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 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Revised August 1, 2011

Form C-144 CLEZ

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

Operator: Cimarex Energy Co.	OGRID#: 162683
Address: 600 N. Marienfeld St., Ste. 600; Midland, TX 79701	
Facility or well name: DA VINCI 7 FED COM 3	
API Number: <u>30-015 - 40203</u>	OCD Permit Number: 212872
	Range 27E County: Eddy
	Longitude104° 13' 34.46" NAD: ☐ 1927 ☑ 1983
Surface Owner:   Federal State Private Tribal Trust or	
	ies to activities which require prior approval of a permit or notice of intent) \ \Bigcup P&A
Above Ground Steel Tanks or ☐ Haul-off Bins  3.  Sigus: Subsection C of 19.15.17.11 NMAC ☐ 12"x 24", 2" lettering, providing Operator's name, site location,  Signed in compliance with 19.15.16.8 NMAC	

**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): Adela Molina Regulatory Signature: c-mail address: amolina@cimarex.com 432-620-1960 Telephone;

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 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

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

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?

Disposal Facility Permit Number: R-9166

Disposal Facility Permit Number:

Yes (If yes, please provide the information below) No

Required for impacted areas which will not be used for future service and operations:

facilities are required.

Disposal Facility Name:

Disposal Facility Name:

7							
OCD Approval: Permit Application (including closure plan)  Closure Plan	an (only)						
OCD Representative Signature:	Approval Date: 09/27/2012						
Title: D157 H Sufern	OCD Permit Number: 2/2872						
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							
Instructions: Please indentify the facility or facilities for where the liquids, dril two facilities were utilized.	ling fluids and drill cuttings were disposed. Use attachment if more than						
Disposal Facility Name:							
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) \( \subseteq \text{No} \)							
Required for impacted areas which will not be used for future service and operation	ons:						
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:						

### 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 Zero 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.

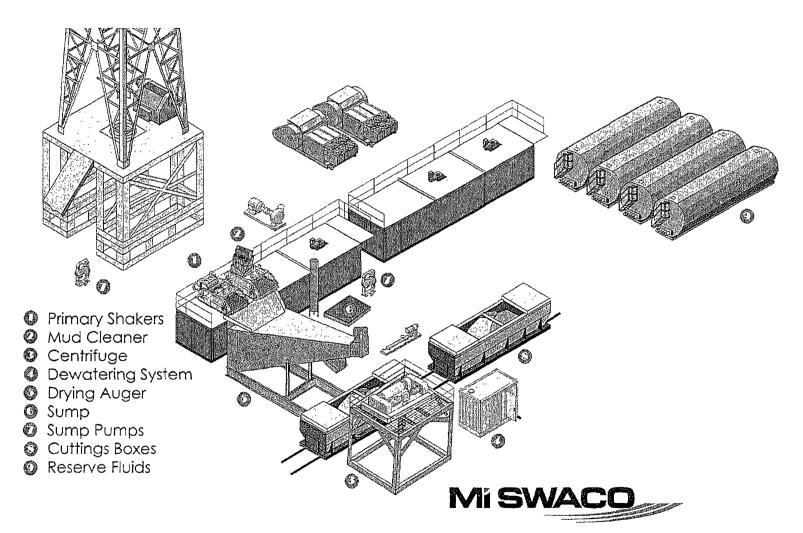
Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose 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



DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised October 15, 2009

Submit one copy to appropriate District Office

1301 W. Grand Avenue, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

### OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, New Mexico 87505

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT API Number Pool Code Pool Name Property Code Property Name Well Number DA VINCI "7" FEDERAL COM 3H OGRID No. Operator Name Elevation 3211'

### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	7	25 S	27 E		10	SOUTH	1650	EAST	EDDY

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	7	25 S	27 E		330	NORTH	1700	EAST	EDDY
Dedicated Acres   Joint or Infill   Consolidation Code   Order No.									

## NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<del></del>		
PROPOSED HOLE LOC. Lat - N 32* Long - W 104* NMSPCE- N 41 NMSPCE- E 57 (NAD-83	ATION 09'03.38"	1700'	OPERATOR CERTIFICATION  I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division
			Signature Date
			Printed Name  SURVEYOR CERTIFICATION
		649586	I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison and that the same is true and correct to the best of my belief
 	    +		NOVEMBER: WEX 2011  Date Surveyor  Signature & Seal of  Professpaal Surveyor
SURFACE L   Lat - N 32   Long - W 104   NMSPCE - N 4   (NAD-8:	08'14.32" '13'34.46" 13706.0 74486.1		W.S. 103 105
	SL	_3218 6'  0	Certificate No. Gary L. Jones 7977  BASIN SURVEYS