

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: Yates Petroleum Corporation OGRID #: 025575
Address: 105 South Fourth Street, Artesia, New Mexico 88210
Facility or well name: Harkey 35 State #2H
API Number: 30-015-38260 OCD Permit Number: 210914
U/L or Qtr/Qtr A Section 35 Township 24S Range 27E County: Eddy
Center of Proposed Design: Latitude N 32.178761 Longitude W 104.153814 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
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
☒ Signed in compliance with 19.15.3.103 NMAC

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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: _____

NMOCD ARTESIA

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: <u>Gandy Marley</u>	Disposal Facility Permit Number: <u>NM-01-0019</u>
Disposal Facility Name: <u>CRI</u>	Disposal Facility Permit Number: <u>R-9166</u>
Disposal Facility Name: <u>Lea Land Farm</u>	Disposal Facility Permit Number: <u>WM-1-035</u>
Disposal Facility Name: <u>Sundance Services Inc.</u>	Disposal Facility Permit Number: <u>NM-01-0003</u>

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): Monti Sanders

Title: Land Regulatory Technician

Signature: *MSanders*

Date: 11/10/10

e-mail address: montis@yatespetroleum.com

Telephone: 575-748-4244

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

OCD Representative Signature: *ADade*

Approval Date: 11/15/2010

Title: Dist # Supervisor

OCD Permit Number: 210914

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: _____

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 8,600' MD (8,280' TVD). A 6 1/8" hole will then be drilled to 12,696' MD (8,280' 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 7700'.

2nd Intermediate

0 ft to 1,200 ft				Make up Torque ft-lbs			Total ft =	1,200
O.D.	Weight	Grade	Threads	opt.	min.	mx.		
7 inches	26 #/ft	L-80	LT&C	5110	3830	6390		
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift		
5,410 psi	7,240 psi	511,000 #		604,000 #		6.151		

1,200 ft to 7,900 ft				Make up Torque ft-lbs			Total ft =	6,700
O.D.	Weight	Grade	Threads	opt.	min.	mx.		
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		

7,900 ft to 8,600 ft				Make up Torque ft-lbs			Total ft =	700
O.D.	Weight	Grade	Threads	opt.	min.	mx.		
7 inches	26 #/ft	L-80	LT&C	5110	3830	6390		
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift		
5,410 psi	7,240 psi	511,000 #		604,000 #		6.151		

DV tool set at approx. 5700'

Stage I: Cement w/625sx PVL (YLD 1.41 Wt. 13) TOC=5700'.

Stage II: Lead w/600sx Lite crete (YLD 2.66 Wt. 9.9) tail w/125sx PVL (YLD 1.41 Wt 13) TOC = 0'

Production

0 ft to 12,696 ft				Make up Torque ft-lbs			Total ft =	12,696
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. 7700' and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 7700'.

Cemented w/525sx PVL (YLD 1.83 Wt 13) TOC= 7700'

Co: 0	Units: Feet, ° 7100ft	VS Az: 271.24	Tgt TVD: 8280.00
Drillers: 0	Elevation:	Tgt Radius: 0.00	Tgt MD: 0.00
Well Name: HARKEY 35 STATE 2H	Northings:	Tgt N/S: 100.00	Tgt Displ.: 0.00
Location: 0	Eastings:	Tgt EW: -4620.00	Method: Minimum Curvature

No.	MD	CL	Inch	Azi	TVD	VS	N/S	EW	BR	WR	DLS	Comments
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Castille
1	770.00	770.00	0.00	360.00	770.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Bell Canyon
2	2415.00	1645.00	0.00	360.00	2415.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Cherry Canyon
3	3156.00	741.00	0.00	360.00	3156.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Brushy Canyon
4	4378.00	1222.00	0.00	360.00	4378.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Bone Springs
5	5871.00	1493.00	0.00	360.00	5871.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 Avalon Shale
6	6120.00	249.00	0.00	360.00	6120.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 1st Bone Springs
7	6945.00	825.00	0.00	360.00	6945.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 2nd Bone Springs
8	7481.00	536.00	0.00	360.00	7481.00	0.00	0.01	0.00	0.00	-1.14	0.00	0.00 KOP
9	7802.54	7802.54	0.00	271.24	7802.54	0.00	0.01	0.00	12.00	0.00	12.00	12.00
10	7900.00	97.46	11.70	271.24	7899.32	9.91	0.22	-9.91	12.00	0.00	12.00	12.00
11	8000.00	100.00	23.70	271.24	7994.42	40.25	0.88	-40.25	12.00	0.00	12.00	12.00
12	8100.00	100.00	35.70	271.24	8081.13	89.70	1.95	-89.68	12.00	0.00	12.00	12.00
13	8200.00	100.00	47.70	271.24	8155.66	156.10	3.39	-156.07	12.00	0.00	12.00	12.00
14	8272.12	469.58	56.35	271.24	8199.99	212.90	4.61	-212.85	12.00	0.00	12.00	12.00 Harkey Sand
15	8300.00	27.88	59.70	271.24	8214.76	236.54	5.13	-236.49	11.99	0.00	11.99	11.99
16	8400.00	100.00	71.70	271.24	8255.84	327.52	7.09	-327.44	12.00	0.00	12.00	12.00
17	8500.00	100.00	83.70	271.24	8277.11	425.04	9.20	-424.94	12.00	0.00	12.00	12.00
18	8552.53	750.00	90.00	271.24	8280.00	477.46	10.34	-477.35	12.00	0.00	12.00	12.00 Harkey Sand Target
19	12696.15	4143.62	90.00	271.24	8280.01	4621.08	100.01	-4620.00	0.00	0.00	0.00	0.00 Lateral TD

