

API NUMBER: 063 24932

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

Approval Date: 06/30/2021  
Expiration Date: 12/30/2022

Multi Unit Oil & Gas

**PERMIT TO DRILL**

WELL LOCATION: Section: 29 Township: 8N Range: 12E County: HUGHES

SPOT LOCATION: ☐ SW ☐ SW ☐ NE ☐ NW  
FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 1059 1511

Lease Name: ARIEL Well No: 2-20-17WH Well will be 1059 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

DONNIE FREEMAN  
3236 ASH, BOX 14  
LAMAR OK 74850

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

	Name	Code	Depth
1	MAYES	353MYES	4440
2	WOODFORD	319WDFD	4540
3	HUNTON	269HNTN	4590
4	SYLVAN	203SLVN	4591

Spacing Orders: 671026 Location Exception Orders: 715552 Increased Density Orders: 715555  
673551 715556  
703547  
715551

Pending CD Numbers: No Pending

Working interest owners' notified: \*\*\*

Special Orders: No Special Orders

Total Depth: 15500 Ground Elevation: 848

Surface Casing: 500

Depth to base of Treatable Water-Bearing FM: 130

Deep surface casing has been approved

Under Federal Jurisdiction: No  
Fresh Water Supply Well Drilled: No  
Surface Water used to Drill: Yes

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.  
B. Solidification of pit contents.  
D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 21-37683  
H. (Other) PIT 2 - CONCRETE LINED PIT PER OPERATOR REQUEST

**PIT 1 INFORMATION**

Type of Pit System: ON SITE

Type of Mud System: AIR

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: 4

Liner not required for Category: 4

Pit Location is: BED AQUIFER

Pit Location Formation: SENORA

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 18 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

Category of Pit: C

Liner not required for Category: C

Type of Mud System: WATER BASED

Pit Location is: BED AQUIFER

Chlorides Max: 8000 Average: 5000

Pit Location Formation: SENORA

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.

**MULTI UNIT HOLE 1**

Section: 17 Township: 8N Range: 12E Meridian: IM

Total Length: 10230

County: HUGHES

Measured Total Depth: 15500

Spot Location of End Point: NE NE NE NW

True Vertical Depth: 4900

Feet From: NORTH 1/4 Section Line: 165

End Point Location from

Feet From: WEST 1/4 Section Line: 2480

Lease, Unit, or Property Line: 165

**NOTES:**

Category	Description
DEEP SURFACE CASING	[6/29/2021 - GC2] - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING
HYDRAULIC FRACTURING	[6/29/2021 - GC2] - OCC 165:10-3-10 REQUIRES:  1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN;  2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS. FORM 6000NHF SHALL BE USED AND IS FOUND AT THIS LINK: <a href="http://OCCEWEB.COM/OG/OGFORMS.HTML">OCCEWEB.COM/OG/OGFORMS.HTML</a> ; AND,  3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT <a href="http://FRACFOCUS.ORG">FRACFOCUS.ORG</a>
INCREASED DENSITY - 715555	[6/30/2021 - G56] - 17-8N-12E X671026 WDFD 2 WELLS CALYX ENERGY III, LLC 11/25/2020
INCREASED DENSITY - 715556	[6/30/2021 - G56] - 20-8N-12E X703547 WDFD 2 WELLS CALYX ENERGY III, LLC 11/25/2020
LOCATION EXCEPTION - 715552	[6/30/2021 - G56] - (I.O.) 17 & 20-8N-12E X671026 MYES, WDFD, HNTN 17-8N-12E X673551 SLVN 17-8N-12E X703547 MYES, WDFD, HNTN, SLVN 20-8N-12E COMPL INT (17-8N-12E) NCT 165' FNL, NCT 0' FSL, NCT 990' FWL COMPL INT (20-8N-12E) NCT 0' FNL, NCT 165' FSL, NCT 990' FWL CALYX ENERGY III, LLC 11/25/2020
SPACING - 671026	[6/30/2021 - G56] - (640)(HOR) 17 & 18-8N-12E EST MYES, WDFD, HNTN, OTHER COMPL INT (MYES, HNTN) NLT 660' FB COMPL INT (WDFD) NLT 165' FNL/FSL, NLT 330' FEL/FWL (COEXIST WITH SP # 297893 HNTN)
SPACING - 673551	[6/30/2021 - G56] - (640)(HOR) 17 & 18-8N-12E EST SLVN COMPL INT NLT 330' FB

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 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.

SPACING - 703547	[6/30/2021 - G56] - (640)(HOR) 20-8N-12E EXT 671215 MYES, WDFD, HNTN, SLVN, OTHER COMPL INT (MYES, HNTN) NCT 660' FB COMPL INT (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL COMPL INT (SLVN) NCT 330' FB (COEXIST WITH SP # 289836 HNTN, # 303010 HNTN)
SPACING - 715551	[6/30/2021 - G56] - (I.O.) 17 & 20-8N-12E EST MULTIUNIT HORIZONTAL WELL X671026 MYES, WDFD, HNTN 17-8N-12E X673551 SLVN 17-8N-12E X703547 MYES, WDFD, HNTN, SLVN 20-8N-12E (MYES, HNTN, SLVN ARE ADJACENT CSS TO WDFD) 50% 17-8N-12E 50% 20-8N-12E CALYX ENERGY III, LLC 11/25/2020



# Well Location Plat

S.H.L. Sec. 29-8N-12E I.M.  
B.H.L. Sec. 17-8N-12E I.M.

Operator: CALYX ENERGY III, LLC  
Lease Name and No.: ARIEL 2-20-17WH  
Surface Hole Location: 1059' FNL - 1511' FWL Gr. Elevation: 848'  
SW/4-SW/4-NE/4-NW/4 Section: 29 Township: 8N Range: 12E I.M.  
Bottom Hole Location: 165' FNL - 2480' FWL  
NE/4-NE/4-NE/4-NW/4 Section: 17 Township: 8N Range: 12E I.M.  
County: Hughes State of Oklahoma  
Terrain at Loc.: Mostly open field with timber located near the wells and at the Southeast corner of pad.



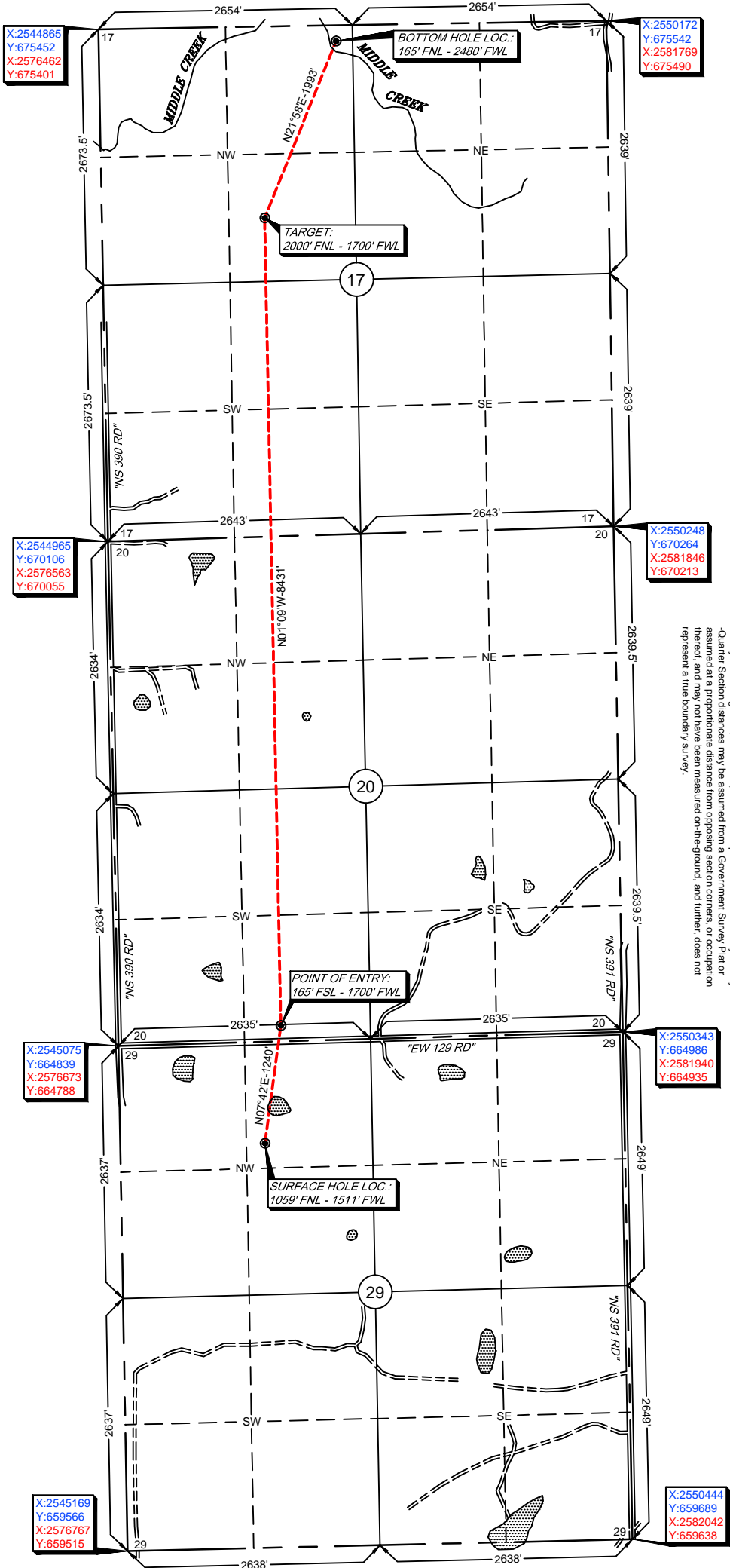
All bearings shown  
are grid bearings.



GPS DATUM  
NAD 83  
NAD 27  
OK SOUTH ZONE

Surface Hole Loc.:
Lat: 35°08'31.76"N
Lon: 96°03'58.59"W
Lat: 35.14215570
Lon: -96.06627426
X: 2546604.87
Y: 663822.94
Surface Hole Loc.:
Lat: 35°08'31.42"N
Lon: 96°03'57.58"W
Lat: 35.14206203
Lon: -96.06599433
X: 2578202.62
Y: 663771.77
Point of Entry:
Lat: 35°08'43.88"N
Lon: 96°03'56.30"W
Lat: 35.14552239
Lon: -96.06563967
X: 2546771.08
Y: 665051.76
Point of Entry:
Lat: 35°08'43.54"N
Lon: 96°03'55.30"W
Lat: 35.14542865
Lon: -96.06535974
X: 2578368.83
Y: 665000.53
Target:
Lat: 35°10'07.27"N
Lon: 96°03'56.39"W
Lat: 35.16868666
Lon: -96.06566510
X: 2546601.92
Y: 673481.44
Target:
Lat: 35°10'06.93"N
Lon: 96°03'55.39"W
Lat: 35.16859256
Lon: -96.06538512
X: 2578199.67
Y: 673429.86
Bottom Hole Loc.:
Lat: 35°10'25.40"N
Lon: 96°03'46.99"W
Lat: 35.17372315
Lon: -96.06305255
X: 2547347.44
Y: 675329.27
Bottom Hole Loc.:
Lat: 35°10'25.06"N
Lon: 96°03'45.98"W
Lat: 35.17362889
Lon: -96.06277262
X: 2578945.20
Y: 675277.58

-Please note that this location was stated 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. -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. -Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportionate 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, 2022

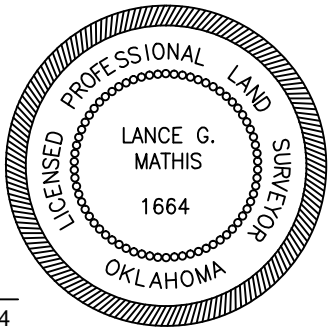
## Certification:

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

06/22/2021

OK LPLS 1664



Invoice #9440-B

Date Staked: 06/16/2021 By: D.W.  
Date Drawn: 06/18/2021 By: S.S.