

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

API NUMBER: 107 23612

Approval Date: 03/13/2019

Expiration Date: 09/13/2020

Horizontal Hole
Multi Unit

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 10N Rge: 12E

County: OKFUSKEE

SPOT LOCATION: ☐ SE ☐ NE ☐ NE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 2075 198

Lease Name: HALPERT

Well No: 1-17-5CH

Well will be 198 feet from nearest unit or lease boundary.

Operator CALYX ENERGY III LLC
Name:

Telephone: 9189494224

OTC/OCC Number: 23515 0

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

JACQUELINE SHAMEL
PO BOX 277
WELEETKA OK 74880

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	3350	6	
2	WOODFORD	3800	7	
3			8	
4			9	
5			10	

Spacing Orders: 689880
691166
554633

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201900138
201900137

Special Orders:

Total Depth: 16464

Ground Elevation: 644

Surface Casing: 440

Depth to base of Treatable Water-Bearing FM: 190

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? Y

Wellhead Protection Area? Y

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 4

Liner not required for Category: 4

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

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? Y

Wellhead Protection Area? Y

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 05 Twp 10N Rge 12E County OKFUSKEE

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 400

Depth of Deviation: 3068

Radius of Turn: 382

Direction: 359

Total Length: 12796

Measured Total Depth: 16464

True Vertical Depth: 3850

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

Notes:

Category

Description

HYDRAULIC FRACTURING

2/20/2019 - 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

2/20/2019 - G71 - PIT 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - NORTH CANADIAN RIVER), WBM/CUTTINGS CAPTURED IN CONCRETE-LINED PIT, SOLIDIFIED AND HELD UNTIL DISPOSAL APPROVED BY OCC

PENDING CD - 201900137

3/11/2019 - G58 - 5, 8, & 17-10N-12E
EST MULTIUNIT HORIZONTAL WELL
X554633 MSSP, WDFD
X691166 MSSP, WDFD
X689880 MSSP, WDFD
(WDFD IS ADJACENT CSS TO MSSP)
20% 17-10N-12E
40% 8-10N-12E
40% 5-10N-12E
NO OP. NAMED
REC 2/4/2019 (DUNN)

This permit does not address the right of entry or settlement of surface damages.

107 23612 HALPERT 1-17-5CH

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 - 201900138	3/11/2019 - G58 - 5, 8, & 17-10N-12E X554633 MSSP, WDFD X691166 MSSP, WDFD X689880 MSSP, WDFD COMPL. INT. 17-10N-12E NCT 660' FNL, NCT 0' FNL, NCT 330' FEL COMPL. INT. 8-10N-12E NCT 0' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. 5-10N-12E NCT 0' FSL, NCT 165' FNL, NCT 330' FEL NO OP. NAMED REC 2/4/2019 (DUNN)
PUBLIC WATER SUPPLY WELLS	2/20/2019 - G71 - MCINTOSH CO RWD #13 - 3 PWS/WPA, SW/4 17-10N-12E
SPACING - 554633	3/11/2019 - G58 - (640) 5-10N-12E EST MSSP, WDFD, OTHERS
SPACING - 689880	3/11/2019 - G58 - (640)(HOR) 17-10N-12E EST MSSP, WDFD, OTHERS COMPL. INT. (MSSP) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL
SPACING - 691166	3/11/2019 - G58 - (640)(HOR) 8-10N-12E EST MSSP, WDFD, OTHERS COMPL. INT. (MSSP) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

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.



Well Location Plat

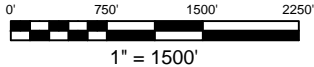
S.H.L. Sec. 17-10N-12E I.M.
B.H.L. Sec. 5-10N-12E I.M.

Operator: CALYX ENERGY III, LLC
Lease Name and No.: HALPERT 1-17-5CH
Footage: 2075' FSL - 198' FEL Gr. Elevation: 664'
Section: 17 Township: 10N Range: 12E I.M.
County: Okfuskee State of Oklahoma
Terrain at Loc.: Location fell in a flat, open, cultivated field, Southeast of an existing well site.

107-23612



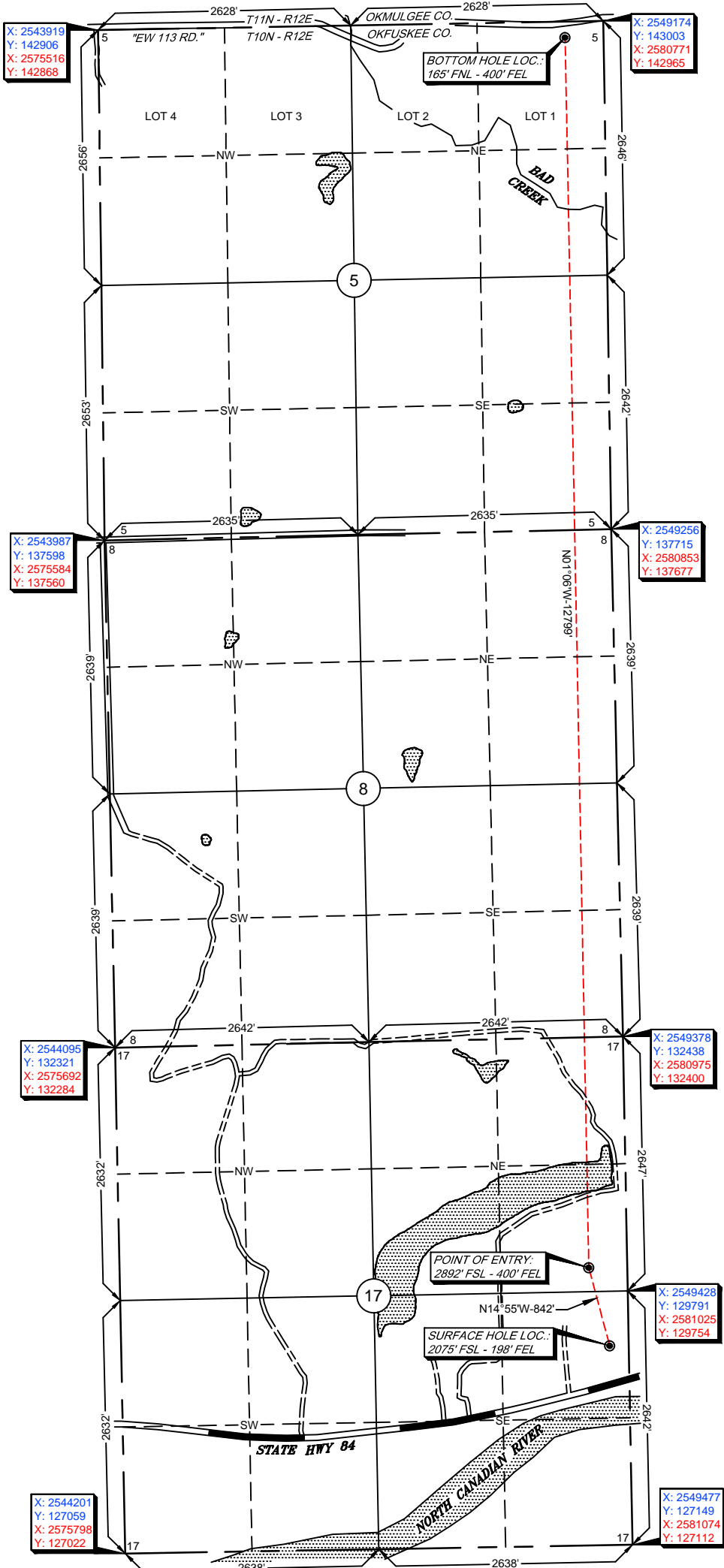
All bearings shown
are grid bearings.



GPS DATUM
NAD 83
NAD 27
OK NORTH ZONE

Surface Hole Loc.:
Lat: 35°20'20.33"N
Lon: 96°03'10.36"W
Lat: 35.33898002
Lon: -96.05287820
X: 2549239.86
Y: 129220.24
Surface Hole Loc.:
Lat: 35°20'19.97"N
Lon: 96°03'09.36"W
Lat: 35.33888183
Lon: -96.05259921
X: 2580837.33
Y: 129182.99
Point of Entry:
Lat: 35°20'28.42"N
Lon: 96°03'12.78"W
Lat: 35.34122708
Lon: -96.05355053
X: 2549022.96
Y: 130034.02
Point of Entry:
Lat: 35°20'28.06"N
Lon: 96°03'11.78"W
Lat: 35.34112886
Lon: -96.05327154
X: 2580620.42
Y: 129996.74
Bottom Hole Loc.:
Lat: 35°22'34.99"N
Lon: 96°03'12.66"W
Lat: 35.37638644
Lon: -96.05351613
X: 2548776.64
Y: 142830.20
Bottom Hole Loc.:
Lat: 35°22'34.63"N
Lon: 96°03'11.65"W
Lat: 35.37628730
Lon: -96.05323749
X: 2580373.98
Y: 142792.24

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 hereof, 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 #8433-A-A
Date Staked: 01/24/19 By: H.S.
Date Drawn: 01/28/19 By: C.K.
Rev. Lease Name: 02/01/19 By: R.S.

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

02/01/19
OK LPLS 1664

