

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

API NUMBER: 117 23575

Approval Date: 01/14/2014
Expiration Date: 07/14/2014

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 34 Twp: 20N Rge: 8E County: PAWNEE
SPOT LOCATION: NE NW NE NW FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 245 768

Lease Name: CECKLER Well No: 1-27H Well will be 245 feet from nearest unit or lease boundary.
Operator Name: OSAGE EXPLORATION & DEVELOPMENT INC Telephone: 4052700989 OTC/OCC Number: 23098 0

OSAGE EXPLORATION & DEVELOPMENT INC
100 PARK AVE STE 1040
OKLAHOMA CITY, OK 73102-8018

WILLIAM H. CECKLER
P.O. BOX 189
HANCOCK ME 04640

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

Name	Depth	Name	Depth
1	MISSISSIPPIAN	2650	6
2			7
3			8
4			9
5			10

Spacing Orders: 616642

Location Exception Orders: 617009

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 7921

Ground Elevation: 771

Surface Casing: 340

Depth to base of Treatable Water-Bearing FM: 270

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

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: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 13-25019

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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 27 Twp 20N Rge 8E County PAWNEE

Spot Location of End Point: NE NW NE NW

Feet From: NORTH 1/4 Section Line: 300

Feet From: EAST 1/4 Section Line: 844

Depth of Deviation: 2089

Radius of Turn: 786

Direction: 359

Total Length: 4597

Measured Total Depth: 7921

True Vertical Depth: 2875

End Point Location from Lease,
Unit, or Property Line: 300

Notes:

Category

Description

LOCATION EXCEPTION - 617009

12/18/2013 - G75 - (I.O.) 27-20N-8E
X616642 MSSP
COMPL. INT. NCT 200 FSL, NCT 200 FNL, NCT 300 FWL
OSAGE EXPLOR. & DEVELOP., INC.
10-15-2013

SPACING - 616642

12/18/2013 - G75 - (640)(HOR) 27-20N-8E
EST MSSP, OTHER
POE TO BHL NCT 660' FB
(SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS; COEXIST KLINTWORTH
3, API 117-22304, MSSCT, NE4, LEASE BASIS)