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

HOBBS OCD
JUL 06 2011
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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
21-Jul-08

For closed-loop systems that only use above ground steel tanks or haul off bins and purpose 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-looped 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 government authority's rules, regulations or ordinances.

1.
Operator: **Apache Corporation** OGRID#: **873**
Address: **303 Veterans Airpark Lane, Ste 3000, Midland, TX 79705**
Facility or Well Name: **South Lusk 33 Federal #1**
API Number: **30-025-36312** OCD Permit Number: P1-03439
U/L or Qtr/Qtr F Section **33** Township **19S** Range **32E** 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 of 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 Services** Disposal Facility Permit Number: **NM-01-0003**
Disposal Facility Name: **Controlled Recovery Inc.** 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): **Guinn Burks** Title: **Reclamation Foreman**
Signature: Guinn Burks Date: **6/15/2011**
e-mail address: **guinn.burks@apachecorp.com** Telephone **432-556-9143**

7.

OCD Approval: [ ] Permit Application (including closure plan) [X] Closure Plan (only)

OCD Representative Signature: [signature] **Approval Date:** 7-6-2011

Title: Staff Mgr **OCD Permit Number:** P1-03439

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) **Guinn Burks** Title: **Reclamation Foreman**

Signature: ______________ Date: ______________

e-mail address: **guinn.burks@apachecorp.com** Telephone: **432-556-9143**

CLOSED LOOP SYSTEM DESIGN, OPERATION, MAINTENANCE, AND CLOSURE PLAN FOR PLUGGING AND ABANDONDMENT OPERATIONS

This document is intended to provide design requirements as well as operating, maintenance and closure instructions for closed-loop (plugging fluids) systems, ensuring compliance with the New Mexico Title 19, Chapter 15, Part 17 rules and regulations. Plugging units operating for Apache Corporation in New Mexico shall be rigged up with a closed-loop system consistent with this design and should be operated, maintained, and closed in a manner consistent with this document.

DESIGN

The closed-loop system shall be designed and constructed to ensure the confinement of oil, gas, or water and to prevent uncontrolled releases.

The steel tank(s) shall be a minimum of 90 barrels and constructed and in a condition such that no leaks or uncontrolled release would be expected. The tank(s) shall be placed to receive all of the fluid as it returns from the well bore and entry from the flow line shall be such that splash is minimized. The tank(s) shall be connected with steel lines where applicable from the wellhead to the tank. It shall have a separate off load valve to which a vacuum truck can be attached for unloading.

The steel tanks(s) shall comply with any applicable requirements specified in 19.15.17 NMAC. Additionally, the appropriate well signs shall be in place to comply with 19.15.17 NMAC.

OPERATION and MAINTENANCE

The closed-loop system shall be operated and maintained at all times in such a manner as to prevent contamination of fresh water and protect the public health and the environment. While Apache Corporation relies on various third party vendors to provide, operate and maintain the closed-loop system, in the end it is the Apache Corp on-site representative who must take responsibility for the effective operation of the system. At the end of the plugging activities, all return fluids should be disposed of in a licensed disposal facility in New Mexico.

Know which and approved disposal facility is closest to your location and verify that they are capable and prepared to receive the fluids from your well. Track all loads sent during the plugging of the well and up to the time the rig is moved off of the location.

Current approved facilities are;

Controlled Recovery Inc.	(877) 505-4274
Sundance Incorporated	(575) 394-2511

Ensure that the closed-loop system meets the design criteria listed above and is properly installed and fully functional prior to commencing any operations which require circulation.

Inspect the active system tanks at least every tour to ensure no fluid is leaking onto the location. Check any valves and interconnecting pipes for leaks. Correct any leaks as soon as possible upon detection.

Monitor and know the fluid level in the containment tank and call for a vacuum truck with enough lead time to allow for delays. Ensure that the truck driver knows which approved disposal he will be transporting the fluid to for off loading.

Make every effort to operate and maintain the closed-loop system in a manner that puts no fluid or well bore discharges in contact with the location or surrounding area.

In the event of a spill over five (5) barrels, take immediate action to contain the spill and make the following notifications;

EHS Apache Hotline (800) 874-3262
NMOCD District Office

In the event of oil reaching water, include the following notification;

Environmental Protection Agency (EPA) National Response Center

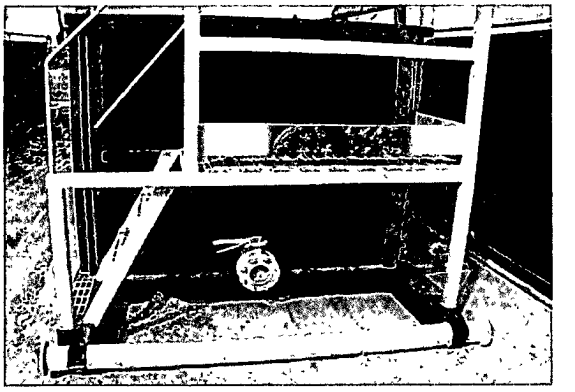
CLOSURE

Upon completion of plugging the well, all connecting lines will be drained into the tank and all remaining fluid in the tank will be removed by a vacuum truck and taken to an approved facility for disposal. All equipment will then be removed so location remediation can begin.

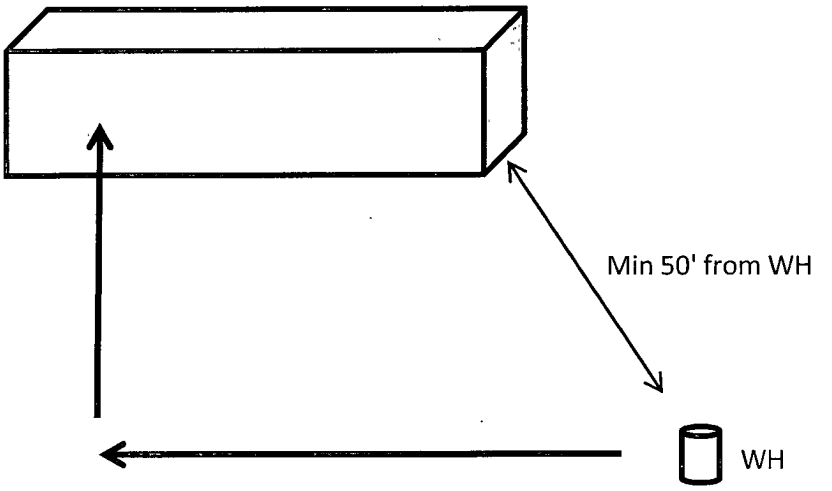
Prepared by

Guinn Burks

Guinn Burks
Reclamation Foreman
Apache Corporation



Closed-loop Tank



BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Permanent Abandonment of Federal Wells
Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within **ninety (90)** days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

2. **Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.**

3. Blowout Preventers: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. Mud Requirement: Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.

5. Cement Requirement: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Dry Hole Marker: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). **The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10th day, the BLM is to be contacted with justification to receive an extension for completing the cut off.**
The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation procedure.

J. Amos 3/6/11

Requirements for ground level dry hole markers
Well Identification Markers
Conditions of Approval (COA)

The BLM Carlsbad Field Office (CFO) Conditions of Approval (COA) Requires that ground level dry hole markers be placed on well within the Lesser Prairie Chicken habitat area. The dry hole markers will be to the following specifications. The operator will construct the markers as follows:

1. An 8 inch X 8 inch steel plate 1/8 to 3/16 of an inch thick is to be placed on the old dry hole marker stand pipe 2 inches from ground level, in the Lesser Prairie Chicken habitat area.

2. Steel plate may be welded or bolted approximately 2 inches from ground level on the stand pipes. If plates are bolted to the stand pipe, the person installing the plate will be required to weld a pipe collar on the plate and place a minimum of two set screws/bolt on each collar. Aluminum data plates may be bolted with minimum ¼ inch bolt and locking nuts or self tapping fine threaded screws. A minimum of one in each corner is to be installed on each plate.

3. An 8 inch x 8 inch aluminum plate, which is 12 gauge or .080 sign material (1/8 inch aluminum plate may be used in place of the .080 plate) with the required information for that well stamped or engraved in a minimum 3/8 inch tall letter or number.

4. The following information will be stamped or engraved on the 8 inch X 8 inch aluminum plate in the following order.

    a. First row: Operators name
    b. Second row: Well name and number
    c. Third row: Legal location to include ¼ ¼, Section, Township, and range. If the legal location cannot be placed on one row it can be split into two rows with the ¼ ¼ (example: 1980 FNL 1980 FWL) being on the top row.
    d. Fourth row: Lease Number and API number.
        i. Example marker plate: (attached)

NMOCD Order No. R-12965 also required the operator to notify NMOCD when this type of dry hole marker is used. This can be done on the subsequent report of abandonment which is submitted to the BLM after the well is plugged. State that a ground level dry hole marker was installed as required in the COA's from the BLM.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 E Greene St
Carlsbad, New Mexico 88220-6292
www.blm.gov/nm

TAKE PRIDE IN AMERICA

In Reply Refer To: 1310

Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its pre-disturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines. Strip and remove caliche, contour the location to blend with the surrounding landscape, re-distribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.

2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.

3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.

4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation

equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.

6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.

7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos
Supervisory Environmental Protection Specialist
575-234-5909, 575-361-2648 (Cell)

Terry Gregston
Environmental Protection Specialist
575-234-5958

Bobby Ballard
Environmental Protection Specialist
575-234-2230

Randy Rust
Environmental Protection Specialist
575-234-5943

Linda Denniston
Environmental Protection Specialist
575-234-5974

Jennifer Van Curen
Environmental Protection Specialist
575-234-5905

Justin Frye
Environmental Protection Specialist
575-234-5922

Cody Layton
Natural Resource Specialist
575-234-5959

Trishia Bad Bear
Natural Resource Specialist
575-393-3612

Todd Suter
Surface Protection Specialist
575-234-5987

Doug Hoag
Civil Engineering Technician
575-234-5979