

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

API NUMBER: 011 23872

Approval Date: 11/03/2017

Expiration Date: 05/03/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 14 Twp: 14N Rge: 12W

County: BLAINE

SPOT LOCATION: ☐ NW ☐ SW ☐ SW ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 2218 232

Lease Name: TECH

Well No: 1-14-11XH

Well will be 232 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

MIKE AND SARAH HELM
257368 E 940 ROAD
GEARY OK 73040

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

Name	Depth	Name	Depth
1 MISS'AN LM	12766	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 107747
102663

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201706141
201706143
201706145

Special Orders:

Total Depth: 20210

Ground Elevation: 1741

Surface Casing: 1999

Depth to base of Treatable Water-Bearing FM: 170

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-33272

H. SEE MEMO

E. Haul to Commercial pit facility: Sec. 31 Twn. 12N Rng. 8W Cnty. 17 Order No: 587498

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 11 Twp 14N Rge 12W County BLAINE

Spot Location of End Point: N2 NW NW NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 12100

Radius of Turn: 420

Direction: 359

Total Length: 7450

Measured Total Depth: 20210

True Vertical Depth: 12961

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

Notes:

Category

Description

DEEP SURFACE CASING

11/2/2017 - 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

11/2/2017 - 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

INTERMEDIATE CASING

11/2/2017 - 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

11/2/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 1 – CUTTINGS WILL BE SOIL FARMED, PIT 2 – OBM RETURNED TO VENDOR, OBM CUTTINGS TO ORDER 587498, 31-12N-8W, CANADIAN CO

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 23872 TECH 1-14-11XH

Category	Description
PENDING CD - 201706141	11/3/2017 - G60 - (I.O.) 11 & 14-14N-12W EST MULTIUNIT HORIZONTAL WELL X102663/107747 MPLM 66.70% 11-14N-12W 33.30% 14-14N-12W NO OP. NAMED REC. 10/9/17 (MINMIER)
PENDING CD - 201706143	11/3/2017 - G60 - (I.O.) 11 & 14-14N-12W X102663/107747 MPLM SHL 2640' FNL, 350' FWL ** COMPL. INT. (14-14N-12W) NCT 2640' FNL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (11-14N-12W) NCT 0' FSL, NCT 150' FNL, NCT 330' FWL NO OP. NAMED REC. 10/9/17 (MINMIER) **SHL WILL BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION PER OPERATOR
PENDING CD - 201706145	11/3/2017 - G60 - 14-14N-12W X102663/107747 MPLM 1 WELL NO OP. NAMED REC. 10/9/17 (MINMIER)
SPACING - 102663	11/3/2017 - G60 - (640) 11 & 14-14N-12W EST MPLM, OTHERS EXT OTHERS
SPACING - 107747	11/3/2017 - G60 - NPT 102663 FOR EXT OF OTHER FM.

EXHIBIT: A (1 of 2)
SHEET: 8.5x11
SHL: 14-14N-12W
BHL: 11-14N-12W



3501123872

COVER SHEET

CONTINENTAL RESOURCES, INC.

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

Section 14 Township 14N Range 12W I.M.

Well 1: TECH 1-14-11XH

County BLAINE State OK

Well 2: BLUE FIU 1-14-23XH

Operator CONTINENTAL RESOURCES, INC.

Well: _____

NAD - 83

POINT	NAME	NORTHING	EASTING	ELEVATION	LATITUDE LONGITUDE	LATITUDE LONGITUDE	DESIGN ELEVATION
W1	TECH 1-14-11XH	251533	1833581	1741.24	N35°41'24.45" W98°27'15.62"	N35.690124 W98.454338	2,218' FNL / 232' FWL (NW/4 SEC 14)
W2	BLUE FIU 1-14-23XH	251503	1833581	1743.71	N35°41'24.15" W98°27'15.62"	N35.690042 W98.454338	2,248' FNL / 232' FWL (NW/4 SEC 14)
L.P.	LANDING POINT	251817	1833678	---	N35°41'27.26" W98°27'14.45"	N35.690905 W98.454013	1,934' FNL / 330' FWL (NW/4 SEC 14)
B.H.L.	BOTTOM HOLE LOCATION	258987	1833732	---	N35°42'38.17" W98°27'14.21"	N35.710603 W98.453947	50' FNL / 330' FWL (NW/4 SEC 11)
X1	RYCROFT 1-11H	253939	1836351	---	N35°41'48.36" W98°26'42.17"	N35.696768 W98.445047	11-14N-12W:S2SW4SW4SE4 TD: 18,004' 200' FSL / 2,310' FEL
X2	NEELY-1	249800	1834835	---	N35°41'07.36" W98°27'00.32"	N35.685378 W98.450089	14-14N-12W:SW4 TD: 11,555' 1,320' FSL / 1,485' FWL
X3	PEARL 1-14	250440	1837319	---	N35°41'13.81" W98°26'30.24"	N35.687169 W98.441732	14-14N-12W:N2SE4 TD: 11,600' 1,980' FSL / 1,320' FWL
X4	TECH-1	251786	1837006	---	N35°41'27.10" W98°26'34.10"	N35.690861 W98.442807	14-14N-12W:N2SW4NE4 TD: 11,500' 1,950' FNL / 1,650' FEL
X5	PAYNE 1-14H	248696	1837002	---	N35°40'56.54" W98°26'33.99"	N35.682373 W98.442774	14-14N-12W:S2SE4SW4SE4 TD: 18,568' 235' FSL / 1,650' FEL

NAD - 27

POINT	NAME	NORTHING	EASTING	ELEVATION	LATITUDE LONGITUDE	LATITUDE LONGITUDE	DESIGN ELEVATION
W1	TECH 1-14-11XH	251509	1865181	1741.24	N35°41'24.28" W98°27'14.37"	N35.690077 W98.453990	2,218' FNL / 232' FWL (NW/4 SEC 14)
W2	BLUE FIU 1-14-23XH	251479	1865181	1743.71	N35°41'23.98" W98°27'14.36"	N35.689994 W98.453990	2,248' FNL / 232' FWL (NW/4 SEC 14)
L.P.	LANDING POINT	251792	1865279	---	N35°41'27.09" W98°27'13.20"	N35.690857 W98.453665	1,934' FNL / 330' FWL (NW/4 SEC 14)
B.H.L.	BOTTOM HOLE LOCATION	258983	1865332	---	N35°42'38.00" W98°27'12.96"	N35.710556 W98.453599	50' FNL / 330' FWL (NW/4 SEC 11)
X1	RYCROFT 1-11H	253914	1867951	---	N35°41'48.19" W98°26'40.92"	N35.696720 W98.444699	11-14N-12W:S2SW4SW4SE4 TD: 18,004' 200' FSL / 2,310' FEL
X2	NEELY-1	249775	1866435	---	N35°41'07.19" W98°26'59.07"	N35.685330 W98.449741	14-14N-12W:SW4 TD: 11,555' 1,320' FSL / 1,485' FWL
X3	PEARL 1-14	250416	1868919	---	N35°41'13.64" W98°26'28.99"	N35.687122 W98.441385	14-14N-12W:N2SE4 TD: 11,600' 1,980' FSL / 1,320' FWL
X4	TECH-1	251761	1868606	---	N35°41'26.93" W98°26'32.85"	N35.690814 W98.442459	14-14N-12W:N2SW4NE4 TD: 11,500' 1,950' FNL / 1,650' FEL
X5	PAYNE 1-14H	248672	1868602	---	N35°40'56.37" W98°26'32.74"	N35.682326 W98.442426	14-14N-12W:S2SE4SW4SE4 TD: 18,568' 235' FSL / 1,650' FEL

Certificate of Authorization No. 7318

Date Staked: 08-18-17
Date Drawn: 08-18-17



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

REVISIONS

No.	DATE	BY	DESCRIPTION	COMMENTS
00	08-18-17	MJL	ISSUED FOR APPROVAL	--

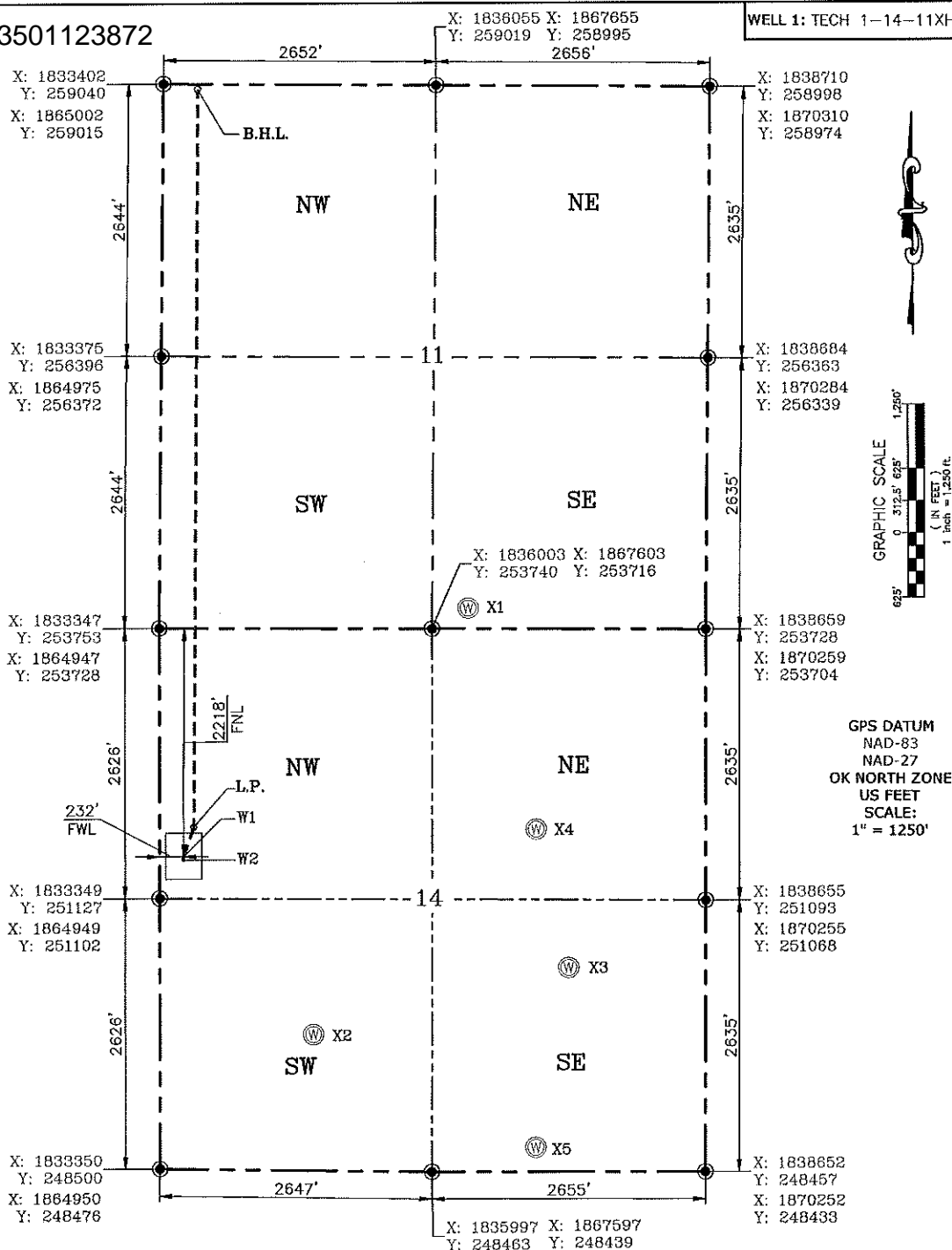
EXHIBIT: A (2 of 2)SHEET: 8.5x14SHL: 14-14N-12WBHL: 11-14N-12W**PETRO LAND SERVICES SOUTH, LLC**10404 VINEYARD BLVD, SUITE G100, OKLA. CITY, OKLA. 73120 * OFFICE (405) 212-3108
Certificate of Authorization No. 7318**CONTINENTAL
RESOURCES, INC.**
(OPERATOR)

BLAINE

County Oklahoma

2218' FNL-232' FWL Section 14 Township 14N Range 12W I.M.**3501123872**

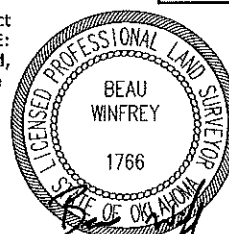
WELL 1: TECH 1-14-11XH



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.

Date Staked: 08-18-17
Date Drawn: 08-18-17Oklahoma PLS # 1766 DATE 8/18/17