TPIT-SDP149-01

Salado Draw Reserve Pit
SD 14 Fed P149
Temporary Pit
Permit Application
Package 1 of 2

Chevron USA Inc
August 5, 2020

C-144 Permit Package
Salado Draw Pad 419, Temporary Pit
Section 15 of T26S, R32E, Lea County

SD 15 FEDERAL P419 #011H
SD 15 FEDERAL P419 #012H
SD 15 FEDERAL P419 #013H
SD 15 FEDERAL P419 #014H

Chevron USA Incorporated
6301 Deauville Blvd.
Midland, TX 79706
(432) 687-7866

August 5, 2020

New Mexico Oil Conservation Division
Energy, Minerals, and Natural Resources Department
5200 Oakland Avenue
Albuquerque, NM 87113

Via Electronic Submittal

RE: Chevron USA Incorporated Temporary Pit Application
Salado Draw Pad 419
Section 15 of T26S, R32E, Lea County

Ms. Lucas Kamat,

Enclosed is a complete C-144 permit application for a Temporary Pit with non-low chloride drilling fluid located at an existing Chevron USA Inc. BLM lease #NMNM118722 located in Section 15, T26S R32E. This package includes the following documentation:

- C-144 for Non-Low Chloride Temporary Pit
- Siting Criteria Demonstration
- Siting Criteria Figures 1-10
- Variance Requests
- Appendix A – USGS Groundwater Data
- Appendix B – NMOSE Water Data
- Appendix C – Hydrogeologic Data
- Appendix D – Design Plan
- Appendix E – Operating and Maintenance Plan
- Appendix F – Closure Plan
- Appendix G – Evaluation of Unstable Conditions
- Attachments 1-4

Please do not hesitate to contact us if you require any additional information or clarification supporting the approval of this application.

Sincerely,

Jacob Chu
Natural Resources Advisor
JNakoaChu@Chevron.com

Jonathon Fisher
Wells Engineer
JonathonFisher@Chevron.com

Cas Bridge, PhD, PG (LA1175)
Environmental Scientist
Cas.Bridge@Chevron.com

Chevron USA Incorporated
Chevron USA Inc.
6301 Deauville Blvd
Midland, TX 79706
Tel 432 687 7866

Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMNM118722

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
SD 15 FED P419 11H

2. Name of Operator
CHEVRON USA INC
Contact: LAURA BECERRA
E-Mail: LBECERRA@CHEVRON.COM

9. API Well No.
30-025-46730

3a. Address
6301 DEAUVILLE BLVD
MIDLAND, TX 79706

3b. Phone No. (include area code)
Ph: 432-687-7665

10. Field and Pool or Exploratory Area
WC025G08S263205N;UP WOLFC

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 15 T26S R32E Mer NMP SESE 577FSL 1020FEL

11. County or Parish, State
LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Emergency Pits or Cl osure
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Chevron respectfully submits for your review the attached application for a Temporary Pit with non-low chloride drilling fluid located at the existing Chevron USA Inc. BLM lease NMNM118722 in Section 15, T26S-R32E.

A copy of the application submitted to the NMOCD with supporting documents is attached to this request.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #524476 verified by the BLM Well Information System
For CHEVRON USA INC, sent to the Hobbs

Name *(Printed/Typed)* LAURA BECERRA — Title REGULATORY SPECIALIST

Signature (Electronic Submission) — Date 08/06/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ Date _____

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

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-144
Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:
- ☐ Below grade tank registration
- ☒ Permit of a pit or proposed alternative method
- ☐ Closure of a pit, below-grade tank, or proposed alternative method
- ☐ Modification to an existing permit/or registration
- ☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.

Operator: **Chevron USA Inc.** OGRID #: **4323**

Address: **6301 Deauville Blvd., Midland, TX 79706**

Facility or well name: **SD 14 FED P419**

API Number: **30-025-46730, 46731, 46732, 46810** OCD Permit Number: _____

U/L or Qtr/Qtr **SE ¼** Section **15** Township **26S** Range **32E** County: **Lea**

Center of Proposed Design: Latitude **32.037891** Longitude **-103.657266** NAD83

Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.

☒ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC

Temporary: ☒ Drilling ☐ Workover

☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☒ no

☒ Lined ☐ Unlined Liner type: Thickness 40 mil ☐ LLDPE ☒ HDPE ☐ PVC ☐ Other _____

☐ String-Reinforced

Liner Seams: ☒ Welded ☐ Factory ☐ Other _____ Volume: 2 x 25,000 bbl Dimensions: L244ft x W 313 ft x D 10 ft

3.

☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC

Volume: _____bbl Type of fluid: _____

Tank Construction material: _____

☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off

☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____

Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

4.

☐ **Alternative Method:**

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☒ Four-foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify

12.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.

Proposed Closure: 19.15.17.13 NMAC **See Appendix F**

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method:
- ☐ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☒ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☒ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method

14.

Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - ☒ NM Office of the State Engineer - iWATERS database search; ☒ USGS; ☐ Data obtained from nearby wells **See Appendices A & B, Figure 7**	☐ Yes ☒ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - ☒ NM Office of the State Engineer - iWATERS database search; ☒ USGS; ☐ Data obtained from nearby wells **See Appendices A & B, Figure 7**	☐ Yes ☒ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - ☒ NM Office of the State Engineer - iWATERS database search; ☒ USGS; ☐ Data obtained from nearby wells **See Appendices A & B, Figure 7**	☒ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site **See Figure 6**	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image **See Figure 2**	☐ Yes ☒ No

6.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other:

☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☒ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. **See Variance Requests**

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. **Siting criteria does not apply to drying pads or above-grade tanks.**

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells	☐ Yes ☐ No ☒ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . - ☒ NM Office of the State Engineer - iWATERS database search; ☒ USGS; ☐ Data obtained from nearby wells **See Appendices A, B, Figure 7**	☐ Yes ☒ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality **See Figures 2 & 7**	☐ Yes ☒ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division **See Figure 4**	☐ Yes ☒ No
Within an unstable area. **(Does not apply to below grade tanks)** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map **See Figures 6, 8 & 9, Appendix G**	☐ Yes ☒ No
Within a 100-year floodplain. **(Does not apply to below grade tanks)** - FEMA map **See Figure 3**	☐ Yes ☒ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lakebed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site **See Figure 6**	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image **See Figure 2**	☐ Yes ☒ No
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, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site **See Appendices A & B, and Figures 1 & 2**	☐ Yes ☒ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site **See Figures 2, 5 & 6**	☐ Yes ☒ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC

☒ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC **See Appendix C**

☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC **Attached**

☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC **See Appendix D**

☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC **See Appendix E**

☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC **See Appendix F**

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC

☐ A List of wells with approved application for permit to drill associated with the pit.

☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site **See Appendices A & B, Figure 7**	☐ Yes ☒ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site **See Figures 2, 5 & 6**	☐ Yes ☒ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality **See Figure 2**	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division **See Figure 4**	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map **See Figures 6, 8 & 9, Appendix G**	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map **See Figure 3**	☐ Yes ☒ No

16.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC **Attached**
- ☒ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- ☒ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC **See Appendix D**
- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC **See Appendix F**
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC **See Appendix F**
- ☒ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC **See Appendix F**
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved) **See Appendix F**
- ☒ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC **See Appendix F**
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC **See Appendix F**
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC **See Appendix F**

17.

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Laura Becerra Title: Sr. Regulatory Affairs Coordinator

Signature:  Date: 8/5/2020

e-mail address: LBecerra@Chevron.com Telephone: (432) 687-7665

18.

OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

19.

Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ **Closure Completion Date:** _____

20.
Closure Method:
☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

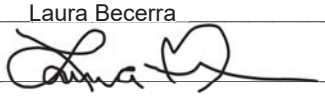
21.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Proof of Closure Notice (surface owner and division)
- ☐ Proof of Deed Notice (required for on-site closure for private land only)
- ☐ Plot Plan (for on-site closures and temporary pits)
- ☐ Confirmation Sampling Analytical Results (if applicable)
- ☐ Waste Material Sampling Analytical Results (required for on-site closure)
- ☐ Disposal Facility Name and Permit Number
- ☐ Soil Backfilling and Cover Installation
- ☐ Re-vegetation Application Rates and Seeding Technique
- ☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983

22.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Laura Becerra Title: Sr. Regulatory Affairs Coordinator

Signature:  Date: 8/5/2020

e-mail address: LBecerra@Chevron.com Telephone: (432) 687-7665

Siting Criteria Demonstration (19.15.17.10)

Temporary Pit containing non-low chloride fluids

Salado Draw P419 Pit

Section 15, T26S, R32E

Depth to Groundwater, 19.15.17.10.3(a)

Figure 7, **Appendices A & B**, and the discussion presented below demonstrate that the groundwater within the broader area of the proposed site is in excess of 100 feet beneath the Temporary Pit.

Figure 7 depicts the location of the pit relative to the locations of water wells within 5 miles of the pit for which water level data are available, and the estimated potentiometric surface in the area. Depth to water for the most recent, reliable measurement and the well identification number are shown adjacent to each well on **Figure 7**. The approximate boundary of the Pecos River Basin alluvial aquifer is shown and green and is located ~1.5 miles to the southwest of the Temporary Pit. Water well data, including gauging dates, are detailed in **Appendix A** (USGS) and **Appendix B** (NMOSE).

All water wells located within 5 miles of the temporary pit were gauged by USGS at > 100 ft bgs.

- The nearest water wells to the pit location are located in a cluster approximately 1.7 miles to the southwest. Water level was measured at 220 ft bgs in 2013 (2,938 ft above NGVD29) within a USGS well within the cluster.
- To the northwest, the nearest well is located 3.3 miles away and is completed in the Santa Rosa Sandstone. Water level was measured at 290 ft bgs (3,004 ft above NAVD88) in 1987.
- To the northeast, the nearest well is located 4.4 miles away and is completed in the Chinle Formation. Water level was measured at 190 ft bgs (3,193 ft above NAVD88) in 1986.

A thick layer of Quaternary alluvium is present at surface in the vicinity of the proposed location and is composed of eroded and reworked eolian and fluvial material. The alluvium generally ranges from 100 to 200 feet-thick in this area (Meyer et al., 2012). The Quaternary deposits are underlain by the Triassic-age Santa Rosa and Chinle formations and deeper, Permian-age strata (**Figure 9**). The Chinle Formation outcrops approximately 1.5 miles to the east of the proposed location and exhibits a regional dip of about 1 degree to the east and south. Permian strata outcrop approximately 20 miles to the west along the course of the Pecos River.

Geotechnical reports and boring logs were obtained for two frac ponds located ~1.2-miles to the east of the proposed pit location (**Figure G.3 and Attachments 2 and 3**). Most borings were <35-feet deep but one was advanced to 80-feet. All borings, including to 80-feet, were dry and did not fill with water after 24-hours after drilling.

Proximity to Surface Water, 19.15.17.10.3(b)

Figure 6 visualizes USGS contour lines and the USGS National Hydrography Dataset. The map demonstrates that the location is not within 1,000 feet of a continuously flowing waterway course, any other significant watercourse or lakebed, sinkhole, or playa lake.

- The nearest stream (ephemeral) is more than 2000 feet northwest of the pit location.
- The nearest surface water feature (intermittent pond) is in excess of 2 miles east-southeast of the pit location.

Proximity to Occupied Residences, Schools, Hospitals, Institutions or Churches, 19.15.17.10.3(c)

The DigitalGlobe aerial imagery in **Figure 2** demonstrates that the location is not within 300 feet of occupied residences, schools, hospitals, institutions or churches.

- All structures within 1,000 feet of the location are associated with oil & gas activity.

Proximity to Springs and/or Domestic Freshwater Wells 19.15.17.10.3(d)

No springs or domestic freshwater wells have been mapped within 300 ft of the pit location.

Proximity to Incorporated Municipal Boundaries and Fresh Water Well Fields 19.15.17.10.3(e)

Figure 1 demonstrates that the location is not within incorporated municipal boundaries or defined municipal fresh water well fields covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- The closest municipality is the city of Jal, approximately 27 miles to the west-northwest.

Proximity to Wetlands, 19.15.17.10.3(f)

Utilizing USFWS wetland data, **Figure 5** demonstrates that the proposed location is not located within 300 feet of a wetland.

- A pond associated with oil and gas development is the nearest “freshwater pond” identified by USFWS and is located approximately 4,000 feet away.
- The nearest Freshwater Emergent Wetland is located approximately 2 miles east southeast of the project location.

Proximity to Subsurface Mines, 19.15.17.10.3(g)

Analysis of aerial imagery in the vicinity of the proposed temporary pit show that the nearest mines are all surficial caliche pits. There are no subsurface mines in the area as indicated in **Figure 4**.

Proximity to Unstable Area, 19.15.17.10.3(h)

Figure 8 identifies the location of the proposed temporary pit with respect to BLM Karst areas. The proposed Temporary Pit is mapped in a "Medium Potential" karst area. Evidence of karst in the area consists predominantly of large depressions that formed over millions of years via dissolution of the Rustler and Salado formations (Bachman, 1973). There are, however, no indications that voids or other karst features are present or are likely to form in the vicinity of the proposed location. Therefore, local karst potential is likely to be low. An Evaluation of Unstable Conditions is presented in **Appendix G** that details several lines of evidence in support of this position. In summary:

1. There are no dissolution features within 2.2-miles of the proposed location (**Figure G.1**),
2. Karst forming strata are over 1,000-feet deep beneath the proposed location (**Figure G.4**),
3. An Arcadis field study of the area indicated no closed depressions, caves, or fissures in the immediate vicinity of the proposed pit (**Figure G.3, Attachment 1**),
4. TetraTech geotechnical reports and boring logs from <1.2 miles-away indicated low karst potential and were dry after 24 hours (**Figure G.5, Attachments 2 and 3**),
5. The Bureau of Land Management, Paul Murphy prepared the Environmental Assessment (EA), document number - DOI-BLM-P020-2020-0198-EA, evaluating SD 15 Fed Pads 418 & 419. This EA notes that during on-site inspection, no known features exist within the proposed area. (**Section 3.4, Attachment 4)**.

In the unlikely event that a void occurs during construction or operation activities, all activities must stop immediately, and the BLM should then be contacted within 24 hours to devise the best management plan to protect the environment and human safety.

Proximity to Floodplains, 19.15.17.10.3(i)

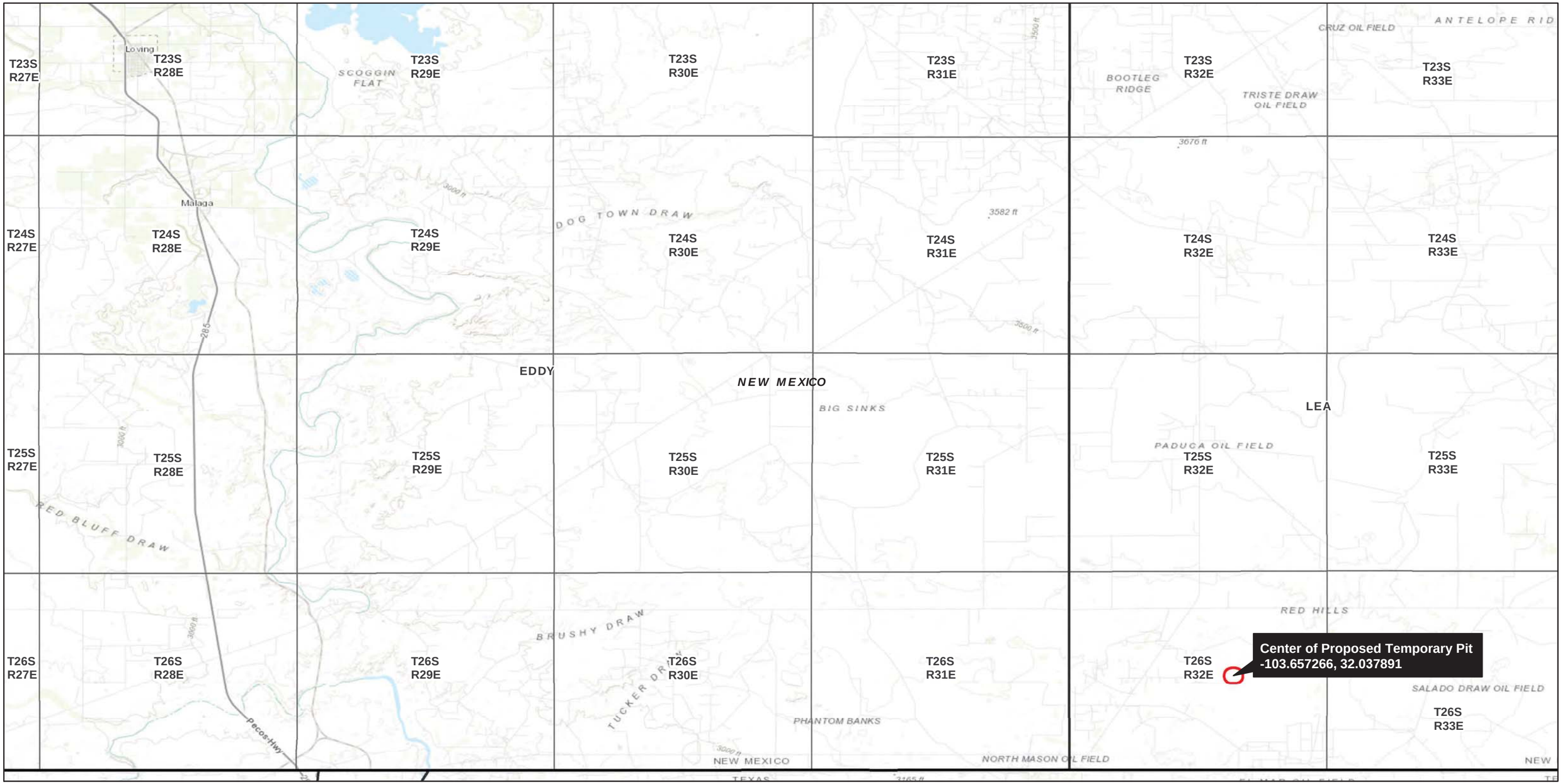
The location is within an area that has not yet been mapped by the Federal Emergency Management Agency with respect to the Flood Insurance Rate 100-Year Floodplain. In lieu of FEMA data, **Figure 3** visualizes the USDA – SSURGO Soils data for dominant flooding frequency condition. The location is not located within an area with any indication of flooding. The nearest area determined to have "Rare" flooding frequency is in excess of 1 mile away. As defined by the USDA, *"'Rare' means that flooding is unlikely but possible under unusual weather conditions. The chance of flooding is 1 to 5 percent in any year"*.

Site Specific Information, Figures 1-10

Temporary Pit containing non-low chloride fluids

Salado Draw P419 Pit

Section 15, T26S, R32E



LEGEND

Proposed Temporary Pit

1,000 ft Buffer

N W E S

0 1 2 4 6 8 Miles

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SD 15 FED P419 Temporary Pit

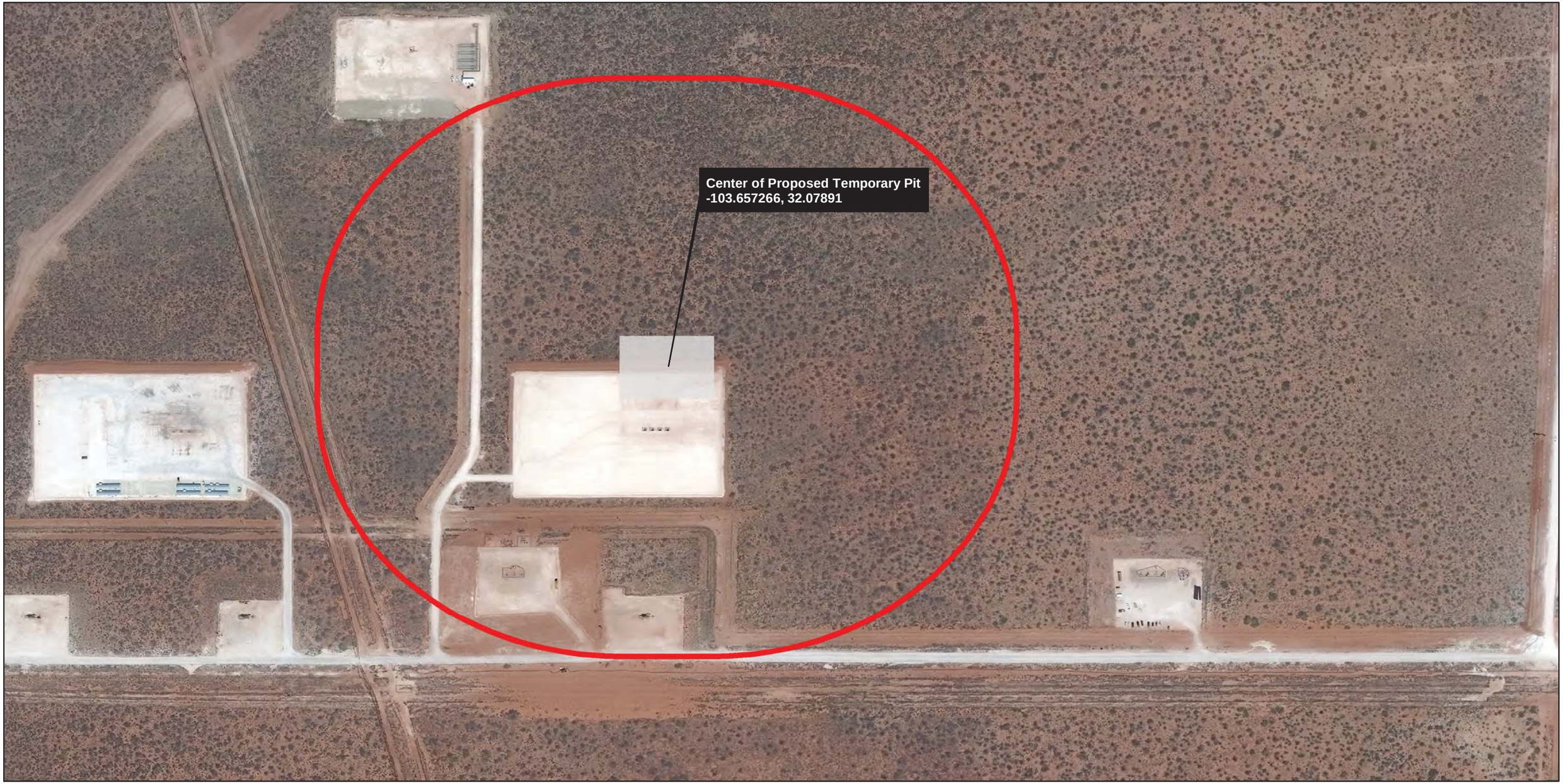
Figure 1: Vicinity Map

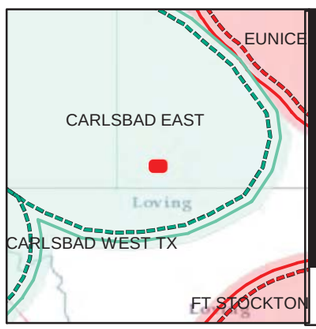
STATE: NEW MEXICO **COUNTY:** LEA

Chevron North America Exploration & Production
Mid-Continent Business Unit

CONSULT THE LAND DEPARTMENT REGARDING ANY CHEVRON LAND ASSETS

LAND GRID: TOBIN	IMAGERY: ESRI	
DATA SOURCE: ESRI		
PIPELINE DATA: N/A		
Coordinate System: GCS North American 1983		
DRAWN BY: MCBU HSE	PROJECT PHASE: CURRENT	DATE: 5/28/2020





LEGEND

Proposed Temporary Pit

1,000 ft Buffer

N
W E
S

0 0.03 0.06 0.12 0.18 0.24 Miles

SD 15 FED P419 Temporary Pit

Figure 2: Site Overview

STATE: NEW MEXICO **COUNTY:** LEA

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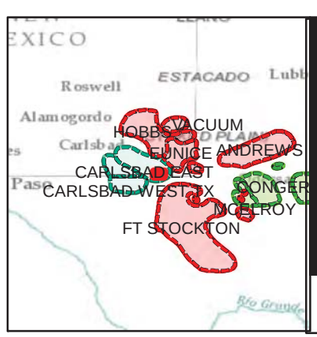
LAND GRID: TOBIN	IMAGERY: DigitalGlobe
DATA SOURCE: DigitalGlobe - Spatial on Demand Imagery	
PIPELINE DATA: N/A	
Coordinate System: GCS North American 1983	
DRAWN BY: MCBU HSE	PROJECT PHASE: CURRENT / DATE: 5/28/2020



LEGEND

- Proposed Temporary Pit
- 1,000 ft Buffer

Flooding Frequency - Dominant Condition

- Very frequent
- Frequent
- Very rare
- Occasional
- Common
- Rare

N W E S

0 0.3 0.6 1.2 1.8 2.4 Miles

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SD 15 FED P419 Temporary Pit

Figure 3: Floodplain Map

STATE: NEW MEXICO **COUNTY:** LEA

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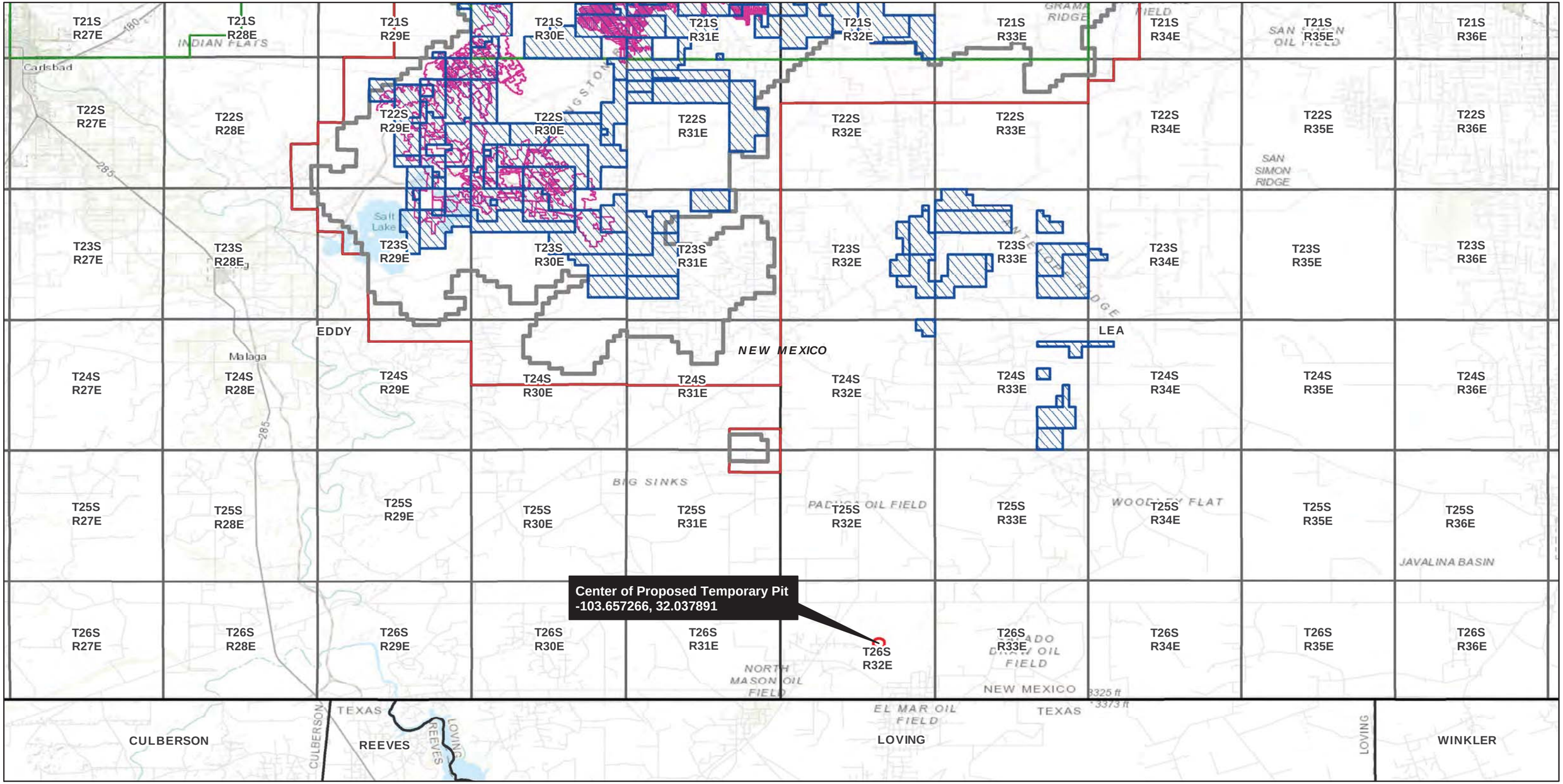
CONSULT THE LAND DEPARTMENT REGARDING ANY CHEVRON LAND ASSETS

LAND GRID: TOBIN	IMAGERY: ESRI	
DATA SOURCE: USDA - SSURGO Soils		
PIPELINE DATA: N/A		
Coordinate System: GCS North American 1983		
DRAWN BY: MCBU HSE	PROJECT PHASE: CURRENT	DATE: 5/28/2020



LEGEND

- Proposed Temporary Pit
- 1,000 ft Buffer
- Potash Leases
- Four String Casing Area
- Mine Workings
- Known Potash Leasing Area (KPLA)
- Schedule of Proposed Actions (SOPA)

N, W, E, S

0 1.75 3.5 7 10.5 14 Miles

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SD 15 FED P419 Temporary Pit

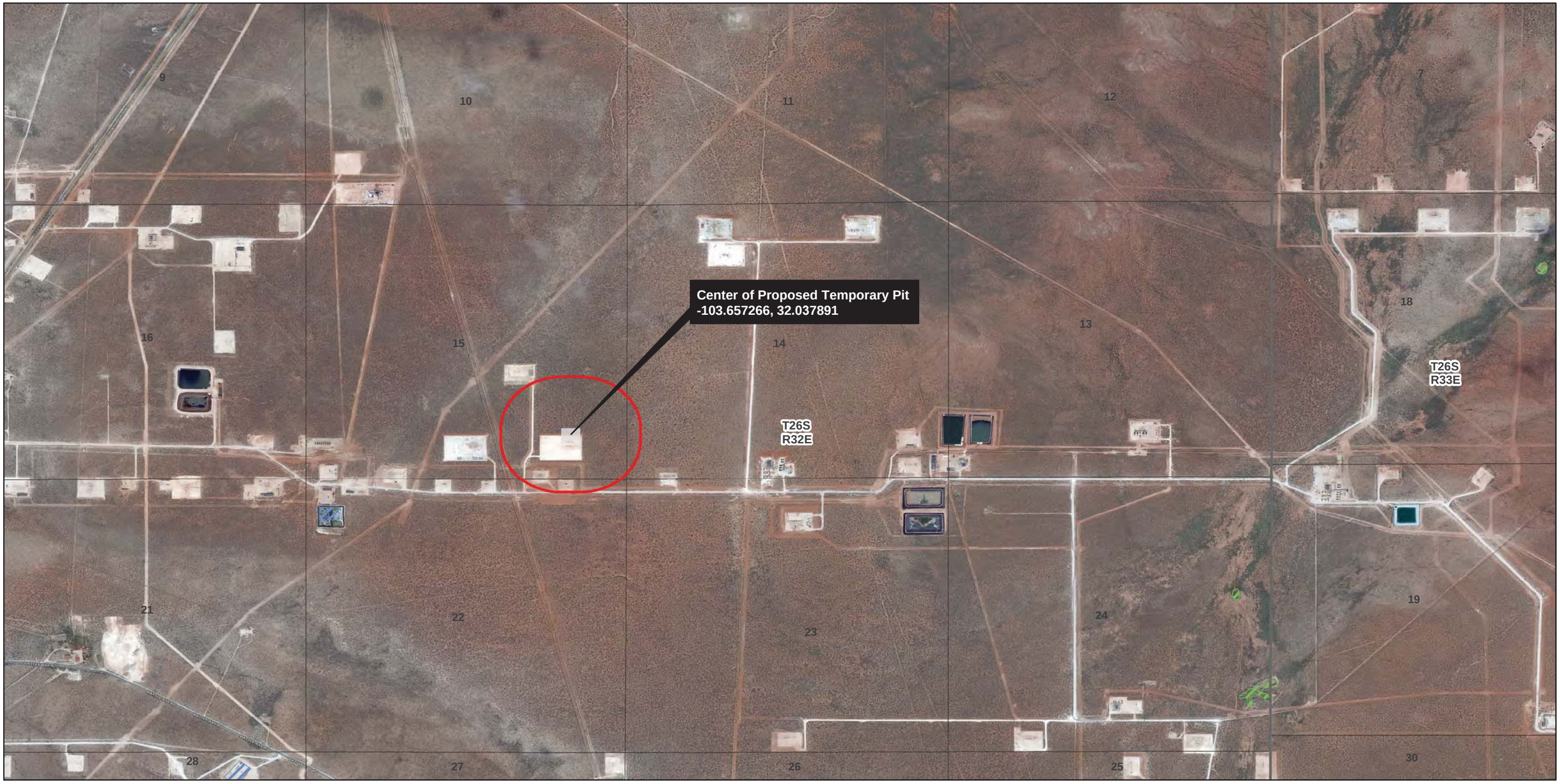
Figure 4: Subsurface Mines - Potash

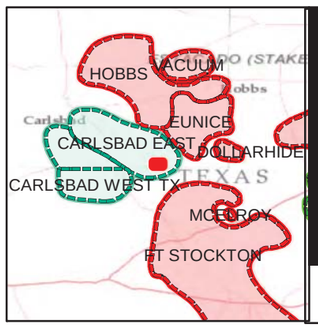
STATE: NEW MEXICO **COUNTY:** LEA

Chevron North America Exploration & Production
Mid-Continent Business Unit

CONSULT THE LAND DEPARTMENT REGARDING ANY CHEVRON LAND ASSETS

LAND GRID: TOBIN	IMAGERY: ESRI
DATA SOURCE: Bureau of Land Management - Potash	
PIPELINE DATA: N/A	
Coordinate System: GCS North American 1983	
DRAWN BY: MCBU HSE	PROJECT PHASE: CURRENT | DATE: 5/28/2020





LEGEND

- Proposed Temporary Pit
- 1,000 ft Buffer
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

N W E S

0 0.15 0.3 0.6 0.9 1.2 Miles

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SD 15 FED P419 Temporary Pit

Figure 5: Wetlands Map

STATE: NEW MEXICO **COUNTY:** LEA

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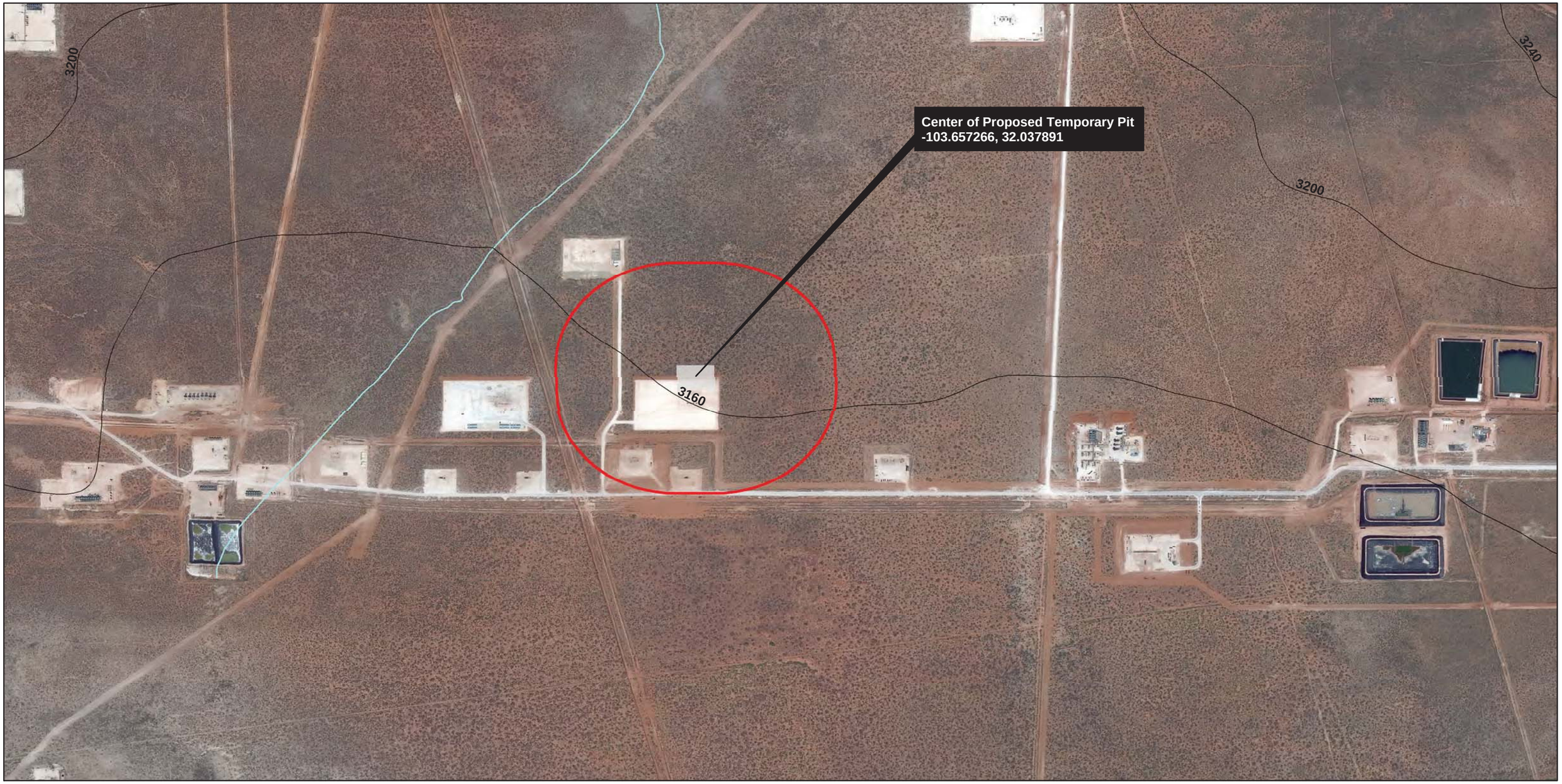
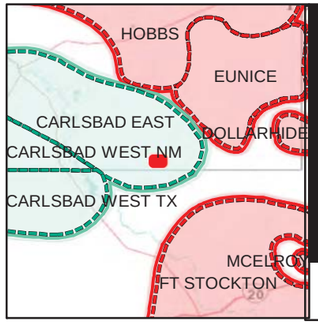
Mid-Continent Business Unit

CONSULT THE LAND DEPARTMENT REGARDING ANY CHEVRON LAND ASSETS

LAND GRID: TOBIN	IMAGERY: DigitalGlobe	
DATA SOURCE: US Fish & Wildlife Service		
PIPELINE DATA: N/A		
Coordinate System: GCS North American 1983		
DRAWN BY: MCBU HSE	PROJECT PHASE: CURRENT	DATE: 5/28/2020





LEGEND

Proposed Temporary Pit

1,000 ft Buffer

USGS Contour Lines NM

StreamRiver, NHD FCode 46007: Ephemeral

N
W
E
S

0 0.075 0.15 0.3 0.45 0.6 Miles

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SD 15 FED P419 Temporary Pit

Figure 6: Elevation Contour & NHD Map

STATE: NEW MEXICO **COUNTY:** LEA

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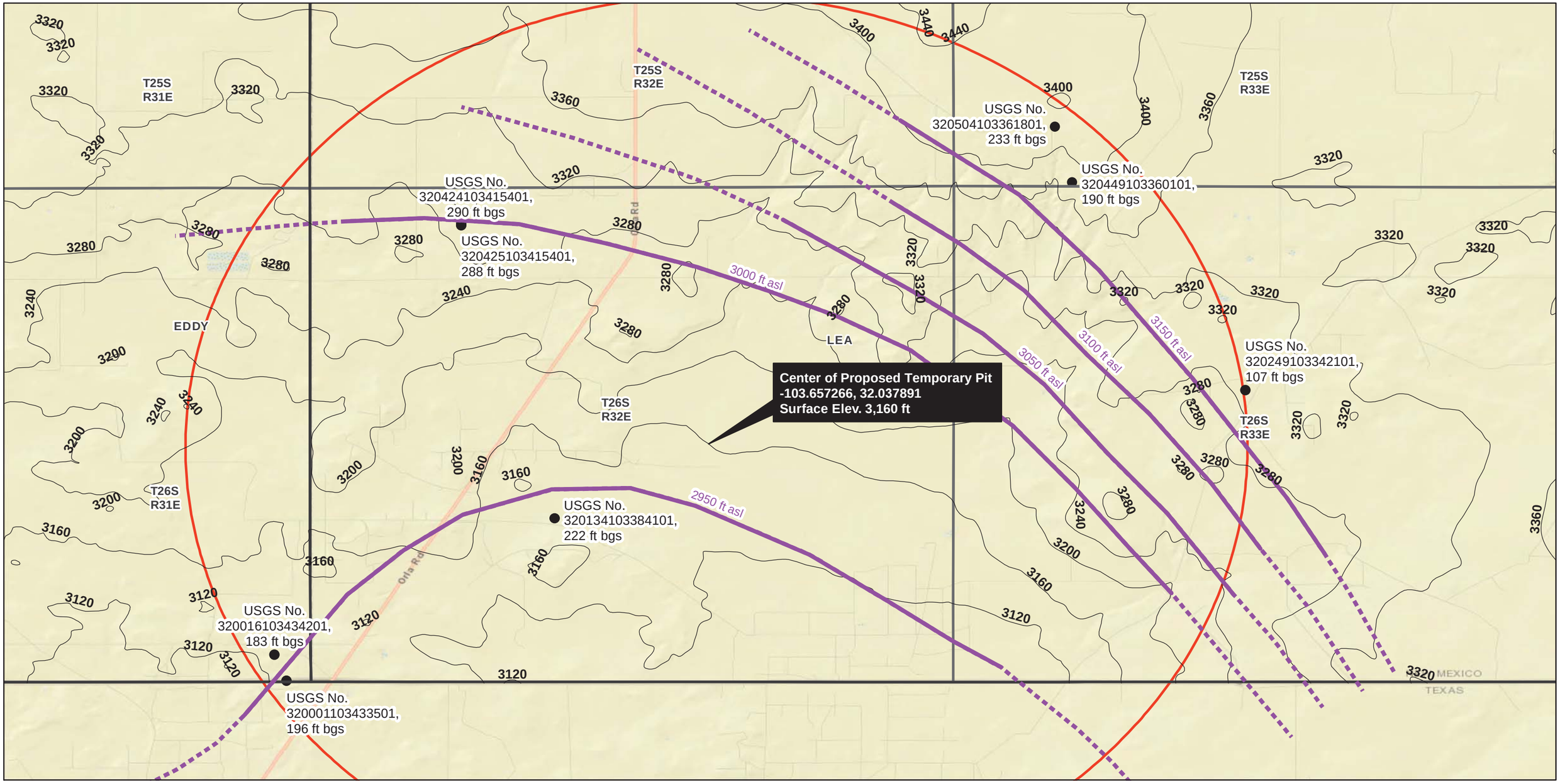
CONSULT THE LAND DEPARTMENT REGARDING ANY CHEVRON LAND ASSETS

LAND GRID: TOBIN	IMAGERY: DigitalGlobe
DATA SOURCE: USGS	
PIPELINE DATA: N/A	
Coordinate System: GCS North American 1983	
DRAWN BY: MCBU HSE	PROJECT PHASE: CURRENT DATE: 7/24/2020



LEGEND

- 5 mile buffer
- Potentiometric Surface
- USGS Wells
- USGS Contour Lines NM

N W E S

0 0.475 0.95 1.9 2.85 3.8 Miles

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SD 15 FED P419 Temporary Pit

Figure 7: USGS Wells and Potentiometric Surface Map

STATE: NEW MEXICO **COUNTY:** LEA

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LAND GRID: TOBIN	IMAGERY: ESRI	
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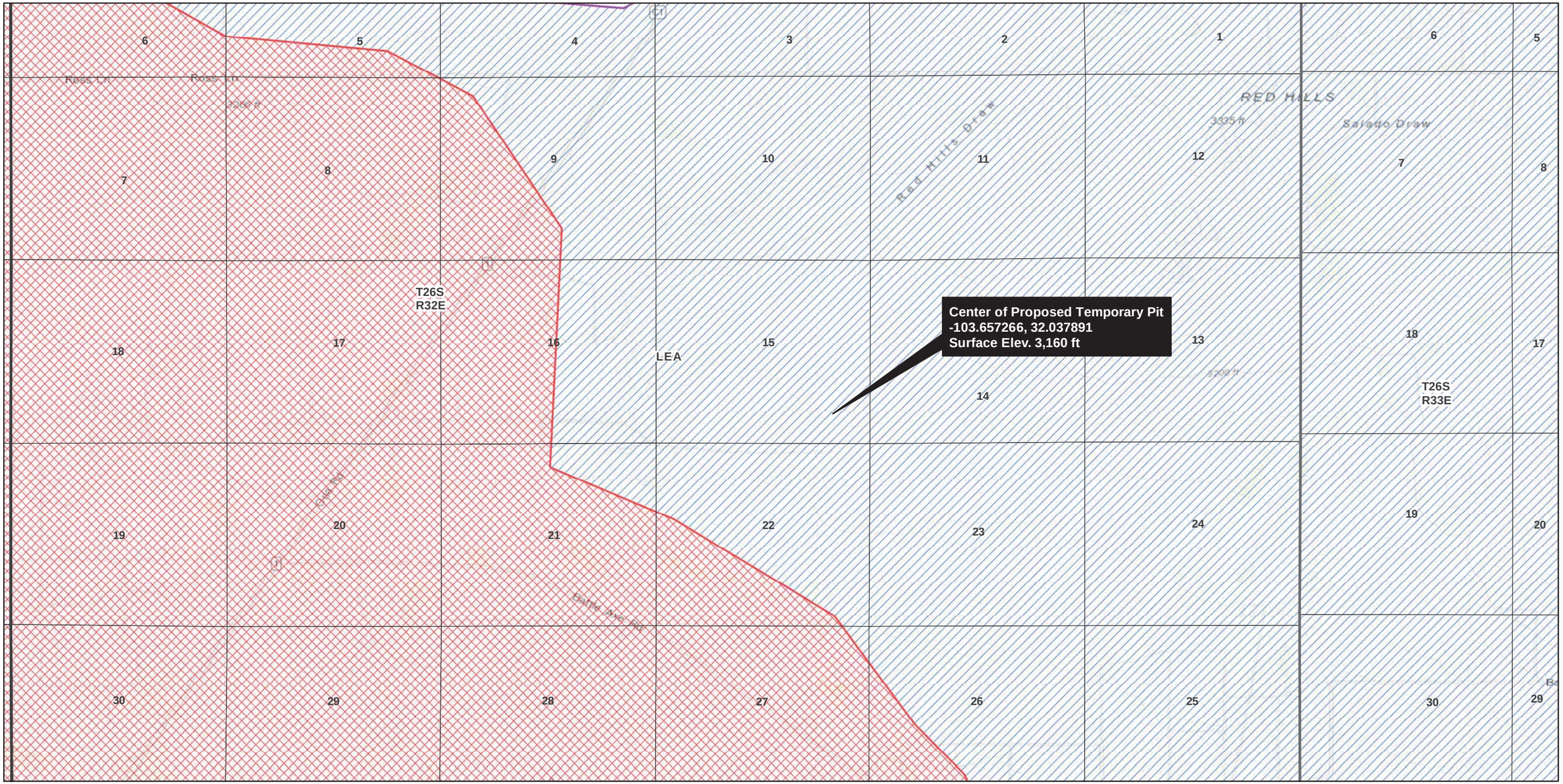

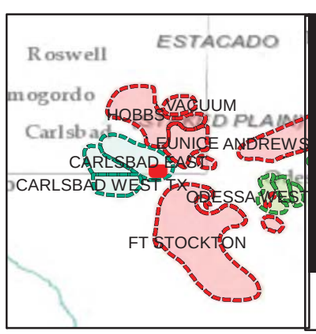

LEGEND

Karst Occurence Potential

- High
- Medium
- Low

0 0.225 0.45 0.9 1.35 1.8 Miles

N W E S

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SD 15 FED P419 Temporary Pit

Figure 8: Karst Potential

STATE: NEW MEXICO **COUNTY:** LEA

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Mid-Continent Business Unit

CONSULT THE LAND DEPARTMENT REGARDING ANY CHEVRON LAND ASSETS

LAND GRID: TOBIN	IMAGERY: ESRI
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PIPELINE DATA: N/A	
Coordinate System: GCS North American 1983	
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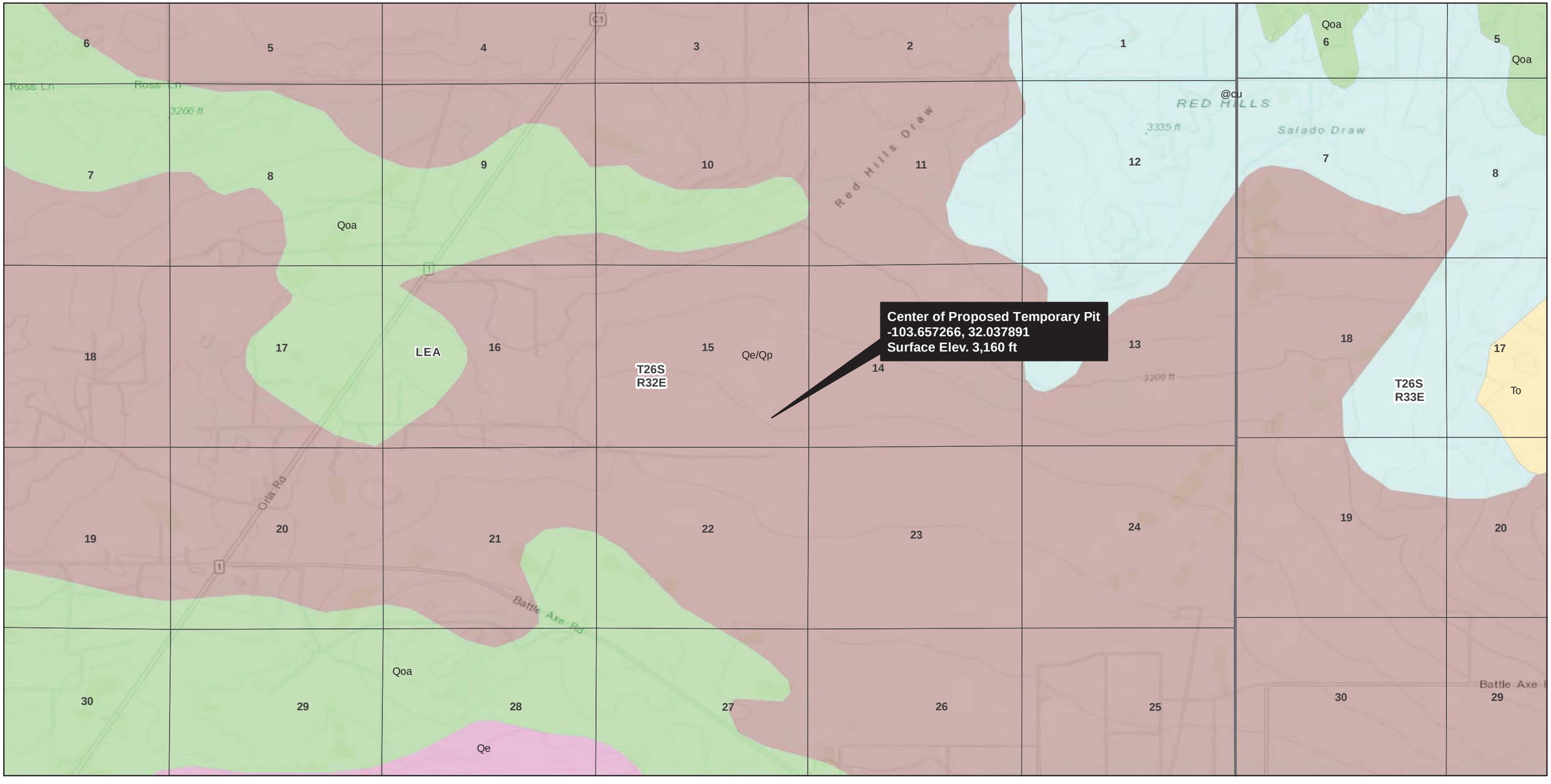

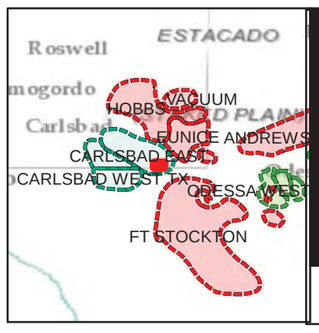

LEGEND

Geology

- Upper Chinle Group
- Ogalala Formation
- Quaternary - Eolian Deposits
- Quaternary - Eolian / Piedmont Alluvial Deposits
- Quaternary - Older Alluvial Deposits

N W E S

0 0.225 0.45 0.9 1.35 1.8 Miles

SD 15 FED P419 Temporary Pit

Figure 9: Local Geology

STATE: NEW MEXICO **COUNTY:** LEA

Chevron North America Exploration & Production
Mid-Continent Business Unit

CONSULT THE LAND DEPARTMENT REGARDING ANY CHEVRON LAND ASSETS

LAND GRID: TOBIN	IMAGERY: ESRI	
DATA SOURCE: Bureau of Land Management		
PIPELINE DATA: N/A		
Coordinate System: GCS North American 1983		
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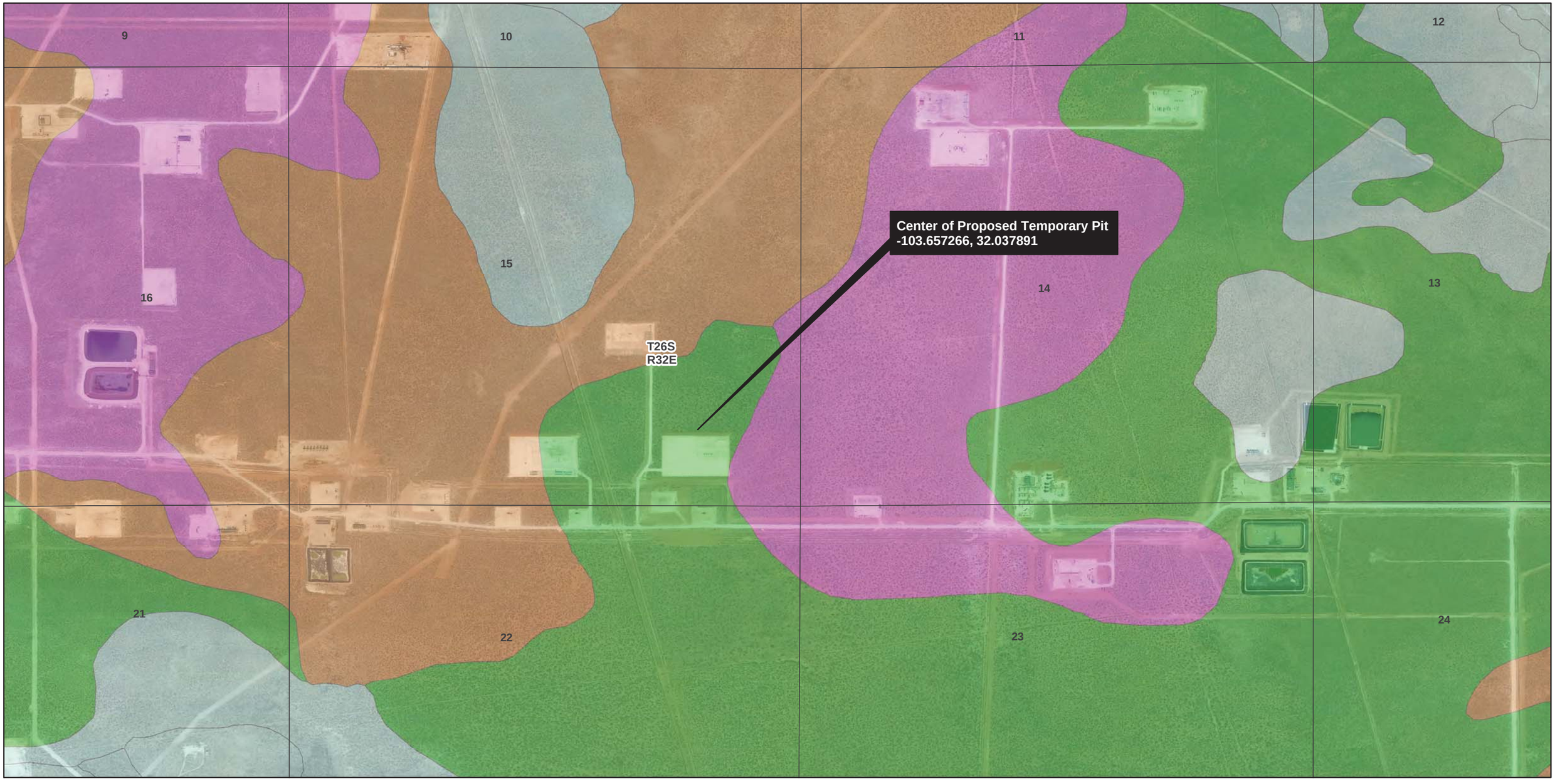

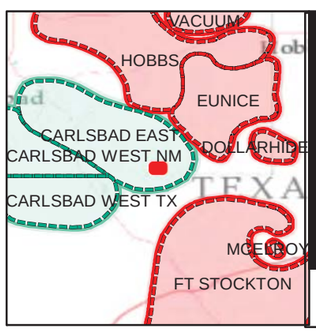

LEGEND

Lea County Soil Data

- Berino-Cacique association soils, hummocky
- Pyote and Maljamar fine sands
- Pyote soils and dune land
- all other values

N W E S

0 0.075 0.15 0.3 0.45 0.6 Miles

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SD 15 FED P419 Temporary Pit

Figure 10: Soils

STATE: NEW MEXICO **COUNTY:** LEA

Chevron North America Exploration & Production
Mid-Continent Business Unit

CONSULT THE LAND DEPARTMENT REGARDING ANY CHEVRON LAND ASSETS

LAND GRID: TOBIN	IMAGERY: DigitalGlobe	
DATA SOURCE: Bureau of Land Management, US Department of Agriculture		
PIPELINE DATA: N/A		
Coordinate System: GCS North American 1983		
DRAWN BY: MCBU HSE	PROJECT PHASE: CURRENT	DATE: 7/24/2020

Variance Requests

Temporary Pit containing non-low chloride fluids

Salado Draw P419 Pit

Section 15, T26S, R32E

Variance Requests
Salado Draw P419
Temporary Pit

Variance Request 1 of 2 – Extension of Closure Timeline for Temporary Pit

Reason for the requested variance

The Operator wishes to standardize closure practices and procedures across all active development areas where Temporary Pits are used. A closure timeline extension allows for improved flexibility in managing closure operations and would improve efficiency by allowing the closure of multiple pits during a single campaign.

The closure timeline is stated with the definition of a Temporary Pit, in that a pit *"must be closed within six months from the date the operator releases the drilling or workover rig from the first well using the pit"*.

For purposes of this variance, the Operator proposes a timeline based on the earliest Rig Down Move Out (RDMO) date. RDMO is defined as the date the drilling rig is moved off location, typically after the completion of drilling the last well on the pad. The Operator proposes dewatering the pit within 30 days of RDMO and proposes closing the pits within 1 year of RDMO.

The Operator uses a batch drilling process for drilling multiple wells on a single pad. The common procedure is to drill all the surface hole sections first followed by intermediate hole sections and finally production hole sections. The drilling rig skid moves to the next well without performing rig down activities when batch drilling. For the proposed four-well pad, the rig drills surfaces in the order of wells one to four, then intermediates in the order of wells four to one, and finally productions in the order of one to four. Note that specific orders may change based off well design and location specific factors, but the process of skidding and batch drilling is consistent throughout.

If the Operator ceases operations before drilling is complete and the rig is moved off the pad location, this constitutes a RDMO date and the 1-year closure criteria is based off the earliest RDMO date.

The Operator may utilize a smaller surface rig for the drilling of surface holes if permitted to do so. The rig down and move out of the surface rig does not constitute an RDMO date if the larger rig intending to drill production holes arrives within 3 months.

Demonstration that the variance will provide equal or better protection of fresh water, public health and the environment.

In order to uphold the Operator's commitment to people and the environment, the following assurances will be provided in excess of the baseline requirements of 19.15.17 NMAC.

- The Operator will dewater the Temporary Pit within 30 days after RDMO.
- The Operator will utilize a 40-mil HDPE liner, as proposed in **Variance 2**.
- No fluid will be stored in the pit for any purpose after the completion of drilling activities other than in the event of emergency actions as described in 19.15.17.14 NMAC.
- The pits will be visually inspected on a monthly basis between RDMO and closure.
- If fluid is seen in the pit during inspection, then the Operator will mobilize equipment to have the pits drained within 7 days.
- The operator will maintain a fence around the perimeter of the pits and ensure it remains in good repair until closure.

Variance Request 2 of 2 – Proposed Use of High-Density Polyethylene (HDPE) Liner for Temporary Pit in lieu of Linear Low-Density Polyethylene (LLDPE) Liner

Memorandum

To: New Mexico Oil Conservation Division (NMOCD)

From: Chevron MCBU - Facilities Engineering Group

Subject: Variance Request for Use of HDPE Liner Material for Temporary Reserve Pits in New Mexico

Date: 7/23/2020

Chevron requests a variance to NMAC 19.15.17.11 (F) for use of high-density polyethylene (HDPE) geomembrane for the lining of temporary drilling reserve pits. HDPE is a preferred material which Chevron will install during drilling reserve pit construction. Chevron will utilize an HDPE geomembrane which offers equal or better performance than a typically available 20-mil string reinforced linear low-density polyethylene (LLDPE) material detailed in 19.15.17.11 (F), NMAC. An HDPE liner of equivalent thickness or greater than the 20-mil LLDPE will be installed. The following are considered in the design for implementation of the HDPE material to ensure the product is an equivalent, to the LLDPE material described, for temporary reserve drilling pits in New Mexico.

- An HDPE liner that has a thickness of less than 30-mils will be installed in a reserve pit as a shop-fabricated, extruded liner, and will not be field welded. Only HDPE liners of 30-mils in thickness or greater will be field welded for use in the temporary reserve pits.
- HDPE has lower permeability compared to LLDPE. This provides high barrier protection for soils during drilling operations and usage of the pits.
- HDPE may be installed with an underlying geotextile or similar material to provide additional protection from puncture or stress cracking. The subgrade for the liner system will be screened of deleterious materials and rocks and will be suitable for the liner installation. The use of geotextile or similar material will be evaluated on a specific case-by-case basis by Chevron.
- The HDPE liner used in Chevron's temporary reserve pits will have an equivalent or higher tear resistance and puncture resistance than that of a typical 20-mil string reinforced liner.
- HDPE material properties and liner has improved UV resistance to degradation when compared to LLDPE. This allows for extended life and improved long-term durability in pit liner applications.

All requirements for temporary pits' design and construction will be met in accordance with NMAC 19.15.17.11 and liner compatibility will comply with EPA SW-846 Method 9090A. Any requirements that may not be able to be adequately addressed, will be addressed under a separate variance request on a case-by-case basis.

Disclaimer: Tetra Tech, Inc. has not evaluated the full design of temporary reserve pits for Chevron and is not involved in the construction or operation of Chevron's lined, temporary reserve pits. Chevron understands that they will ensure that specific pit designs meet the criteria and intent of the NMAC and applicable codes for each pit location and construction.

7/23/2020

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