

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

API NUMBER: 011 24199

Approval Date: 03/25/2019

Expiration Date: 09/25/2020

Horizontal Hole
Multi Unit

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 02 Twp: 16N Rge: 13W

County: BLAINE

SPOT LOCATION: ☐ NW ☐ NE ☐ NE ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 300 2260

Lease Name: KNUTSON

Well No: 2-2-11XHM

Well will be 300 feet from nearest unit or lease boundary.

Operator Name: CONTINENTAL RESOURCES INC

Telephone: 4052349020; 4052349

OTC/OCC Number: 3186 0

CONTINENTAL RESOURCES INC
PO BOX 269000
OKLAHOMA CITY, OK 73126-9000

GERALD L. KNUTSON
14916 TOMASHA DRIVE
INDEPENDENCE MO 64055

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	10583	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201900529
201900528
201900527
201900526
201900532
201900533

Special Orders:

Total Depth: 20644

Ground Elevation: 1673

Surface Casing: 220

Depth to base of Treatable Water-Bearing FM: 120

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

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: RUSH SPRINGS

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 19-36256

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: OIL BASED

Chlorides Max: 300000 Average: 200000

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: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 11 Twp 16N Rge 13W County BLAINE

Spot Location of End Point: S2 S2 S2 S2

Feet From: SOUTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 2640

Depth of Deviation: 10179

Radius of Turn: 409

Direction: 178

Total Length: 9822

Measured Total Depth: 20644

True Vertical Depth: 11313

End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category

Description

HYDRAULIC FRACTURING

3/1/2019 - 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

INTERMEDIATE CASING

3/1/2019 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES

MEMO

3/1/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201900526

3/18/2019 - GB1 - 11-16N-13W
X201900528 MSSP
2 WELLS
NO OP. NAMED
REC. 3/15/2019 (DENTON)

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.

011 24199 KNUTSON 2-2-11XHM

Category	Description
PENDING CD - 201900527	3/18/2019 - GB1 - 2-16N-13W X201900529 MSSP 2 WELLS NO OP. NAMED REC. 3/15/2019 (DENTON)
PENDING CD - 201900528	3/18/2019 - GB1 - (640) 11-16N-13W VAC 87122 MISS VAC 159742 CSTR EXT 668965 MSSP, OTHER REC 3/12/2019 (MINMIER)
PENDING CD - 201900529	3/18/2019 - GB1 - (640) 2-16N-13W VAC 87122 MISS VAC 357576 CSTR EXT 593865 MSSP, OTHER REC 3/12/2019 (MINMIER)
PENDING CD - 201900532	3/18/2019 - GB1 - (I.O.) 2 & 11-16N-13W EST MULTIUNIT HORIZONTAL WELL X201900529 MSSP 2-16N-13W X201900528 MSSP 11-16N-13W 50% 2-16N-13W 50% 11-16N-13W NO OP. NAMED REC. 3/15/2019 (DENTON)
PENDING CD - 201900533	3/18/2019 - GB1 - (I.O.) 2 & 11-16N-13W X201900529 MSSP 2-16N-13W X201900528 MSSP 11-16N-13W SHL (2-16N-13W) 30' FNL, 2260' FWL *** COMPL. INT. (2-16N-13W) NCT 150' FNL, NCT 0' FSL, NCT 1320' FWL COMPL. INT. (11-16N-13W) NCT 0' FNL, NCT 150' FSL, NCT 1320' FWL NO OP. NAMED REC. 3/15/2019 (DENTON)
	*** ITD HAS SHL AS 300' FNL, 2260' FWL; TO BE CORRECTED AS HEARING FOR FINAL ORDER PER ATTORNEY FOR OPERATOR

EXHIBIT: A (1 of 2)
SHEET: 8.5x11
SHL: 2-16N-13W
BHL-2 11-16N-13W



COVER SHEET

CONTINENTAL RESOURCES, INC.
P.O. BOX 26900 OKLAHOMA CITY, OK 73126 * (T) 1-800-256-8955 (F) 405-234-9253


Section 2 Township 16N Range 13W I.M. Well: KNUTSON 2-2-11XHM
County BLAINE State OK Well: --
Operator CONTINENTAL RESOURCES, INC.

NAD-83							EXISTING ELEVATION	DESIGN ELEVATION
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE			
W2	KNUTSON 2-2-11XHM	327346	1804544	35° 53' 52.72" -98° 33' 12.86"	35.897977 -98.553573	300' FNL / 2260' FWL (NW/4 SEC 2)	1672.88'	1673.48'
LP-2	LANDING POINT	327344	1804923	35° 53' 52.72" -98° 33' 08.25"	35.897977 -98.552291	300' FNL / 2640' FWL (NE/4 SEC 2)	--	--
BHL-2	BOTTOM HOLE LOCATION	317246	1804904	35° 52' 12.85" -98° 33' 07.78"	35.870236 -98.552162	50' FSL / 2640' FWL (SW/4 SEC 11)	--	--
X-1	CRAIN #1-11 (LEONA B CRAIN)	319380	1803966	35° 52' 33.90" -98° 33' 19.34"	35.876083 -98.555371	11-16N-13W TD: 12,147' 2,170' FSL / 1,683' FWL	--	--
X-2	SMOOT #1	320481	1805582	35° 52' 44.88" -98° 33' 59.78"	35.879133 -98.549938	11-16N-13W TD: 9,810' 1,975' FNL / 1,969' FEL	--	--
X-3	CRAIN #1-11	319558	1804084	35° 52' 35.67" -98° 33' 17.91"	35.876575 -98.554974	11-16N-13W TD: 9,740' 2,350' FSL / 1,800' FWL	--	--
X-4	CRAIN #11-2	320481	1803612	35° 52' 44.77" -98° 33' 23.71"	35.879103 -98.556586	11-16N-13W TD: 9,685' 1,986' FNL / 1,320' FWL	--	--
X-5	LEONA #1-11	319502	1804484	35° 52' 35.14" -98° 33' 13.05"	35.876428 -98.553625	11-16N-13W TD: 9,532' 2,300' FSL / 2,200' FWL	--	--

NAD-27							EXISTING ELEVATION	DESIGN ELEVATION
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE			
W2	KNUTSON 2-2-11XHM	327321	1836146	35° 53' 52.56" -98° 33' 11.58"	35.897934 -98.553216	300' FNL / 2260' FWL (NW/4 SEC 2)	1672.88'	1673.48'
LP-2	LANDING POINT	327319	1836525	35° 53' 52.56" -98° 33' 06.96"	35.897934 -98.551934	300' FNL / 2640' FWL (NE/4 SEC 2)	--	--
BHL-2	BOTTOM HOLE LOCATION	317221	1836506	35° 52' 12.69" -98° 33' 06.50"	35.870192 -98.551805	50' FSL / 2640' FWL (SW/4 SEC 11)	--	--
X-1	CRAIN #1-11 (LEONA B CRAIN)	319355	1835567	35° 52' 33.74" -98° 33' 18.05"	35.876039 -98.555014	11-16N-13W TD: 12,147' 2,170' FSL / 1,683' FWL	--	--
X-2	SMOOT #1	320456	1837183	35° 52' 44.72" -98° 32' 58.49"	35.879090 -98.549581	11-16N-13W TD: 9,810' 1,975' FNL / 1,969' FEL	--	--
X-3	CRAIN #1-11	319533	1835686	35° 52' 35.51" -98° 33' 16.62"	35.876531 -98.554618	11-16N-13W TD: 9,740' 2,350' FSL / 1,800' FWL	--	--
X-4	CRAIN #11-2	320456	1835214	35° 52' 44.61" -98° 33' 22.42"	35.879060 -98.556229	11-16N-13W TD: 9,685' 1,986' FNL / 1,320' FWL	--	--
X-5	LEONA #1-11	319477	1836085	35° 52' 34.98" -98° 33' 11.77"	35.876384 -98.553268	11-16N-13W TD: 9,532' 2,300' FSL / 2,200' FWL	--	--

Certificate of Authorization No. 7318

Date Staked: 12-7-18
Date Drawn: 12-6-18

 Prepared By:
Petro Land Services South
10400 Vineyard Blvd.
Suite C
Oklahoma City, OK 73120

REVISIONS				
No.	DATE	BY	DESCRIPTION	COMMENTS
00	12-6-18	HDG	ISSUED FOR APPROVAL	--

