

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

API NUMBER: 119 24057

Approval Date: 04/16/2013
Expiration Date: 10/16/2013

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 06 Twp: 17N Rge: 4E County: PAYNE
SPOT LOCATION: SE SE SW SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 295 1530

Lease Name: LOUIS Well No: 7-2MH Well will be 295 feet from nearest unit or lease boundary.
Operator Name: CALYX ENERGY LLC Telephone: 9189494224 OTC/OCC Number: 22299 0

CALYX ENERGY LLC
10820 E 45TH ST STE 208
TULSA, OK 74146-3807

LOUIS A. WILLIAMS
5913 W. 9TH ST.
CUSHING OK 74023

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

Name	Depth	Name	Depth
1	MISSISSIPPIAN	4053	6
2			7
3			8
4			9
5			10

Spacing Orders: 603670

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201301889

Special Orders:

Total Depth: 9252

Ground Elevation: 849

Surface Casing: 130

Depth to base of Treatable Water-Bearing FM: 80

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: 13-22843

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 07 Twp 17N Rge 4E County PAYNE

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 600

Depth of Deviation: 3500

Radius of Turn: 553

Direction: 170

Total Length: 4883

Measured Total Depth: 9252

True Vertical Depth: 4053

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category	Description
PENDING CD - 201301889	4/16/2013 - G75 - (I.O.) 7-17N-4E X603670 MSSP COMPL. INT. NCT 165 FNL, NCT 165 FSL, NCT 330 FEL NO OP. NAMED REC 4-8-2013 (OSBURN)
SPACING - 603670	4/16/2013 - G75 - (640)(HOR) 7-17N-4E VAC 257240 MSSLM EXT 593209 MSSP, OTHERS POE TO BHL NCT 660' FB (SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS)

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