

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

API NUMBER: 117 23466 A

Approval Date: 04/25/2013  
Expiration Date: 10/25/2013

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 22N Rge: 4E

County: PAWNEE

SPOT LOCATION: C N2 NW NW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 2310 660

Lease Name: STATE

Well No: 1H-16

Well will be 330 feet from nearest unit or lease boundary.

Operator Name: HIGHMOUNT OPERATING LLC

Telephone: 4057495263; 4057495

OTC/OCC Number: 22912 0

HIGHMOUNT OPERATING LLC  
14000 QUAIL SPRINGS PKWY FL 600  
OKLAHOMA CITY, OK 73134-2616

COMMISSIONERS OF THE LAND OFFICE  
120 N. ROBINSON, SUITE 1000W  
OKLAHOMA CITY OK 73102

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	3786	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 595336

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201302314

Special Orders:

Total Depth: 8120

Ground Elevation: 1009

**Surface Casing: 350**

Depth to base of Treatable Water-Bearing FM: 260

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: WATER BASED

Chlorides Max: 5000 Average: 3000

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: 2

Liner not required for Category: 2

Pit Location is BED AQUIFER

Pit Location Formation: OSCAR

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

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.

HORIZONTAL HOLE 1

Sec 16 Twp 22N Rge 4E County PAWNEE

Spot Location of End Point: C S2 SW SW

Feet From: SOUTH 1/4 Section Line: 330

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 3140

Radius of Turn: 598

Direction: 180

Total Length: 4041

Measured Total Depth: 8120

True Vertical Depth: 3786

End Point Location from Lease,  
Unit, or Property Line: 330

Notes:

Category	Description
PENDING CD - 201302314	4/25/2013 - G75 - (I.O.) 16-22N-4E X595336 MSSP COMPL. INT. NCT 330 FNL, NCT 150 FSL, NCT 660 FWL NO OP. NAMED REC 4-23-2013 (NORRIS)
SPACING - 595336	4/25/2013 - G75 - (640/40) 16-22N-4E EST (40)(VER) OTHERS EST (640)(HOR) MSSP, OTHER POE TO BHL NCT 660' FB (SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS)