

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

HOBBS OCD

MAR 06 2013

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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 CLEZ
Revised August 1, 2011

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office.

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: ☒ Permit ☐ Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

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 U.S.A. INC. OGRID #: 4323
Address: 15 SMITH ROAD, MIDLAND TEXAS 79705
Facility or well name: MARK
API Number: 30-025-09979 OCD Permit Number: P1-05865
U/L or Qtr/Qtr B Section 3 Township 22S Range 37E County: LEA
Center of Proposed Design: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2. ☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Operation: ☐ Drilling a new well ☒ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A
☒ Above Ground Steel Tanks or ☐ Haul-off Bins

3. **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

4. **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.
☒ 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 Box 5) - 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: _____

5. **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: CONTROLLED RECOVERY INC. (CRI) R360 Disposal Facility Permit Number: R 9166-NM-01-0006
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

6. **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): Scott Haynes Title: Permit Specialist
Signature: Scott Haynes Date: 3/5/2013
e-mail address: tox@chevron.com Telephone: 432-687-7198

7.

OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only)OCD Representative Signature: Mary BrownApproval Date: 3/8/2013Title: Compliance OfficerOCD Permit Number: P1-05865

8.

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: _____

9.

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

10.

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

Mark #1

2.18.2012

Penrose Skelly, Grayburg Reservoir

T22S, R37E, Sec. 3

N 32° 25' 34.968", W -103° 8' 54.492" (NAD27)

Job: Open Hole Sonic Hammer, Acidize & Scale Squeeze

PREWORK:

1. Utilize the rig move check list.
2. Check anchors and verify that pull test has been completed in the last 24 months.
3. Ensure location of & distance to power lines is in accordance with MCA SWP. Complete and electrical variance and electrical variance RUMS if necessary.
4. Ensure that location is of adequate build and construction.
5. Ensure that elevators and other lifting equipment are inspected. Caliper all lifting equipment at the beginning of each day or when sizes change.
6. When NU anything over and open wellhead (EPA, etc.) ensure the hole is covered to avoid dropping anything downhole.
7. For wells to be worked on or drilled in an H₂S field/area, include the anticipated maximum amount of H₂S that an individual could be exposed to along with the ROE calculations for 100 ppm and 500 ppm.
8. If the possibility of trapped pressure exists, check for possible obstructions by:
 - Pumping through the fish/tubular – this is not guaranteed with an old fish as the possibility of a hole above the obstruction could yield inconclusive results
 - Dummy run – make a dummy run through the fish/tubular with sandline, slickline, eline or rods to verify no obstruction. Prior to making any dummy run contact RE and discuss.

If unable to verify that there is no obstruction above the connection to be broken, or if there is an obstruction:

- Hot Tap at the connection to check for pressure and bleed off

Observe and watch for signs / indicators of pressure as connection is being broken. Use mud bucket (with seals removed) and clear all non-essential personnel from the floor.

Procedure:

This procedure is meant to be followed. It is up to the WSM, Remedial Engineer and Production Engineer to make the decisions necessary to do SAFELY what is best for the well. In the extent that this procedure does not reflect actual operations, please contact RE, PE and Superintendent for MOC

1. Verify that well does not have pressure or flow. If well has pressure, note tubing and casing pressures on Wellview report. Bleed down well; if necessary, kill with 2% KCL brine fluid (8.6 ppg).
2. MI & RU workover unit.
3. Unseat pump, POOH with rods and pump. Examine rods for wear/pitting/paraffin. Do not hot water unless necessary. ND wellhead, unset TAC, NU BOP. POOH and LD 1 jt, PU 5-1/2" packer and set ~ @ 25', test BOP pipe rams to 250 psi/1000 psi. Note testing pressures on Wellview report. Release and LD packer.
4. PU 2-3 jts tubing and tag for fill. (TAC 3,463', Csg shoe 3,574', TD 3,860', EOT 3,804'). Take care not to push TAC past csg shoe. POOH while scanning 2-7/8" 6.5# J-55 prod tubing (Verify that tbg is 6.5#). LD all non-yellow band joints. If fill is tagged:
 - A. Above 3,850' continue with foam/air clean out per step 5.
 - B. Below 3,850' clean out not needed, skip step 5.

Note: Strap pipe out of the hole to verify depths and note them on Wellview report.
Send scan log report to LGBI@chevron.com.

5. PU and RIH with 4-3/4" MT bit, 6 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS. RU power swivel and clean out to original PBTD at 3,860' with foam/air unit (**continue to supplemental procedure and in accordance with attached SOG**). POOH with 2-7/8" WS and bit. LD bit & BHA. Stand back work string.
6. Contact sonic tool rep to be on site during job. *Verify that work string is clean, inspect for excessive rust.* PU and RIH with Sonic Hammer tool and work string to ~3,850' or enough to cover the bottom of the open hole with a whole stand. Hydrotest tubing to 6,000 psi. Stand back tubing to top perforations. Install stripper head and stand pipe with sufficient treating line to move tools vertically ~ 65'. Take returns out BOP to ½ free w/gas buster.
7. MI & RU Petroplex. Titrate acids and verify concentration (HCl ±1.5%) report results in daily work summary. Treat all intervals from 3,590' to 3,850' with 30 bbls of 2% KCL brine water per interval (refer to Table A). Pump down Sonic Hammer tool at 5 BPM while reciprocating tool across intervals. Do not exceed 5,000 psi tubing pressure. Leave annulus open in circulation mode while treating intervals with 2% KCL brine.
8. Follow the KCL brine water wash with 5,000 gals 15% NEFE HCl of total acid for all intervals as in Table A. Spot 3 bbls of acid outside tubing, shut in casing, pump 1,000 gallons of acid @ 5 BPM over first treating interval from 3,590'-3,650', monitor casing pressure not exceeding 500 psi. Flush tubing with 2% KCL brine after every acidized interval, make a connection and continue with remaining interval. Refer to Table A.

Table A: Perforation Intervals for acid.

Interval	Depth	Interval (Ft.)	Acid Volume (gal)
1	3590' - 3650'	60	1,000
2	3650' - 3710'	60	1,000
3	3710' - 3770'	60	1,000
4	3770' - 3830'	60	1,000
5	3830' - 3850'	20	1,000
Total			5,000

9. Ensure Sonic Hammer is above open hole. Shut in well for 1 hr for the acid to spend. Monitor casing pressure to keep it below 500 psi. Bleed off excess pressure if necessary. Attempt to flow back. If acid does not flow back, do not swab. RD and release pump truck. POOH and LD Sonic Hammer tool.
10. PU and RIH with 4-3/4" MT bit, 6 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS. RU power swivel and clean out to original PBTD at 3,860' with foam/air unit (**continue to supplemental procedure and in accordance with attached SOG**). POOH with 2-7/8" WS and bit. LD bit & BHA. LD work string.
11. RIH with 2-7/8" production tubing hydrotesting to 6,000 psi. Set TAC per ALCR recommendation. ND BOP. NU WH. RIH with rods and pump per ALCR. Hang well on. RD and release workover unit.
12. Pump Scale squeeze down annulus of well. Pump 3 drums (165 gallons) Baker SCW-358 Scale Inhibitor Chemical mixed with 36 bbl 2% KCL. Displace scale chemical with 80 bbl 2% KCL. Pump at max rate of 5 BPM. Do not exceed 300 psi at surface.
13. Turn well over to production.

FOAM / AIR CLEANOUT PROCEDURE

- This procedure is an addition to the original procedure.
 1. Install flowback manifold with two chokes. All components on flowback manifold must be rated to at least 5,000 psi. If possible, flowback manifold components should be hydrotested before delivery. Hardline pipes from 2" casing valve to manifold to half pit with gas buster.
 2. Install flowback tank downwind from rig.
 3. Position Air unit upwind from Rig next to water tanks. Have vacuum truck on standby to empty halfpit. (if needed)
 4. RIH with 4-3/4" MT bit, 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS.
 5. NU stripper head with **NO Outlets** (Check stripper cap for thread type - course threads preferred). **Stripper head to be stump tested to 1,000 psi before being delivered to rig.** Check chart or test at rig.
 6. RU foam air unit. Make quality foam on surface before going down hole with foam/air. Install flapper float at surface before beginning to pump. Break circulation with foam/air. Evacuate fluid from well.

Pump high quality foam at all times. Do not pump dry air at any time. Fluid injection rates will generally be above 12 gallons per minute

Whenever there is pressure on the stripper head, have a dedicated person continuously monitor pressure at choke manifold and have a dedicated person at accumulator ready to close annular BOP in case stripper leaks. Do not allow pressure on stripper head to exceed 500 psi. If pressure cannot be controlled below 500 psi, stop pumping, close BOP and bleed off pressure.

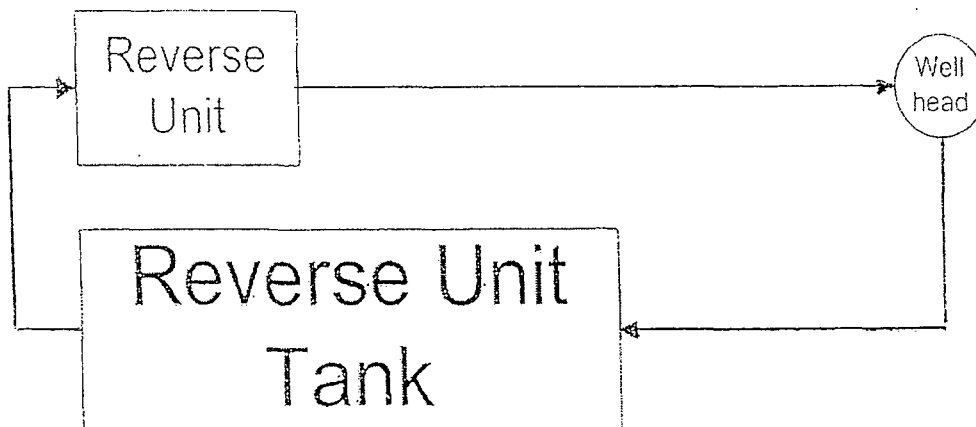
7. Clean out fill to 3,860' with low RPM's rotation and circulation, always keep pipe moving. Short trips can be beneficial to hole cleaning. Circulate well clean for at least 1 hour at the end of the day and pull up above the perforations before shut down for night. If the foam/air unit goes down, pull above the perforations.
8. When tripping out of hole, have special float bleed off tool available to relieve trapped pressure below float.

Ensure that high quality, stiff foam is pumped while circulating the fill. Stiff foam is required to prevent segregation while circulating. Monitor flow and pressures carefully when cleaning out.

Before rigging up power swivel to rotate, carefully inspect Kelly hose to ensure that it is in good condition. Ensure that swivel packing is in good condition.

Continue on with original procedure for completion.

CHEVRON –REVERSE UNIT – SCHEMATIC – OPERATING AND
MAINTENANCE – CLOSURE PLAN



Notes:

1. This is a generic layout, exact equipment orientation will vary from location to location.

2. This is a schematic representation, so drawing is not to scale.

Operating and Maintenance Plan

1. All recovered fluids and solids will be discharged into reverse tank.

2. Reverse tank will be continuously monitored by designated rig crew so that tank will not be overfilled.

3. Rig crew will visually inspect fluid integrity of reverse tank on a daily basis.

4. Documentation of visual inspection of reverse tank will be captured on daily completion morning report

Closure Plan

1. All recovered fluids and solids will be removed from reverse tank and hauled off of site

2. All recovered fluids and solids will be disposed of at a suitable off-location waste disposal facility