District I 1625 N. French Dr. Hobbs. NM 88240 District II 811 S. First St., Artesia. NM 8240 District III 400 S. De Aztec NM 87410 District III 120 S. St. Francis Dr. Santa Fc. 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 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 CLLZ) 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 his environment. Not does approval relieve the operator of its responsibility to comp	bility should operations result in pollution of surface water, ground water or the oly with any other applicable governmental authority's rules, regulations or ordinances	
Operator Cimarex Energy Co. of Colorado	OGRID #: 162683	
Address 600 N. Marienfeld St., Ste. 600, Midland, TX 79701		
API Number. 30-025-40444	OCD Permit Number 21-04197	
U/L or Qu/Qu B Section 36 Township 18S		
	Longitude 103° 43° 03.612 NAD: □1927 ⊠ 1983	
Surface Owner Federal State Private Tribal Trust or Indian /		
2		
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		
Signed in comprisince with 19 13 16.8 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: <u>CRI</u>		
Disposal Facility Name		
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		
Operator Application Certification:		
Thereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief		
Name (Print):	le. Regulatory	
Signature ////////////////////////////////////	Date. 2/13/12	
e-mail address tstathem (cimarex.com	Telephone. 432-620-1936	

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Oil Conservation Division

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7	No. / al 2	
OCD Approval: Permit Application (including closure plan) Closure		
OCD Representative Signature:	Approval Date: 92/14/1	
Title:	OCD Permit Number: P1-04197	
s. 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 System Instructions: Please indentify the facility or facilities for where the liquids, d two facilities were utilized.	ns That Utilize Above Ground Steel Tanks or Haul-off Bins Only: rilling fluids and drill cuttings were disposed. Use attachment if more than	
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 oper Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	ations.	
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closur belief—I also certify that the closure complies with all applicable closure requir	c report is true, accurate and complete to the best of my knowledge and ements and conditions specified in the approved closure plan.	
Name (Print).	Title	
Signature.	Date:	
e-mail address:	Telephone:	

Cimarex Energy Co. of Colorado - Closed-Loop System Design Plan

Equipment List

- Primary Shakers
- Mud Cleaner hydro-cyclones
- 1 or 2 Centrifuges (depending on well depth)
- De-watering system with pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing (may not be necessary for shallower wells)
- Drying Augur
- Sump Drying Augur
- Sump
- Cuttings Boxes
- Reserve Fluids Tank Farm
- Wire Mesh Trash Enclosure (spent motor oils kept in separate containers and later sent to approved landfill)

Operation and Maintenance

The Cimarex Zeto Discharge system is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This ensures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

These closed loop operations can be monitored by our service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and tested for all regulated toxic materials. If found they are removed and disposed of per regulatory requirements.

Closure Plan

During drilling operations, all liquids, drilling fluids, and cuttings will be hauled off via CRI (Controlled Recovery Incorporated, Permit R-9166).



Closed Loop with Drying Auger and Dewatering System

