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

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

of New Mexico ls and Natural Resources AUG 1 2 2010 Pepartment Conservation Division NMOCD ARTES PAINT 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.

used does not relieve the operator of liability should operations result in pollution of surface water, ground water or the

Please be advised that approval of this request does not relieve the operator of hability should operations result in pollution of surface water, ground water of the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinary.	ances.
Operator: Yates Petroleum Corporation OGRID #:025575	
Address:105 South Fourth Street, Artesia, New Mexico 88210	
Facility or well name: Cassiopeia BQD State Com #1H	
20 010 20000	
	-
U/L or Qtr/Qtr B Section 25 Township 26S Range 27E County: Eddy	
Center of Proposed Design: Latitude N 32.019911 Longitude W 104.142028 NAD: ☐ 1927 ☐ 198.	,
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)	A /
Above Ground Steel Tanks or Haul-off Bins	
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 19.15.3.103 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 NMA	يا
Previously Approved Design (attach copy of design) API Number:	
Previously Approved Operating and Maintenance Pian 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: Gandy Marley Disposal Facility Permit Number: NM-01-0019	
Disposal Facility Name: CRI Disposal Facility Permit Number: R-9166	
Disposal Facility Name: Lea Land Farm Disposal Facility Permit Number: WM-1-035	
Disposal Facility Name: Sundance Services Inc. 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 opera Yes (If yes, please provide the information below) No	ions?
Required for impacted areas which will not be used for future service and operations:	Ì
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: I hereby certify that the information submitted with this application is true, accurate 	and complete to the best of my knowledge and belief.
Name (Brint): Monti Sanders	Title: Land Regulatory Technician
Signature: // Winder	Date: <u>8/11/10</u>
e-mail address: montis@yatespetrolcum.com	Telephone: <u>575-748-4244</u>
7. OCD Approval: Permit Application (including closure plan) Closure Plan	(gnly)
OCD Representative Signature:	Approval Date: 08/19/2010 CD Permit Number: 210672
Title: DISTAL SUPERVISE C	CD Permit Number: 210672
8. Closure Report (required within 60 days of closure completion): Subsection K of Instructions: Operators are required to obtain an approved closure plan prior to in The closure report is required to be submitted to the division within 60 days of the section of the form until an approved closure plan has been obtained and the closure plan prior to in the plan has been obtained and the closure plan prior to in the plan has been obtained and the closure plan has been obtained and the closure plan prior to in the plan has been obtained and the closure plan prior to in the plan has been obtained and the closure plan has been plan has bee	nplementing any closure activities and submitting the closure report. completion of the closure activities. Please do not complete this
9. Closure Report Regarding Waste Removal Closure For Closed-loop Systems The Instructions: Please indentify the facility or facilities for where the liquids, drilling two facilities were utilized.	
	usposal Facility Permit Number:
Disposal Facility Name:	Pisposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or in Yes (If yes, please demonstrate compliance to the items below) No	areas that will not be used for future service and operations?
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	
Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure republief. I also certify that the closure complies with all applicable closure requirement	
Name (Print):	Title·
Signature:	Date:
e-mail address:	Telephone:

Yates Petroleum Corporation Closed Loop System

Equipment Design Plan

Closed Loop System will consist of:

- 1 double panel shale shaker
- 1 (minimum) Centrifuge, certain wells and flow rates may require 2 centrifuges On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System
- 1 minimum centrifugal pump to transfer fluids
- 2-500 bbl. FW Tanks
- 1 500 bbl. BW Tank
- 1 half round frac tank 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.
- 1 Set of rail cars / catch bins

Certain wells will use an ASC Auger Tank

Operation Plan

All equipment will be inspected at least hourly by rig personnel and daily by contractors' personnel.

Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

Closure Plan

Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, Lea Land Farm, CRI or Sundance Services Inc.

Contingency Casing Design

If hole conditions dictate, 7" casing will be set at 6,800'. A 6 1/8" hole will then be drilled to 11,395' MD (6,450' TVD) where 4 1/2" casing will be set and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 5900'.

2nd Intermediate

	0 ft to	6,800 ft	Make up Torque ft-	lbs Tota	I ft = 6,800
O.D.	Weight	Grade Threads	opt. min. m	x.	
7 inches	26 #/ft	J-55 LT&C	3670 2750	4590	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift	
4,320 psi	4,980 psi	367 ,000 #	415 ,000 #	6.151	

DV tool placed at 5500'.

Stage I: 6800'-5500 Cemented w/275sx PVL (YLD 1.41 Wt 13) TOC= 5500'

Stage II: 5500'-1700 Cemented w/565sx Lite Crete (YLD 2.66 Wt 9.9), tail w/100sx PVL (YLD 1.41 Wt 13) TOC= 1700'

Production

	0 ft to	11,395 ft	Make up Torque ft-lbs	Total ft = 11,39
O.D.	Weight	Grade Threads	opt min. mx.	
4.5 inches	11.6 #/ft	HCP-110 LT&C	3020 2270 3780	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield Drift	
8,650 psi	10,690 psi	279 ,000 #	367,000# 3.875	

DV tool placed at approx. 5900' and cemented with one stage up to dv tool. After completion procedures, the

4 1/2" casing will be cut and pulled at 5900'.

Cemented w/850sx PVL (YLD 1.41 Wt 13) TOC= 5900'

Co: Yates Petroleum Corporation	Units: Feet, °, 7100ft	VS Az: 0.00	Tgt TVD: 6450.00
Drillers: 0	Elevation:	Tgt Radius: 0.00	Tgt MD: 0.00
Well Name: Cassiopeia BQD State Com. #1H	Northing:	Tgt N/S: 5150.00	Tgt Displ.: 0.00
Location: 0	Easting:	Tgt E/W: 0.00	Method: Minimum Curvature

No.	MD CL	Inc.	· Azi.	TVD	VS	+N/S-	+E/W-	BR	WR	DLS Comments
0	0.00 0.00	0.00	0.00	0.00	0.00	0.00	0.00			
1	670.00 670.00	0.00	0.00	670.00	0.00	0.00	0.00	0.00	0.00	0.00 Castille
2	2100.00 1430.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00 Base of Salt
3	2350.00 250.00	0.00	0.00	2350.00	0.00	0.00	0.00	0.00	0.00	0.00 Delaware
4	3200.00 850.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00 Cherry Canyon
5	4450.00 1250.00	0.00	0.00	4450.00	0.00	0.00	0.00	0.00	0.00	0.00 Brushy Canyon
6	5950.00 1500.00	0.00	0.00	5950.00	0.01	0.01	0.00	0.00	0.00	0.00 Bone Springs
7	5972.54 5972.54	0.00	0.00	5972.54	0.01	0.01	0.00	0.00	0.00	0.00 KOP
8	6000.00 27.46	3.30	0.00	5999.98	0.79	0.79	0.00	12.00	0.00	12.00
9	6100.00 100.00	15.30	0.00	6098.49	16.92	16.92	0.00	12.00	0.00	12.00
10	6200.00 100.00	27.30	0.00	6191.49	53.17	53.17	0.00	12.00	0.00	12.00
11	6300.00 100.00	39.30	0.00	6274.93	107.97	107.97	0.00	12.00	0.00	12.00
12	6400.00 100.00	51.30	0.00	6345.14	178.91	178.91	0.00	12.00	0.00	12.00
13	6500.00 100.00	63.30	0.00	6399.07	262.90	262.90	0.00	12.00	0.00	12.00
14	6600.00 100.00	75.30	0.00	6434.36	356.28	356.28	0.00	12.00	0.00	12.00
15	6700.00 100.00	87.30	0.00	6449.47	454.94	454.94	0.00	12.00	0.00	12.00
16	6722.53 750.00	90.00	0.00	6450.00	477.47	477.47	0.00	12.00	0.00	12.00 Avalon Shale Target
,17	11395.07 4672.54	90.00	0.00	6450.01	5150.01	5150.01	0.00	0.00	0.00	0.00 Lateral TD

