

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

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  
July 21, 2008

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 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.

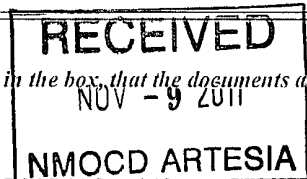
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1  
Operator: Chesapeake Operating, Inc. OGRID #: 147179  
Address: P.O. Box 18496 Oklahoma City, OK 73154-0496  
Facility or well name CROW FLATS 14 16 28 USA 5H  
API Number. 30-015-39509 OCD Permit Number 212063  
U/L or Qtr/Qtr G Section 19 Township 24S Range 29E County EDDY  
Center of Proposed Design: Latitude 32 204920 Longitude -104.02115- 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 or 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 **This is an amended permit as another drilling rig is scheduled to drill this well.**  
☐ 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. CRI Disposal Facility Permit Number NM-01-0006  
Disposal Facility Name. SUNDANCE DISPOSAL Disposal Facility Permit Number. NM-01-0003  
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): Bryan Arrant Title Sr Regulatory Compl. Sp.  
Signature: [Signature] Date 11/04/2011  
e-mail address: bryan.arrant@chk.com Telephone. (405)935-3782

7. **OCD Approval:** ☐ Permit Application (including closure plan) ☐ Closure Plan (only)

**OCD Representative Signature:** \_\_\_\_\_ **Approval Date:** \_\_\_\_\_

**Title:** \_\_\_\_\_ **OCD Permit Number:** \_\_\_\_\_

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) \_\_\_\_\_ Title \_\_\_\_\_

Signature \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address \_\_\_\_\_ Telephone \_\_\_\_\_

# RIG 120 SPECIFICATIONS



## HOISTING & ROTATING EQUIPMENT

<b>Drawworks</b>	Oilwell 760 rated @ 1000 hp driven by (2) Caterpillar D379 rated @ 550 hp / 1200 rpm
<b>Auxiliary Brake</b>	Parmac 342 hydromatic
<b>Rotary Table</b>	National C-275 (27-1/2") chain-driven by drawworks
<b>Traveling Block</b>	Continental Emsco RA-44 (350 ton)
<b>Hook</b>	Web Wilson Hydra Hook (350 ton), unitized with traveling block
<b>Top Drive</b>	Tesco 250-HMIX (250 ton) rated @ 700 hp powered by Tesco 630 hp hydraulic power unit
<b>Pipe-Handling</b>	Varco ST-80 "Iron Roughneck" powered by Aberdeen Dynamics 18114-2 hydraulic power unit rated @ 60 hp

## MAST & SUBSTRUCTURE

<b>Mast Design</b>	Verstic Technologies Cantilever
<b>Height</b>	142'
<b>Capacity</b>	573k Static Hook Load (10 lines)
<b>Substructure Design</b>	Verstic Technologies Box-on-Box
<b>Floor Height</b>	23'
<b>Clear Height</b>	19'
<b>Capacities</b>	573k Casing / 370k Setback

## TRANSPORT

<b>Estimated Loads</b>	30 (less tubulars)
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## POWER PACKAGE

<b>Drawworks</b>	(2) Cat D379 rated @ 550 hp
<b>Mud Pumps</b>	(2) Cat 3508B rated @ 900 hp
<b>Light Plant</b>	(2) Cat C-18 rated @ 630 hp
<b>Generators</b>	(2) Marathon rated @ 425 kW / 607 kVA / 0.7 pf

## BOP EQUIPMENT

<b>Annular</b>	Shaffer 13-5/8" 5M Spherical
<b>Single Ram</b>	None
<b>Double Ram</b>	Shaffer 13-5/8" 5M SL
<b>Accumulator</b>	Koomey 6-station / 200 gallon
<b>Choke Manifold</b>	Cameron 4-1/16" 5M

## STORAGE CAPACITIES

<b>Drilling Water</b>	400 bbl
<b>Diesel</b>	11,250 gallons

## MUD SYSTEM

<b>Mud Pumps</b>	(2) Oilwell A-1100-PT triplex rated @ 1100 hp, each driven by (1) Caterpillar 3508B rated @ 900 hp
<b>Charging Pumps</b>	(2) 6x5x14 @ 60 hp / 1200 rpm
<b>Process Pit</b>	(424 bbl) three-compartment w/ (2) 10 hp mud agitators
<b>Suction Pit</b>	(473 bbl) three-compartment w/ (4) 10 hp mud agitators
<b>Trip Tank</b>	(128 bbl) one-compartment w/ (1) 10 hp mud agitator
<b>Trip Tank Pump</b>	4x3x13 @ 30 hp / 1200 rpm
<b>Shale Shakers</b>	(2) Derrick FLC-503 linear-motion
<b>Degasser</b>	Double Life DAD-DP atmospheric
<b>Desander</b>	NOV 2-cone / 10"
<b>Desander Pump</b>	6x5x14 @ 75 hp / 1200 rpm
<b>Desilter</b>	NOV 16-cone / 4"
<b>Desilter Pump</b>	6x5x14 @ 75 hp / 1200 rpm
<b>Mud Mixing Pumps</b>	(2) 6x5x14 @ 75 hp / 1200 rpm

## TUBULARS

<b>Drill Pipe</b>	5" 19.50# G-105 5" 19.50# S-135 5" HWDP
<b>Drill Collars</b>	As needed for normal drilling operations



**Chesapeake Operating, Inc.'s Closed Loop System  
CROW FLATS 14 16 28 USA 5H  
Unit D, Sec. 14, T-26-S R-28-E  
Eddy Co., NM  
API # 30-015-39509**

**Equipment & Design:**

**Chesapeake Operating, Inc. is to use a closed loop system with roll-off steel pits.  
For cuttings and solids removal this rig has:**

**Two- Derrick FLC-503 Dual Shale Shakers-Linear Motion  
One- NOV 2-Cone/10" Desander  
One-Double Life DAD-DP Atmospheric Degasser  
One-NOV 16 Cone/4" Desilter  
One-400 bbl tank for fresh water  
One-500 bbl tank for brine water**

**Operations & Maintenance:**

**During each and every tour, the rig's drilling crew will inspect and monitor closely the drilling fluids contained within the steel pits and visually monitor any spill which may occur.**

**Within 48 hours should a minor spill, release or leak occur; the NMOCD District II office in Artesia (575-748-1283) will be notified. Please note that notifications may be made earlier to the district office should a greater release occur.**

**Closure:**

**During and after drilling operations, liquids (which apply), all drill cuttings and drilling fluids will be hauled and disposed to the Controlled Recovery, Inc.'s location.**

**The permit number for Controlled Recovery, Inc. is: NM-01-0006  
The alternative disposal facility will be Sundance Disposal.  
Their permit # is: NM-01-0003.**

**This is an amended permit as another drilling rig is scheduled to drill this well.**