

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

API NUMBER: 083 24356

Approval Date: 12/04/2014  
Expiration Date: 06/04/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 12 Twp: 16N Rge: 3W County: LOGAN  
SPOT LOCATION:     FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 200 1320

Lease Name: SHIPMAN Well No: 1-1 MH 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  
324 N ROBINSON AVE STE 800  
OKLAHOMA CITY, OK 73102-6419

NORMA JEANNE & MERLE SHIPMAN  
3727 W COLLEGE AVENUE  
GUTHRIE OK 73044

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

Name	Depth	Name	Depth
1	MISSISSIPPIAN	5260	6
2			7
3			8
4			9
5			10

Spacing Orders: 623828  
626309

Location Exception Orders: 624290

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 10393

Ground Elevation: 1033

Surface Casing: 540

Depth to base of Treatable Water-Bearing FM: 490

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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 BED AQUIFER

Pit Location Formation: GARBER

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 14-29056

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 01 Twp 16N Rge 3W County LOGAN

Spot Location of End Point: N2 N2 NW NW

Feet From: NORTH 1/4 Section Line: 200

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 5050

Radius of Turn: 400

Direction: 352

Total Length: 4715

Measured Total Depth: 10393

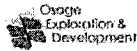
True Vertical Depth: 5749

End Point Location from Lease,  
Unit, or Property Line: 200

Notes:

Category	Description
LOCATION EXCEPTION - 624290	12/4/2014 - G91 - (I.O.) 1-16N-3W X623828/626309 MSSP, OTHERS COMPL. INT. NCT 200 FNL, NCT 200 FSL, NCT 660 FWL OSAGE EXPLORATION & DEVELOPMENT, INC. 4-22-2014
SPACING - 623828	12/4/2014 - G91 - (640)(HOR)1-16N-3W EXT 612015 MSSP, OTHERS VAC 136591 MSSLM, OTHER POE TO BHL NCT 660' FB (SUPERCEDE NON-DEVELOP NON-HORIZONTAL SPACING UNITS)
SPACING - 626309	12/4/2014 - G91 - CONFIRM 623828 DUE TO RESPONDENTS NOTIFICATIONS

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.

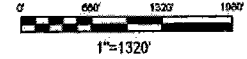


# Well Location Plat

S.H.L. Sec. 12-16N-3W I.M.  
B.H.L. Sec. 1-16N-3W I.M.

Operator: OSAGE EXPLORATION & DEVELOPMENT  
Lease Name and No.: SHIPMAN 1-1MH  
Footage: 200' FNL - 1320' FWL GR. ELEVATION: 1033' Good Site? YES  
Section: 12 Township: 16N Range: 3W I.M.  
County: Logan State of Oklahoma  
Alternate Loc.: N/A  
Terrain at Loc.: Stake fell in pasture. South of E-W Fence and OHE.

083-24356

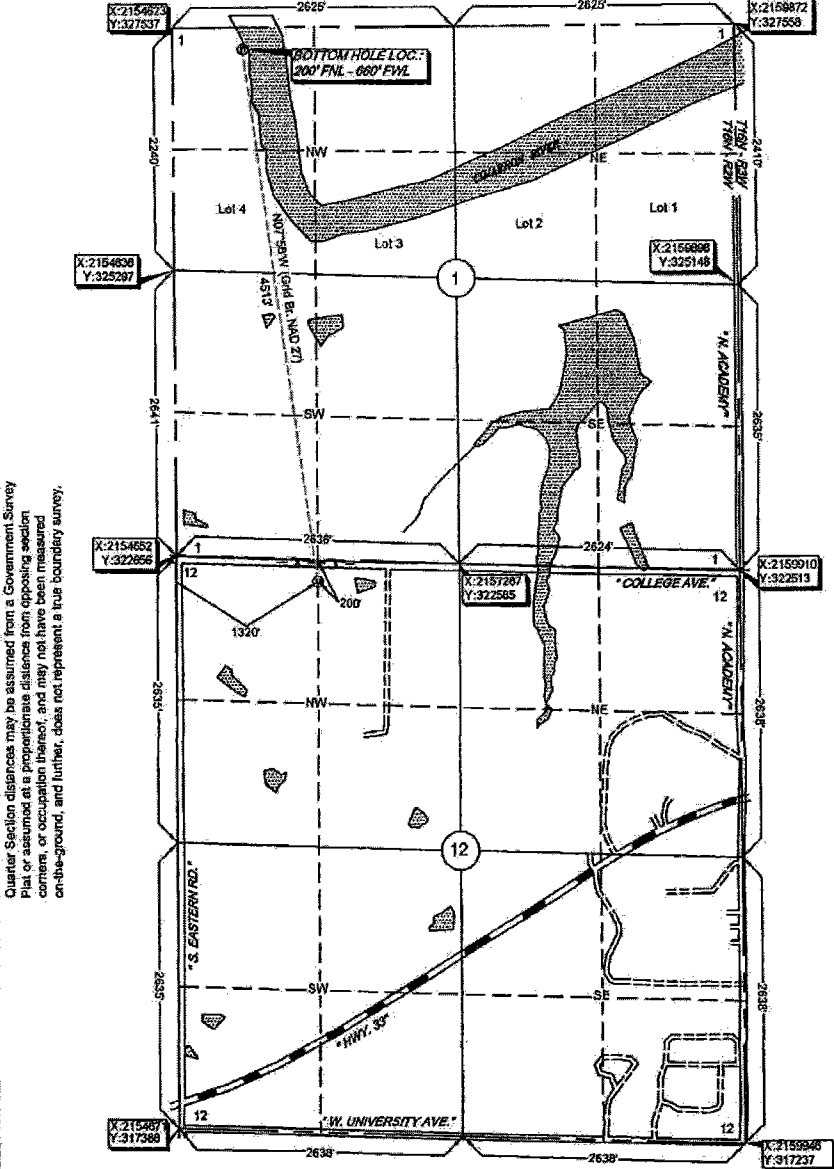


Accessibility: From the East.  
Directions: From the town of Guthrie, OK. At the intersection of Hwy 77 & Hwy 33, go West on Hwy 33 ± 3 miles, then turn North on "S. Eastern Rd./N. Broadway" go ±1.0 mile to NW Corner of Section 12-16N-3W

GPS DATUM  
NAD - 27  
OK NORTH ZONE

Surface Hole Loc.:  
Lat: 35°53'04.53"N  
Lon: 97°28'24.55"W  
X: 2155972  
Y: 322421

Bottom Hole Loc.:  
Lat: 35°53'53.21"N  
Lon: 97°28'32.59"W  
X: 2155284  
Y: 327339



NOTE: X and Y data shown hereon for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey.

Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS.

survey and plat by,  
**Arkoma Surveying and Mapping, PLLC**  
P.O. Box 238 Wilburton, OK 74578  
Ph. 918-465-5711 Fax 918-465-5030

Certificate of Authorization No. 5348  
Expires June 30, 2016

Invoice #5070  
Date Staked: 11/07/14 By: J.W.  
Date Drawn: 11/11/14 By: T.S.

**Certification:**  
This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

*Stan Drannon* 11/13/14  
STAN DRANNON OK LPLS 1672

