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MAY 21 2010
HOBBSOCD

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: [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.

1.
Operator: Chesapeake Operating, Inc. OGRID #: 147179
Address: P.O. Box 18496 Oklahoma City, OK 73154-0496
Facility or well name: Perseus 10 Federal Com # 3H
API Number: 30-005- 29537 OCD Permit Number: P1-D2037
U/L or Qtr/Qtr H Section 10 Township 15 South Range 31 East County: Chaves
Center of Proposed Design: Latitude 33.032107 Longitude -103.80100 NAD: [X] 1927 [ ] 1983
Surface Owner: [X] Federal [ ] State [ ] Private [ ] Tribal Trust or Indian Allotment

2.
[X] **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Operation: [X] 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 [X] Haul-off Bins

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
[X] 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.
[X] Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
[X] Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
[X] 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 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: Controlled Recovery, Inc. 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) [X] 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: Senior Regulatory Compl. Sp.
Signature: Bryan Arrant Date: 05/04/2010
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: Geologist **Approval Date:** 05/24/2010

Title: _____ **OCD Permit Number:** P1-02037

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 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 *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: _____

Chesapeake Operating, Inc.'s Closed Loop System
Perseus 10 Federal Com. # 3H
Unit H, Sec. 10, T-15-S R-31-E
Chaves Co., NM
API # TBD

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 2-cone/10" desander
(1) NOV 16-cone /4" desilter
(1) 400 bbl "frac tank" for fresh water
(1) 500 bbl "frac tank" brine water
For additional information, please see attached page.

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 spill, release or leak occur, the NMOCD District I office in Hobbs (575-393-6161) 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.

CACTUS DRILLING COMPANY, L.L.C.

RIG 120 SPECIFICATIONS

HOISTING & ROTATING EQUIPMENT

Drawworks	Oilwell 760 rated @ 1000 hp driven by (2) Caterpillar D379 rated @ @ 550 hp / 1200 rpm
Auxiliary Brake	Parmac 342 hydromatic
Rotary 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 ton), unitized with traveling block
Swivel	Oilwell PC-300 (300 ton)
Pipe-Handling	Varco ST-80 "Iron Roughneck" powered by Aberdeen Dynamics 18114-2 hydraulic power unit rated @ 60 hp

MAST & SUBSTRUCTURE

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

TRANSPORT

Estimated Loads	30 (less tubulars)

POWER PACKAGE

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

BOP EQUIPMENT

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

STORAGE CAPACITIES

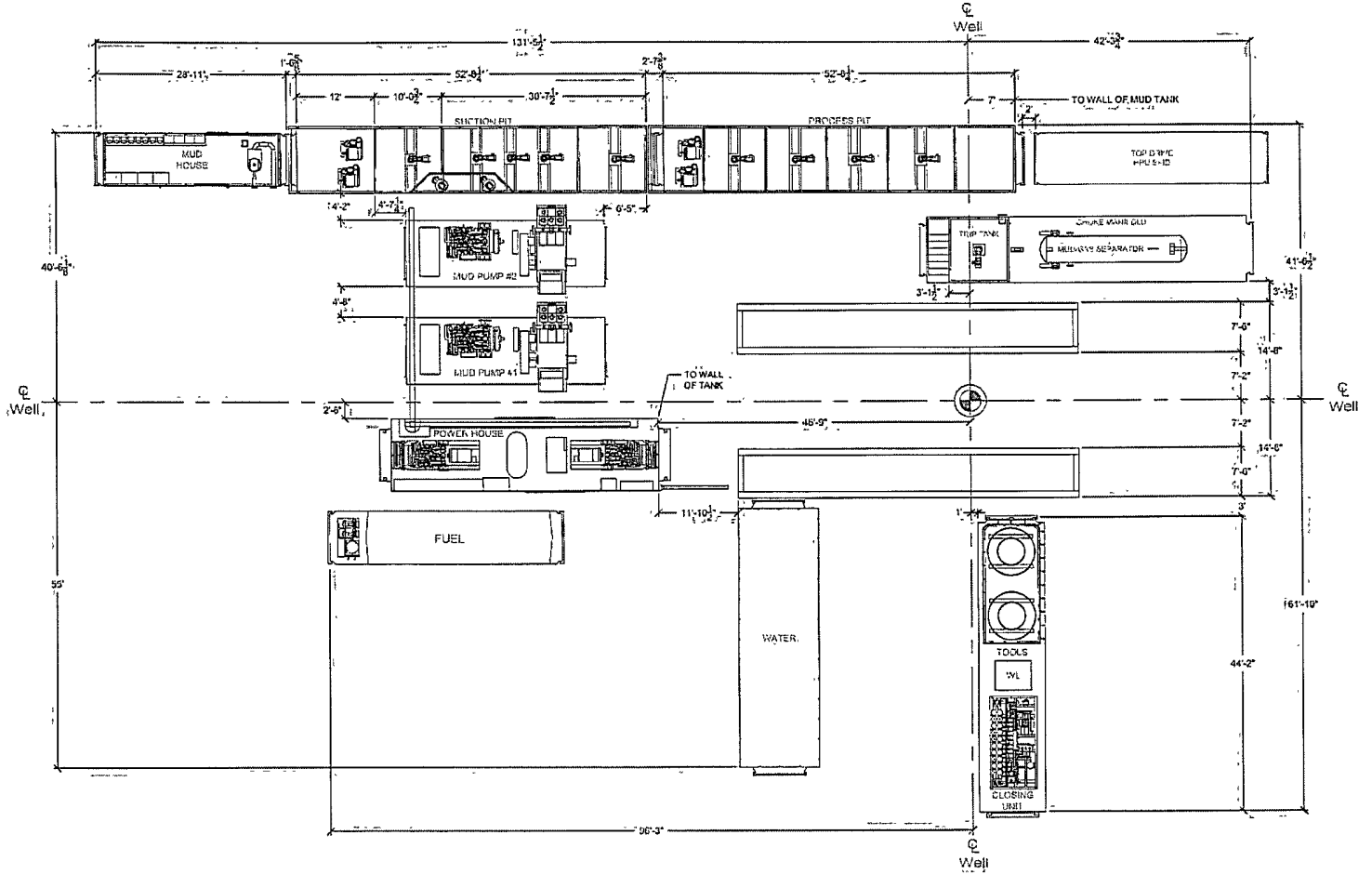
Drilling Water	400 bbl
Diesel	11,250 gallons

MUD SYSTEM

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

TUBULARS

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



65' ℄ Well
150' 160'
100'
MINIMUM AREA CLEARANCE

8' 4' 0 8' 16' 24'
SCALE IN FEET (1/16"=1'-0")

SYM	DATE	REVISION	BY

TOLERANCE UNLESS OTHERWISE SPECIFIED
DIMENSIONS IN INCHES
DECIMAL DIMENSION
CONCENTRICITY
X.X ± .1 ± FIR
XX.X ± .06 .06 FIR
X.XXX ± .010 .010 FIP
ANGLES ± 5 DEGREES

'ACAD FILE CAC120-A-001-00-RO

CUSTOMER NO:
FILE
DWG BY J.D.L. 4/14/09
CHK BY
APP BY J.P.S. 3/4/10
SCALE: 1/16" = 1'-0"

CACTUS Drilling Co., L.L.C.
Oklahoma City, OK, U.S.A.
Tel 405-677-5547 Fax 405-677-3065

TITLE
RIG 120
DRILL SITE

DOC. B
CAC120-A001
SHEET 1/1