

API NUMBER: 063 24931

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 1496

Lease Name: ARIEL Well No: 1-20-17WH 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: 715554 Increased Density Orders: No Density Orders
673551
703547
715553

Pending CD Numbers: No Pending Working interest owners' notified: *** Special Orders: No Special Orders
Total Depth: 15500 Ground Elevation: 847 Surface Casing: 500 Depth to base of Treatable Water-Bearing FM: 130

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

Deep surface casing has been approved

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 NW NW

True Vertical Depth: 4900

Feet From: NORTH 1/4 Section Line: 165

End Point Location from

Feet From: WEST 1/4 Section Line: 1280

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	<p>[6/29/2021 - GC2] - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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: OCCEWEB.COM/OG/OGFORMS.HTML; AND,</p> <p>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 FRACFOCUS.ORG</p>
LOCATION EXCEPTION - 715554	<p>[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 330' FWL COMPL INT (20-8N-12E) NCT 0' FNL, NCT 165' FSL, NCT 330' FWL CALYX ENERGY III, LLC 11/25/2020</p>
SPACING - 671026	<p>[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)</p>
SPACING - 673551	<p>[6/30/2021 - G56] - (640)(HOR) 17 & 18-8N-12E EST SLVN COMPL INT NLT 330' FB</p>
SPACING - 703547	<p>[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)</p>

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 - 715553

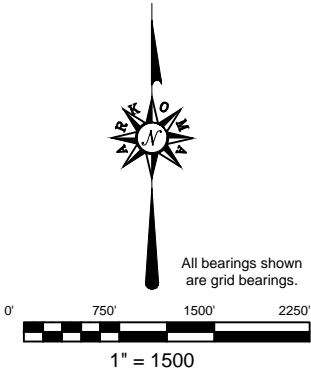
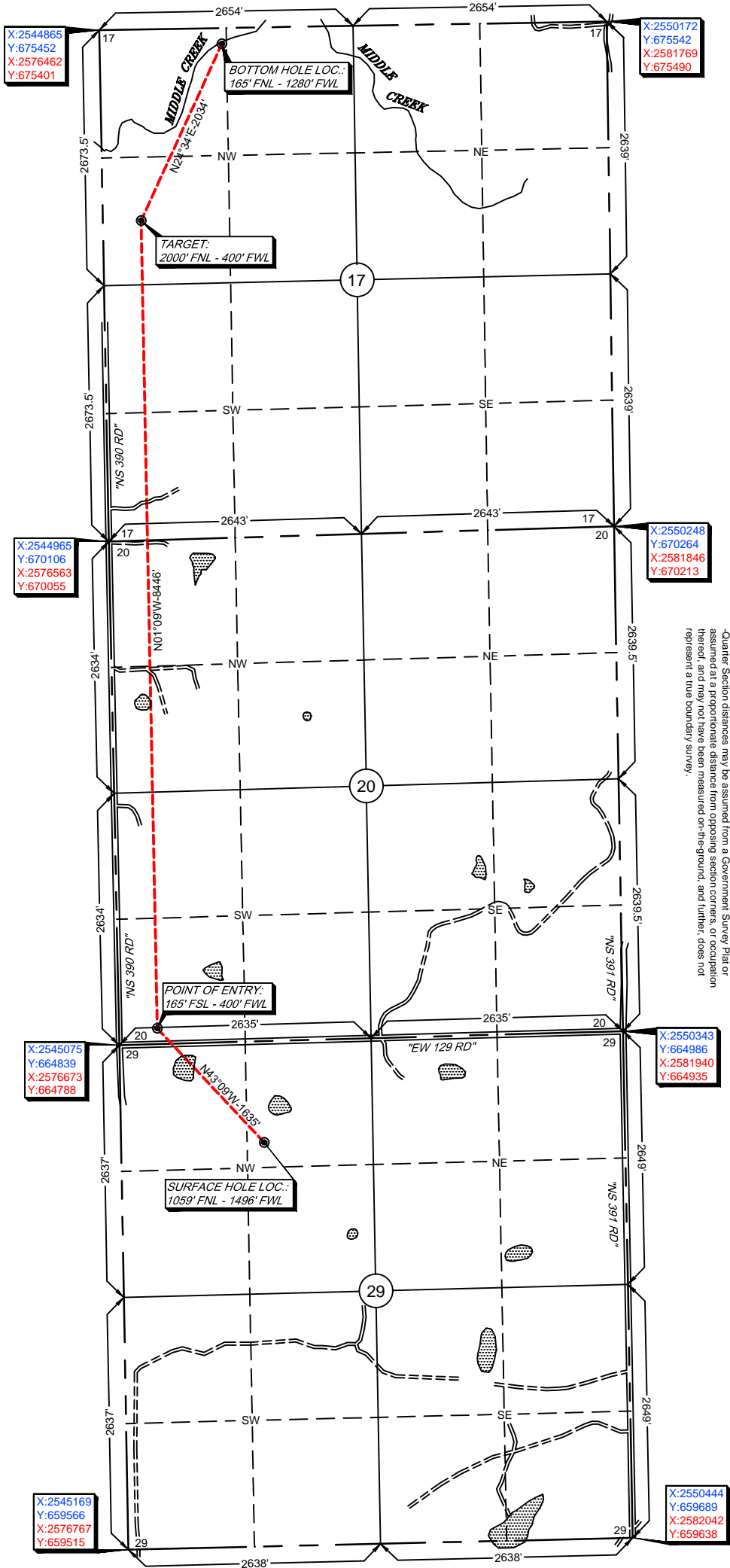
[6/30/2021 - G56] - (I.O.) 17 & 20-8N-12E
EST MULTIUNIT HORIZONTAL WELL
X671026 MYES, WDFD, HNTN 17-8N-12E
X673551 SLVN 17-8N-12E
X703547 MYES, WDFD, HNTN, SLVN 20-8N-12E
(MYES, HNTN, SLVN ARE ADJACENT CSS TO WDFD)
50% 17-8N-12E
50% 20-8N-12E
CALYX ENERGY III, LLC
11/25/2020



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 1-20-17WH
Surface Hole Location: 1059' FNL - 1496' FWL Gr. Elevation: 847'
SW/4-SW/4-NE/4-NW/4 Section: 29 Township: 8N Range: 12E I.M.
Bottom Hole Location: 165' FNL - 1280' FWL
NE/4-NE/4-NW/4-NE/4-NE/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.



GPS DATUM
NAD 83
NAD 27
OK SOUTH ZONE

Surface Hole Loc.:
Lat: 35°08'31.76"N
Lon: 96°03'58.77"W
Lat: 35.14215602
Lon: -96.06632443
X: 2546589.87
Y: 663822.77

Surface Hole Loc.:
Lat: 35°08'31.42"N
Lon: 96°03'57.76"W
Lat: 35.14206235
Lon: -96.06604450
X: 2578187.62
Y: 663771.60

Point of Entry:
Lat: 35°08'43.77"N
Lon: 96°04'11.96"W
Lat: 35.14549104
Lon: -96.06998794
X: 2545471.55
Y: 665015.46

Point of Entry:
Lat: 35°08'43.43"N
Lon: 96°04'10.95"W
Lat: 35.14539743
Lon: -96.06970791
X: 2577069.31
Y: 664964.29

Target:
Lat: 35°10'07.30"N
Lon: 96°04'12.05"W
Lat: 35.16869480
Lon: -96.07001464
X: 2545302.10
Y: 673459.51

Target:
Lat: 35°10'06.96"N
Lon: 96°04'11.04"W
Lat: 35.16860084
Lon: -96.06973455
X: 2576899.85
Y: 673407.98

Bottom Hole Loc.:
Lat: 35°10'25.43"N
Lon: 96°04'01.44"W
Lat: 35.17373075
Lon: -96.06706776
X: 2546147.61
Y: 675309.03

Bottom Hole Loc.:
Lat: 35°10'25.09"N
Lon: 96°04'00.44"W
Lat: 35.17363662
Lon: -96.06678773
X: 2577745.36
Y: 675257.39

-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

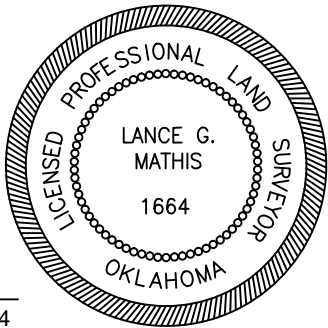
Certification:

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