## API NUMBER: 063 24769 Α

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

Approval Date:	02/12/2018
Expiration Date:	08/12/2018

Horizontal Hole Oil & Gas

Amend reason: AMEND TO ADD PIT INFORMATION FOR SURFACE CASING AND CHANGE DISPOSAL METHODS FOR ORIGINAL PIT

## AMEND PERMIT TO DRILL

OT LOCATION	V: Sec: 14 Twp: 8N V: SW SE SE	OL_	County: HUG	SOUTH FROM	EAST 575			
Lease Name:			Well No:	1-14-11WH			feet from nearest unit or lease boundary	
Operator Name:	CALYX ENERGY III LLC			Telephone: 9	189494224	ОТС	/OCC Number: 23515 0	
CALYX E	ENERGY III LLC							
6120 S Y	ALE AVE STE 1480					CREEK, LLC		
TULSA, OK			136-4226		2798 N 3	N 394 RD		
					DUST		OK 74839	
`	s) (Permit Valid for Li Name	sted Format	ions Only): Depth		Name		Depth	
		sted Format	* *		<b>Name</b> 6		Depth	
	Name	sted Format	Depth				Depth	
1	Name	sted Format	Depth		6 7 8		Depth	
1 2 3 4	Name	sted Format	Depth		6 7 8 9		Depth	
1 2 3	Name	sted Format	Depth		6 7 8		Depth	
1 2 3 4	Name WOODFORD	sted Format	Depth		6 7 8 9	Increase	<b>Depth</b> ed Density Orders:	
1 2 3 4 5	Name WOODFORD	sted Format	Depth 4800		6 7 8 9	Increase		

Total Depth: 15500 Ground Elevation: 672 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 180

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

Approved Method for disposal of Drilling Fluids:

B. Solidification of pit contents.

H. SEE MEMO

A. Evaporation/dewater and backfilling of reserve pit.

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?

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).

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

## HORIZONTAL HOLE 1

Sec 11 Twp 8N Rge 12E County HUGHES

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: 4501 Radius of Turn: 492

Direction: 2

Total Length: 10227

Measured Total Depth: 15500

True Vertical Depth: 4900

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

Notes:

Category Description

DEEP SURFACE CASING 1/23/2018 - 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 1/23/2018 - 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

LOCATION EXCEPTION - 673864 5/10/2018 - G58 - (I.O.) 11 & 14-8N-12E

X671757 WDFD (11 & 14-8N-12E)

COMPL. INT. (14-8N-12E) NCT 0 FNL, NCT 165' FSL, NCT 330' FEL COMPL. INT. (11-8N-12E) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL

NO OP. NAMED 2/23/2018

MEMO 5/9/2018 - G71 - PIT 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST,

WBM/CUTTINGS CAPTURED IN CONCRETE-LINED PIT, SOLIDFIED AND HELD UNTIL DISPOSAL

APPROVED BY OCC

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.

063 24769 LINCOLN 1-14-11WH

Category Description

**SPACING - 671757** 1/24/2018 - G58 - (640)(HOR) 11 & 14-8N-12E

EST WDFD, OTHERS

COMPL. INT. NLT 165' FNL & FSL, NCT 330' FEL & FWL

(EXIST CONCURRENTLY WITH PREVIOUSLY FORMED NON-HORIZONTAL DRILLING AND

**SPACING UNIT)** 

**SPACING - 673486** 5/10/2018 - G58 - (I.O.) 11 & 14-8N-12E

EST. MULTIUNIT HORIZONTAL WELL X671757 WDFD (11 & 14-8N-12E)

50% 14-8N-12E 50% 11-8N-12E NO OP. NAMED 2/12/2018

5/10/2018 - G58 - (640)(HOR) 11 & 14-8N-12E VAC 670966 WDFD, OTHERS **SPACING - 676885**