<u>District I</u> 1625 N French Dr., Hobbs, NM 88240

State of New Mexico Energy Minerals and Natural Resources

Form C-144 CLEZ July 21, 2008

1220 S St Francis Dr , Santa Fe, NM 87505

District II
1301 W. Grand Avenue, Artesia, NM 88210 FEB 25 2009 Oil Conservation Division District III 1000 Rio Brazos Road, Aztec, NM 87410 **HOBBSOCD** 1220 South St. Francis Dr.

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

Santa Fe, NM 87505

(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.		
Operator: Apache Corporation OGRID #: 873		
Address: 6120 S. Yale Ave., Suite 1500 Tulsa, Oklahoma 74136		
Facility or well name: Hawk A-5 # 4		
API Number: 3D-025-3939DOCD Permit Number: P1-01039		
U/L or Qtr/Qtr Unit P Section 5 Township 21S Range 37E County: Lea		
Center of Proposed Design: Latitude 32.501816° N Longitude 103.177572° W NAD: \$\infty\$1927 \$\square\$1983		
Surface Owner: Federal State Tribal Trust or Indian Allotment		
2.		
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		
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.		
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 indentify 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 Incorporated Disposal Facility Permit Number. NM-01-0003		
Disposal Facility Name: Disposal Facility Permit Number: 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): Lana Williams . Title: Engineering Tech		
Signature: Sana Williams Date: 2/11/09		
e-mail address: lana.williams@apachecorp.com Telephone: 918 491-4980		

OCD Approval: Permit Application (including closure plan) Closure Plan (only)		
OCD Representative Signature:	Approval Date: 04/21/09	
Title: Geologist	OCD Permit Number: P1-01039	
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:		
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify 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:		
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		
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): SAM HAMPTON Title: DRILLING ENGINEER		
Name (Print): SAM HAMPTON	Inie: DKILLING ENGINEER	
Signature:	Date:	
e-mail address: sam.hampton@apachecorp.com	Telephone: 918-491-4954	

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Closed Loop Mud System

Drilling muds will circulate through a closed system consisting of steel tanks, mud pumps, piping, to the rotating hood, return piping back to the steel tanks. Solids will be removed from the waste streams to steel pits using these types of equipment.

- 1. Shale shakers will be installed with graduated screens to remove solids from all mud streams.
- 2. A mud cleaner will be installed to remove finer solid particles. Drilling mud will circulate by pump through the mud cleaner. The pump will generate optimal pressure for the mud cleaner cones to process solids.
- 3. A centrifuge will pick up effluent from the mud cleaner to process smaller particles.
- 4. Flocculants will be added to the waste stream entering the centrifuge to flocculate solids. Flocculation increases the efficiency of the centrifuge to remove solids to a smaller size.
- 5. Roll off bins will installed to handle the solids produced by the shale shaker, mud cleaner, and centrifuge. The solids will drop directly into the bins. Once a bin is full it will be hauled to OCD approved disposal site.

Operation and Maintenance

Personnel with appropriate training and experience will be on-site 24 hours per day to operate and maintain the solids control equipment. If equipment problems occur the repairs or parts replacement will be done by qualified personnel. Personnel will monitor the solids levels in the roll off bins. Trucking companies will be notified to pick up the full bins and move the new bins into place.

Closure Plan

Cuttings and solids will be disposed of at an OCD permitted facility according to OCD guidelines. Where possible fluids will be recycled. If unable to use the fluids the fluids will be hauled to an approved disposal facility. Fluids will be temporarily stored in tanks of sufficient volume to maintain the liquids on-site.

