

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

API NUMBER: 117 23525

Approval Date: 03/28/2013  
Expiration Date: 09/28/2013

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 35 Twp: 23N Rge: 4E County: PAWNEE  
SPOT LOCATION:  NW  SE  SE  SW FEET FROM QUARTER: FROM SOUTH FROM WEST  
SECTION LINES: 500 2290

Lease Name: GERMAN Well No: 1-2H Well will be 500 feet from nearest unit or lease boundary.  
Operator Name: CUMMINGS OIL COMPANY Telephone: 4059481818 OTC/OCC Number: 5481 0

CUMMINGS OIL COMPANY  
5400 NW GRAND BLVD STE 100  
OKLAHOMA CITY, OK 73112-6113

FERGUSON FARMS  
702 EAST OSAGE STREET  
CLEVELAND OK 74020

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	3500	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 608082

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201301518

Special Orders:

Total Depth: 8650

Ground Elevation: 1032

**Surface Casing: 520**

Depth to base of Treatable Water-Bearing FM: 370

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: 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 02 Twp 22N Rge 4E County PAWNEE

Spot Location of End Point: W2 E2 SE SW

Feet From: SOUTH 1/4 Section Line: 660

Feet From: WEST 1/4 Section Line: 1980

Depth of Deviation: 2000

Radius of Turn: 900

Direction: 180

Total Length: 4450

Measured Total Depth: 8650

True Vertical Depth: 3610

End Point Location from Lease,  
Unit, or Property Line: 660

Notes:

Category	Description
PENDING CD - 201301518	3/26/2013 - G30 - W2 2-22N-4E X608082 MSSP COMP. INT. NCT 165 FSL, NCT 165 FNL, NCT 330 FEL NO OP. NAMED REC 3/28/13 (NORRIS)
SPACING - 608082	3/26/2013 - G30 - (320 HOR) W2 2-22N-4E EST MSSP POE TO BHL: NLT 660' FB (SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS; COEXIST WITH DEVELOPED NON-HORIZONTAL SPACING UNITS)