

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

API NUMBER: 107 23602

Approval Date: 08/15/2018
Expiration Date: 02/15/2019

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 15 Twp: 10N Rge: 9E

County: OKFUSKEE

SPOT LOCATION: NW NW SW SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 1050 167

Lease Name: CHEATWOOD

Well No: 1-16-28CH

Well will be 167 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

LONNIE R. & KARON R. CHEATWOOD
115151 N. 3740 RD
OKEMAH OK 74859

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: 201804833
201804834
201804835
201804841
201804851
201804840

Special Orders:

Total Depth: 14722

Ground Elevation: 811

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 210

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

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: SEMINOLE

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

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

B. Solidification of pit contents.

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

H. SEE MEMO

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: SEMINOLE

HORIZONTAL HOLE 1

Sec 28 Twp 10N Rge 9E County OKFUSKEE

Spot Location of End Point: S2 SE SE SE

Feet From: SOUTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 3223

Radius of Turn: 477

Direction: 185

Total Length: 10750

Measured Total Depth: 14722

True Vertical Depth: 3875

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

Notes:

Category

Description

DEEP SURFACE CASING

8/7/2018 - 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

HYDRAULIC FRACTURING

8/7/2018 - G71 - OCC 165:10-3-10 REQUIRES:

1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE;

2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE "FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,

3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG

MEMO

8/7/2018 - 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

PENDING CD - 201804833

8/8/2018 - G57 - (640)(HOR) 16-10N-9E
EXT 646252 MSSP, WDFD
POE TO BHL (MSSP) NLT 660' FB
POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL
REC 7-16-2018 (JOHNSON)

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.

Category	Description
PENDING CD - 201804834	8/8/2018 - G57 - (640)(HOR) 21-10N-9E EXT 646252 MSSP, WDFD POE TO BHL (MSSP) NLT 660' FB POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL REC 7-16-2018 (JOHNSON)
PENDING CD - 201804835	8/8/2018 - G57 - (640)(HOR) 28-10N-9E EST MSSP, WDFD POE TO BHL (MSSP) NLT 660' FB POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL REC 7-16-2018 (JOHNSON)
PENDING CD - 201804840	8/8/2018 - G57 - (I.O.) 16,21,28-10N-9E EST MULTIUNIT HORIZONTAL WELL X201804833 MSSP, WDFD 16-10N-9E X201804834 MSSP, WDFD 21-10N-9E X201804835 MSSP, WDFD 28-10N-9E (WDFD IS AN ADJACENT COMMON SOURCE OF SUPPLY TO THE MSSP) 10% 16-10N-9E 45% 21-10N-9E 45% 28-10N-9E CALYX ENERGY III, LLC. REC 7-16-2018 (JOHNSON)
PENDING CD - 201804841	8/8/2018 - G57 - (I.O.) 16,21,28-10N-9E X201804833 MSSP, WDFD 16-10N-9E X201804834 MSSP, WDFD 21-10N-9E X201804835 MSSP, WDFD 28-10N-9E COMPL. INT. (16-10N-9E) NLT 165' FSL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (21-10N-9E) NCT 0' FNL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (28-10N-9E) NCT 0' FNL, NCT 165' FSL, NCT 330' FEL NO OP. NAMED REC 7-16-2018 (JOHNSON)
PENDING CD - 201804851	8/8/2018 - G57 - 16-10N-9E X201804833 MSSP 1 WELL NO OP. NAMED REC 7-16-2018 (JOHNSON)

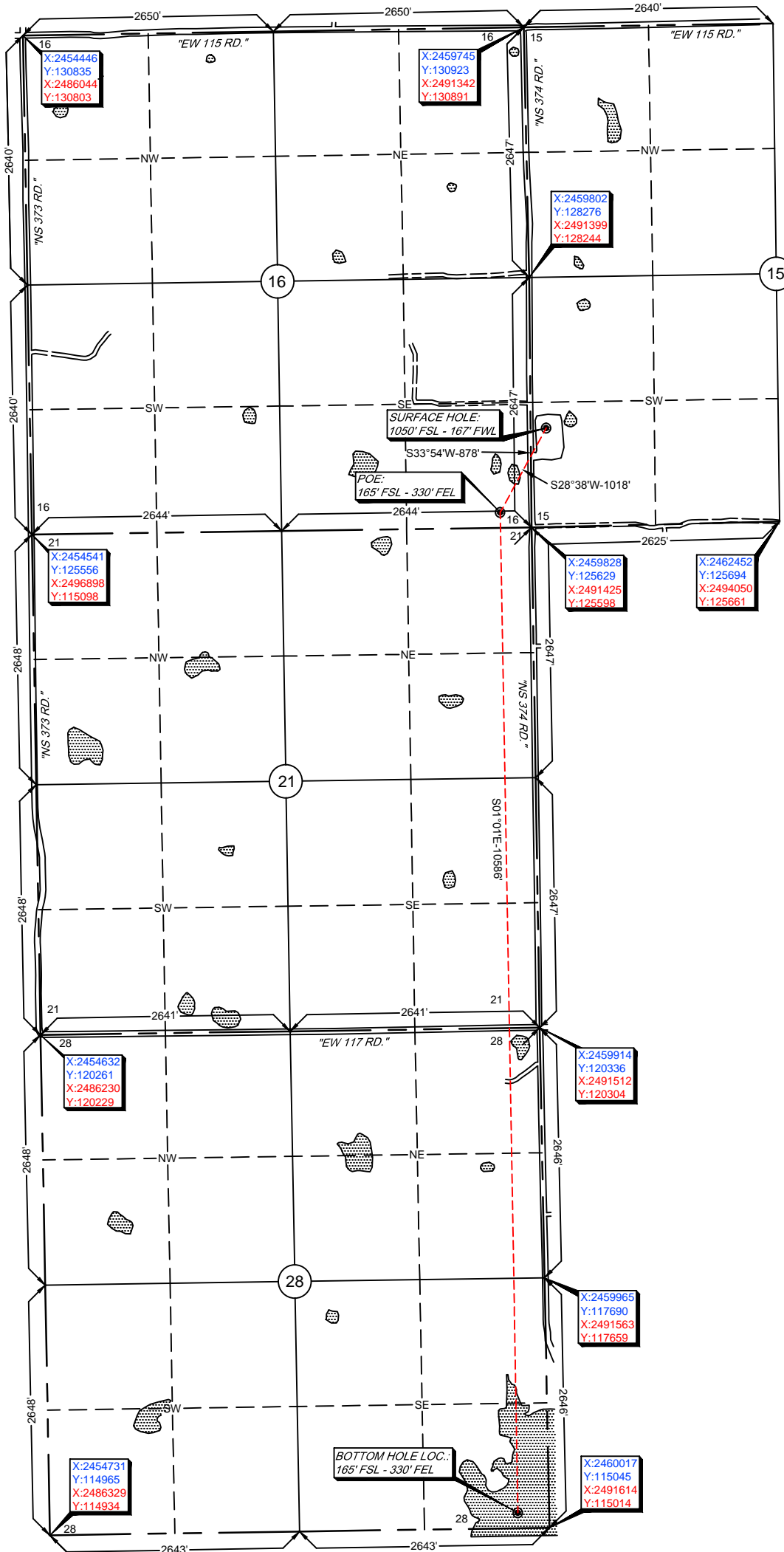
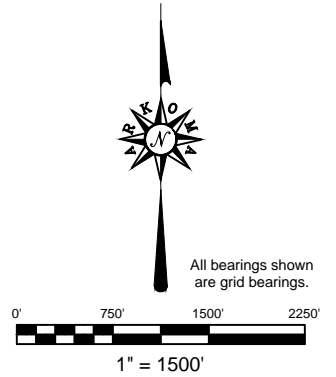
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Calyx Energy LLC Well Location Plat

S.H.L. Sec. 15-10N-9E I.M.
B.H.L. Sec. 28-10N-9E I.M

Operator: CALYX ENERGY III, LLC
Lease Name and No.: CHEATWOOD 1-16-28CH
Footage: 1050' FSL - 167' FWL Gr. Elevation: 811'
Section: 15 Township: 10N Range: 9E I.M.
County: Okfuskee State of Oklahoma
Terrain at Loc.: Location fell on existing Cheatwood location.

API:107 23602



GPS DATUM
NAD 83
NAD 27
OK NORTH ZONE

Surface Hole Loc.:
Lat: 35°20'11.58"N
Lon: 96°21'07.99"W
X: 2459984.27
Y: 126683.27

Surface Hole Loc.:
Lat: 35°20'11.29"N
Lon: 96°21'06.96"W
X: 2491581.64
Y: 126651.38

POE:
Lat: 35°20'02.83"N
Lon: 96°21'14.06"W
X: 2459496.48
Y: 125789.79

POE:
Lat: 35°20'02.53"N
Lon: 96°21'13.03"W
X: 2491094
Y: 125758

Bottom Hole Loc.:
Lat: 35°18'18.14"N
Lon: 96°21'13.96"W
X: 2459683.68
Y: 115205.20

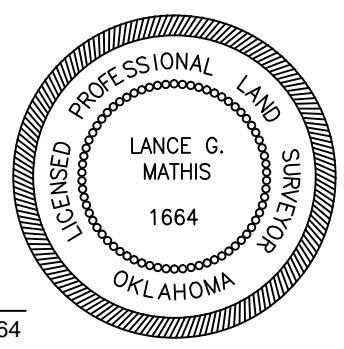
Bottom Hole Loc.:
Lat: 35°18'17.84"N
Lon: 96°21'12.93"W
X: 2491281.16
Y: 115173.59

Please note that this location was staked 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 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 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, 2020
Invoice #7897-B
Date Staked: 06/26/18 By: H.S.
Date Drawn: 07/10/18 By: J.K.
Revise LP: 08/13/18 By: J.D.

Lance G. Mathis
LANCE G. MATHIS

08/14/18
OK LPLS 1664





Well Location Plat

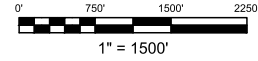
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All bearings shown are grid bearings.



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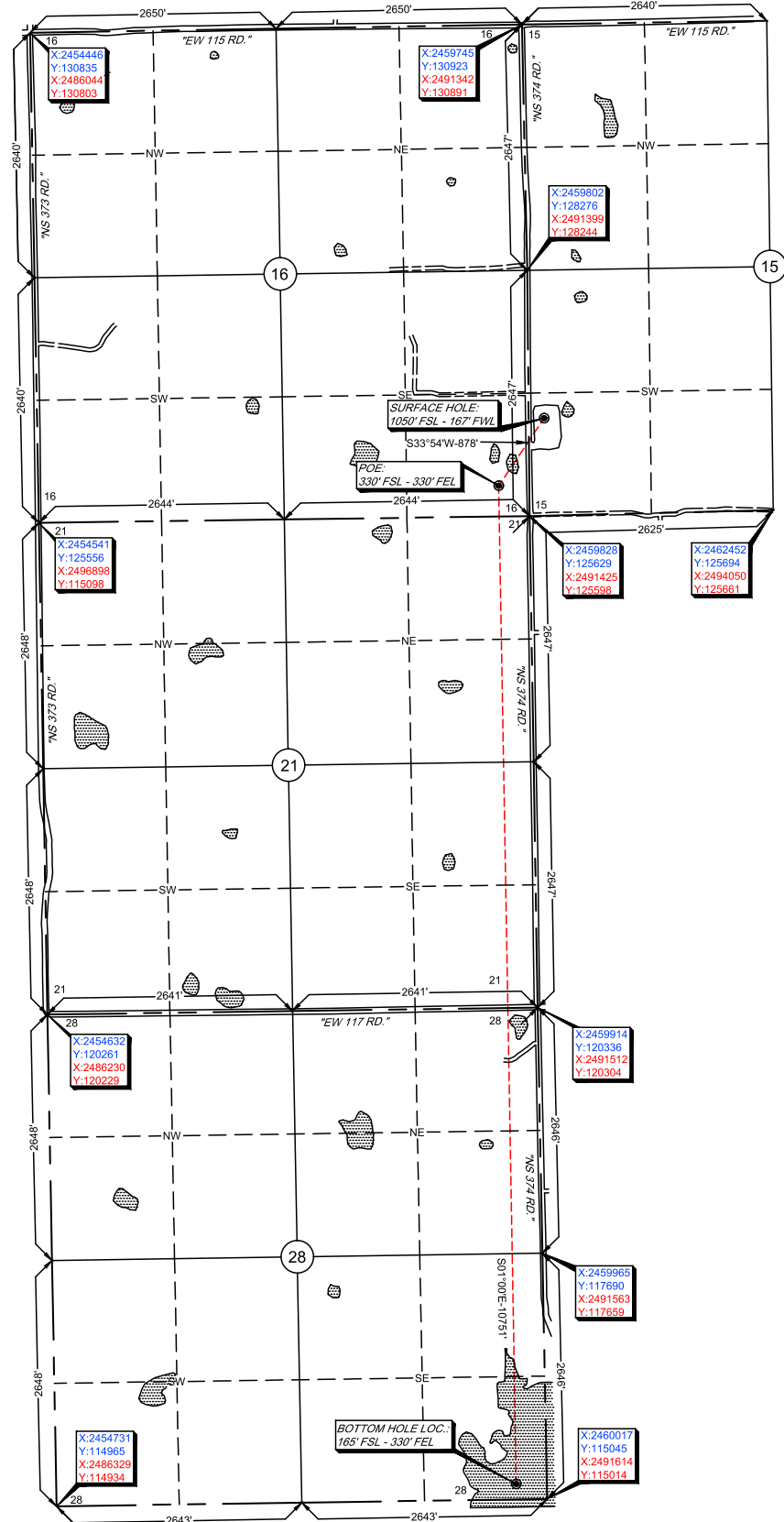
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Lon: 96°21'06.96"W
X: 2491581.64
Y: 126651.38

POE:
Lat: 35°20'04.46"N
Lon: 96°21'14.04"W
X: 2459494.86
Y: 125954.79

POE:
Lat: 35°20'04.16"N
Lon: 96°21'13.01"W
X: 2491092.24
Y: 125922.94

Bottom Hole Loc.:
Lat: 35°18'18.14"N
Lon: 96°21'13.96"W
X: 2459683.68
Y: 115205.20

Bottom Hole Loc.:
Lat: 35°18'17.84"N
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