

**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 A

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

Horizontal Hole Oil & Gas

Amend reason: ADD HORIZONTAL INFO, CORRECT SURFACE FOOTAGES

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 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: 673572 Location Exception Orders: 677378 Increased Density Orders: 676682
673549 675537
673551 675450
671026 675538

Pending CD Numbers: 201801931

Special Orders:

Total Depth: 14162 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: 551649

H. SEE MEMO

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 18 Twp 8N Rge 12E County HUGHES

Spot Location of End Point: NW NW SW NE

Feet From: NORTH 1/4 Section Line: 1615

Feet From: EAST 1/4 Section Line: 2618

Depth of Deviation: 3718

Radius of Turn: 382

Direction: 225

Total Length: 9844

Measured Total Depth: 14162

True Vertical Depth: 4250

End Point Location from Lease,
Unit, or Property Line: 0

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 - 675450

7/27/2018 - G57 - 8-8N-12E
X673572 WDFD
1 WELL
CALYX ENERGY III, LLC.
3-29-2018

INCREASED DENSITY - 675537

7/27/2018 - G57 - 5-8N-12E
X673572 WDFD
1 WELL
CALYX ENERGY III, LLC.
3-30-2018

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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.

Category	Description
INCREASED DENSITY - 675538	7/27/2018 - G57 - 7-8N-12E X673572 WDFD 1 WELL CALYX ENERGY III, LLC. 3-30-2018
INCREASED DENSITY - 676682	7/27/2018 - G57 - 18-8N-12E X671026 WDFD 1 WELL CALYX ENERGY, LLC. 4-23-2018
LOCATION EXCEPTION - 677378	7/27/2018 - G57 - (I.O.) 5,7,8,18-8N-12E X673572 MYES, WDFD, HNTN 5,7,8-8N-12E X673549 SLVN 5,7,8-8N-12E X573551 SLVN 18-8N-12E X671026 MYES, WDFD, HNTN 18-8N-12E COMPL. INT. (5-8N-12E) NFT 1320' FSL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (8-8N-12E) NCT 0' FNL, NCT 0' FWL, NCT 660' FEL COMPL. INT. (7-8N-12E) NCT 0' FSL, NCT 0' FEL, NFT 990' FEL** COMPL. INT. (18-8N-12E) NCT 0' FNL, NCT 2640' FSL, NCT 330' FEL CALYX ENERGY III, LLC. 5-7-2018 **S/B NFT 1320' FEL; WILL BE CORRECTED AT THE HEARING FOR THE FINAL ORDER PER THE OPERATOR
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
PENDING CD - 201801931	6/1/2018 - G57 - (I.O.) 5,7,8,18-8N-12E X673572 MYES, WDFD, HNTN 5,7,8-8N-12E X673549 SLVN 5,7,8-8N-12E X673551 SLVN 18-8N-12E X671026 MYES, WDFD, HNTN 18-8N-12E (MYES, HNTN, SLVN ARE THE ADJACENT COMMON SOURCES OF SUPPLY TO THE WDFD) 15% 5-8N-12E 30% 8-8N-12E 40% 7-8N-12E 15% 18-8N-12E NO OP. NAMED REC 3-26-2018 (DUNN)
SPACING - 671026	7/27/2018 - G57 - (640) 18-8N-12E EST MYES, WDFD, HNTN POE TO BHL (MYES, HNTN) NLT 660' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL (COEXIST WITH SP. ORDER #297893 HNTN SE4)
SPACING - 673549	6/1/2018 - G57 - (640)(HOR) 5,7,8-8N-12E EST SLVN POE TO BHL (SLVN) NLT 330' FB
SPACING - 673551	6/1/2018 - G57 - (640)(HOR) 18-8N-12E EST SLVN POE TO BHL NLT 330' FB
SPACING - 673572	6/1/2018 - G57 - (640)(HOR) 5,7,8-8N-12E EXT 666244 WDFD HNTN EST MYES, OTHER POE TO BHL (MYES, HNTN) NLT 660' FB POE TO BHL (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

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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.

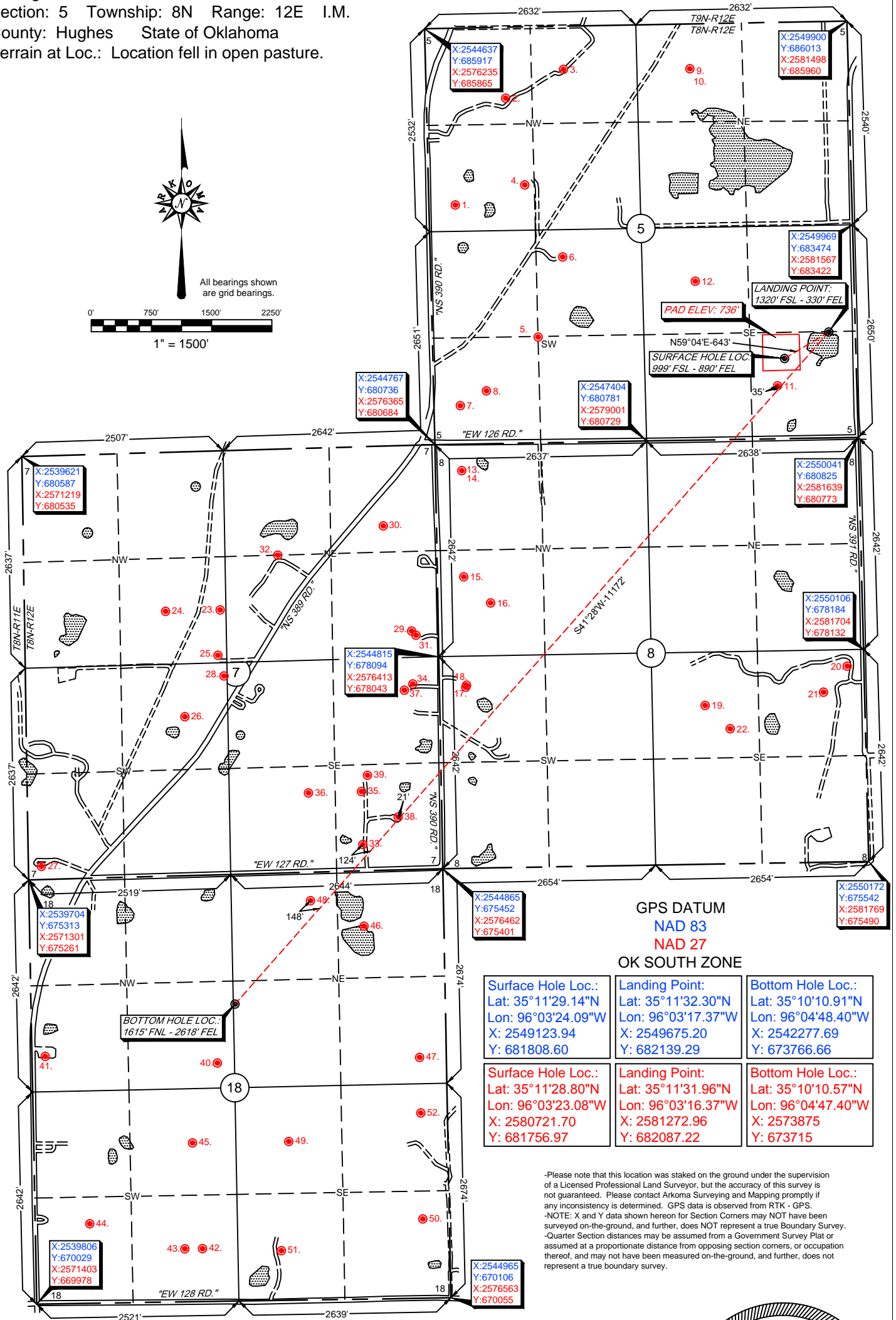
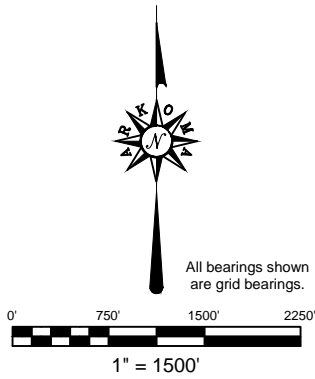


Well Location Plat

S.H.L. Sec. 5-8N-12E I.M.
B.H.L. Sec. 18-8N-12E I.M.

API:063 24825

Operator: CALYX ENERGY III, LLC
Lease Name and No.: ROOSEVELT 2-5-18WH
Footage: 999' FSL - 890' FEL **Final Pad Elev.: 736'**
Section: 5 Township: 8N Range: 12E I.M.
County: Hughes State of Oklahoma
Terrain at Loc.: Location fell in open pasture.



GPS DATUM

NAD 83

NAD 27

OK SOUTH ZONE

Surface Hole Loc.: Lat: 35°11'29.14"N Lon: 96°03'24.09"W X: 2549123.94 Y: 681808.60	Landing Point: Lat: 35°11'32.30"N Lon: 96°03'17.37"W X: 2549675.20 Y: 682139.29	Bottom Hole Loc.: Lat: 35°10'10.91"N Lon: 96°04'48.40"W X: 2542277.69 Y: 673766.66
Surface Hole Loc.: Lat: 35°11'28.80"N Lon: 96°03'23.08"W X: 2580721.70 Y: 681756.97	Landing Point: Lat: 35°11'31.96"N Lon: 96°03'16.37"W X: 2581272.96 Y: 682087.22	Bottom Hole Loc.: Lat: 35°10'10.57"N Lon: 96°04'47.40"W X: 2573875 Y: 673715

-Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS.
-NOTE: X and Y data shown hereon for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey.
-Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportionate distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground, and further, does not represent a true boundary survey.

Survey and plat by:
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Wilburton, OK 74578
Ph. 918-465-5711 Fax 918-465-5030
Certificate of Authorization No. 5348
Expires June 30, 2018
Invoice #7653-B
Date Staked: 02/26/18 By: H.S.
Date Drawn: 02/26/18 By: J.H.
Rev. X&Y Decimals: 06/05/18 By: R.M.
Rev. SHL: 06/06/18 By: J.H.
Rev. LP: 08/01/18 By: J.K.

Certification:

This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

LANCE G. MATHIS

08/01/18

OK LPLS 1664

