

Operator Name/Number: OXY USA Inc. 16696
 Lease Name/Number: Ridge Runner 7 State #2H 40380
 Pool Name/Number: Red Tank Bone Spring, East 51687
 Surface Location: 1650 FNL 250 FWL 2 Sec 7 T22S R33E State Lease No. V0-4617
 Top Perf: 1652 FNL 330 FWL 2 Sec 7 T22S R33E
 Bottom Perf: 1747 FNL 330 FEL H Sec 7 T22S R33E
 Bottom Hole Location: 1750 FNL 180 FEL H Sec 7 T22S R33E

C-102 Plats: 6/24/14 10/17/14 11/12/14 Elevation: 3612.2' GL Objective: 2nd Bone Spring

Proposed TD: Horizontal Lateral 10877' TVD 15496' TMD
 SL - Lat: 32.4089733 Long: 103.6185227 X=720600.78 Y=513236.38 NAD - 1927
 TP - Lat: 32.4089684 Long: 103.6182635 X=720680.78 Y=513235.12 NAD - 1927
 BP - Lat: 32.4086899 Long: 103.6036823 X=725181.55 Y=513164.20 NAD - 1927
 BH - Lat: 32.4086805 Long: 103.6031963 X=725331.57 Y=513161.84 NAD - 1927

Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Condition	Collapse Design Factor	Burst Design Factor	Tension Design Factor
14-3/4"	0-975'	11-3/4"	47	BT&C	J55	New	4.81	1.38	5.26
				Hole filled with 8.5# Mud			1514#	3072#	
10-5/8"	0-4750'	8-5/8"	32	BT&C	J-55	New	2.21	1.34	2.2
				Hole filled with 10.2# Mud			2533#	3928#	
7-7/8"	0-15496'	5-1/2"	20	BT&C	P-110	New	2.14	1.33	2.23
				Hole filled with 9.2# Mud			7480#	10640#	

Collapse and burst loads calculated using Stress Check with anticipated loads

Cement Program:

- 11-3/4" Surface Circulate cement to surface w/ 420sx PPC cmt w/ 4% Bentonite + 1% CaCl₂ + .125#/sx Poly-E-Flake, 13.5ppg 1.73 yield 1006# 24hr CS 125% Excess followed by 200sx PPC cmt w/ 2% CaCl₂, 14.8ppg 1.35 yield 1346# 24hr CS 125% Excess
- 8-5/8" Intermediate Circulate cement to surface w/ 990sx HES Light PPC cmt w/ 5% salt + .125#/sx Poly-E-Flake + 2#/sx Kol-Seal, 12.9ppg 1.89 yield 700# 24hr CS 125% Excess followed by 190sx PPC cmt w/ 1% CaCl₂, 14.8ppg 1.33 yield 2100# 24hr CS 125% Excess
- 5-1/2" Production Cement w/ 610sx Tuned Light cmt w/ 3#/sx Kol-Seal + .125#/sx Poly-E-Flake + .8% HR-601, 10.2ppg 3.459 yield 788# 24hr CS 100% Excess followed by 790sx Super H cmt w/ 3#/sx salt + .4% CFR-3 + .5% Halad-344 + .3% HR-800 + .125#/sx Poly-E-Flake, 13.2ppg 1.66 yield 620# 24hr CS 40% Excess. Calc TOC-3750'

Description of Cement Additives: Calcium Chloride, Salt (Accelerator); CFR-3 (Dispersant); Bentonite (Light Weight Additive); Kol-Seal, Poly-E-Flake (Lost Circulation Additive); Halad-344 (Low Fluid Loss Control); HR-601, HR-800 (Retarder)

The above cement volumes could be revised pending the caliper measurement.

Proposed Mud Circulation System:

Depth	Mud Wt. ppg	Visc sec	Fluid Loss	Type System
0 - 975'	8.5	28-38	NC	Fresh Water/Spud Mud
975 - 4750'	10.2	28-32	NC	Fresh water/NaCl Brine
4750 - 15496'	9.2	32-50	<18	Cut Brine/Sweeps

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, water zones until such time as casing can be cemented into place for zonal isolation.

BOP Program:

Surface None
 Intermediate/Production 13-5/8" 10M three ram stack w/ 5M annular preventer, 5M Choke Manifold

Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Geological Marker	Depth	Type
a. Rustler	950'	---
b. Top Salt	1090'	---
c. Bottom Salt	3850'	---
d. Base Anhydrite	4725'	---
e. Delaware	4725'	Formation
f. 1st Bone Spring	8600'	Oil/Gas
g. 2nd Bone Spring	9800'	Oil/Gas

Fresh water may be present above the Rustler formation. Surface casing will be set below the top of the Rustler, which will cover potential fresh water sources.

A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

Form APD Comments

Permit 195509

**State of New Mexico
Energy, Minerals and Natural
Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505**

PERMIT COMMENTS

Operator Name and Address: OXY USA INC [16696] PO Box 4294 Houston, TX 77210	API Number:
	Well: RIDGE RUNNER 7 STATE #002H

Created By	Comment	Comment Date
STEWARTD	Top Perforated Interval: 1652 FNL 330 FWL 2(E) 7-22S-33E - Lat: 32.4089684 Long: 103.6182635 Bottom Perforated Interval: 1747 FNL 330 FEL H 7-22S-33E - Lat: 32.4086899 Long: 103.6036823 A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility.	11/13/2014