

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

API NUMBER: 063 24817

Approval Date: 06/26/2018

Expiration Date: 12/26/2018

Straight Hole

Stratigraphic Test

PERMIT TO DRILL

WELL LOCATION: Sec: 18 Twp: 9N Rge: 10E

County: HUGHES

SPOT LOCATION: ☐ SW ☐ SW ☐ NW ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 1293 182

Lease Name: THUNDER

Well No: 1-13-1CH

Well will be 182 feet from nearest unit or lease boundary.

Operator Name: CALYX ENERGY III LLC

Telephone: 9189494224

OTC/OCC Number: 23515 0

CALYX ENERGY III LLC
6120 S YALE AVE STE 1480
TULSA, OK 74136-4226

EDWARD V. & LORI M. WILLIAMS
2151 N. 377 RD.
WETUMKA OK 74883

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	3600	6	
2	WOODFORD	3875	7	
3			8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 4000

Ground Elevation: 855

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 140

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: ON SITE

A. Evaporation/dewater and backfilling of reserve pit.

Type of Mud System: AIR

Is depth to top of ground water greater than 10ft below base of pit? Y

H. SEE MEMO

Within 1 mile of municipal water well? N

F. Haul to Commercial soil farming facility: Sec. 14 Twn. 7N Rng. 9E Cnty. 63 Order No: 551649

Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 4

Liner not required for Category: 4

Pit Location is BED AQUIFER

Pit Location Formation: WEWOKA

Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

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.

PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 8000 Average: 5000

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: WEWOKA

Notes:

Category	Description
DEEP SURFACE CASING	5/31/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING
MEMO	5/31/2018 - G71 - PIT 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, WBM/CUTTINGS CAPTURED IN CONCRETE-LINED PIT, SOLIDIFIED AND HELD UNTIL DISPOSAL APPROVED BY OCC
SPACING	6/26/2018 - G57 - NA - STRATIGRAPHIC TEST
STRAT TEST	6/26/2018 - G57 - THIS WELL HAS BEEN APPROVED AS A STRATIGRAPHIC TEST WITH THE INTENT TO SET SURFACE CASING ONLY. OPERATOR WILL FILE AN AMENDED FORM 1000 CHANGING THE TYPE OF DRILLING OPERATION AT A LATER DATE.

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.

063 24817 THUNDER 1-13-1CH

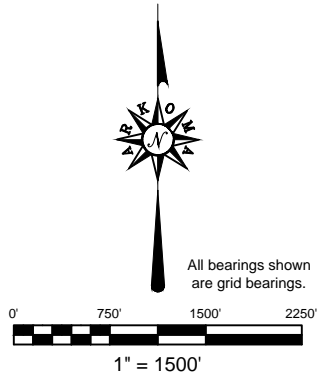


Well Location Plat

S.H.L. Sec. 18-9N-10E I.M.
B.H.L. Sec. 1-9N-9E I.M.

Operator: CALYX ENERGY III, LLC
Lease Name and No.: THUNDER 1-13-1CH
Footage: 1293' FNL - 182' FWL Gr. Elevation: 855'
Section: 18 Township: 9N Range: 10E I.M. County: Hughes State of Oklahoma
Terrain at Loc.: Location fell in open pasture, slopes down to NW & SE pad corners, E-W fence runs through location.

API: 063 24817



GPS DATUM
NAD 83
NAD 27
OK SOUTH ZONE

Surface Hole Loc.:
Lat: 35°15'26.82"N
Lon: 96°17'56.54"W
X: 2476317.68
Y: 704529.56

Surface Hole Loc.:
Lat: 35°15'26.51"N
Lon: 96°17'55.51"W
X: 2507915.31
Y: 704479.97

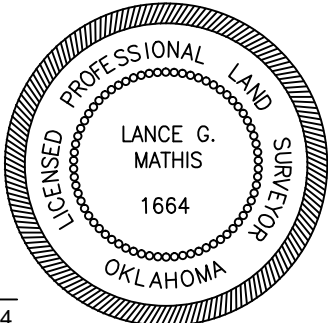
POE:
Lat: 35°15'31.72"N
Lon: 96°18'05.97"W
X: 2475527.60
Y: 705012.23

POE:
Lat: 35°15'31.41"N
Lon: 96°18'04.94"W
X: 2507125.22
Y: 704962.66

Bottom Hole Loc.:
Lat: 35°17'22.43"N
Lon: 96°18'05.44"W
X: 2475383.00
Y: 716205.53

Bottom Hole Loc.:
Lat: 35°17'22.13"N
Lon: 96°18'04.41"W
X: 2506980.51
Y: 716155.66

-Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of the survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is obtained from RTK - GPS. NOTE: X and Y data shown herein for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey. Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportional distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground, and further, does not represent a true boundary survey.



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, 2020
Invoice #7753-C
Date Staked: 03/28/18 By: H.S.
Date Drawn: 04/13/18 By: J.D
Revise Lse. Nm.: 05/31/18 By: R.M.

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.

LANCE G. MATHIS
06/13/18
OK LPLS 1664