

OKLAHOMA CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
P.O. BOX 52000
OKLAHOMA CITY, OK 73152-2000
(Rule 165:10-3-1)

API NUMBER: 045 23542

Approval Date: 11/25/2014
Expiration Date: 05/25/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 20 Twp: 19N Rge: 24W County: ELLIS
SPOT LOCATION: NE NE NW NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 270 1000

Lease Name: EULA MAE 17-19-27 Well No: 1H Well will be 270 feet from nearest unit or lease boundary.

Operator Name: CHESAPEAKE OPERATING LLC Telephone: 4059358143; 4059358 OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING LLC
PO BOX 18496
OKLAHOMA CITY, OK 73154-0496

RANDY SHIRRILL
P.O. BOX 293
ARNETT OK 73832

Formation(s) (Permit Valid for Listed Formations Only):

Name	Depth	Name	Depth
1 CLEVELAND	8652	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 104550 Location Exception Orders: 625446 Increased Density Orders: 625445
105512
611804

Pending CD Numbers:

Special Orders:

Total Depth: 13750 Ground Elevation: 2390 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 600

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

PIT 1 INFORMATION

Type of Pit System: ON SITE
Type of Mud System: WATER BASED
Chlorides Max: 25000 Average: 8000
Is depth to top of ground water greater than 10ft below base of pit? Y
Within 1 mile of municipal water well? N
Wellhead Protection Area? N
Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 1B

Liner required for Category: 1B

Pit Location is BED AQUIFER

Pit Location Formation: OGALLALA

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-28882

H. SEE MEMO

This permit does not address the right of entry or settlement of surface damages.
The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

PIT 2 INFORMATION

Type of Pit System: ON SITE
Type of Mud System: OIL BASED
Chlorides Max: 300000 Average: 160000
Is depth to top of ground water greater than 10ft below base of pit? Y
Within 1 mile of municipal water well? N
Wellhead Protection Area? N
Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 3
Liner required for Category: 3
Pit Location is BED AQUIFER
Pit Location Formation: OGALLALA

HORIZONTAL HOLE 1

Sec 17 Twp 19N Rge 24W County ELLIS
Spot Location of End Point: NE NE NW NW
Feet From: NORTH 1/4 Section Line: 200
Feet From: WEST 1/4 Section Line: 1000
Depth of Deviation: 8170
Radius of Turn: 780
Direction: 360
Total Length: 4355
Measured Total Depth: 13750
True Vertical Depth: 8950
End Point Location from Lease,
Unit, or Property Line: 200

Notes:

Table with 2 columns: Category and Description. Contains notes such as 'DEEP SURFACE CASING', 'INCREASED DENSITY - 625445', 'LOCATION EXCEPTION - 625446', 'MEMO', 'SPACING - 104550', 'SPACING - 105512', and 'SPACING - 611804'.

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