

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

API NUMBER: 091 21803 B

Approval Date: 06/13/2018
Expiration Date: 12/13/2018

Horizontal Hole
Multi Unit

Oil & Gas

Amend reason: CHANGE NAME, SURFACE FOOTAGES, AND
LATERAL INFORMATION

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 8N Rge: 13E County: MCINTOSH
SPOT LOCATION: NW NW NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 275 324

Lease Name: OSCAR LU Well No: 2-17-20CH Well will be 275 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

MIDDLE CREEK, LLC.
2798 N. 394
DUSTIN OK 74839

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

	Name	Depth	Name	Depth
1	CANEY	4500	6	
2	MISSISSIPPIAN	4525	7	
3	MAYES	4675	8	
4	WOODFORD	4775	9	
5	HUNTON	4840	10	

Spacing Orders: 528400 Location Exception Orders: 677094 Increased Density Orders:
671800
681007

Pending CD Numbers: Special Orders:

Total Depth: 15035 Ground Elevation: 759 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 220

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

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.
B. Solidification of pit contents.

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.

F. Haul to Commercial soil farming facility: Sec. 14 Twn. 7N Rng. 9E Cnty. 63 Order No: 551649

H. SEE MEMO

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

Sec 20 Twp 8N Rge 13E County PITTSBURG

Spot Location of End Point: S2 SW SW SW

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 4218

Radius of Turn: 382

Direction: 180

Total Length: 10217

Measured Total Depth: 15035

True Vertical Depth: 4840

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

Notes:

Category

Description

DEEP SURFACE CASING

1/25/2019 - G56 - 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

1/25/2019 - G56 - 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 - 677094

1/25/2019 - G56 - (I.O.) 17 & 20-8N-13E
X528400 MSSP, WDFD 17-8N-13E
X671800 CNEY, MYES 20-8N-13E
COMPL INT (17-8N-13E) NCT 0' FSL, NCT 165' FNL, NCT 330' FWL COMPL INT (20-8N-13E) NCT 0' FNL, NCT 165' FSL, NCT 330' FWL CALYX ENERGY III, LLC
5/1/2018

MEMO

1/25/2019 - G56 - PIT 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, WBM/CUTTINGS CAPTURED IN CONCRETE-LINED PIT, SOLIDIFIED AND HELD UNTIL DISPOSAL APPROVED BY OCC

SPACING - 528400

1/25/2019 - G56 - (640) 17-8N-13E
VAC OTHER
EST OTHERS
EXT 507398 MSSP
EXT 515955 WDFD, HNTN, OTHERS

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.

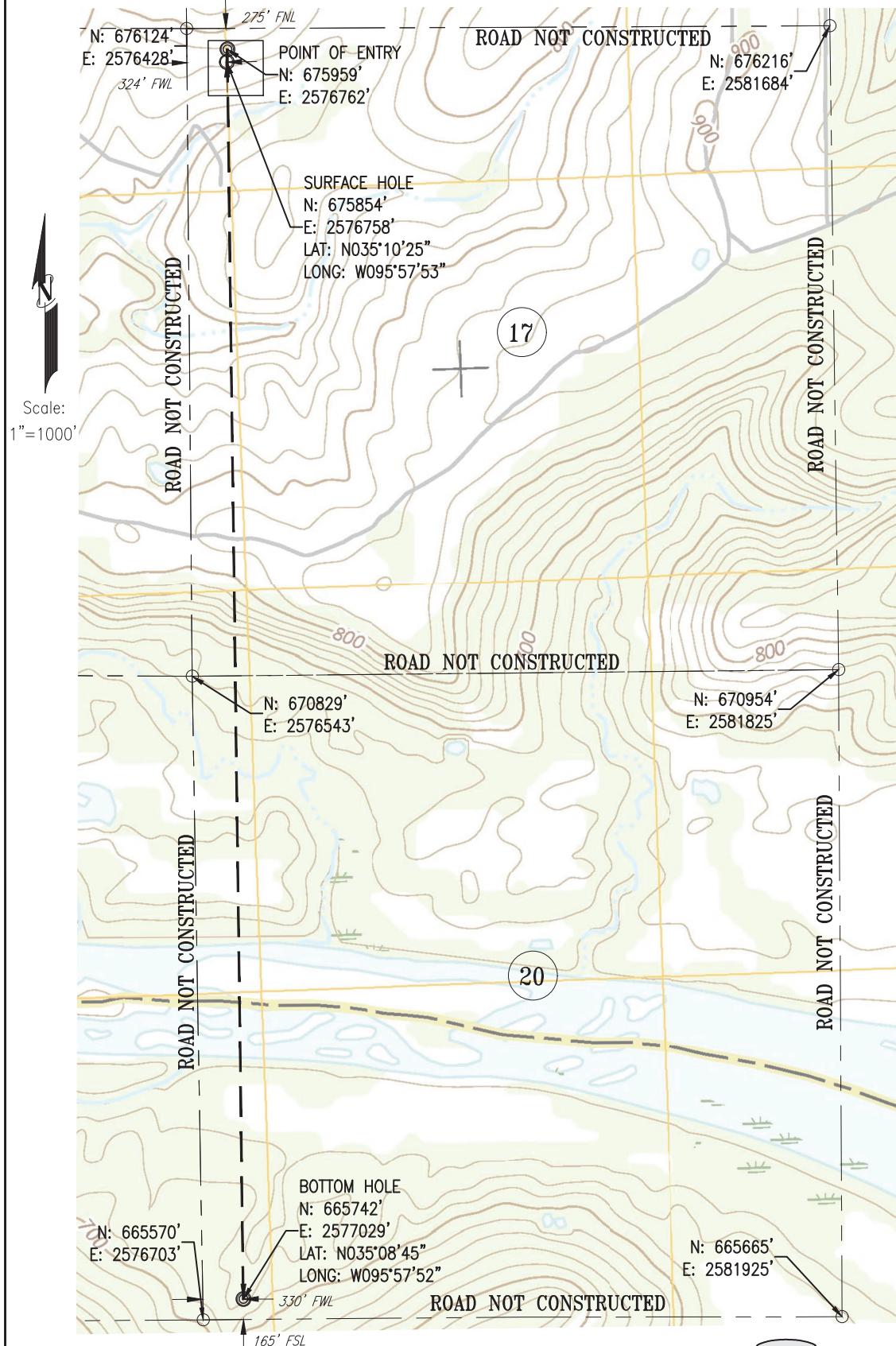
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

091 21803 OSCAR LU 2-17-20CH

Category	Description
SPACING - 671800	1/25/2019 - G56 - (640)(HOR) 20-8N-13E EST CNEY, MYES, WDFD, HNTN COMPL INT (WDFD) NLT 165' FNL/FSL, NLT 330' FEL/FWL COMPL INT (CNEY) NLT 330' FB COMPL INT (MYES, HNTN) NLT 660' FB
SPACING - 681007	1/25/2019 - G56 - (I.O.) 17 & 20-8N-13E ESTABLISH MULTIUNIT HORIZONTAL WELL X528400 MSSP, WDFD 17-8N-13E X671800 CNEY, MYES 20-8N-13E (WDFD IS AN ADJACENT COMMON SOURCE OF SUPPLY TO MSSP 17-8N-13E; MYES IS AN ADJACENT COMMON SOURCE OF SUPPLY TO CNEY 20-8N-13E) 50% 17-8N-13E 50% 20-8N-13E CALYX ENERGY III, LLC 8/6/2018

BOTTOM HOLE EXHIBIT

MCINTOSH County, Oklahoma Sections 17 & 20, Township 8N, Range 13E I.M.



Above Background data from
U.S.G.S. Topographic Map
Contour Interval 10'

SURFACE HOLE: 324' FWL & 275' FNL Sec. 17-T8N-R13E
POINT OF ENTRY: 330' FWL & 165' FNL Sec. 17-T8N-R13E
BOTTOM HOLE: 330' FWL & 165' FSL Sec. 20-T8N-R13E



Operator: CALYX ENERGY III, LLC
Well Name: OSCAR LU 2-17-20CH

Keystone Engineering
and Land Surveying, Inc.

W18-007 R2