

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

API NUMBER: 129 23890

Approval Date: 11/08/2013
Expiration Date: 05/08/2014

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 32 Twp: 14N Rge: 23W County: ROGER MILLS
SPOT LOCATION: NW NE NE NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 210 550

Lease Name: THOMPSON 32-14-23 Well No: 1H Well will be 210 feet from nearest unit or lease boundary.
Operator Name: CHESAPEAKE OPERATING INC Telephone: 4059358143 OTC/OCC Number: 17441 0

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

PATRICIA KAY MOORE
7400 NW 30TH TERRACE
BETHANY OK 73008

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

Name	Depth	Name	Depth
1 DOUGLAS	8300	6	
2 TONKAWA	8757	7	
3 COTTAGE GROVE	9407	8	
4 CLEVELAND	10700	9	
5 MARMATON	11000	10	

Spacing Orders: 139649

Location Exception Orders: 617662

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 16100

Ground Elevation: 1960

Surface Casing: 700

Depth to base of Treatable Water-Bearing FM: 450

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: CLOUD CHIEF

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 13-24826

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: 200000
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: CLOUD CHIEF

HORIZONTAL HOLE 1

Sec 32 Twp 14N Rge 23W County ROGER MILLS
Spot Location of End Point: S2 S2 SE SE
Feet From: SOUTH 1/4 Section Line: 200
Feet From: EAST 1/4 Section Line: 660
Depth of Deviation: 10445
Radius of Turn: 780
Direction: 181
Total Length: 4430
Measured Total Depth: 16100
True Vertical Depth: 11358
End Point Location from Lease,
Unit, or Property Line: 200

Notes:

Table with 2 columns: Category, Description. Includes entries for LOCATION EXCEPTION - 617662, MEMO, and SPACING - 139649.

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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.