PI NUMBER: 091 21822	OIL & GAS OKLAHO	CORPORATION COMN CONSERVATION DIVI P.O. BOX 52000 MA CITY, OK 73152-20 Rule 165:10-3-1)	SION	Approval Date: 03/19/2019 Expiration Date: 09/19/2020	
rizontal Hole Oil & Gas ti Unit	(Kule 165.10-5-1)				
	<u>P</u>	ERMIT TO DRILL			
VELL LOCATION: Sec: 14 Twp: 9N Rge:	-	DSH			
POT LOCATION: SW NW SW NW	SECTION LINES:	ORTH FROM WEST 765 234			
Lease Name: MIFFLIN	Well No: 1	-15-3CH	Well will be	e 234 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			JACK CAMPBELL RANCH, LLC		
TULSA, OK	74136-4226	3993	56 HIGHWAY 9		
,		HAN	NA	OK 74845	
3 4 5 Spacing Orders: 541908 689525 506976 541781 689526	Location Exception Or	8 9 10 rders: 692685		Increased Density Orders: 690501	
Pending CD Numbers: 201810322				Special Orders:	
Total Depth: 15333 Ground Elevation:	762 Surface Ca	asing: 1500	Dept	h to base of Treatable Water-Bearing FM: 160	
Under Federal Jurisdiction: No	Fresh Water S	upply Well Drilled: No		Surface Water used to Drill: Yes	
PIT 1 INFORMATION		Approved Meth	od for disposal of Dril	ling Fluids:	
Type of Pit System: ON SITE		A. Evaporation	n/dewater and backfill	ing of reserve pit.	
Type of Mud System: AIR		B. Solidificatio	n of pit contents.		
Is depth to top of ground water greater than 10ft below Within 1 mile of municipal water well? N	v base of pit? Y	F. Haul to Con 551649	nmercial soil farming	facility: Sec. 14 Twn. 7N Rng. 9E Cnty. 63 Order No:	
Wellhead Protection Area? N		H. SEE MEMO	)		
Pit is located in a Hydrologically Sensitive Area	a.				
Category of Pit: 4					
Liner not required for Category: 4					
Pit Location is BED AQUIFER					
Pit Location Formation: SENORA					

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

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:
 SENORA

## HORIZONTAL HOLE 1

Rge 13E MCINTOSH Sec 03 Twp 9N County Spot Location of End Point: NW NE NE NE Feet From: NORTH 1/4 Section Line: 165 Feet From: EAST 1/4 Section Line: 600 Depth of Deviation: 2899 Radius of Turn: 573 Direction: 355 Total Length: 11534 Measured Total Depth: 15333 True Vertical Depth: 4200 End Point Location from Lease, Unit, or Property Line: 165

Notes:	
Category	Description
DEEP SURFACE CASING	2/20/2019 - 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	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
INCREASED DENSITY - 690501	3/18/2019 - GA8 - 15-9N-13E X541781 MSSP 1 WELL CALYX ENERGY III, LLC 1/28/2019

Category	Description
LOCATION EXCEPTION -692685	3/18/2019 - GA8 - (I.O.) 15, 10 & 3-9N-13E X541781 MSSP 15-9N-13E X689526 WDFD 15-9N-13E X506976 MSSP, WDFD 10-9N-13E X541908 MSSP 3-9N-13E X689525 WDFD 3-9N-13E COMPL. INT. (15-9N-13E) NCT 660' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (10-9N-13E) NCT 660' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (10-9N-13E) NCT 0' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (3-9N-13E) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL CALYX ENERGY III, LLC 3/11/2019
MEMO	2/20/2019 - 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
PENDING CD - 201810322	3/18/2019 - GA8 - (I.O.) 15, 10 & 3-9N-13E EST MULTIUNIT HORIZONTAL WELL X541781 MSSP 15-9N-13E X689526 WDFD 15-9N-13E X506976 MSSP, WDFD 10-9N-13E X541908 MSSP 3-9N-13E X689525 WDFD 3-9N-13E (WDFD ADJACENT COMMON SOURCE OF SUPPLY TO MSSP) 22% 15-9N-13E 53% 10-9N-13E 25% 3-9N-13E NO OP. NAMED REC. 1/4/2019 (JOHNSON)
SPACING - 506976	3/18/2019 - GA8 - (640) 10-9N-13E VAC OTHERS EXT 500360 MSSP, WDFD, OTHERS
SPACING - 541781	3/18/2019 - GA8 - (640) 159N-13E EXT 535651 MSSP, OTHERS
SPACING - 541908	3/18/2019 - GA8 - (640) 3-9N-13E VAC OTHERS EXT OTHERS EXT 535651 MSSP, OTHERS
SPACING - 689525	3/18/2019 - GA8 - (640)(HOR) 3-9N-13E EST WDFD, OTHER POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL
SPACING - 689526	3/18/2019 - GA8 - (640)(HOR) 15-9N-13E EST WDFD, OTHER POE TO BHL NLT 165' FNL & FSL, NLT 330' FEL & FWL