API NUMBER: 049 25171

Oil & Gas

Horizontal Hole

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

Approval Date: 12/28/2017
Expiration Date: 06/28/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	20	Twp:	3N	Rge: 4W	County:	GARVIN
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SPOT LOCATION: SW NE NE SE FEET FROM QUARTER: FROM SOUTH FROM EAST SECTION LINES: 2289 491

Lease Name: OMER Well No: 2-20-17XHS Well will be 491 feet from nearest unit or lease boundary.

Operator CONTINENTAL RESOURCES INC Telephone: 4052349020; 4052349 OTC/OCC Number: 3186 0

CONTINENTAL RESOURCES INC

PO BOX 269000

OKLAHOMA CITY, OK 73126-9000

ANN & LYNN ROLEN

P.O. BOX 874

LINDSAY OK 73052

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

Name Depth Name Depth SPRINGER 1 11650 6 2 7 3 8 4 9 10 131585 Spacing Orders: Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201707898 Special Orders:

201707897 201707894 201707896

Total Depth: 19035 Ground Elevation: 1164 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 340

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: ON SITE

Type of Mud System: WATER BASED D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-33569

Chlorides Max: 3000 Average: 2000 H. SEE MEMO

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well?

Wellhead Protection Area?

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 2

Liner not required for Category: 2
Pit Location is BED AQUIFER
Pit Location Formation: DUNCAN

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: ON SITE

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: 3

Liner required for Category: 3

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

HORIZONTAL HOLE 1

Sec 17 Twp 3N Rge 4W County GARVIN

Spot Location of End Point: N2 NE NE NE Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 11268 Radius of Turn: 382

Direction: 3

Total Length: 7167

Measured Total Depth: 19035

True Vertical Depth: 11650

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

Notes:

Category Description

DEEP SURFACE CASING 12/6/2017 - 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 12/6/2017 - 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 12/6/2017 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 1 -

CUTTINGS WILL BE SOIL FARMED, PIT 2 – OBM RETURNED TO VENDOR, CUTTINGS WILL BE HAULED TO PAULS VALLEY LANDFILL (GARVIN) 3525009 OR SOUTHERN PLAINS LANDFILL

(GRADY) 3526013

PENDING CD - 201707894 12/6/2017 - G57 - (I.O.) 17-3N-4W

X131585 SPRG

5 WELLS

CONTINENTAL RESOURCES, INC REC 12-22-2017 (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.

049 25171 OMER 2-20-17XHS

Category Description

X131585 SPRG

10 WELLS

CONTINENTAL RESOURCES, INC.

REC 12-22-2017 (DENTON)

PENDING CD - 201707897 12/6/2017 - G57 - (I.O.) 20 & 17-3N-4W

EST MULTIUNIT HORÍZONTAL WELL

X131585 SPRG 33.33% 20-3N-4W 66.67% 17-3N-4W

CONTINENTAL RESOURCES, INC.

REC 12-22-2017 (DENTON)

PENDING CD - 201707898 12/6/2017 - G57 - (I.O.) 20 & 17-3N-4W

X131585 SPRG X165:10-3-28(C)(2)(B)

COMPL. INT. (20-3N-4W) NCT 1320' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (17-3N-4W) NCT 0' FSL, NCT 150' FNL, NCT 330' FEL

NO OP. NAMÈD

REC 12-22-2017 (DENTON)

SPACING - 131585 12/6/2017 - G57 - (640) 20 & 17-3N-4W

EST SPRG, OTHERS

API: 049 25171

EXHIBIT: <u>A (1 of 3)</u> SHEET: 8.5x11 20-3N-4W SHL: BHL-1: <u>17-3N</u>-4W BHL-2: <u>29-3N-4W</u>



COVER SHEET

$\frac{\text{CONTINENTAL}}{\text{P.O. BOX 26900 OKLAHOMA CITY, OK 73126 * (T) 1-800-256-8955 (F) 405-234-9253}}$

Section $\underline{20}$ Township $\underline{3N}$ Range $\underline{4W}$ I.M. Well W1: \underline{OMER} 2-20-17XHS Well W2: ___OMER 3-20-29XHS __State ___OK County _ GARVIN

CONTINENTAL RESOURCES, INC.

NAD-83

POINT	NAME	NORTHING	EASTING	ELEVATION	LATITUDE LONGITUDE	LATITUDE LONGITUDE		DESIGN ELEVATION
W1	OMER 2-20-17XHS	503633	2078207	1168.41	N34'43'00.09" W97'38'05.75"	N34.716691° W97.634931°	2,289' FSL / 491' FEL (SE/4 SEC 20)	1163.84
W2	OMER 3-20-29XHS	503633	2078237	1167.01	N34'43'00.09" W97'38'05.39"	N34.716691° W97.634831°	2,289' FSL / 461' FEL (SE/4 SEC 20)	1163.84
LP-1	LANDING POINT	504107	2078366		N34'43'04.77" W97'38'03.83"	N34.717992* W97.634398*	2,526' FNL / 330' FEL (SE/4 SEC 20)	
LP-2	LANDING POINT	503151	2078371		N34'42'55.32" W97'38'03.80"	N34.715366* W97.634390*	1,807' FSL / 330' FEL (SE/4 SEC 20)	
BHL-1	BOTTOM HOLE LOCATION	511863	2078335		N34'44'21.49" W97'38'03.86"	N34.739304° W97.634406°	50' FNL / 330' FEL (NE/4 SEC 17)	
BHL-2	BOTTOM HOLE LOCATION	496105	2078415		N34'41'45.62" W97'38'03.59"	N34.696006* W97.634330*	50' FSL / 330' FEL (SE/4 SEC 29)	
X1	CUNNINGHAM RANCH	509879	2076687		N36'24'00.44" W97'37'56.59"	N36.400122 W97.632387	17-3N-4W:S2SW4NE4 TD: 12,500' 610' FSL / 660' FWL	
X2	HINES 1-17H	506791	2074852		N36'23'29.97" W97'38'19.18"	N36.391658 W97.638662	17-3N-4W:SW4SW4SE4SW4 TD: 19,332' 170' FSL / 1,450' FWL	
Х3	OMER 1-17H	506912	2073801		N36'23'31.21" W97'38'32.03"	N36.392002 W97.642231	17-3N-4W:SE4SW4SE4SW4 TD: 17,871' 295' FSL / 400' FWL	
X4	PURDY HART SU NE	511252	2078001		N36'24'13.97" W97'37'40.45"	N36.403880 W97.627904	17-3N-4W:NE4NE4 TD: 9,260' 1,980' FSL / 1,980' FWL	
X5	LANG 1-20H	501624	2706861		N36'22'38.80" W97'37'54.85"	N36.377446 W97.631903	20-3N-4W:SW4SE4SW4SE4 TD: 19,140' 285' FSL / 1,850' FEL	
Х6	WARDEN 1-20H	501599	2073719		N36'22'38.68" W97'38'33.27"	N36.377410 W97.642574	20-3N-4W:SW4SW4SW4SW4 TD: 18,600' 270' FSL / 305' FWL	
X7	MARIE GREGORY 1-29H	501599	2073764		N36'22'38.67" W97'38'32.72"	N36.377410 W97.642421	20-3N-4W:SE4SW4SW4SW4 TD: 18,477' 270' FSL / 350' FWL	
X8	BRAY 1-29H	497374	2077411		N36'21'56.76" W97'37'48.32"	N36.365767 W97.630090	29-3N-4W:SE4 TD: 4,470' 1,320' FSL / 1,320' FWL	
Х9	VESTA MARIE 1-29H	500942	2074758		N36'22'32.14" W97'38'20.60"	N36.375595 W97.639055	29-3N-4W:SW4NW4NE4NW4 TD: 19,050' 390' FNL / 1,340' FWL	

NAD-27

IN F	(D-27							
POINT	NAME	NORTHING	EASTING	ELEVATION	LATITUDE LONGITUDE	LATITUDE LONGITUDE		DESIGN ELEVATION
W1	OMER 2-20-17XHS	503591	2109803	1168.41	N34'42'59.81" W97'38'04.64"	N34.716614' W97.634622'	2,289' FSL / 491' FEL (SE/4 SEC 20)	1163.84
W2	OMER 3-20-29XHS	503591	2109833	1167.01	N34'42'59.81" W97*38'04.28"	N34.716614' W97.634522'	2,289' FSL / 461' FEL (SE/4 SEC 20)	1163.84
LP-1	LANDING POINT	504065	2109961		N34'43'04.50" W97'38'02.72"	N34.717916* W97.634089*	2,526' FNL / 330' FEL (SE/4 SEC 20)	
LP-2	LANDING POINT	503109	2109967		N34'42'55.04" W97'38'02.69"	N34.715289* W97.634081*	1,807' FSL / 330' FEL (SE/4 SEC 20)	
BHL-1	BOTTOM HOLE LOCATION	511821	2109931		N34'44'21.22" W97'38'02.75"	N34.739228* W97.634097*	50' FNL / 330' FEL (NE/4 SEC 17)	
BHL-2	BOTTOM HOLE LOCATION	496063	2110010		N34'41'45.34" W97'38'02.48"	N34.695929* W97.634021*	50' FSL / 330' FEL (SE/4 SEC 29)	
X1	CUNNINGHAM RANCH	509853	2108287		N36*24'00.32" W97*37'55.41"	N36.400088 W97.632058	17-3N-4W:S2SW4NE4 TD: 12,500' 610' FSL / 660' FWL	
X2	HINES 1-17H	506765	2106451		N36'23'29.85" W97'38'18.00"	N36.391624 W97.638333	17-3N-4W:SW4SW4SE4SW4 TD: 19,332' 170' FSL / 1,450' FWL	
хз	OMER 1-17H	506887	2105400		N36'23'31.09" W97'38'30.85"	N36.391968 W97.641902	17-3N-4W:SE4SW4SE4SW4 TD: 17,871' 295' FSL / 400' FWL	
X4	PURDY HART SU NE	511227	2109601		N36'24'13.85" W97'37'39.27"	N36.403846 W97.627576	17-3N-4W:NE4NE4 TD: 9,260' 1,980' FSL / 1,980' FWL	
X5	LANG 1-20H	501599	2108460		N36'22'38.68" W97'37'53.67"	N36.377411 W97.631575	20-3N-4W:SW4SE4SW4SE4 TD: 19,140' 285' FSL / 1,850' FEL	
Х6	WARDEN 1-20H	501574	2105319		N36'22'38.55" W97'38'32.08"	N36.377375 W97.642246	20-3N-4W:SW4SW4SW4SW4 TD: 18,600' 270' FSL / 305' FWL	
X7	MARIE GREGORY 1-29H	501574	2105364		N36'22'38.55" W97'38'31.53"	N36.377375 W97.642093	20-3N-4W:SE4SW4SW4SW4 TD: 18,477' 270' FSL / 350' FWL	
X8	BRAY 1-29H	497349	2109010		N36*21'56.64" W97*37'47.14"	N36.365732 W97.629761	29-3N-4W:SE4 TD: 4,470' 1,320' FSL / 1,320' FWL	
х9	VESTA MARIE 1-29H	500917	2106357		N36'22'32.02" W97'38'19.42"	N36.375561 W97.638727	29-3N-4W:SW4NW4NE4NW4 TD: 19,050' 390' FNI / 1,340' FWI	

Certificate of Authorization No. 7318

Date Staked: N/A Date Drawn: 11-30-17



Prepared By:
Petro Land Services South
10404 Vineyard Blvd.
Suite G100
Oklahoma City, OK 73120

R E	VISION			
No.	DATE	BY	DESCRIPTION	COMMENTS
00	11-30-2017	MJL	ISSUED FOR APPROVAL	

PETRO LAND SERVICES SOUTH, LLC 10404 VINEYARD BLVD. SUITE G100, OKLA. CITY, OKLA. 73120 * OFFICE (405) 212-3108 Certificate of Authorization No. 7318

Continental

CONTINENTAL RESOURCES,INC (OPERATOR)

8.5x14 SHEET: _ 20-3N-4W **GARVIN** SHL: _ County Oklahoma 2,289' FSL-491' FEL Section 17-3N-4W 20 Township _ 3N Range 4W I.M. BHL-1:

EXHIBIT: A (2 of 3)

WELL W1: OMER 2-20-17XHS X: 2076018 X: 2107614 Y: 511909 Y: 511867 WELL W2: OMER 3-20-29XHS Y: 511909 2647' 2647 X: 2078665 Y: 511914 X: 2073372 Y: 511904 X: 2110260 Y: 511871 X: 2104967 Y: 511862 BHL-1 **(W)** X4 2640 NW NE X1 X: 2073387 2078672 Y: 509260 Y: 509274 X: 2110268 Y: 509231 X: 2104982 Y: 509218 GRAPHIC SCAL 2645 SE SW хз X2 **(W)** X: 2078680 Y: 506634 (W) X: 2073403 Y: 506616 2076041 X: 2104998 Y: 506574 X: 2110275 506625 Y: 506592 2107637 506583 GPS DATUM NAD-83 NAD-27 2644 OK NORTH ZONE NE NW US FEET SCALE: 1'' = 1250'LP-1 X: 2078696 Y: 503989 X: 2073409 Y: 503972 X: 2110292 Y: 503947 X: 2105004 Y: 503930 W1 491' FEL 2645 SE SW X: 2076064 Y: 501337 X: 2107659 **∭** X5 (W) X7 501294 2078713 X: 2073415 Y: 501328 501345 2649 2649 2110308 X: 2105011 Y: 501286 Y: 501303

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 PLS 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.

CERTIFICATE:

I, Beau Winfrey an Oklahoma Licensed Land Surveyor and an authorized agent of Petro Land Services South, LLC, do hereby certify to the information shown herein.



Oklahoma PLS No.1766

Date Staked: N/A Date Drawn: 11-30-17