API NUMBER: 011 24232

Oil & Gas

Horizontal Hole

Name:

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

Approval Date: 07/09/2019
Expiration Date: 01/09/2021

455 feet from nearest unit or lease boundary.

3186 0

OTC/OCC Number:

PERMIT TO DRILL

WELL LOCATION: Sec: Twp: 15N Rge: 13W County: BLAINE FEET FROM QUARTER: SPOT LOCATION: lsw FROM SOUTH WEST NW sw ll se SECTION LINES: 455 1485 Lease Name: RANDOLPH Well No: 4-34-27XHM CONTINENTAL RESOURCES INC Operator Telephone: 4052349020: 4052349

CONTINENTAL RESOURCES INC

PO BOX 269000

OKLAHOMA CITY, OK 73126-9000

CRAIG & MARCELLA COWAN

Well will be

87080 N 2500 RD

FAY OK 73646

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

Name Depth Name Depth MISSISSIPPIAN 1 11587 6 2 7 8 3 4 9 10 686029 Spacing Orders: Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201903045 Special Orders:

201903048

Total Depth: 18831 Ground Elevation: 1667 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 110

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36778

Chlorides Max: 8000 Average: 5000 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? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Wellhead Protection Area?

Liner not required for Category: C
Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 27 Twp 15N Rge 13W County BLAINE NW Spot Location of End Point: SW SW SF Feet From: NORTH 1/4 Section Line: 2632 Feet From: WEST 1/4 Section Line: 1485

Depth of Deviation: 10856 Radius of Turn: 477 Direction: 360

Total Length: 7226

Measured Total Depth: 18831

True Vertical Depth: 11587

End Point Location from Lease,
Unit, or Property Line: 1485

Notes:

Category Description

DEEP SURFACE CASING 7/1/2019 - 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 7/1/2019 - 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 7/1/2019 - 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 7/1/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

PENDING CD - 201903045 7/9/2019 - G58 - S2 27 & 34-15N-13W

X686029 MSSP 5 WELLS NO OP. NAMED

REC 6/25/2019 (MINMIER)

PENDING CD - 201903048 7/9/2019 - G58 - (I.O.) S2 27 & 34-15N-13W

X686029 MSSP

COMPL. INT. NCT 150' FSL, NCT 150' FNL, 1485' FWL

NO OP. NAMED

REC 6/25/2019 (MINMIER)

SPACING - 686029 7/9/2019 - G58 - (960)(HOR) S2 27 & 34-15N-13W

EST MSSP, OTHER COMPL. INT. NLT 660' FB

EXHIBIT: A (1 of 3)
SHEET: 8.5x11
SHL: 34-15N-13W

BHL-4 <u>27-15N-13W</u>



COVER SHEET

CONTINENTAL RESOURCES, INC.

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

011-24232

Section	34	Township	15N	Range	13W	L.M.	,	Well:	RANDOLPH	4-34-	27XHM

County ____State __OK ___ Well: _____

Operator ____CONTINENTAL RESOURCES, INC.

NAD-83EXISTING DESIGN LATITUDE LATITUDE POINT WELL NAME NORTHING EASTING FIEVATION FLEVATION 455' FSL / 1485' FWL (SW/4 SEC 34) RANDOLPH 4-34-27XHM 1798137 W4 264952 1666.64 1667.30 35° 43′ 37.57" -98° 34′ 26.24 35.727104 -98.573956 LP-4 LANDING POINT 265182 1798139 684' FSL / 1485' FWL (SW/4 SEC 34) __ __ 35* 44' 49.04" -98* 34' 26.10" 35.746955 -98.573916 BHL-4 BOTTOM HOLE LOCATION 272408 1798194 2632' FNL / 1485' FWL (NW/4 SEC 27) ___ 35° 44′ 55.52″ -98° 34′ 20.09″ 35.748755 -98.572249 27-15N-13W: | TD: 11,358' | 1,976' FNL / 1,980' FWL X-1 L.M. GODWIN #1 273060 1798692 ----35.750573 35* 45' 02.06" -98* 34' 28.10" 27-15N-13W: | TD: 10,800' | GODWIN #1-27 273726 1798036 -98.574473 1,316' FNL / 1,320' FWL 27-15N-13W: | TD: 11,086' | 2,000' FSL / 1,320' FWL 35° 44′ 42.71″ -98° 34′ 28.10″ 35.745198 -98.574472 X-3 COWAN #1 271769 1798025 27-15N-13W: | TD: 11,050' | 1,740' FSL / 1,313' FEL 35* 44' 40.07" 35.744464 X-4 DAVIS #1-27 271487 1800654 -98° 33' 56.19" 27-15N-13W: | TD: 11,025' | 1,316' FNL / 1,314' FEL 35° 45' 01.99" -98° 33' 56.18" 35.750553 X-5 FORNEY #1 273703 1800668 -98.565605 27-15N-13W: | TD: 10,950' | 1,556' FNL / 2,442' FWL 35* 44' 59.66" -98* 34' 14.49 35,749905 GODWIN #27-1 273476 1799157 X-6 ___ __ 35° 44′ 55.41″ -98° 33′ 43.25″ LADYBUG 27_22-15N-13W 1HX 35.748725 -98.562015 27-15N-13W: | TD: 20,065' | 1,979' FNL / 248' FEL X-7273032 1801729 ___ __ 35* 43' 47.57" -98* 34' 28.21 34-15N-13W: | TD: 11,180' | 1,695' FSL / 1,320' FWL 35.729881 -98.574503 X-8 COWAN #1-34 266194 1797983 __ __ 34-15N-13W: | TD: 11,180' | 1,320' FSL / 1,320' FEL 35* 43' 43.83" -98* 33' 56.23" X-9 LITSCH #1 265800 1800617 __ -98.565620 35* 43' 37.34" -98* 34' 36.25" 35.727040 -98.576736 34-15N-13W: | TD: 11,241' | 660' FSL / 660' FWL 265164 1797314 X-10 COWAN #1-34 34-15N-13W: | TD: 11,125' | 1,315' FNL / 1,470' FWL 35* 44' 09.92" -98* 34' 26.32' 35.736090 X-11 COWAN #1-34 268453 1798152 34-15N-13W: | TD: 11,255' | 1,050' FSL / 2,000' FWL 35° 43′ 41.18″ -98° 34′ 19.99″ X-12 COWAN #34-1 265544 1798657 35° 43′ 33.53″ -98° 33′ 42.99″ 34-15N-13W: | TD: 19,839' | 280' FSL / 230' FEL 35.725982 RANDOLPH X-13 264753 1801703 #1-34-27XHM 34-15N-13W: | TD: 11,156' | 1,974' FNL / 1,975' FEL 35° 44' 03.36" 35.734267 X - 14L.M. GODWIN #1 267779 1799971 -98.567835 -98° 34' 04.21'

Certificate of Authorization No. 7318

Date Staked: **-**-19 Date Drawn: 06-07-19



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

REVISIONS							
No.	DATE	ВҮ	DESCRIPTION	COMMENTS			
00	06-07-19	TJW	ISSUED FOR APPROVAL				

EXHIBIT: A (2 of 3) SHEET: 8.5×11 SHL: 34-15N-13WBHL-4 27-15N-13W



COVER SHEET CONTINUED...

CONTINENTAL RESOURCES, INC.

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

Section 34 Township 15N Range 13W I.M. Well: RANDOLPH 4-34-27XHM

County _____State __OK ____ Well: _____

Operator _____CONTINENTAL RESOURCES, INC.

		NAD-	-27					
POINT	WELL NAME NORTHING		EASTING LATITUDE LONGITUDE		LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W4	RANDOLPH 4-34-27XHM	264927	1829738	35° 43′ 35.13″ -98° 34′ 24.98″	35.726425 -98.573605	455' FSL / 1485' FWL (SW/4 SEC 34)	1666.64	1667.30'
LP-4	LANDING POINT	265157	1829740	35° 43′ 37.40″ -98° 34′ 24.97″	35.727056 -98.573603	684' FSL / 1485' FWL (SW/4 SEC 34)		
BHL-4	BOTTOM HOLE LOCATION	272383	1829795	35° 44′ 48.87" -98° 34′ 24.82"	35.746908 -98.573562	2632' FNL / 1485' FWL (NW/4 SEC 27)		
X-1	L.M. GODWIN #1	273035	1830294	35° 44' 55.35" -98° 34' 18.82"	35.748708 -98.571894	27-15N-13W: TD: 11,358' 1,976' FNL / 1,980' FWL		
X-2	GODWIN #1-27	273701	1829637	35° 45′ 01.89″ -98° 34′ 26.83″	35.750526 -98.574118	27-15N-13W: TD: 10,800' 1,316' FNL / 1,320' FWL		
X-3	COWAN #1	271744	1829626	35° 44' 42.54" -98° 34' 26.82"	35.745151 -98.574118	27-15N-13W: TD: 11,086' 2,000' FSL / 1,320' FWL		
X-4	DAVIS #1-27	271462	1832255	35° 44′ 39.90″ -98° 33′ 54.91″	35.744417 -98.565254	27-15N-13W: TD: 11,050' 1,740' FSL / 1,313' FEL		
X-5	FORNEY #1	273678	1832269	35° 45' 01.82" -98° 33' 54.90"	35.750506 -98.565251	27-15N-13W: TD: 11,025' 1,316' FNL / 1,314' FEL		
X-6	GODWIN #27-1	273451	1830758	35° 44' 59.49" -98° 34' 13.21"	35.749858 -98.570337	27-15N-13W: TD: 10,950' 1,556' FNL / 2,442' FWL		
X-7	LADYBUG 27_22-15N-13W 1HX	273007	1833330	35° 44' 55.24" -98° 33' 41.98"	35.748678 -98.561661	27-15N-13W: TD: 20,065' 1,979' FNL / 248' FEL		
X-8	COWAN #1-34	266169	1829584	35° 43′ 47.40″ -98° 34′ 26.94″	35.729833 -98.574149	34-15N-13W: TD: 11,180' 1,695' FSL / 1,320' FWL		
X-9	LITSCH #1	265775	1832218	35° 43′ 43.66″ -98° 33′ 54.96″	35.728795 -98.565266	34-15N-13W: TD: 11,180' 1,320' FSL / 1,320' FEL		
X-10	COWAN #1-34	265139	1828915	35° 43′ 37.17″ -98° 34′ 34.98″	35.726992 -98.576382	34-15N-13W: TD: 11,241' 660' FSL / 660' FWL		
X-11	COWAN #1-34	268428	1829753	35° 44' 09.75" -98° 34' 25.04"	35.736042 -98.573623	34-15N-13W: TD: 11,125' 1,315' FNL / 1,470' FWL		
X-12	COWAN #34-1	265519	1830258	35° 43′ 41.01″ -98° 34′ 18.71″	35.728059 -98.571864	34-15N-13W: TD: 11,255' 1,050' FSL / 2,000' FWL		
X-13	RANDOLPH #1-34-27XHM	264728	1833303	35° 43′ 33.36″ -98° 33′ 41.72″	35.725934 -98.561589	34-15N-13W: TD: 19,839' 280' FSL / 230' FEL		
X-14	L.M. GODWIN #1	267754	1831572	35° 44' 03.19" -98° 34' 02.93"	35.734219 -98.567481	34-15N-13W: TD: 11,156' 1,974' FNL / 1,975' FEL		

Certificate of Authorization No. 7318

Date Staked: **-**-19 Date Drawn: 06-07-19



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

PETRO LAND SERVICES SOUTH, LLC 10400 VINEYARD BLVD. SUITE C, OKLA. CITY, OKLA. 73120 * OFFICE (405) 212-3108 Certificate of Authorization No. 7318

Continental

CONTINENTAL RESOURCES, INC (OPERATOR)

8.5x14 SHEET: _ 34-15N-13W BLAINE SHL: _ County Oklahoma 455' FSL-1485' FWL Section 27-15N-13W $\frac{34}{100}$ Township $\frac{15N}{100}$ Range $\frac{13W}{100}$ I.M. BHL-4

EXHIBIT: <u>A (3 of 3)</u>

RANDOLPH WELL: 4-34-27XHM 2632 2634' X: 1796724 X: 1801990 Y: 275053 Y: 275009 X: 1828325 X: 1833591 X: 1799356 Y: 275028 Y: 274984 Y: 275030 X: 1830957 Y: 275005 ₩-X-2 **₩**-X-5 X-6 — NW NE ₩—X-1 X-7 — X: 1796709 -BHL-4 X: 1801973 Y: 272417 Y: 272372 X: 1828310 X: 1833574 Y: 272392 Y: 272347 X-3 — (V) **₩**-X-4 2636' SE SW X: 1799323 Y: 269758 X: 1830924 Y: 269733 X: 1796693 X: 1801955 Y: 269781 Y: 269736 X: 1828294 X: 1833556 Y: 269756 Y: 269711 GPS DATUM NAD-83 NW -X-11 NE NAD-27 OK NORTH ZONE **US FEET** SCALE: ₩-X-14 1" = 1250 X: 1796671 X: 1801943 Y: 267145 Y: 267104 -314 X: 1828272 X: 1833544 Y: 267120 Y: 267079 -(4) SE 2636 **₩**-X-9 SW 1485 ₩
- X-12 FWI X: 1799290 ₩-X-10 Y: 264490 X: 1830891 455, FSL X: 1796648 Y: 264465 X-13 -(W) X: 1801931 Y: 264508 Y: 264471 X: 1828249 X: 1833532 2642 2642 Y: 264483 Y: 264446 CURRENT REV.: 0

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, RANDALL J. BILYEU 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.1196

Date Drawn: 06-07-19