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 District IV 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

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: X 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: Chesapeake Operating, Inc. OGRID #: 147715 Address: P.O. Box 18496 Oklahoma City, OK 73154

Facility or well name: CROW FLATS 14 FEDERAL 4H				
API Number: <u>30-015-38466</u> OCD Pern	OCD Permit Number: 211174			
U/L or Qtr/Qtr L Section 14 Township 16S F	Range 28E	County: EDDY		
Center of Proposed Design: Latitude 32.921546 Longitud	e <u>-104.15413</u>		NAD: 🛛 1927 🗌 1983	
Surface Owner: X Federal State Private Tribal Trust or Indian Allotment				
2.			HERE TO THE TOTAL PROPERTY OF THE TOTAL PROP	
☐ 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)				
Above Ground Steel Tanks or Ab				
3. Signs: Subsection C of 19.15.17.11 NMAC	This is an an	nended permit fo	rrig change	
12"x 24", 2" lettering, providing Operator's name, site location, and emergency to	elephone numbers		RECEIVED	
Signed in compliance with 19.15.16.8 NMAC	•		MAR 2 0 2012	
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.				
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 Solutions: Please indentify the facility or facilities for the disposal of liquids, dr facilities are required.	illing fluids and d	rill cuttings. Use attaci	liment if more than two	
	Disposal Facility Permit Number: NM-01-0006			
Disposal Facility Name: SUNDANCE DISOSAL Disposal Facility Permit Number: NM-01-0003				
Will any of the proposed closed-loop system operations and associated activities occ ☐ Yes (If yes, please provide the information below) ☒ No	ur on or in areas th	at will not be used for f	future service and operations?	
Required for impacted areas which will not be used for future service and operations Soil Backfill and Cover Design Specifications based upon the appropriate r Re-vegetation Plan - based upon the appropriate requirements of Subsection I Site Reclamation Plan - based upon the appropriate requirements of Subsection	equirements of Su of 19.15.17.13 NM	1AC	13 NMAC	
6. Operator Application Certification: Liberary certify that the information submitted with this application is true, accurate	and complete to the	a boot of mules and	o and halise	

Name (Print): Bryan Arrant Signature:

Form C-144 CLEZ

Title: Regulatory Specialist II

Date: <u>03/18/2012</u>

e-mail address: bryan.arrant@chk.com

7. OCD Approval: Permit Application (including closure plan) Closure	Plan (only) Approval Date:		
OCD Representative Signature:			
Title:	OCD Permit Number: ZIII) 4		
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. Cleaner Deposit Depositing Wests Demond Cleaner For Cleand Icon System	That Hillian About Cround Steel Tonks on Houl off Ding Only		
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:	Disposal Facility Permit Number:		
Were the closed-loop system operations and associated activities performed on or in areas that <i>will not</i> 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 Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	tions:		
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:		





HOISTING & ROTATING EQUIPMENT

Drawworks^{*} Oilwell 760 rated @ 1000 hp driven by (2) Caterpillar D379 rated @

@ 550,hp / 1200 rpm

. 34 to

Auxiliary Brake Parmac 342 hydromatic

Rolary Table National C-275 (27-1/2") chain-driven by drawworks Traveling Block Continental Emsco RA-44 (350 ton)

Hook

Web Wilson Hydra Hook (350 too), untitzed with traveling block? Top Drive. Tesco 250-HMIX (250 ton) rated @ 700 hp powered by Tesco 630 hp

hydraulic power unit

Varço ST-80 "Iron Roughneck" powered by Aberdeen Dynamics. 181 14-2 hydraulic power unit rated @ 60 hp. Pipe-Handling

MAST'S SUBSTRUCTURE

Venstic Technologies Cantilever Mast Design

Height

Capacily Substructure Design Floor Height .

Clear Height Capacilles

142 573k Static Hook Load (10 lines)

Venslic Technologies Box-on-Box

573k Casing / 370k Selback

TRANSPORT

Estimated Loads 30 (less jubulars)

POWER PACKAGE

Drawworks Mud Pumps Light Plant Generalors

(2) Cai 0379 rated @ 550 hp (2) Cat 3508B rated @ 900 hb: (2) Cat C-18 rated @ 630 hp (2) Marathon rated @

425,kW / 607 kVA / 0.7 pt

Annular Single Ram Double Ram Accumulator Shaffer 13-5/8" 5M/Spherical None Shaffer 13-5/8"-5/M-SL

Choke Manifold

Koomey: 6-station / 200 gallon Cameron 4-1/16".5M

STORAGE CARACITIES

Drilling Water Diesel

11,250 gallons

MUD SYSTEM Mud.Pumps

by (II) Cater pillar 35088 rated @ 900 hp (2) 6x5x14 @ 60 hp / 1200 rpm Charging Pumps (424 bbl) Three-compariment. W/ (2) 10 hp mud agitators Process Pit

(2) Oilwell A-1 100-PT Iriplex:

rated @ ,1'100'hp, each driven

(473 bbl) three-compartment Suction Pit w/ (4) 10 hp mud agitalors

Trip Tarik (128 bbl) one compartment w/(1), 10 hp.mud.cgitator 4x3x13 @ 30 hp.y 1200 rpm (2) Derrick/FLC-503 Trip Tank Pump

Shale Shakers linear-motion

Inear-motion Double:Life DAD-DP atmospheric NOV:2-cone? 10 Degasser'-Desander

Desander Pump

Desilter

NOV 2-cone / 10 NOV 16-cone / 4" 6x5x14 @ 75 hp / 1200 rpm 6x5x14 @ 75 hp / 1200 rpm (2) 6x5x14 @ 75 hp / 1200 rpm Desilter Pump Mud Mixing Pumps

TUBULARS Drill Pipe

5" 19.50# G-105 5" 19.50# S-135;

5" HWDP.

Drill Collais

As needed tor normal drilling operations

Chesapeake Operating, Inc.'s Closed Loop System CROW FLATS 14 FEDERAL 4H Unit L, Sec. 14, T-16-S R-28-E Eddy Co., NM

API # 30-015-38466

Equipment & Design:

Chesapeake Operating, Inc. is to use a closed loop system with roll-off steel pits.

- (2) Derrick FLC-503 linear motion shale shakers
- (1) NOV 16-cone / 4" desilter
- (1) NOV 2-cone / 10" desander

Frac tanks for fresh and brine water

Operations & Maintenance:

During each and every tour, the rig's drilling crew will inspect and monitor the drilling fluids contained within the steel pits.

Should a spill or leak occur, the NMOCD District II office in Artesia (575-748-1283) will be notified. Please note that notifications will be made immediately should a significant release occur.

This is in keeping in compliance with NMOCD's reporting requirements for spills and releases.

Closure:

During and after drilling operations all drill cuttings and drilling fluids will be hauled and disposed to Controlled Recovery, Inc.'s location.

The disposal facility permit number for CRI is: NM-01-0006

The OCD permit number for the CROW FLATS 14 FEDERAL 4H well is: 211174