

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

API NUMBER: 011 24010

Approval Date: 05/10/2018

Expiration Date: 11/10/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 27 Twp: 15N Rge: 11W

County: BLAINE

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 238 1650

Lease Name: TILL

Well No: 2-27HM

Well will be 238 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

ADAM & SHERRY COWAN
256139 E 780 RD
WATONGA OK 73772

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

	Name	Depth	Name	Depth
1	MISSISSIPPI	11294	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 578803

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201803005
201803090

Special Orders:

Total Depth: 16285

Ground Elevation: 1444

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 70

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

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

PERMIT NO: 18-34407

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 27 Twp 15N Rge 11W County BLAINE

Spot Location of End Point: S2 SW SE SW

Feet From: SOUTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 1650

Depth of Deviation: 10933

Radius of Turn: 490

Direction: 180

Total Length: 4582

Measured Total Depth: 16285

True Vertical Depth: 11294

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

Notes:

Category

Description

DEEP SURFACE CASING

5/7/2018 - 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

5/7/2018 - 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

INTERMEDIATE CASING

5/7/2018 - 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

5/7/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

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 24010 TILL 2-27HM

Category	Description
PENDING CD - 201803005	5/10/2018 - G60 - (I.O.) 27-15N-11W X578803 MISS 4 WELLS NO OP. NAMED REC. 5/7/18 (NORRIS)
PENDING CD - 201803090	5/10/2018 - G60 - (I.O.) 27-15N-11W X578803 MISS X165:10-3-28(C)(2)(B) MISS MAY BE CLOSER THAN 600' TO THE HOMSEY 1-22H OR THE COWAN 15-10-15N-11W-1HX OR THE PORKCHOP 34-15N-11W-1H ** POE TO BHL NCT 150' FNL, NCT 150' FSL, NCT 1320' FWL NO OP. NAMED REC. 5/7/18 (NORRIS) **WELL NAMES WILL BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION PER OPERATOR
SPACING - 578803	5/10/2018 - G60 - (640) 27-15N-11W EXT 563805 MISS, OTHERS

3501124010
EXHIBIT: A (1 of 2)
SHEET: 8.5x11
SHL: 27-15N-11W
BHL-2 27-15N-11W



COVER SHEET

CONTINENTAL RESOURCES, INC.

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

Section 27 Township 15N Range 11W I.M. Well: TILL 2-27HM
County BLAINE State OK Well: --
Operator CONTINENTAL RESOURCES, INC.

NAD-83

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W2	TILL 2-27HM	274479	1861399	35° 45' 12.53" -98° 21' 39.41"	35.753479 -98.360948	238' FNL / 1650' FWL (NW/4 SEC 27)	1443.68	1444.15
LP-2	LANDING POINT	274269	1861399	35° 45' 10.45" -98° 21' 39.41"	35.752903 -98.360947	448' FNL / 1650' FWL (NW/4 SEC 27)	--	--
BHL-2	BOTTOM HOLE LOCATION	269491	1861390	35° 44' 23.20" -98° 21' 39.30"	35.739779 -98.360917	50' FSL / 1650' FWL (SW/4 SEC 27)	--	--
X-1	EWING #1	273378	1863705	35° 45' 01.73" -98° 21' 11.39"	35.750480 -98.353165	27-15N-11W:NE4 TD: 10,362' 1,320' FSL / 1,320' FWL	--	--
X-2	HOAR UNIT #1	273398	1861417	35° 45' 01.83" -98° 21' 39.15"	35.750510 -98.360874	27-15N-11W:NW4 TD: 10,400' 1,320' FSL / 1,670' FWL	--	--
X-3	LOWMAN #1	273400	1861067	35° 45' 01.85" -98° 21' 43.39"	35.750514 -98.362053	27-15N-11W:NW4 TD: 10,275' 1,320' FSL / 1,320' FWL	--	--
X-4	GUENTHER #1-27	270076	1864352	35° 44' 29.09" -98° 21' 03.40"	35.741414 -98.350944	27-15N-11W:SE4SE4 TD: 10,350' 660' FSL / 1,980' FWL	--	--
X-5	TILL #1-27H	269710	1862180	35° 44' 25.39" -98° 21' 29.72"	35.740386 -98.358256	27-15N-11W:SE4SE4SW4 TD: 16,900' 275' FSL / 2,440' FWL	--	--

NAD-27

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W2	TILL 2-27HM	274455	1892999	35° 45' 12.36" -98° 21' 38.17"	35.753434 -98.360602	238' FNL / 1650' FWL (NW/4 SEC 27)	1443.68	1444.15
LP-2	LANDING POINT	274245	1892999	35° 45' 10.29" -98° 21' 38.16"	35.752857 -98.360601	448' FNL / 1650' FWL (NW/4 SEC 27)	--	--
BHL-2	BOTTOM HOLE LOCATION	269467	1892990	35° 44' 23.04" -98° 21' 38.06"	35.739733 -98.360571	50' FSL / 1650' FWL (SW/4 SEC 27)	--	--
X-1	EWING #1	273354	1895305	35° 45' 01.56" -98° 21' 10.15"	35.750434 -98.352820	27-15N-11W:NE4 TD: 10,362' 1,320' FSL / 1,320' FWL	--	--
X-2	HOAR UNIT #1	273373	1893017	35° 45' 01.67" -98° 21' 37.90"	35.750464 -98.360528	27-15N-11W:NW4 TD: 10,400' 1,320' FSL / 1,670' FWL	--	--
X-3	LOWMAN #1	273376	1892667	35° 45' 01.69" -98° 21' 42.15"	35.750469 -98.361707	27-15N-11W:NW4 TD: 10,275' 1,320' FSL / 1,320' FWL	--	--
X-4	GUENTHER #1-27	270052	1895952	35° 44' 28.93" -98° 21' 02.16"	35.741368 -98.350599	27-15N-11W:SE4SE4 TD: 10,350' 660' FSL / 1,980' FWL	--	--
X-5	TILL #1-27H	269686	1893780	35° 44' 25.23" -98° 21' 28.48"	35.740341 -98.357911	27-15N-11W:SE4SE4SW4 TD: 16,900' 275' FSL / 2,440' FWL	--	--

Certificate of Authorization No. 7318

Date Staked: 04-10-18
Date Drawn: 04-10-18



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

REVISIONS

No.	DATE	BY	DESCRIPTION	COMMENTS
00	04-10-18	MJL	ISSUED FOR APPROVAL	--

Oklahoma PLS No.1196 DATE