

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

API NUMBER: 103 24543

Approval Date: 06/25/2013  
Expiration Date: 12/25/2013

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 22 Twp: 21N Rge: 2E

County: NOBLE

SPOT LOCATION:  NE  NW  NW  NW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 2345 650

Lease Name: SCHOOL-BARRON

Well No: 16-1H

Well will be 295 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

JEANNIE G. SHARDEIN  
10400 N. BETHEL RD.  
GLENCOE OK 74032

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

Name	Depth	Name	Depth
1 WOODFORD	4443	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 591772

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201303813

Special Orders:

Total Depth: 10150

Ground Elevation: 948

**Surface Casing: 400**

Depth to base of Treatable Water-Bearing FM: 280

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: WELLINGTON

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 21N Rge 2E County NOBLE

Spot Location of End Point: NE NE NE NE

Feet From: SOUTH 1/4 Section Line: 2495

Feet From: WEST 1/4 Section Line: 2313

Depth of Deviation: 3600

Radius of Turn: 1750

Direction: 360

Total Length: 4800

Measured Total Depth: 10150

True Vertical Depth: 4450

End Point Location from Lease,  
Unit, or Property Line: 145

Notes:

Category	Description
PENDING CD - 201303813	6/20/2013 - G30 - (E.O.) 16-21N-2E X591772 WDFD XOTHER COMP. INT. NCT 150 FSL, NCT 150 FNL, NCT 330 FWL** NO OP. NAMED REC 6/21/13 (OSBURN)  **LOCATION TO BE AMENDED IN HEARING ON 6/21/13, NCT 330 FEL
SPACING - 591772	6/20/2013 - G30 - (640 HOR) 16-21N-2E EST WDFD POE TO BHL: NCT 330' FB (SUPERCEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS)
WATERSHED STRUCTURE	6/20/2013 - G71 - WELL WITHIN 1/2 MILE OF AN OKLAHOMA CONSERVATION COMMISSION WATERSHED STRUCTURE. CONTACT THE LOCAL CONSERVATION DISTRICT OFFICE AT (580) 336-2003 PRIOR TO DRILLING