

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

API NUMBER: 119 24049

Approval Date: 03/27/2013
Expiration Date: 09/27/2013

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 06 Twp: 18N Rge: 4E

County: PAYNE

SPOT LOCATION: SE SW SW SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 225 390

Lease Name: HILDEBRAND

Well No: 7-1MH

Well will be 225 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

MARLENE C. HILDEBRAND
1200 WHITEHURST
CHOCTAW OK 73020

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

Name	Depth	Name	Depth
1	MISSISSIPPIAN	4028	6
2			7
3			8
4			9
5			10

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201300809
201301255

Special Orders:

Total Depth: 8986

Ground Elevation: 903

Surface Casing: 360

Depth to base of Treatable Water-Bearing FM: 310

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: OSCAR

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 13-22623
H. CLOSED SYSTEM=STEEL PITS PER OPERATOR OPTION

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 18N Rge 4E County PAYNE

Spot Location of End Point: W2 SE SW SW

Feet From: SOUTH 1/4 Section Line: 330

Feet From: WEST 1/4 Section Line: 721

Depth of Deviation: 3192

Radius of Turn: 1386

Direction: 180

Total Length: 4408

Measured Total Depth: 8986

True Vertical Depth: 4028

End Point Location from Lease,
Unit, or Property Line: 330

Notes:

Category	Description
PENDING CD - 201300809	3/27/2013 - G30 - (640 HOR) 7-18N-4E EST MSSP, OTHERS DEL 113976 MSSLM DEL 585969 MISS, OTHER REC 2/25/13 (NORRIS)
PENDING CD - 201301255	3/27/2013 - G30 - 7-18N-4E X201300809 MSSP SHL NCT 100 FSL, NCT 100 FWL 6-18N-4E 1ST PERF NCT 165 FNL, NCT 330 FWL 7-18N-4E LAST PERF NCT 165 FSL, NCT 500 FWL 7-18N-4E REC 3/25/13 (DECKER)

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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.