

HOBBS OCD

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

OCT 25 2012

RECEIVED

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
July 21, 2008

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 NMOC 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: Apache Corporation OGRID #: 873
Address: 303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705
Facility or well name: Round Up #001
API Number: 30-025-37100 OCD Permit Number: 11-05364
U/L or Qtr/Qtr H Section 35 Township 19S Range 38E County: Lea
Center of Proposed Design: Latitude 32.6183793245943 Longitude -103.112977302244 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 19.15.3.103 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: Sundance, Inc. Disposal Facility Permit Number: NM-01-0003
Disposal Facility Name: CRI Disposal Facility Permit Number: NM-01-0006
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): Fatima Vasquez Title: Regulatory Tech I
Signature: _____ Date: 10/23/2012
e-mail address: Fatima.Vasquez@apachecorp.com Telephone: (432) 818-1015

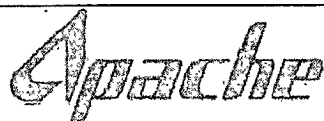
OCT 25 2012

7.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only)
OCD Representative Signature: [Signature] Approval Date: 10-25-2012
Title: DST. MGT OCD Permit Number: 91-05364

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: Sundance, Inc. Disposal Facility Permit Number: NM-01-0003
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): Fatima Vasquez Title: Regulatory Tech I
Signature: _____ Date: _____
e-mail address: Fatima.Vasquez@apachecorp.com Telephone: (432) 818-1015



Round Up # 1

API: 30-025-37100

House Field

Lea, New Mexico

AFE Number: PA-12-3976

KB: 3596' GL: 3584' (KB 12' above GL)

13-3/8" 68 lb/ft casing set @ 317'

8-5/8" 24 lb/ft J-55 STC casing set @ 1640'

5-1/2" 17 lb/ft N-80 casing set @ 7800'

TD: 7800' PBD: 7800'

TWO STAGE FRAC COMPLETION PROCEDURE

Casing: 5-1/2", 17lb/ft, N-80

ID: 4.892"

Drift= 4.767"

Capacity= 0.02324 BBL/ft

Burst= 7740 psi; 80%= 6192 psi

5-1/2" x 3-1/2" Annular capacity 0.0113 BBL/ft

Tubing: 3-1/2", 7.7 lb/ft, N-80

Capacity= 0.0091 bbl/ft

Burst= 8640 psi; 80%= 6912

Collapse 7870 psi; 80%= 6296 psi

Yield 130,140 lbs; 80%= 104,112 lbs

- **Anticipate two days for stimulations. Prepare service co., wireline, and other associated contractors to be present during job.**
- 1. Prep location. Spot the necessary 500 BBL lined acid tanks, 500 BBL water tanks, and BOP onto location. Set a flow back tank before stimulation. Have Service Co test water for quality.
- 2. MIRU PU. Kill well as necessary. Unseat pump. POOH w/ rods and pump.
- 3. ND wellhead. NU BOP. Release TAC. POOH w/ tubing and TAC. PU & TIH w/ 4-3/4" bit and scrapper for 5-1/2", 17 lb/ft, N-80 casing and 3-1/2" N-80 tubing to be used as WS. CO to 7,200'. Circulate hole clean. POOH and stand back tbg. LD DC and bit.

STAGE I- Drinkard

- 4. RIH w/ SN and PKR-RBP straddle assembly w/ ball catcher on WS. Set RBP at $\pm 7,110'$. TOH and set PKR just above perforations at $\pm 7,000'$. Test backside to 1000 psi.
- 5. ND BOP. NU 10K psi frac valve. MIRU frac services. NU and test surface lines to 7,500 psi. Max pressure to be **6,500 psi** at surface, set pressure alarms and pop-offs accordingly.
- 6. Load hole and establish rate and pressure. Frac the Drinkard down tubing per recommendations as provided by Service Company. Flush to top perf w/ 64 bbls. SD. Shut-in well.

Target Rate: 40 BPM

Max Pressure: **6,500 psi**

7. If necessary, kill well. Release PKR and wash to down to RBP. Latch and release RBP and TOH w/ PRK-RBP and set RBP w/ ball catcher at $\pm 6,470'$. Test RBP to 500 psi. POOH w/ PKR and tubing.

STAGE II- Blinebry

8. MIRU WL. NU Lubricator. TIH w/ csg gun or available equivalent perforator and perforate as detailed below using Connex 0.5" diameter BH charges: **Correlate to the GR on Schlumberger Three Detector Litho-Density Compensated Neutron/Spectral Gamma Ray Log dated 10/20/2005.**

Perf Interval		Ft	JSPE (60° phasing)	Holes
6,114	6,118	4	2	8
6,167	6,174	7	2	14
6,196	6,199	3	2	6
6,215	6,218	3	2	6
6,308	6,314	6	2	12
6,322	6,326	4	2	8
6,345	6,351	6	2	12
6,360	6,365	5	2	10
6,416	6,420	4	2	8
Total Perfs = 84 holes / 42 ft Net (306 ft Gross)				

**** Ensure proper pressure control equipment is installed prior to perforating. ****

9. POH w/ perforators and RDMO wireline
10. RIH w/ SN and PKR on WS and set PKR just above new perfs at $\pm 6,060'$. Test backside to 1000 psi.
11. RU Service Company. NU 10K psi frac valve. NU and test surface lines to 7,500 psi. Max pressure to be 6,500 psi at surface, set pressure alarms and pop-offs accordingly and monitor throughout job.
12. Load hole and break down Blinebry perfs. Establish rate and pressure. Acidize down csg w/ 3000 gals of 15% NEFE HCL w/ additives using 130 ball sealers to divert evenly spaced through the job as a max rate but do not exceed **6,500 psi** surface treating pressure. Displace to bottom perf with 63 BBLs of flush. Surge balls.
13. Unset PKR and TIH w/ to knock balls off. Reset PKR at $\pm 6,060'$. Test backside to 1000 psi.
14. Load hole and establish rate and pressure. Frac the Blinebry down tbg per recommendations as provided by Service Company. Flush w/ 56 bbls to top perf. SD. Shut-in well.

Target Rate: 40 BPM

Max Pressure: **6,500 psi**

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15. ND frac valve and tree. NU BOP's. Kill well as necessary. Release PKR and wash to down to RBP at 6,470'. Latch and release RBP and TOH w/ PRK-RBP w/ ball catcher.
 16. RIH w/ 4-3/4" bit (mill), subs, DC on 3-1/2" tbg clean well out to PBTD. Circulate bottoms up two times. POOH with WS.
 17. Run production tubing and rods as per the Hobbs office specifications.
 18. RDMOPU. Place well into production and on test for 2 weeks. Have chemical rep test fluids and put well on the appropriate chemical maintenance program.



DESIGN PLAN, OPERATING & MAINTENANCE PLAN, & CLOSURE PLAN
FOR OCD FOR C-144

DESIGN PLAN

Fluid & cuttings coming from drilling operations will pass over the Shale Shaker with the cuttings going to the Sundance Inc / CRI haul off bin and the cleaned fluid returning to the working steel pits.

Equipment includes:

- 2 – 500 bbl steel frac tanks (fresh water for drilling)
- 2 – 180 bbl steel working pits
- 3 – 75 bbl steel haul off bins
- 2 – Pumps (6-1/2" x 10" PZ 10 or equivalent)
- 1 – Shale shaker
- 1 – Mud cleaner – QMAX MudStripper

OPERATING AND MAINTENANCE PLAN

Inspection to occur every four for proper operation of system and individual components. If any problems are found they will be repaired and/or corrected immediately.

CLOSURE PLAN

All haul bins containing cuttings will be removed from location and hauled to Sundance Incorporated (NM-01-0003) disposal site located 3 miles East of Eunice, NM on the Texas border / Controlled Recovery, Inc's (NM-01-0006) disposal site located near mile marker 66 on Highway 62/180.

Vicki Brown
Drilling Tech