

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

API NUMBER: 083 24271

Approval Date: 03/04/2014

Expiration Date: 09/04/2014

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 11 Twp: 16N Rge: 3W

County: LOGAN

SPOT LOCATION: NW NW NW NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 200 200

Lease Name: OSAGE WHITTEN

Well No: 1-3MH

Well will be 200 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

BARBARA L. WHITTEN
1318 S. STILLWELL
PITTSBURG KS 66762

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

Name	Depth	Name	Depth
1	MISSISSIPPIAN	5632	6
2			7
3			8
4			9
5			10

Spacing Orders: 618126

Location Exception Orders: 619495

Increased Density Orders:

Pending CD Numbers: 201400093

Special Orders:

Total Depth: 10712

Ground Elevation: 965

Surface Casing: 440

Depth to base of Treatable Water-Bearing FM: 390

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

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 BED AQUIFER

Pit Location Formation: GARBER

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

PERMIT NO: 14-26383

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 03 Twp 16N Rge 3W County LOGAN

Spot Location of End Point: N2 N2 NE NE

Feet From: NORTH 1/4 Section Line: 200

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 5065

Radius of Turn: 567

Direction: 355

Total Length: 4756

Measured Total Depth: 10712

True Vertical Depth: 5640

End Point Location from Lease,

Unit, or Property Line: 200

Notes:

Category

Description

LOCATION EXCEPTION - 619495

2/10/2014 - G75 - (I.O.) 3-16N-3W
X618126 MSSP, OTHERS
COMPL. INT. NCT 200 FSL, NCT 200 FNL, NCT 660 FEL
SLAWSON EXPLOR. CO., INC.
12-20-2013

PENDING CD - 201400093

2/10/2014 - G75 - MOD 619495 CHANGING OPERATOR TO OSAGE EXPLOR. & DEVELOP., INC.
REFERRED FOR ADMIN. APPROVAL 1-27-2014 (STUCK)

SPACING - 618126

2/10/2014 - G75 - (640)(HOR) 3-16N-3W
EXT 607492 MSSP, OTHERS
POE TO BHL NCT 660' FB
(SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS; COEXIST MISS, JAMES 1-3, W2 NW4, LEASE BASIS)

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083 24271 OSAGE WHITTEN 1-3MH