API NUMBER: 063 24762

Horizontal Hole Oil & Gas

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

Approval Date: 02/07/2018
Expiration Date: 08/07/2018

PERMIT TO DRILL

WELL LOCATION: Sec: 23 Twp: 9N Rge: 11E County: HUGHES

SPOT LOCATION: SE NE SE SE FEET FROM QUARTER: FROM **SOUTH** FROM **EAST**
SECTION LINES: **724** **219**

Lease Name: MADISON **Well No: 1-23-14WH** **Well will be 219 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

DUNN REVOCABLE TRUST
11710 S. HOLLEY CT.
JENKS OK 74037

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

	Name	Depth		Name	Depth
1	WOODFORD	4000	6		
2			7		
3			8		
4			9		
5			10		

Spacing Orders: 666635
667659

Location Exception Orders: 667547

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 15250 Ground Elevation: 905 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 40

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes

PIT 1 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: CALVIN

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-33507
H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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.

HORIZONTAL HOLE 1

Sec 14 Twp 9N Rge 11E County HUGHES

Spot Location of End Point: N2 NE NE NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 3827

Radius of Turn: 573

Direction: 358

Total Length: 10522

Measured Total Depth: 15250

True Vertical Depth: 4100

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

Notes:

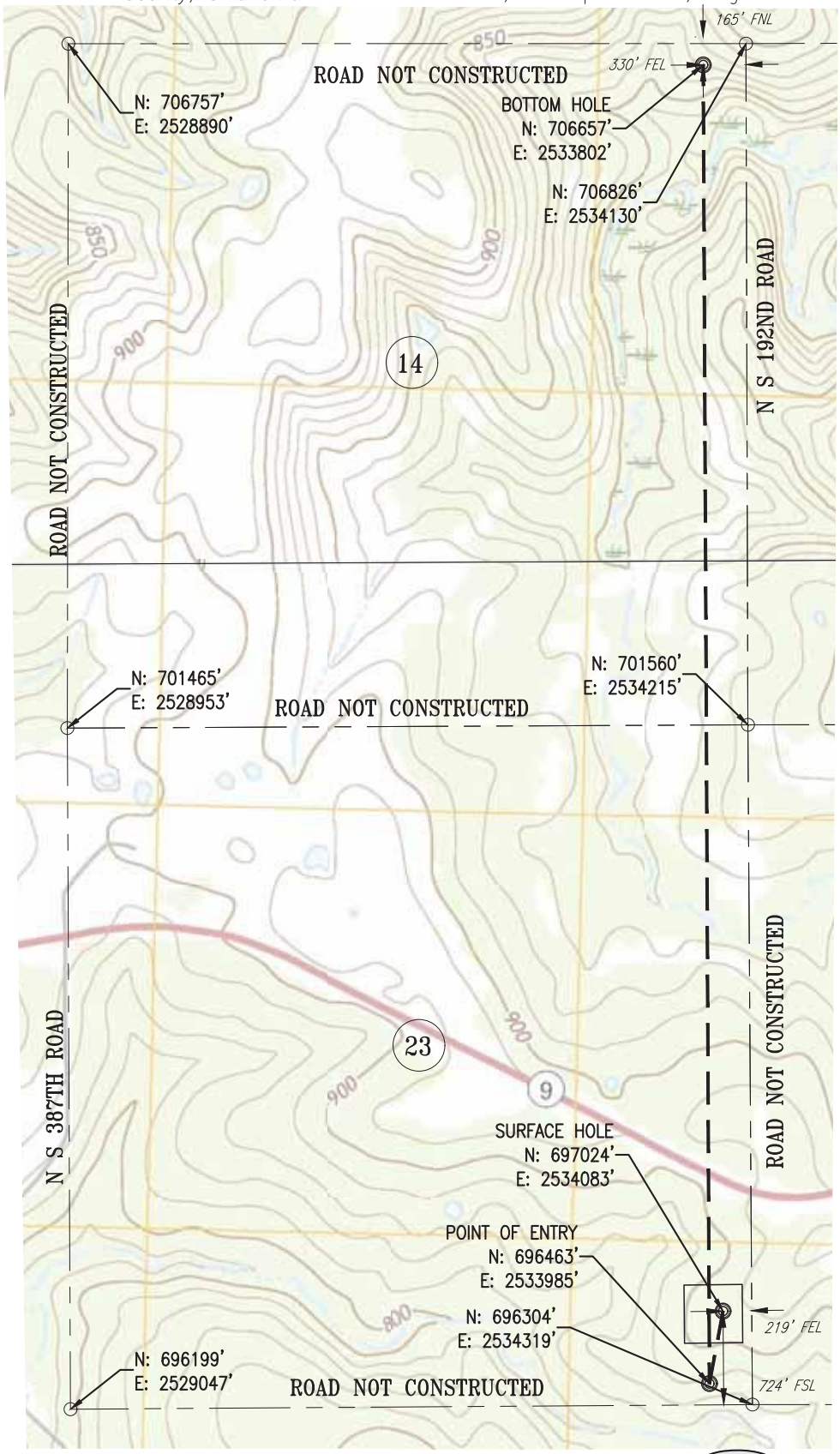
Category	Description
DEEP SURFACE CASING	2/5/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING
HYDRAULIC FRACTURING	2/5/2018 - G71 - OCC 165:10-3-10 REQUIRES: 1) PRIOR TO COMMENCEMENT OF 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 - 667547	2/6/2018 - G57 - (I.O.) 23 & 14-9N-11E X666635 WDFD COMPL. INT. (23-9N-11E) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (14-9N-11E) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL CALYX ENERGY III, LLC. 8-28-2017
SPACING - 666635	2/6/2018 - G57 - (640)(HOR) 23 & 14-9N-11E EXT 660420 WDFD, OTHER EST OTHER POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL
SPACING - 667659	2/6/2018 - G57 - (I.O.) 23 & 14- 9N-11E X666635 WDFD 50% 23-9N-11E 50% 14-9N-11E CALYX ENERGY III, LLC. 8-30-2017

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

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BOTTOM HOLE EXHIBIT

HUGHES County, Oklahoma Sections 23 & 14, Township 9N, Range 11E I.M.



N

Scale: 1"=1000'

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

SURFACE HOLE: 219' FEL & 724' FSL Sec. 23–T9N–R11E
POINT OF ENTRY: 330' FEL & 165' FSL Sec. 23–T9N–R11E
BOTTOM HOLE: 330' FEL & 165' FNL Sec. 14–T9N–R11E

Operator: CALYX ENERGY III, LLC
Well Name: MADISON 1–23–14WH

W17–028

Keystone Engineering and Land Surveying, Inc.

Keystone Engineering and Land Surveying, Inc. CA #5877 Exp. 6/30/19 P.O. Box 436 Stillwater, OK. 74076 Ph. (405) 743-3355