API NUMBER: 063 24905 A

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

Approval Date: 01/23/2020

Expiration Date: 07/23/2021

Multi Unit Oil & Gas

Amend reason: ADDING MAYES FORMATION; CORRECT WOODFORD FORMATION DEPTH

## **AMEND PERMIT TO DRILL**

OODFORD FORMATION DEPTH	PERIMIT TO DRILL		
WELL LOCATION: Section: 14 Township: 8N Range: 12E Cou	unty: HUGHES		
SPOT LOCATION: SE NW SE SW FEET FROM QUARTER: FROM SO	OUTH FROM WEST		
SECTION LINES: 808	8 1712		
Lease Name: HAMILTON Well No: 4-1	14-2WH Well will be 808 feet from nearest unit or lease boundary.		
Operator Name: CALYX ENERGY III LLC Telephone: 918	89494224 OTC/OCC Number: 23515 0		
CALYX ENERGY III LLC	MIDDLE CREEK, LLC		
6120 S YALE AVE STE 1480	2798 N 394		
TULSA, OK 74136-4226	DUSTIN OK 74839		
Earmation(a) (Parmit Valid for Listed Formations Only)			
Formation(s) (Permit Valid for Listed Formations Only):  Name Code Depth			
1 MAYES 353MYES 4700			
2 WOODFORD 319WDFD 4800			
Spacing Orders: 670063 Location Exception	Orders: 712769 Increased Density Orders: 707353		
671757	707354		
712768	710234		
Pending CD Numbers: No Pending	Special Orders: No Special Orders		
Total Depth: 15395 Ground Elevation: 670 Surface Cas	Sing: 750 Depth to base of Treatable Water-Bearing FM: 40		
	Deep surface casing has been approved		
Under Federal Jurisdiction: No	Approved Method for disposal of Drilling Fluids:		
Fresh Water Supply Well Drilled: No	A. Evaporation/dewater and backfilling of reserve pit.		
Surface Water used to Drill: Yes	B. Solidification of pit contents.		
	D. One time land application (REQUIRES PERMIT) PERMIT NO: 20-37219		
	H. (Other)  PIT 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST		
PIT 1 INFORMATION	Category of Pit: 4		
Type of Pit System: ON SITE	Liner not required for Category: 4		
Type of Mud System: AIR	Pit Location is: ALLUVIAL		
	Pit Location Formation: ALLUVIUM		
Is depth to top of ground water greater than 10ft below base of pit? Y	Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).		
Within 1 mile of municipal water well? N			
Wellhead Protection Area? N			
Pit <u>is</u> located in a Hydrologically Sensitive Area.			
PIT 2 INFORMATION	Category of Pit: C		
Type of Pit System: CLOSED Closed System Means Steel Pits	Liner not required for Category: C		
Type of Mud System: WATER BASED	Pit Location is: ALLUVIAL		
Chlorides Max: 8000 Average: 5000	Pit Location Formation: ALLUVIUM		
Is depth to top of ground water greater than 10ft below base of pit? Y			

Within 1 mile of municipal water well? N  $\label{eq:Wellhead Protection Area?} \ N$ 

located in a Hydrologically Sensitive Area.

Pit

MULTI UNIT HOLE 1

Section: 2 Township: 8N Range: 12E Total Length: 9450

County: HUGHES Measured Total Depth: 15395

Spot Location of End Point: SE NW SW SW True Vertical Depth: 4848

Feet From: SOUTH 1/4 Section Line: 695 End Point Location from
Feet From: WEST 1/4 Section Line: 410 Lease,Unit, or Property Line: 410

NOTES:

NOTES:	
Category	Description
DEEP SURFACE CASING	1/22/2020 - 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	1/22/2020 - 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
INCREASED DENSITY - 707353	1/23/2020 - G56 - 2-8N-12E X670063 WDFD 3 WELLS CALYX ENERGY III, LLC 1/9/2020
INCREASED DENSITY - 707354	1/23/2020 - G56 - 14-8N-12E X671757 WDFD 3 WELLS CALYX ENERGY III, LLC 1/9/2020
INCREASED DENSITY - 710234	8/28/2020 - G56 - 11-8N-12E X671757 WDFD 3 WELLS CALYX ENERGY, LLC 3/25/2020
LOCATION EXCEPTION - 712769	8/28/2020 - G56 - (F.O.) 2, 11 & 14-8N-12E X670063 WDFD, OTHERS 2-8N-12E X671757 MYES, WDFD, OTHERS 11 & 14-8N-12E SHL 808' FSL, 1712' FWL COMPL INT (14-8N-12E) WDFD FIRST PERF 1067' FSL, 726' FWL WDFD LAST PERF 0' FNL, 402' FWL COMPL INT (11-8N-12E) WDFD FIRST PERF 0' FNL, 402' FWL WDFD LAST PERF 107' FSL, 408' FWL WDFD LAST PERF 107' FSL, 408' FWL MYES FIRST PERF 353' FSL, 415' FWL MYES FIRST PERF 643' FSL, 429' FWL WDFD FIRST PERF 667' FSL, 429' FWL WDFD LAST PERF 667' FSL, 382' FWL COMPL INT (2-8N-12E) WDFD FIRST PERF 0' FNL, 382' FWL WDFD LAST PERF 594' FSL, 411' FWL CALYX ENERGY III, LLC 7/1/2020
SPACING - 670063	1/23/2020 - G56 - (640)(HOR) 2-8N-12E VAC OTHERS EST WDFD, OTHERS COMPL INT NCT 165' FNL & FSL, NCT 330' FEL & FWL
SPACING - 671757	8/28/2020 - G56 - (640)(HOR) 11 & 14-8N-12E EST MYES, WDFD, OTHERS COMPL INT (MYES) NLT 660' FB COMPL INT (WDFD) NLT 165' FNL/FSL, NLT 330' FEL/FWL

CDACING 740760	9/29/2020 OFC (F.O.) 2.44.9.44.9NL42F	
SPACING - 712768	8/28/2020 - G56 - (F.O.) 2, 11 & 14-8N-12E	
	EST MULTIUNIT HORIZONTAL WELL	
	X670063 WDFD, OTHERS 2-8N-12E	
	X671757 MYES, WDFD, OTHERS 11 & 14-8N-12E	
	(MYES IS AN ADJACENT COMMON SOURCE OF SUPPLY TO WDFD)	
	43.0754% 14-8N-12E	
	50.8953% 11-8N-12E	
	6.0293% 2-8N-12E	
	CALYX ENERGY III, LLC	
	7/1/2020	