

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

RECEIVED

APR 14 2011

HOBBSD

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | | | |
|-----------------|--------------------------------------|---------------|-------------------------------|
| Name of Company | Chevron Environmental Management Co. | Contact | Matt Hudson |
| Address | 1400 Smith Street Room 19001A | Telephone No. | (713) 372-1046 |
| Facility Name | Central Vacuum Unit #342 | Facility Type | Reserve Pit API #30-025-38002 |
| Surface Owner | State of New Mexico | Mineral Owner | Lease No. |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
| A | 36 | 17 S | 34 E | 81.2 | North | 1186.4 | East | Lea |

Latitude 32.798611 Longitude -103.509167

NATURE OF RELEASE

| | | | | | |
|--|---|---|----------------------------|------------------|-----------------------------------|
| Type of Release | C141 submittal requested by L Johnson | Volume of Release | Unknown | Volume Recovered | Unknown |
| Source of Release | Reserve Pit | Date and Hour of Occurrence | Date and Hour of Discovery | | |
| Was Immediate Notice Given? | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | | | |
| By Whom? | Date and Hour | | | | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | | | |
| If a Watercourse was Impacted, Describe Fully.* NA | | | | | |
| Describe Cause of Problem and Remedial Action Taken.* Larry Johnson requested that a C141 be prepared for this location following a Site Inspection. | | | | | |
| Describe Area Affected and Cleanup Action Taken.* Per NMOCD directives, a reserve pit area of approximately 85' x 110' x 100' will be over-excavated and sampled. A remediation plan including analytical results and closure plan will be developed and submitted to the District 1 office for review and approval. | | | | | |
| 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: | | OIL CONSERVATION DIVISION | | | |
| Printed Name: Matt Hudson | | Approved by District Supervisor: | | | |
| Title: Project Manager | | Approval Date: | | Expiration Date: | |
| E-mail Address: mhudson@chevron.com | | Conditions of Approval: | | | Attached <input type="checkbox"/> |
| Date: | | Phone: 713-372-1046 | | | |

* Attach Additional Sheets If Necessary

SITE INFORMATION

Report Type: CLOSURE REQUEST
RP # 2672
CRA Project # 073823

General Site Information:

| | |
|----------------|--|
| Site: | Central Vacuum Unit #342 |
| Company: | Chevron Environmental Management Company |
| Well Location: | Section 36, T-17-S, R-34-E |
| Unit Letter: | Unit A |
| API #: | 30-025-38002 |
| Lease Number: | -- |
| County: | Lea County |
| Surface Owner: | |
| Mineral Owner: | |
| Directions: | From Hobbs, travel west along US Hwy 62/180 approx. 11 miles. Merge onto NM Hwy 529 and travel 2.5 miles to NM Hwy 238. Then travel North on NM Hwy 238 approx. 7.6 miles to CR 51 (Texas Camp Rd). Turn West on CR 51 and travel 0.5 miles to lease road. Then travel north along lease road 1 miles, then 0.2 miles east, then 0.1 miles north to Pit location |

Release Data:

| | |
|--------------------------|--------------|
| Spill GPS: | |
| Date Released: | |
| Source of Contamination: | Pit Location |
| Fluid Released: | |
| Fluids Recovered: | |

Official Communication:

| | Contact #1 | Contact #2 |
|---------------|--|--|
| Name: | Matt Hudson | Tom Larson |
| Company: | CEMC - Upstream Business Unit | CRA |
| Address: | 1400 Smith Street Room 07062 | 2135 S Loop 250 West |
| P.O. Box: | | |
| City: | Houston Texas 77002 | Midland Texas 79703 |
| Phone Number: | 713-372-9207 | 432-686-0086 |
| Fax Number: | | 432-686-0186 |
| Email: | mhudson@croworld.com | tlarson@croworld.com |

Ranking Criteria:

| Depth to Groundwater: | Ranking Score: | Site Data: |
|---|----------------|------------|
| <50 ft. | 20 | |
| 50-99 ft. | 10 | 10 |
| >100 ft. | 0 | |
| | | |
| Wellhead Protection: | Ranking Score: | Site Data: |
| Water Source <1,000 ft., Private <200 ft. | 20 | 20 |
| Water Source >1,000 ft., Private >200 ft. | 0 | |
| | | |
| Surface Body of Water: | Ranking Score: | Site Data: |
| <200 ft. | 20 | |
| 200 ft. - 1,000 ft. | 10 | 10 |
| >1,000 ft. | 0 | |
| | | |
| Total Ranking Score: | 40 | |

| Acceptable Soil RRAL (mg/kg) | | | |
|------------------------------|------------|-----|-----------|
| Benzene | Total BTEX | TPH | Chlorides |
| 10 | 50 | 100 | 250 |

Approved
Sueffs Delving
Env. Specialist
NMOC-DIST 1
6/27/12

RECEIVED

APR 14 2011

HOBBSOC



**CONESTOGA-ROVERS
& ASSOCIATES**

2135 S. Loop 250 West

Midland, Texas 79703

Telephone: (432) 686-0086

Fax: (432) 686-0186

<http://www.craworld.com>

April 13, 2011

Reference No. 073823 & 073824

Mr. Geoffrey R. Leking
Environmental Engineer
New Mexico Oil Conservation Division
1625 N French Drive
Hobbs, New Mexico 88240

RECEIVED

APR 14 2011

HOBBSOCD

Re: Closure Request Workplans
Central Vacuum Unit #342, API #30-025-38002 (RP #2672)
New Mexico "O" State NCT-1 #40 (RP #2673)
Lea County, New Mexico

Dear Mr. Leking:

Conestoga-Rovers & Associates, Inc. (CRA), on behalf of Chevron Environmental Management Company (CEMC), is pleased to submit the closure request workplans for the two subject Sites and Remediation Plans (referenced above) as discussed in our meeting on January 11, 2011. Upon your review and concurrence, CEMC will proceed with described activities and submit a final C-141 for each subject location. CRA will provide the New Mexico Oil Conservation Division (NMOCD) a 48 hour notification prior to commencing field activities.

Should you have any questions regarding these requests, please feel free to give us a call at (432) 686-0086.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES, INC.

James Ornelas
Project Manager

Thomas C. Larson, P.G.
Sr. Geologist/Operations Manager

Enclosures

Cc: Matt Hudson, CEMC, Houston, Texas
Marcos Silvestri AECOM, Houston, Texas

*Approved
Jeff Leking
Env. Specialist
NMOCD-DIST 1
6/27/12*

Equal
Employment Opportunity
Employer



**CONESTOGA-ROVERS
& ASSOCIATES**

2135 S. Loop 250 West

Midland, Texas 79703

Telephone: (432) 686-0086

Fax: (432) 686-0186

<http://www.craworld.com>

April 13, 2011

Reference No. 073823

Mr. Geoffrey R. Leking
ENVIRONMENTAL ENGINEER SPECIALIST
OIL CONSERVATION DIVISION - DISTRICT I
1625 N. French Drive
Hobbs, New Mexico 88240

RECEIVED

APR 14 2011

HOBBSOCD

RE: Closure Request Workplan
RP#2672
Central Vacuum Unit #342, API #30-025-38002
Unit A, Section 36, T17S, R34E
Lea County, New Mexico

Dear Mr. Leking:

The subject location is the Central Vacuum Unit CVU #342 (CVU #342) pit location (Site). The Site is located in Unit Letter A, Section 36, Township 17 South, Range 34 East, Lea County, New Mexico. The approximate pit dimensions are 85'x 110'x 100' with an average depth of approximately 4' below ground surface (bgs). The Site coordinates are N 32.798611° , W 103.509167° . The Site location is shown on FIGURES 1 & 2.

BACKGROUND

According to an online records search, records indicate an application to drill well CVU #342 was submitted by Chevron USA (Chevron) to the New Mexico Oil Conservation Division (NMOCD) in September 2006. In October 2006, the NMOCD approved the application to drill. On April 7, 2010, Chevron submitted a workplan along with a pit closure request (C-144) form (APPENDIX A) to the NMOCD Hobbs district office but was not approved due to closure strategy (onsite trench burial). In December 2010, Chevron Environmental Management Company (CEMC) assumed the responsibilities of the pit closure activities at this subject location from Chevron. CEMC subcontracted Conestoga Rovers & Associates to manage pit closure activities. In late December 2010, a C-141 form (APPENDIX B) was submitted to NMOCD Hobbs district office at the NMOCD's request subsequent to Site inspection. On January 11, 2011, CRA, CEMC, AECOM met at the NMOCD District I Hobbs office to discuss the path forward at the subject property. Topics of discussions included modifications (waste excavation & removal vs. onsite trench burial) to the 2010 closure workplan and objectives necessary to close the pit as directed by the NMOCD District I Hobbs office.

Equal
Employment Opportunity
Employer



GROUNDWATER AND REGULATORY

There are numerous water wells in the vicinity of CVU well #342. According the Petroleum Recovery Research Center (PRRC) database and the New Mexico Office of the State Engineer (NMOSE), the average depth to groundwater in the immediate area of CVU well #342 is approximately 91 feet below ground surface (bgs). A FIGURE depicting the average depths to groundwater, distance to surface water bodies and any wellheads is provided in APPENDIX C.

Site assessment and remedial action activities will be completed in accordance to the New Mexico Oil Conservation Division's (NMOCD's) guidance document *Guidelines for Remediation of Leaks, Spills and Releases*, dated August 13, 1993. Section III of the guidance document provides three general characteristics (Depth to groundwater, Wellhead Protection Area, Distance to Nearest Surface Water Body) to "evaluate a Sites potential risk, the need for remedial action and if necessary, the level of cleanup required at the Site." Section IV provides ranking criteria for each Site-specific characteristic to determine their relative threat to public threat, fresh waters and the environment. The sum of each individual characteristic equals the total ranking score. The total ranking score determines the recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (BTEX) and total petroleum hydrocarbons (TPH) in soil. Based on average depth to groundwater (50 feet-99 feet below ground surface), Wellhead Protection (water source <1,000 feet & <200 feet private) and surface body of water (200 feet -1,000 feet) for the Site, the RRALs were determined to be 10 mg/kg for benzene, 50 mg/kg for BTEX, 100 mg/kg for TPH and 250 mg/kg for chlorides.

PROPOSED ASSESSEMENT, SOIL CONFIRMATION SAMPLING & PIT RESTORATION ACTIVITIES

The following pit assessment & restoration tasks are proposed for the CVU #342 reserve pit location:

- Over-excavate reserve pit material: Approximate dimensions of affected area are approximately 85' x 110' x 100' with an average of 4' in depth;
- Transport and dispose of excavated soils at Sundance facility as non-hazardous oilfield (exempt) waste. the total estimated volume of soils identified for disposal is 1,500 cubic yards, with an equivalent amount of material for backfilling of the remedial excavations;
- Collect five soil confirmation samples from excavation and compare to NMOCD recommended remedial action levels (RRALs) risk-based guidelines for BTEX, TPH & Chlorides; and
- If soil samples exceed the site specific RRALs, a soil boring program (installation of soil borings in the same vicinity of the original sample locations) will be implemented to demonstrate vertical delineation (two consecutive sample intervals below RRALs);



**CONESTOGA-ROVERS
& ASSOCIATES**

March 18, 2011

3

Reference No. 073823

Upon concurrence of vertical delineation by the NMOCD, the following tasks will be completed:

- If excavation exceeds 4 feet bgs, backfill excavation up to 4 feet below ground surface (bgs) to eliminate hazards;
- Lay a 20 mil poly liner in excavated area, cover and compact area with heavy equipment and clean backfill and topsoil material;
- Rip and seed 'constructed affected' location and plant seed with approved mixture and using procedures as designated by property owner; and
- Submit a final C-141 form (spill release) and C-144 form (pit closure) if necessary to the NMOCD summarizing field activities.

CRA will provide the New Mexico Oil Conservation Division (NMOCD) a 48 hour notification prior to commencing both sampling and backfilling activities. If you have any questions or comments with regards to this closure request, please do not hesitate to contact our Midland office at (432) 686-0086.

Respectfully,
Conestoga-Rovers & Associates

James Ornelas
Project Manager

Thomas C. Larson
Midland Operations Manager

Cc: Matt Hudson (CEMC- Houston)



SOURCE: USGS TOPOGRAPHIC MAP
 BUCKEYE 7.5 MINUTE QUADRANGLE
 32° 47' 55" N, 103° 30' 33" W



figure 1
 SITE VICINITY MAP
 CENTRAL VACUUM UNIT #342
 LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company



SOURCE: USGS TOPOGRAPHIC MAP
BUCKEYE 7.5 MINUTE QUADRANGLE
32° 47' 55" N, 103° 30' 33" W



figure 2
SITE LOCATION MAP
CENTRAL VACUUM UNIT #342
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company



Rodney Bailey
Environmental Advisor

Chevron North America
Exploration and Production
Mid Continent Business Unit/HES
15 Smith Rd
Midland, Texas 79705
Office 432-687-7123
Cell 432-894-3519
Fax 866-569-5650

April, 7 2010

Mr. Larry Johnson
NMOCD District Office
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Drilling Pits; Central Vacuum Unit 342 and New Mexico O-40, Closure Plans;
CVU 342, S 36, T 17S, R 34 E, API # 30-025-38002
NM O-40, S 36, T 17S, R 34 E, API # 30-025-38140

Chevron would like to submit this work plan for the closure of drilling pits CVU 342 and NM O-40. Also attached are Pit closure form C-144 for each location.

- Chevron will excavate each pit and liner and store the material adjacent to the excavation.
- The soil beneath the temporary pit will be sampled to determine whether a release has occurred. If a release has occurred Chevron will excavate or blend the soil till closure limits stated in 19.15.17.13.(B) (1) (b) (i) are reached.
- A 20 mil poly liner with welded seams will be placed in the excavation
- The previously excavated material will be returned to the pit, on top of the pit liner. The pit liner will be folded over the backfilled material. (original pit contents)
- A second pit liner will be placed on top of the back filled pit. Clean soil will be used as backfill on top of the liner. The center will be slightly mounded to promote rain water runoff and keep it from pooling in the center.
- Area will be contoured to match surrounding area
- Area will be seeded with NMOCD approved seed.

Chevron will began closure of these drilling pits as soon as we receive NMOCD approval.

If you have any questions please call me at 432-687-7123.

Respectfully,

Rodney Bailey
Environmental Advisor
Chevron North America

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

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

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, 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 OGRID #: _____
Address: 15 Smith Rd Midland Tx 79705
Facility or well name: Central Vacuum Unit 342
API Number: 30-025-38002 OCD Permit Number: _____
U/L or Qtr/Qtr _____ Section 36 Township 17S Range 34E County: Lea
Center of Proposed Design: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983
Surface Owner: ☐ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

3.
☐ Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☐ 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 _____

5.
☐ Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6. **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 _____

7. **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)

8. **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 19.15.3.103 NMAC

9. **Administrative Approvals 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:

- ☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10. **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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No

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 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (*Applies to temporary, emergency, or cavitation pits and below-grade tanks*)

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☒ No
☐ NA

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (*Applies to permanent pits*)

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☒ No
☐ NA

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, 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 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

☐ 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

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☒ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☒ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☒ No

11. **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
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ 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
- ☒ 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

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

12. **Closed-loop Systems 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.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ 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
- ☐ 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

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

☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13. **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 H₂S, 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

14. **Proposed Closure:** 19.15.17.13 NMAC

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 ☐ Closed-loop System
☐ 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 (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15. **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 F 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16. **Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13.D NMAC)

Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ 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 I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17. **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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No

☐ NA

Ground water is between 50 and 100 feet below the bottom of the buried waste

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ 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

☒ Yes ☐ No

☐ NA

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 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

☐ Yes ☒ No

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site

☐ 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

☐ 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

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☒ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☒ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☒ No

18. **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

☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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

☐ 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 F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

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): Rodney Bailey Title: Environmental Advisor

Signature: Rodney Bailey Date: 4-7-10

e-mail address: baile29@chevron.com Telephone: 432-687-7123

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

OCD Representative Signature: _____ Approval Date: _____

Title: _____ OCD Permit Number: _____

21.

Closure Report (required within 60 days of closure completion): Subsection K of 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: _____

22.

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.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

- ☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.

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)
☐ 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

25.

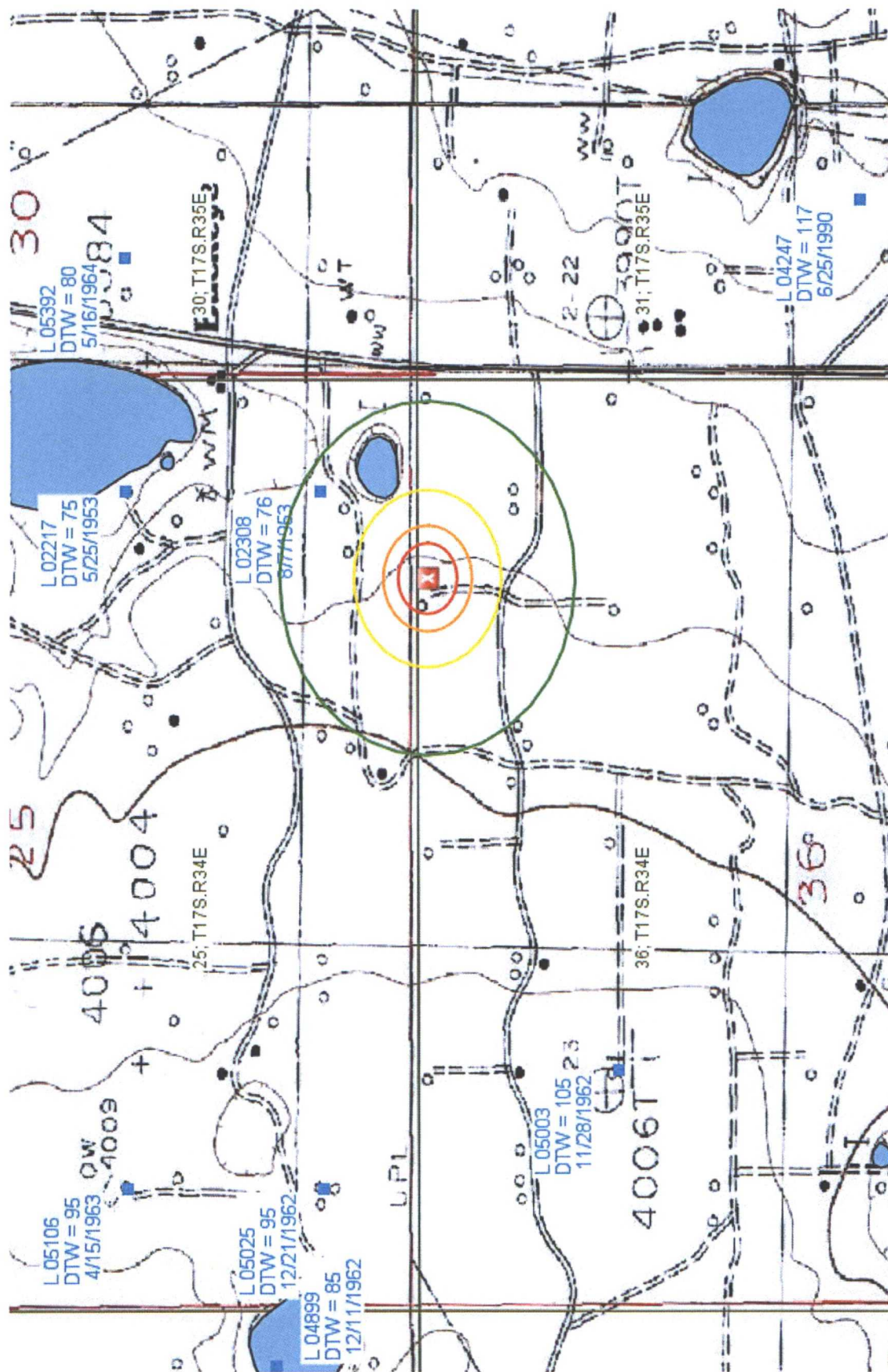
Operator Closure Certification:

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): Rodney Bailey Title: Environmental Advisor

Signature: Rodney Bailey Date: 4-7-10

e-mail address: _____ Telephone: _____



Distance (ft): 200 300 500 1000

| | | |
|---|---------------------------------|------------------|
| <p>Petroleum Recovery Research Center</p> | <p>CENTRAL VACUUM UNIT #342</p> | <p>Figure: 1</p> |
| <p>Client name/project name</p> | <p>Dec 08, 2010</p> | |