API NUMBER: 107 23597

Oil & Gas

Horizontal Hole

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

Approval Date: 07/17/2018
Expiration Date: 01/17/2019

# PERMIT TO DRILL

Lease Name: 1	IMBERW	OLF					Wei	II No:	1-24-13CI	+	
							SECTION LINES:		227		522
SPOT LOCATION:	SW	SE		SE	SE		FEET FROM QUARTER:	FROM	SOUTH	FROM	EAST
WELL LOCATION:	Sec:	24	Twp	: 10N	Rge:	9E	County:	OKF	JSKEE		

Well will be 227 feet from nearest unit or lease boundary.

Operator 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

DALE E. DAVIS

TRUSTEE OF DALE E. DAVIS REV TRUST

116159 HWY 27

OKEMAH OK 74859

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	3475	6	
2	WOODFORD	3770	7	
3			8	
4			9	
5			10	
Spacing Orders:	No Spacing	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201803936 Special Orders:

201803938

Total Depth: 14021 Ground Elevation: 805 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 40

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

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: WEWOKA

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

B. Solidification of pit contents.

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

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

551649

H. PIT 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - NORTH CANADIAN RIVER)

#### PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED
Chlorides Max: 5000, Average: 3000

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

### **HORIZONTAL HOLE 1**

Sec 13 Twp 10N Rge 9E County OKFUSKEE

Spot Location of End Point: N2 NE NE NE Feet From: NORTH 1/4 Section Line: 165
Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 3193 Radius of Turn: 382

Direction: 2

Total Length: 10228

Measured Total Depth: 14021

True Vertical Depth: 3770

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

Notes:

Category Description

DEEP SURFACE CASING 7/13/2018 - 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 7/13/2018 - 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

PENDING CD - 201803936 7/16/2018 - G57 - (1280)(HOR) 13 & 24-10N-9E

EST MSSP, WDFD, OTHER

POE TO BHL (MSSP) NLT 660' FB

POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

**REC 6-4-2018 (JOHNSON)** 

PENDING CD - 201803938 7/16/2018 - G57 - (I.O.) 13 & 24-10N-9E

X201803936 MSSP, WDFD

COMPL. INT. (24-10N-5E) NCT 165' FSL, NCT 330' FEL COMPL. INT. (13-10N-5E) NCT 165' FNL, NCT 330' FEL

CALYX ENERGY III, LLC. REC 6-4-2018 (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.

107 23597 TIMBERWOLF 1-24-13CH

# Glyx Well Location Plat S.H.L. Sec. 24-10N-9E I.M. B.H.L. Sec. 13-10N-9E I.M. Operator: CALYX ENERGY III, LLC API: 107 23597 Lease Name and No.: TIMBERWOLF 1-24-13CH Footage: 227' FSL - 522' FEL Gr. Elevation: 805' Section: 24 Township: 10N Range: 9E I.M. County: Okfuskee State of Oklahoma Terrain at Loc.: Location fell in mostly flat, open pasture. All bearings shown are grid bearings. 1" = 1320' X:2475590 **GPS DATUM** BOTTOM HOLE LOC. **NAD 83** 165' FNL - 330' FEL **NAD 27** OK NORTH ZONE Surface Hole Loc.: Lat: 35°19'10.90"N STATE Lon: 96°18'04.95"W X: 2475255.31 AMH Y: 120809.36 Surface Hole Loc.: 8 Lat: 35°19'10.59"N Lon: 96°18'03.92"W 13 X: 2506852.74 N01°02'W-10229' Y: 120776.66 POE: Lat: 35°19'10.28"N Lon: 96°18'02.63"W X: 2475448.26 Y: 120749.85 NORTH CANADIAN RIVER POE: "NS 376 RD. Lat: 35°19'09.97"N Lon: 96°18'01.61"W X: 2507045.69 Y: 120717.15 Bottom Hole Loc.: Lat: 35°20'51.44"N X:247040 Lon: 96°18'02.71"W X: 2475262.98 Y: 130977.58 Bottom Hole Loc.: Lat: 35°20'51.13"N Lon: 96°18'01.68"W X: 2506860.30 Y: 130944.60 <u>(a</u> 24 HW. 3 S72 52'E-202' SURFACE HOLE LOC 227' FSL - 522' FEL 0 "FW 117 RD." Y:120590 -2641 X:250737 -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 puaranteed. Please context Aroma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK. GPS. ANTE: X and V data shown hereon for Section Conners 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. White SSIONAL ROFE SSIONAL Certification: Arkoma Surveying and Mapping, PLLC LANCE G. This is to certify that this Well Location Plat represents SURVE) P.O. Box 238 Wilburton, OK 74578 Ph. 918-465-5711 Fax 918-465-5030 Certificate of Authorization No. 5348 **MATHIS** the results of a survey made on the ground performed under the supervision of the undersigned. 1664 Expires June 30, 2020

Invoice #7900-B Date Staked: 06/13/18 Date Drawn: 06/20/18 By: H.S. By: J.K. Janu S. Math

07/02/18 **OK LPLS 1664** 

