

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

API NUMBER: 063 24825 B

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

Horizontal Hole Oil & Gas
Multi Unit

Amend reason: PROVIDE AS DRILLED LATERAL LOCATION PER
OCC REQUEST, UPDATE ORDERS

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 8N Rge: 12E County: HUGHES
SPOT LOCATION: NE NW SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 999 890

Lease Name: ROOSEVELT Well No: 2-5-18WH Well will be 890 feet from nearest unit or lease boundary.
Operator CALYX ENERGY III LLC Telephone: 9189494224 OTC/OCC Number: 23515 0
Name:

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 WOODFORD	4150	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 673572 Location Exception Orders: 694383 Increased Density Orders: 692463
671026 691666
694382 691668
691667

Pending CD Numbers:

Special Orders:

Total Depth: 17005 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? 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: 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.

F. Haul to Commercial soil farming facility: Sec. 14 Twn. 7N Rng. 9E Cnty. 63 Order No: 653875

H. SEE MEMO

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is 18 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

Sec 18 Twp 8N Rge 12E County HUGHES

Spot Location of End Point: SE NW NW SW

Feet From: SOUTH 1/4 Section Line: 2119

Feet From: WEST 1/4 Section Line: 620

Depth of Deviation: 1087

Radius of Turn: 382

Direction: 215

Total Length: 11885

Measured Total Depth: 17005

True Vertical Depth: 4320

End Point Location from Lease,
Unit, or Property Line: 620

Notes:

Category

Description

DEEP SURFACE CASING

5/31/2018 - 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

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

INCREASED DENSITY - 691666

11/18/2019 - G56 - 5-8N-12E
X673572 WDFD
1 WELL
CALYX ENERGY III, LLC.
2/20/2019

INCREASED DENSITY - 691667

11/18/2019 - G56 - 7-8N-12E
X673572 WDFD
1 WELL
CALYX ENERGY III, LLC.
2/20/2019

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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 24825 ROOSEVELT 2-5-18WH

INCREASED DENSITY - 691668	11/18/2019 - G56 - 8-8N-12E X673572 WDFD 1 WELL CALYX ENERGY III, LLC. 2/20/2019
INCREASED DENSITY - 692463	11/18/2019 - G56 - 18-8N-12E X671026 WDFD 1 WELL CALYX ENERGY, LLC. 3/6/2019
LOCATION EXCEPTION - 694383	11/18/2019 - G56 - (F.O.) 5,7,8,18-8N-12E X673572 WDFD 5,7,8-8N-12E X671026 WDFD 18-8N-12E 5-8N-12E COMPL. INT. (FIRST PERF) 975' FSL, 2175' FEL COMPL. INT. (LAST PERF) 0' FSL, 1556' FWL 8-8N-12E COMPL. INT. (FIRST PERF) 2128' FNL, 0' FWL COMPL. INT. (LAST PERF) 0' FSL, 2285' FEL 18-8N-12E COMPL. INT. (FIRST PERF) 0' FSL, 2285' FEL COMPL. INT. (LAST PERF) 2216' FSL, 686' 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 STEEL PIT, SOLIDIFIED AND HELD UNTIL DISPOSAL APPROVED BY OCC
SPACING - 671026	11/18/2019 - G56 - (640) 18-8N-12E EST WDFD POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL
SPACING - 673572	11/18/2019 - G56 - (640)(HOR) 5,7,8-8N-12E EXT 666244 WDFD POE TO BHL NLT 165' FNL & FSL, NLT 330' FEL & FWL
SPACING - 694382	11/18/2019 - G56 - (F.O.) 5,7,8,18-8N-12E EST MULTIUNIT HORIZONTAL WELL X673572 WDFD 5,7,8-8N-12E X671026 WDFD 18-8N-12E 15.1411% 5-8N-12E 21.6207% 8-8N-12E 32.1194% 7-8N-12E 31.1188% 18-8N-12E CALYX ENERGY III, LLC 4/10/2019

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Office of the Conservation Division as to when Surface Casing will be run.

SUMMARY OF BOTTOM HOLE LOCATIONS
CALYX ENERGY III, LLC

Roosevelt 2-5-18WH
5,7,8,&18-8N-12E
Hughes Co.

CD 2018-1931-T (Multi Unit Hz) Int. Order 681724
CD 2018-1932-T (Loc. Exc.- sec. 5,7,8,&18) Int. Order 67737!

	MD	TVD	Location
Surface Location			999' FSL & 890' FEL of sec. 5-8N-12E
Woodford	4,635'	4,315'	994' FSL & 2120' FEL of sect. 5-8N-12E
First Perforation	4,696'	4,334'	975' FSL & 2175' FEL of sect. 5-8N-12E
South line of sec. 5 / North line of sec. 8	6,542'	4,255'	0' FSL & 1556' FWL of sect. 5-8N-12E
North line of sec. 8 / West line of sec. 8	9,178'	4,247'	2128' FNL & 0' FWL of sect. 8-8N-12E
South line of sec. 7 / North line of sec. 18	13,094'	4,189'	0' FSL & 2285' FEL of sect. 7-8N-12E
Last Perforation	16,888'	4,319'	2216' FSL & 686' FWL of sect. 18-8N-12E
Terminus (BHL)	17,005'	4,320'	2119' FSL & 620' FWL of sect. 18-8N-12E

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

The completion interval (CI) is from first perforation 4,696' to last perforation 16,888' MD.

Formation tops and entry points	MD	Length of CI in each unit (% of total)
Woodford	4,635	
First Perforation	4,696	1,846 ' in section 5 (15.1411%)
South line of sec. 5 / North line of sec. 8	6,542	2,636 ' in section 8 (21.6207%)
North line of sec. 8 / West line of sec. 8	9,178	3,916 ' in section 7 (32.1194%)
South line of sec. 7 / North line of sec. 18	13,094	3,794 ' in section 18 (31.1188%)
Last Perforation	16,888	
Total Depth (BHL) in Woodford	17,005	12,192 ' total length of C.I. (100%)



H-14-19

