#### API NUMBER: 063 24826 В

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

Approval Date: 07/13/2018 01/13/2019 **Expiration Date** 

905 feet from nearest unit or lease boundary.

23515 0

OTC/OCC Number:

Horizontal Hole Multi Unit

Oil & Gas

Amend reason: AMEND TO PROVIDE AS DRILLED LOCATION PER OCC REQUEST, UPDATE ORDERS AND BHL

## AMEND PERMIT TO DRILL

O NEWOLOT, OF DA	TE ONDENO?	WAS BITE							
WELL LOCATION:	Sec: 05	Twp: 8N	Rge:	12E	Count	y: HUG	HES		
SPOT LOCATION:	NE NW	SE	SE		FEET FROM QUARTER:	FROM	SOUTH	FROM	EAST
					SECTION LINES:		999		905
Lease Name: I	ROOSEVELT				w	ell No:	3-5-18CH	I	
Operator Name:	CALYX ENI	ERGY III LLO	;				Teleph	none: 9	9189494224

CALYX ENERGY III LLC 6120 S YALE AVE STE 1480

TULSA. OK 74136-4226 JAMES B. WISE 3401 HICKORY STICK RD

**OKLAHOMA CITY** OK 73120

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

	Name	Depth		Name	Depth
1	CANEY	3800	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	671026	Location Exception Orders:	694385		Increased Density Orders:
3	673572				
	694384				

Pending CD Numbers: Special Orders:

Total Depth: 15992 Ground Elevation: 736 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 280

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?

Wellhead Protection Area?

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: SENORA

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.

H. SEE MEMO

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

551649

### 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?

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**

Sec. 18 Twp 8N Rge 12E County HUGHES

SW Spot Location of End Point: SW NF Feet From: SOUTH 1/4 Section Line: 1743 Feet From: WEST 1/4 Section Line: 2081

Depth of Deviation: 3518 Radius of Turn: 382 Direction: 225

Total Length: 9683

Measured Total Depth: 15992 True Vertical Depth: 3982 End Point Location from Lease. Unit, or Property Line: 1743

Notes:

Category Description

5/31/2018 - G71 - APPROVED: NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF **DEEP SURFACE CASING** 

CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR

SURFACE CASING

HYDRAULIC FRACTURING 5/31/2018 - 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 - 694385 7/27/2018 - G57 - (F.O.) 5,7,8 &18-8N-12E

X673572 CNEY 5,7 & 8-8N-12E X671026 CNEY 18-8N-12E SHL (5-8N-12E) 999' FSL, 905' FEL

5-8N-12E

COMPL. INT. (FIRST PERF) 446' FSL, 1709' FEL COMPL. INT. (LAST PERF) 0' FSL, 2055' FEL

8-8N-18E

COMPL. INT. (FIRST PERF) 0' FSL, 2055' FEL COMPL. INT. (LAST PERF) 745' FSL, 0' FWL

18-8N-12E

COMPL. INT. (FIRST PERF) 0' FSL, 522' FEL COMPL. INT. (LAST PERF) 1821' FSL, 2140' FWL

CALYX ENERGY III, LLC

4/10/2019

MEMO 6/1/2018 - 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

SPACING - 671026 11/25/2019 - G56 - (640) 18-8N-12E

EST CNEY, OTHERS POE TO BHL NLT 330' FB

SPACING - 673572 11/25/2019 - G56 - (640)(HOR) 5,7,8-8N-12E

EST CNEY, OTHER

POE TO BHL NLT 330' FB

SPACING - 694384 11/25/2019 - G56 - (F.O.) 5,7,8,18-8N-12E

EST MULTIUNIT HORIZONTAL WELL

X673572 CNEY 5,7,8-8N-12E X671026 CNEY 18-8N-12E

4.9485% 5-8N-12E 49.0446% 8-8N-12E 80.479% 7-8N-12E 37.959% 18-8N-12E CALYX ENERGY III, LLC

4/10/2019

# SUMMARY OF BOTTOM HOLE LOCATIONS CALYX ENERGY III, LLC

Roosevelt 3-5-18CH 5,7,8,&18-8N-12E Hughes Co. CD 2018-1933-T (Multi Unit Hz) Int. Order 681725 CD 2018-1934-T (Loc. Exc.- sec. 5,7,8,&18) Int. Order 677379

	MD	TVD	Location
Surface Location	,-		999' FSL & 905' FEL of sec. 5-8N-12E
Caney	4,519'	4,080'	461' FSL & 1697' FEL of sect. 5-8N-12E
First Perforation	4,537'	4,081'	446' FSL & 1709' FEL of sect. 5-8N-12E
South line of sec. 5 / North line of sec. 8	5,099'	4,075'	0' FSL & 2055' FEL of sect. 5-8N-12E
South line of sec. 8 / West line of sec. 8	10,669'	3,922'	745' FSL & 0' FWL of sect. 8-8N-12E
South line of sec. 7 / North line of sec. 18	11,583	3,899	0' FSL & 522' FEL of sect. 7-8N-12E
Last Perforation	15,894'	3,980'	1821' FSL & 2140' FWL of sect. 18-8N-12E
Terminus (BHL)	15,992'	3,982'	1743' FSL & 2081' FWL of sect. 18-8N-12E

Perforations in sections 5,7,8,&18 are in the Caney only.

The completion interval (CI) is from first perforation 4,537' to last perforation 15,894' MD.

	1,519
First Perforation	
	1,537   562 ' in section 5 (4.9485%)
South line of sec. 5 / North line of sec. 8	5,099 5,570 ' in section 8 (49.0446%)
South line of sec. 8 / West line of sec. 8	0,669 914 ' in section 7 (8.0479%)
South line of sec. 7 / North line of sec. 18	1,583 4,311 ' in section 18 (37.959%)
Last Perforation 1	5,894
Total Depth (BHL) in Caney 1	5,992 11,357 ' total length of C.I. (100%)

