

IV. Characterization

The site has been remediated. Initial steps taken included recovering the 9.8 bbls of fluid that was released. Soil was not observed to be impacted at this time. This location is in a low karst zone. Due to a lack of ground water data, this area falls into the <50' category of Table 1.

V. Work Performed

On November 27th, 2020, Devon Energy Production notified the NMOCD of a release of 9.8 bbls of produced water. Initial steps were taken to mitigate the fluid release into the lined containment area, including recovering the released fluid via vacuum truck. There was no soil impacted, and the need for further remediation activities ceased. On January 8th of 2021, Devon engaged SESI to perform a liner inspection on the CTB liner system. It was discovered that this liner maintained its integrity to withhold the release in question.

VI. Conclusions

The spill fluids were contained and successfully recovered / remediated to the NMOCD approved work plan protocol. A total of 9.8 bbls of released fluid were disposed of at the nearest SWD. The subsequent liner inspection was successfully performed with no further actions needed at this time. SESI, on behalf of Devon Energy Production Company, respectfully submits this closure report for your consideration and conclusion of the associated incident number.

VII. Figures & Appendices

Figure 1 – Site Map

Appendix A – Site Photographs

Appendix B – C-141

Appendix C – Repair Photographs

Figure 1

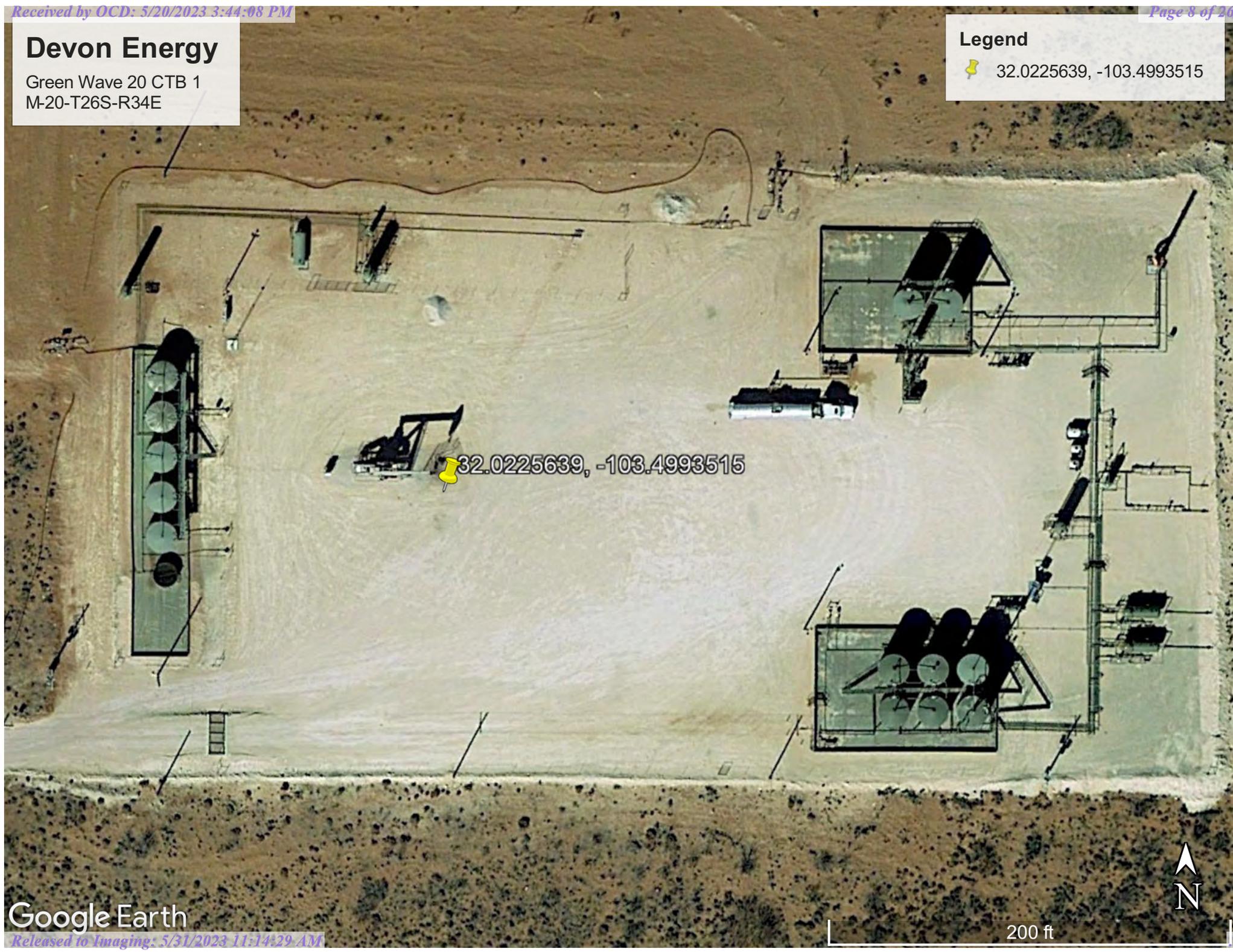
Site Map

Devon Energy

Green Wave 20 CTB 1
M-20-T26S-R34E

Legend

 32.0225639, -103.4993515



 32.0225639, -103.4993515

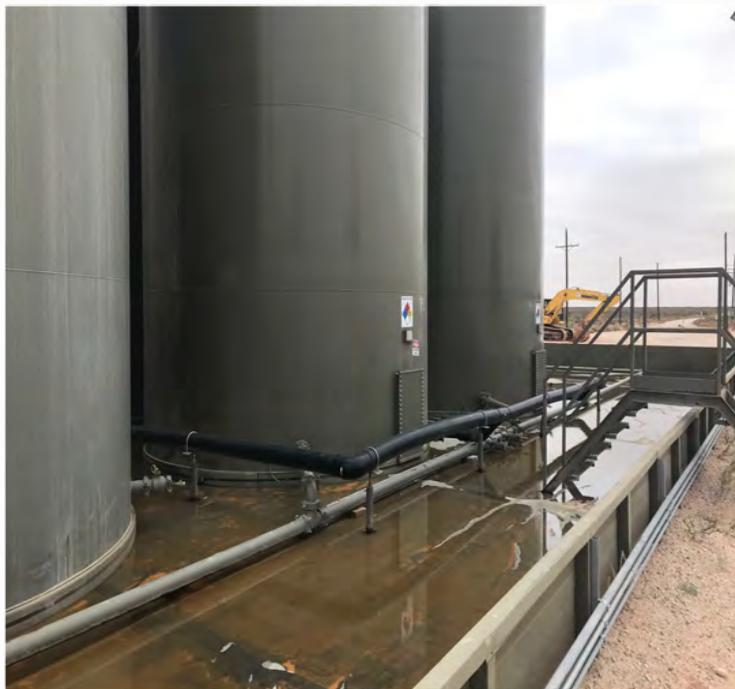


Green Wave 20 CTB 1
May 25, 2021

Devon Energy Production Co
Lea County, New Mexico

Appendix A

Spill Photographs



Green Wave 20 CTB 1
May 25, 2021

Devon Energy Production Co
Lea County, New Mexico

Appendix B

C-141

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

State of New Mexico
Energy Minerals and Natural
Resources 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	NAPP2035138293
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Release Notification

Responsible Party

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

Location of Release Source

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

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

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
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Printed Name: _____ Title: _____ Signature: <u>Kendra DeHoyos</u> Date: _____ email: _____ Telephone: _____
<u>OCD Only</u> Received by: <u>Ramona Marcus</u> Date: <u>12/21/2020</u>

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State of New Mexico
Oil Conservation Division

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Printed Name: Dale Woodall Title: Environmental Professional

Signature: *Dale Woodall* Date: 5/20/2023

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

OCD Only

Received by: _____ Date: _____

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Printed Name: Dale Woodall Title: Environmental Professional

Signature: Dale Woodall Date: 5/20/2023

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: Michael Buchanan Date: 05/31/2023

Printed Name: Mike Buchanan Title: Environmental Specialist

Green Wave 20 CTB 1
May 25, 2021

Devon Energy Production Co
Lea County, New Mexico

Appendix C

Liner/Containment Photographs

Liner Integrity Inspection Report

Name of Site: GREENWAVE 20 CTB 1 **Project #:** DEV-21-002

Inspection Tech: SOSZ Jerry **Date of Inspection:** 01/08/21 **Time:** 0130 PM

Visual Inspection

<u>Type of Secondary Containment:</u>	<u>Status:</u>
Earthen <input type="checkbox"/>	Free Fluid in Secondary Containment <input type="checkbox"/>
Clay <input type="checkbox"/>	Intermittent Pooling <input checked="" type="checkbox"/>
Supported, Coated Fabrics and Laminates <input checked="" type="checkbox"/>	Sump has Fluid <input checked="" type="checkbox"/>
Unsupported Geomembranes <input type="checkbox"/>	Dry <input type="checkbox"/>
Steel <input type="checkbox"/>	Release or leak traces inside containment <input type="checkbox"/>
Cement <input type="checkbox"/>	Release or leak traces outside containment <input type="checkbox"/>

Observations

<u>Environmental Damage:</u>	<u>Comments:</u>
Damage from animals or vegetation compromising liner integrity <input type="checkbox"/>	<p><u>NONE</u></p> <hr/> <hr/> <hr/> <hr/>
Discoloration, erosion, or chemical degradation of the liner <input type="checkbox"/>	
Degradation of the liner system from storm water flow or erosion of the secondary containment system <input type="checkbox"/>	

<u>Physical Damage:</u>	<u>Comments:</u>
Cracks, bulges, stains, chips, seepages in the liner system <input type="checkbox"/>	<p><u>NONE</u></p> <hr/> <hr/> <hr/> <hr/> <hr/>
Improper or deferred maintenance of the liner system <input type="checkbox"/>	
Dike wall, foundation, or embankment movement, settlement, or deterioration compromising the integrity of the liner system <input type="checkbox"/>	
Degradation of the liner system at penetrations (piping, supports, wells, foundations, pads, etc.) <input type="checkbox"/>	
Damage to the liner system from equipment, vehicles, foot traffic, frost heave, etc. <input type="checkbox"/>	
Evidence of foundation movement, settlement, or deterioration <input type="checkbox"/>	

Devon, Greenwave 20 CTB 1, DEV-21-02

Liner/Containment Inspection Photos



95-SW corner facing East outside



96-SW corner facing East inside



97-SW corner facing North outside



98-SW corner facing North inside

Devon, Greenwave 20 CTB 1, DEV-21-02

Liner/Containment Inspection Photos



99-South side facing North inside



00-South side facing North inside



01-South side facing North inside



02-South side facing North inside

Devon, Greenwave 20 CTB 1, DEV-21-02
Liner/Containment Inspection Photos



03-South side facing North inside



04-NW corner facing west outside



05-NW corner facing West inside



06-East side facing West inside

Devon, Greenwave 20 CTB 1, DEV-21-02

Liner/Containment Inspection Photos



07-East side facing West inside



08-East side facing West inside



09-NE corner facing South outside



10-NE corner facing South inside

Devon, Greenwave 20 CTB 1, DEV-21-02

Liner/Containment Inspection Photos



11-Sump, NE corner facing South



12-North side facing South inside



13-North side facing South inside



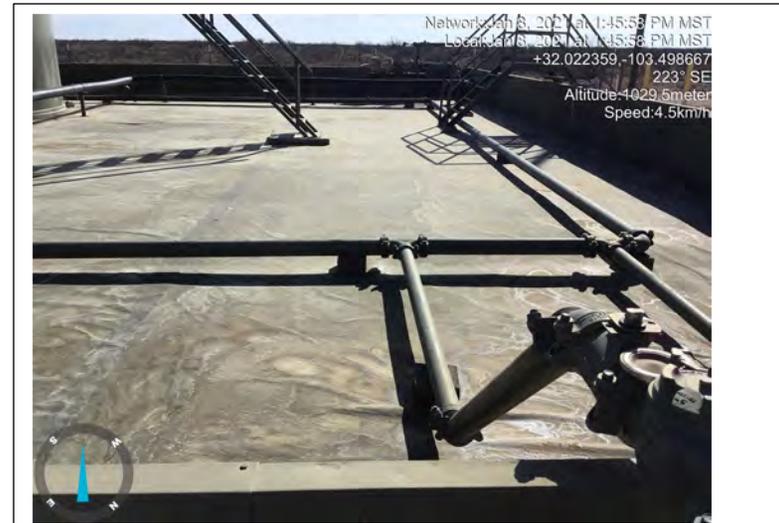
14-North side facing South inside

Devon, Greenwave 20 CTB 1, DEV-21-02

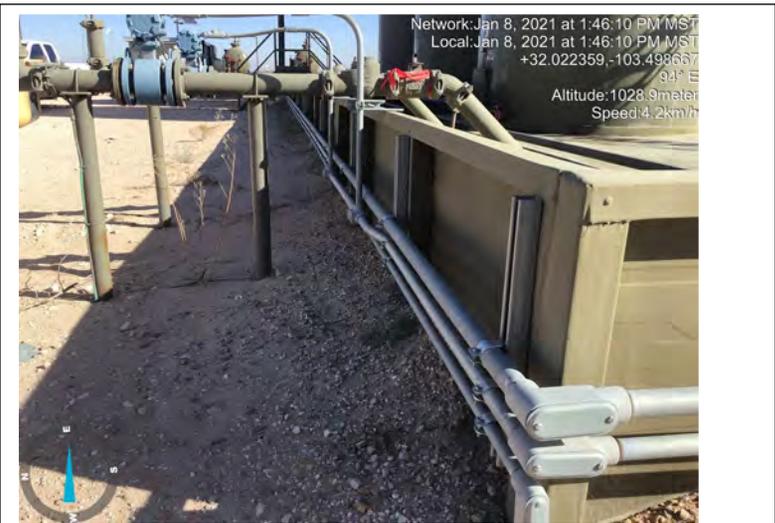
Liner/Containment Inspection Photos



15-North side facing South inside



16-North side facing South inside



17-NW corner facing East outside



18-NW corner facing East inside

Devon, Greenwave 20 CTB 1, DEV-21-02

Liner/Containment Inspection Photos



19-NW corner facing South outside



20-NW corner facing South inside



21-NW corner facing South, Sump



22-Water pool facing West inside

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 218753

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 218753
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	None	5/31/2023