API NUMBER: 063 24825

Straight Hole Stratigraphic Test

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
Expiration Date: 01/13/2019

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** **905**

Lease Name: ROOSEVELT **Well No: 2-5-18WH** **Well will be 905 feet from nearest unit or lease boundary.**

Operator Name: **CALYX ENERGY III LLC** Telephone: 9189494224 OTC/OCC Number: 23515 0

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	MAYES	4000	6		
2	WOODFORD	4150	7		
3	HUNTON	4230	8		
4	SYLVAN	4250	9		
5			10		

Spacing Orders: No Spacing
Location Exception Orders:
Increased Density Orders:

Pending CD Numbers:
Special Orders:

Total Depth: 4400 Ground Elevation: 737 **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

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

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

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
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	7/13/2018 - G57 - NA - STRATIGRAPHIC TEST
STRAT TEST	7/13/2018 - G57 - THIS WELL HAS BEEN APPROVED AS A STRATIGRAPHIC TEST WITH THE INTENT TO SET SURFACE CASING ONLY. OPERATOR WILL FILE AN AMENDED FORM 1000 CHANGING THE TYPE OF DRILLING OPERATION AT A LATER DATE.

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.