



P.O. Box 1708 • Artesia, NM 88211
www.hrlcomp.com

August 6, 2020

Mr. Tom Bynum
Devon Energy Production Company
6488 Seven Rivers Highway
Artesia, New Mexico 88210
Email: tom.bynum@dvn.com

**Subject: Liner Inspection and Closure Report
Ichabod 7 Federal #001H
Incident Number: nOY1724031524
Lea County, New Mexico**

Dear Mr. Bynum:

HRL Compliance Solutions, Inc. (HRL) is pleased to submit this liner inspection and closure report for the August 10th, 2017 release at the Ichabod 7 Federal #001H well pad (Site). The Site is at latitude 32.0511932 and longitude -103.5014954 in Lea County, New Mexico (Figure 1).

Release Summary and Initial Response

On August 10th, 2017, a release of 33 barrels of oil was observed at the Site. The release was due to corrosion of the oil tank. The released oil remained within the lined steel secondary containment. Initial response activities included stopping the source of the release, securing the impacted area, containing the released materials, and removing free liquids within the secondary containment. 33 barrels of oil were recovered. Devon reported the release to the NMOCD on a Release Notification and Corrective Action Form (Form C-141) (Attachment A). The release was assigned incident number nOY1724031524.

New Mexico Administrative Code (NMAC) Site Characterization Criteria

Title 19, Chapter 15, Part 29, Section 11 of the New Mexico Administrative Code (NMAC) provides requirements for release characterization once the free liquids and recoverable materials have been removed from the Site.

Depth to Groundwater

Depth to groundwater at the release was estimated by evaluating data from the New Mexico Office of the State Engineer (NMOSE) and the United States Geological Survey (USGS) (Figure 2). The nearest groundwater well was approximately 1 mile from the Site; the depth to water in this well was 200 feet below ground surface (bgs).

INNOVATIVE SOLUTIONS DELIVERED



Mr. Tom Bynum
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Wellhead Protection Area

There are no sources of water, including springs, wells, or other sources of fresh water, within one-half mile of the release (Figure 2).

Distance to Nearest Significant Watercourse

A significant watercourse is defined as "...a watercourse with a defined bed and bank either named or identified by a dashed blue line on a USGS 7.5-minute quadrangle map or the next lower order tributary with a defined bed and bank" (19.15.17.7 NMAC) (Figure 2). There are no significant watercourses within one-half mile of the lateral extents of the release.

Additional Site Characterization Criteria

The following is additional information related to characterization of the Site.

| Site Characterization | Response/Discussion |
|---|----------------------------|
| What is the shallowest depth to groundwater beneath the area affected by the release? | Greater than 100 feet |
| Did the release impact groundwater or surface water? | No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or other significant watercourse? | No |
| Are the lateral extents of the release within 200 feet of a lakebed, sinkhole, or playa lake? | No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital institution, or church? | No |
| Are the lateral extents of the release within 500 feet of a spring or private, domestic fresh water well used by less than five households for domestic or stock watering purposes? | No |
| Are the lateral extents of the release within 1,000 feet of any fresh water well or spring? | No |
| Are the lateral extents of the release within any incorporated municipal boundaries? | No |
| Are the lateral extents of the release within a defined municipal fresh water well field? | No |
| Are the lateral extents of the release within 300 feet of a wetland? | No |
| Are the lateral extents of the release overlying a subsurface mine? | No |

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August 6, 2020



Mr. Tom Bynum
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| Site Characterization | Response/Discussion |
|---|--|
| Are the lateral extents of the release overlying an unstable area such as karst geology? | The Site is in an area of low potential for karst topography |
| Are the lateral extents of the release within the 100-year floodplain? | No |
| Did the release impact areas not on an exploration, development, production, or storage site? | No |

Liner Inspection

On February 5, 2020, after the released fluid was removed, HRL conducted an inspection to evaluate the integrity of the liner (Attachment B, Photographs). No tears or holes were observed in the liner and the liner was retaining precipitation. Based on this inspection, HRL has determined that the liner remains intact and had the ability to contain the release (Attachment C, Inspection Form).

Conclusions and Recommendations

The August 10th, 2017 release of 33 barrels of oil at the Site remained within the lined containment. HRL has determined that the liner integrity remains intact and had the ability to contain the release; therefore, additional characterization of the soil and/or groundwater at the Site is not necessary. HRL recommends closure of this release.

Scope and Limitations

The scope of HRL's services consists of performing a liner integrity inspection and preparation of this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin.

If you have any questions or concerns, please do not hesitate to contact me at (970) 243-3271 or via email at jlinn@hrlcomp.com.

Sincerely,

HRL Compliance Solutions, Inc.

Julie Linn, PG, RG
Project Manager

Figures:

Figure 1: Site Location

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August 6, 2020



Mr. Tom Bynum
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Figure 2: Depth to Groundwater

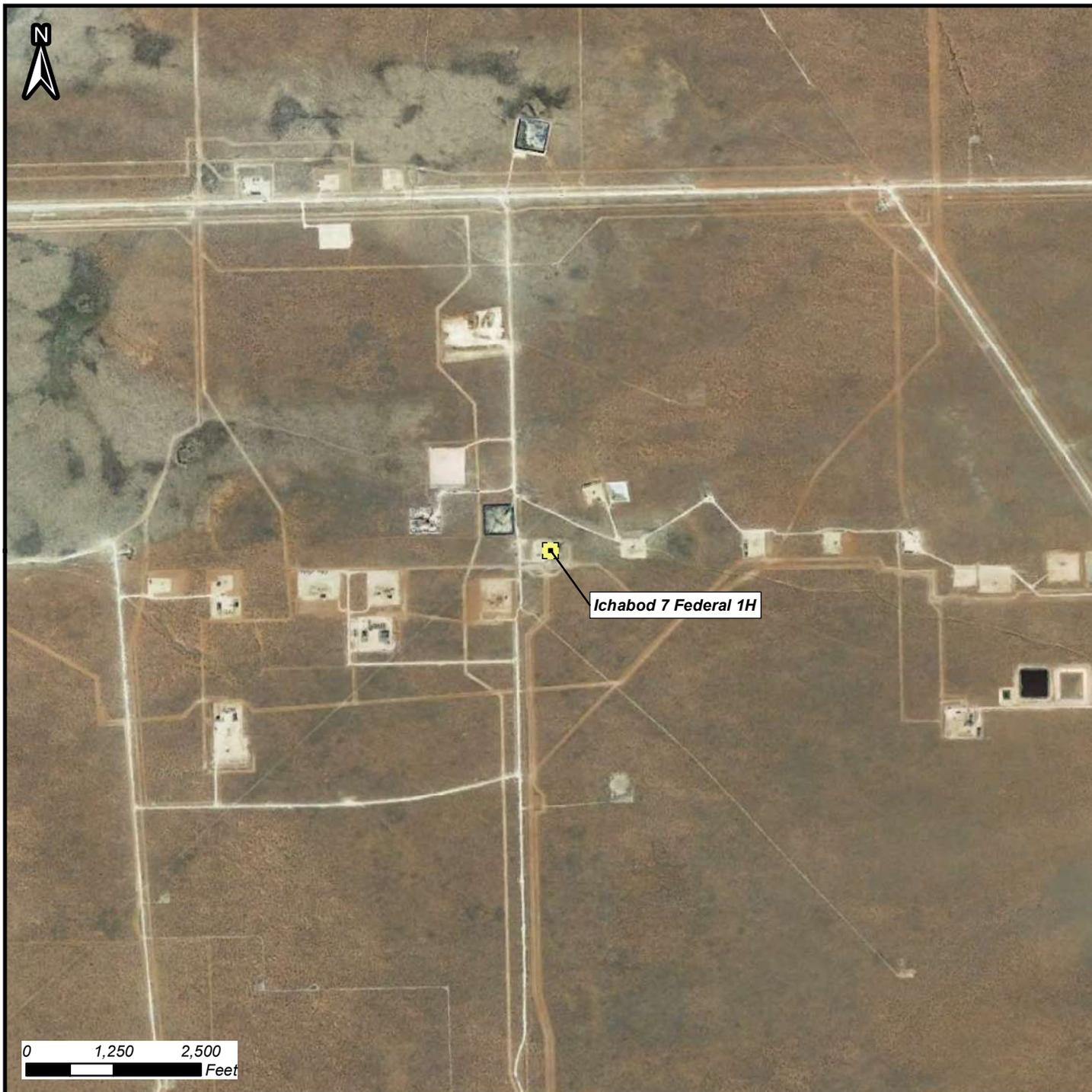
Attachments:

- Attachment A: NMOCD Form C-141
- Attachment B: Photographs
- Attachment C: Liner Inspection Field Form

Ichabod 7 Federal #001H
August 6, 2020



Figures



Ichabod 7 Federal 1H

0 1,250 2,500 Feet

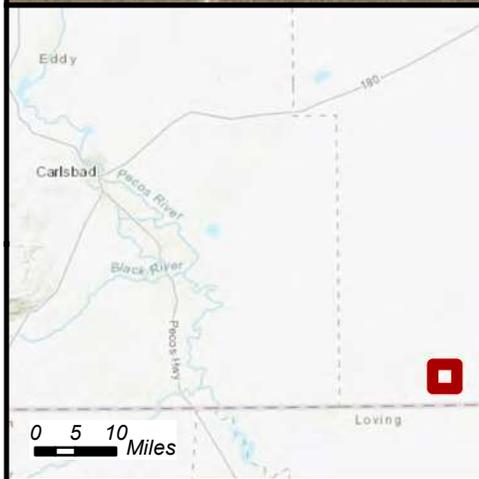


Figure 1: Site Location Map
 Ichabod 7 Federal 1H
 August 2017 Spill
 32.0511932, -103.5014954
 Section 7, Township 26 South, Range 34 East

NOTES / COMMENTS:

Mapped Features

 Facility Location

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HRL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantees as to the quality or accuracy of the underlying data.



Author: A. Asay
Revision: 0
Date: 7/14/2020

T:\CLIENTS\DEVON ENERGY\2020\Ichabod 7 Federal 1H\Map\Ichabod 7 Federal 1H Site Location Map (August 2017 Spill) 071420.mxd

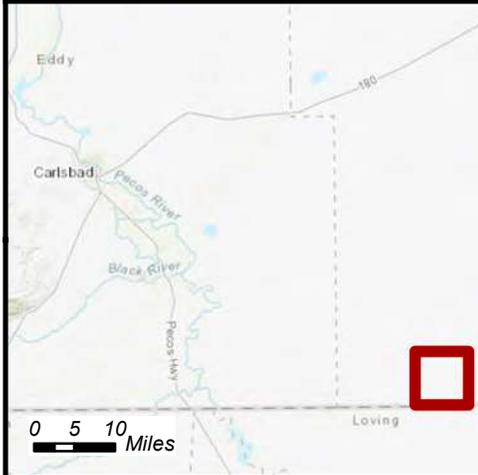
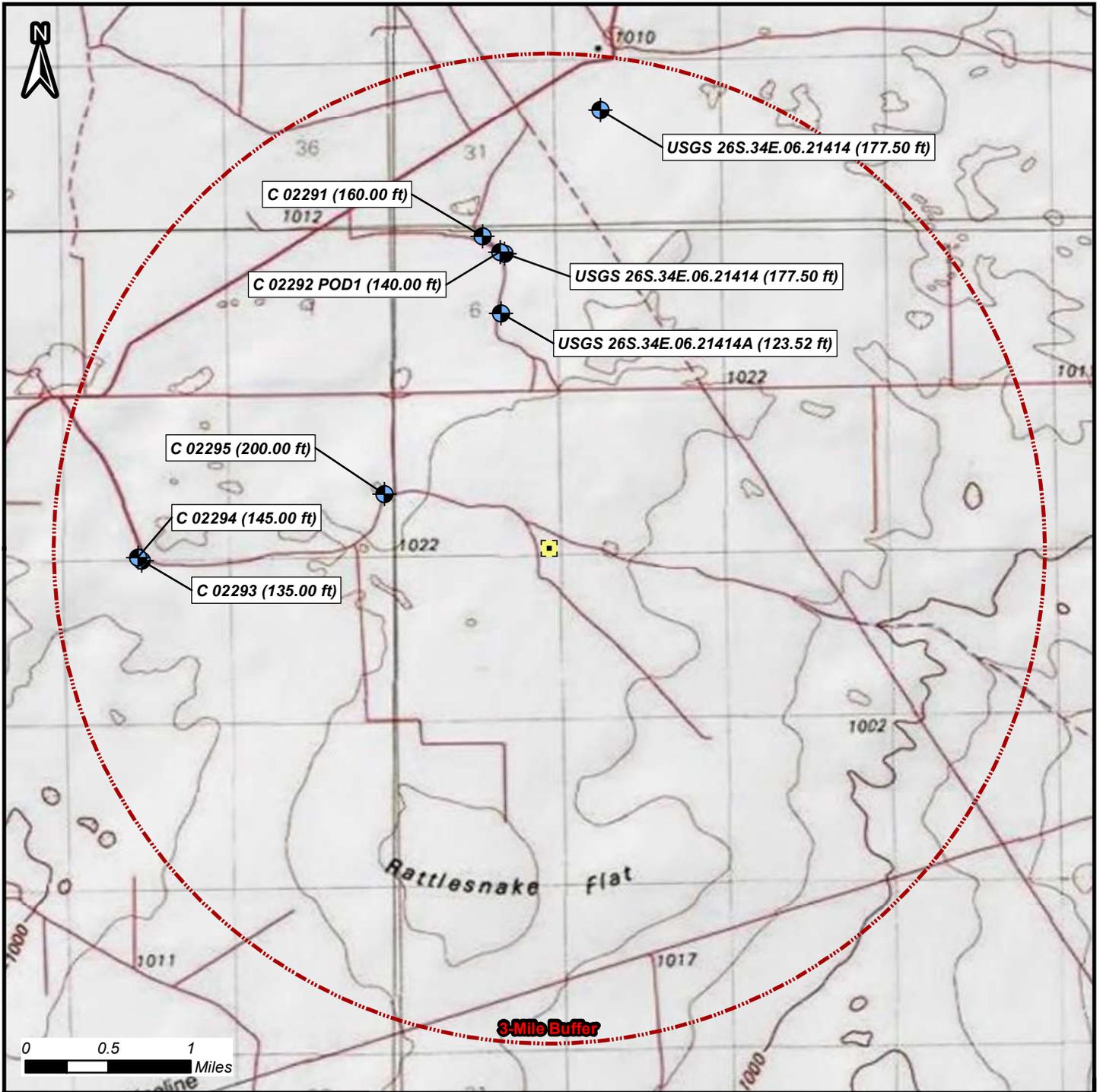




Figure 2: Depth to Groundwater Map
 Ichabod 7 Federal 1H
 August 2017 Spill
 32.0511932, -103.5014954
 Section 7, Township 26 South, Range 34 East

| Well Number | Water Level Below Ground Surface (ft) | Distance from Source (mi) |
|------------------------|---------------------------------------|---------------------------|
| USGS 26S.34E.06.21414A | 123.52 | 1.46 |
| USGS 26S.34E.06.21414 | 177.50 | 1.81 |
| USGS 25S.34E.29.343322 | 128.50 | 2.68 |
| C 02295 | 200.00 | 1.05 |
| C 02292 POD1 | 140.00 | 1.82 |
| C 02291 | 160.00 | 1.94 |
| C 02293 | 135.00 | 2.47 |
| C 02294 | 145.00 | 2.49 |

Mapped Features

- Point of Release
- Groundwater Well
- 3-Mile Buffer

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Author: A. Asay
 Revision: 0
 Date: 7/14/2020

T:\CLIENTS\DEVON ENERGY\2020\Ichabod 7 Federal 1H\Map\Ichabod 7 Federal 1H DTGW Map (August 2017 Spill) 071420.mxd



Attachment A
NMOCD Form C-141

4441 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
 Oil Conservation Division
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-141
 Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

| | |
|--|--|
| Name of Company Devon Energy Production Company | Contact Rebecca Jamison, Production Foreman |
| Address 6488 Seven Rivers Hwy Artesia, NM 88210 | Telephone No. 575-513-5538 |
| Facility Name Ichabod 7 Federal 1H | Facility Type Oil |
| Surface Owner Federal | Mineral Owner Federal |
| API No 30-025-40043 | |

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| P | 7 | 26S | 34E | 195 | South | 330 | East | Lea |

Latitude: 32.0511932

Longitude: -103.5014954

NATURE OF RELEASE

| | | |
|---|--|--|
| Type of Release Oil | Volume of Release 33BBLS | Volume Recovered 33BBLS |
| Source of Release Oil Storage tank | Date and Hour of Occurrence 8/10/2017 @ 5:30 PM | Date and Hour of Discovery 8/10/2017 @ 5:30 PM |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? OCD-Olivia Yu BLM-Shelly Tucker | |
| By Whom? Rebecca Jamison, Production Foreman | Date and Hour BLM-8/10/2017 @ 8:39 AM OCD-8/10/2017 @ 9:38 AM | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

RECEIVED
By Olivia Yu at 8:47 am, Aug 28, 2017

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Oil storage tanks overflowed into the lined SPCC containment.

Describe Area Affected and Cleanup Action Taken.*
Approximately 33BBLS of oil was released as a result of a hole in the bottom of the oil storage tank. A vacuum truck was dispatched and approximately 33BBLS oil was recovered. All fluids remained inside the lined SPCC containment. Once fluids were removed the liner was visually inspected by Devon field staff for any pinholes or punctures and none were found. Based on this inspection there is no evidence that the spill fluids left containment.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

| | | |
|---|---|--|
| Signature: Dana DeLaRosa | OIL CONSERVATION DIVISION | |
| Printed Name: Dana DeLaRosa |  | |
| Title: Field Admin Support | Approved by Environmental Specialist: | Expiration Date: |
| E-mail Address: dana.delarosa@divn.com | Approval Date: 8/28/2017 | |
| Date: Phone: 575.746.5594 | Conditions of Approval: | Attached <input type="checkbox"/> |

Please inspect liner in question. Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids.

nOY1724031524

* Attach Additional Sheets If Necessary



Ichabod 7 Federal 1H
33BBLs Oil_8.10.2017

This map is for illustrative purposes only and is neither a legally recorded map nor survey and is not intended to be used as a legal instrument. No warranty is made by the mapmaker as to the accuracy or completeness of any information shown on this map.



WGS_1984_Web_Mercator_Auxiliary_Sphere
 Prepared by: Dana DeLaRosa
 Map is current as of: 11-Aug-2017



Devon_Google_Maps_Imagery

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 | nOY1724031524 |
| District RP | No-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? | >100 (ft bgs) |
| Did this release impact groundwater or surface water? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Did the release impact areas not on an exploration, development, production, or storage site? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

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

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

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

State of New Mexico
Oil Conservation Division

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| | |
|----------------|---------------|
| Incident ID | nOY1724031524 |
| District RP | No-RP |
| Facility ID | |
| 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: Tom Bynum Title: EHS Consultant

Signature: *Tom Bynum* Date: 8/7/2020

email: tom.bynum@dvn.com Telephone: 575-748-3371

OCD Only

Received by: _____ Date: _____

| | |
|----------------|---------------|
| Incident ID | nOY1724031524 |
| District RP | No-RP |
| Facility ID | |
| Application ID | |

Closure

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

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

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

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

Printed Name: Tom Bynum Title: EHS Consultant

Signature: *Tom Bynum* Date: 8/7/2020

email: tom.bynum@dvn.com Telephone: 575-748-3371

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: *Brittany Hall* Date: 9/20/2022

Printed Name: Brittany Hall Title: Environmental Specialist



Attachment B

Photographs



View of standing water between the tanks in the secondary containment.



View of standing water and ice in the corner of the secondary containment.





View of standing water and ice within the secondary containment.



View of frozen standing water in the corner of the secondary containment.





Attachment C
Liner Inspection Field Form



HRL
COMPLIANCE
SOLUTIONS

Liner Inspection Form

Client Devon Energy

Date of Inspection 2/5/20

Site Name 1 CHARBOD 7 Fed IH

Latitude 32.051257

Longitude -103.501414

| Observations | Yes | No | Comments |
|---|-----|----|----------|
| Is the liner present? | ✓ | | |
| Is the liner torn? | | ✓ | |
| Are there visible holes in the liner? | | ✓ | |
| Is the liner retaining any liquids? | ✓ | | |
| Does it appear the liner had the ability to contain the leak? | ✓ | | |

Type of Liner: Poly Earthen Metal Other (describe below):

Other Concerns or Observations:

Metal Secondary Containment
Standing water up to 2 inches on north end to the center
Ice in secondary containment

Photos 50-69

Inspector Name Anna McCauley

Inspector Signature [Signature]

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 9560

CONDITIONS

| | |
|--|---|
| Operator: Pima Environmental Services, LLC 5614 N Lovington Hwy Hobbs, NM 88240 | OGRID: 329999 |
| | Action Number: 9560 |
| | Action Type: [C-141] Release Corrective Action (C-141) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|--------------------------------|----------------|
| bhall | Closure requires BLM approval. | 9/20/2022 |