API NUMBER: 011 23916

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

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:	01/16/2018	
Expiration Date:	07/16/2018	

PERMIT TO DRILL

CONTINENTAL RESOURCES INC	11 Twp: 16N Rge: 12W County: BLAINE	
CONTINENTAL RESOURCES INC	SECTION LINES.	
CONTINENTAL RESOURCES INC	363 1860	
CONTINENTAL RESOURCES INC PO BOX 269000 OKLAHOMA CITY, OK 73126-9000 Eformation(s) (Permit Valid for Listed Formations Only): Name Depth Name Depth 1 MISSISSIPPIAN 10416 6 6 2 WOODFORD 11116 7 8 3 8 4 9 9 5 10 Pending CD Numbers: 201707573 Equation CD Numbers: 201707573 Total Depth: 15822 Ground Elevation: 1526 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 11 NiFORMATION Type of Fix System: CLOSED Closed System Means Steel Pits Type of Mud System: WATER BASED D. One time land application (REQUIRES PERMIT) PERMIT INFORMATION Type of Fix System: WATER BASED D. One time land application (REQUIRES PERMIT) PERMIT INFORMATION P	Well No: 3-14HM	Well will be 363 feet from nearest unit or lease boundary.
PO BOX 269000 OKLAHOMA CITY, OK 73126-9000 CKLAHOMA CITY	NTINENTAL RESOURCES INC Telephone: 4052349020; 40	52349 OTC/OCC Number: 3186 0
PO BOX 269000		V 2 MONA DODEN
Formation(s) (Permit Valid for Listed Formations Only): Name	00	
Name Depth Name D	ITY, OK 73126-9000	
Price of Mid System: WATER BASED Chorides Max: 8000 Average: 5000 Sedenth of to pot ground water greater than 10ft below base of pit? Your Melthead Protection Area? Neighbor 15822 Ground Elevation: 1526 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 2000 Depth to base of Treatable Water-Bearing FM: 2000 Depth to base of Treatable Water-Bearing FM: 2000 Surface Water used to Drill: No S	Depth Name ISIPPIAN 10416 6 FORD 11116 7 8 9 10 10	
Total Depth: 15822 Ground Elevation: 1526 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 2 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: Sype of Pit System: CLOSED Closed System Means Steel Pits Sype of Mud System: WATER BASED D. One time land application (REQUIRES PERMIT) PERMIT INFORMATION So depth to top of ground water greater than 10ft below base of pit? You within 1 mile of municipal water well? No Wellhead Protection Area? No No Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 2 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 2 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 2 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 2 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 2 Surface Casing: 1500 Surface Water supply Well Drilled: No Surface Water used to Drill: No Pit Information of the provided Method for disposal of Drilling Fluids: Depth to base of Treatable Water-Bearing FM: 2 Surface Vater used to Drill: No Pit Information of the provided Method for disposal of Drilling Fluids: Depth to base of Treatable Water used to Drill: No Pit Information of the provided Method for disposal of Drilling Fluids: Depth to base of Treatable Water used to Drill: No Pit Information of the provided Method for disposal of Drilling Fluids: Depth to base of Treatable Water used to Drill: No Pit Information of the provided Method for disposal of Drilling Fluids: Depth to base of Treatable Water used to Drill: No Pit Information of the provided Method for disposal of Drilling Fluids: Depth to base of Treatable Water used to Drilling Fluids: Depth to base of Treatable Water used to Drilling Fluids: Depth to base of Treatable Water used to Drilling Fluids: Depth to base of Treatable Water used to Drilling Fluids: Depth to base of Treatable Water used to Drilling Fluids:		
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 1s located in a Hydrologically Sensitive Area.	Ground Elevation: 1526 Surface Casing: 1500	Depth to base of Treatable Water-Bearing FM: 230
Type of Pit System: CLOSED Closed System Means Steel Pits Type of Mud System: WATER BASED Chlorides Max: 8000 Average: 5000 S 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 1s located in a Hydrologically Sensitive Area.		
Fype of Mud System: WATER BASED D. One time land application (REQUIRES PERMIT) PERMIT I Chlorides Max: 8000 Average: 5000 s 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 It is located in a Hydrologically Sensitive Area.		d for disposal of Drilling Fluids:
Chlorides Max: 8000 Average: 5000 s depth to top of ground water greater than 10ft below base of pit? Y Within 1 mile of municipal water well? N Vellhead Protection Area? N Pit 1s located in a Hydrologically Sensitive Area.	-	
s depth to top of ground water greater than 10ft below base of pit? Y Mithin 1 mile of municipal water well? N Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area.	=	d application (REQUIRES PERMIT) PERMIT NO: 17-3362
Mithin 1 mile of municipal water well? N Wellhead Protection Area? N Pit 1s located in a Hydrologically Sensitive Area.		
Wellhead Protection Area? N Pit 1s located in a Hydrologically Sensitive Area.	- ·	
Pit is located in a Hydrologically Sensitive Area.		
, ,		
	Try or	
Iner not required for Category: C	Patengary C	

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

Rge 12W Sec 14 Twp 16N County BLAINE Spot Location of End Point: S2 S2 SW SF Feet From: SOUTH 1/4 Section Line 30 Feet From: **EAST** 1980 1/4 Section Line:

Depth of Deviation: 10043
Radius of Turn: 477
Direction: 182
Total Length: 5030

Measured Total Depth: 15822

True Vertical Depth: 11116

End Point Location from Lease,
Unit, or Property Line: 30

Notes:

Category Description

DEEP SURFACE CASING 1/12/2018 - G57 - 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 1/12/2018 - G57 - 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

INCREASED DENSITY - 671432 1/12/2018 - G57 - 14-16N-12W

X648807 MSSP 3 WELLS

CONTINENTAL RESOURCES, INC.

12-22-2017

INTERMEDIATE CASING 1/12/2018 - G57 - 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

Description Category

1/12/2018 - G57 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT **MEMO**

PENDING CD - 201707573

1/12/2018 - G57 - (I.O.) 14-16N-12W X648807 MSSP, WDFD COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 1320' FEL

NO OP. NAMED

REC 12-4-2017 (M. PORTER)

1/12/2018 - G57 - (640) 14-16N-12W VAC 193321 CSTR **SPACING - 648807**

VAC 201845 CSTR EXT 585991 MSSP, WDFD

EXHIBIT: A (1 of 2)

SHEET: ___ 8.5x11

11-16N-12W SHL:





API: 011 23916

CONTINENTAL RESOURCES, INC.

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

Well: ______SWAIM 3-14HM Section $\frac{11}{2}$ Township $\frac{16N}{2}$ Range $\frac{12W}{2}$ I.M. State OK BLAINE County Well: ___ Operator CONTINENTAL RESOURCES, INC. Well: ___

NAD-83 LATITUDE LATITUDE DESIGN POINT NORTHING EASTING ELEVATION LONGITUDE LONGITUDE 317466 1837082 363' FSL / 1,860' FEL (SE/4 SEC 11) SWAIM 3-14HM 1526.78 1526.16 N35*52'14.22 W98*26'38.27 N35.870618 317220 1836962 --118' FSL / 1,980' FEL (SE/4 SEC 11) __ L.P. LANDING POINT W98.443963° N35*51'21.09" N35.855858* 1836946 30' FSL / 1.980' FEL (SE/4 SFC 14) 311847 B.H.L. BOTTOM HOLE LOCATION --W98*26'38.16" W98.443934* N35*52'51.68" 11-16N-12W:NE4 | TD: 9,384' | 1,270' FSL / 1,320' FEL N35.881021 GRASSHOPPER UNIT-1 321004 1837623 W98.441792 W98*26'30.45" 11-16N-12W:W2W2E2SW4 | TD: 9,450' | 1,320' FSL / 1,520' FWL 1835234 LYDIA-1-11 318427 X2 W98*26'59.33" W98.449814 11-16N-12W:SE4SW4SW4 | TD: 15,864' | 230' FSL / 1,050' FWL N35*52'15.27 N35.870909 BIXLER BIA-1-11H 317337 1834751 W98*27'05.14" 11-16N-12W:NE4SW4SW4SW4 | TD: 20,349' | 348' FSL / 491' FWL N35*52'16.42" W98*27'11.92" N35.871227 CHIPMUNK 11_2-16N-12W 317455 1834194 --X4 W98.453310 14-16N-12W:SE4 | TD: 9,525' | 1,320' FSL / 1,320' FWL N35*51'33.85" N35.859403 Х5 HESSEL UNIT-1 313135 1837626 W98*26'29.97" 14-16N-12W:NW4 | TD: 9,481' | 1,320' FSL / 1,320' FWL N35*51'59 93" N35 866648 SAWYER-1 1835013 315784 Х6 W98*27'01.86" W98.450518 N35*52'06.45" N35.868459 14-16N-12W:W2E2NW4NW4 | TD: 9,525' | X7 BOSTON-1-14 316446 1834481 __ __ w98*27'08.37" W98.452325 1,980' FSL / 785' FWL 14-16N-12W:S2S2N2SW4 | TD: 9,500' | 1,520' FSL / 1,320' FWL N35*51'35.81" W98*27'01.84" N35.859947 RUTH ANN-1-14 313345 1835004 W98.450511

NA	N A D - 2 7							
POINT	NAME	NORTHING	EASTING	ELEVATION	LATITUDE LONGITUDE	LATITUDE LONGITUDE		DESIGN ELEVATION
W1	SWAIM 3-14HM	317442	1868683	1526.78	N35*52'16.50" W98*26'35.56"	N35.871251* W98.443210*	363' FSL / 1,860' FEL (SE/4 SEC 11)	1526.16
L.P.	LANDING POINT	317196	1868563		N35*52'14.07" W98*26'37.00"	N35.870575° W98.443611°	118' FSL / 1,980' FEL (SE/4 SEC 11)	
B.H.L.	BOTTOM HOLE LOCATION	311823	1868547		N35*51'20.93" W98*26'36.90"	N35.855815* W98.443582*	30' FSL / 1,980' FEL (SE/4 SEC 14)	
X1	GRASSHOPPER UNIT-1	320980	1869224		N35*52'51.52" W98*26'29.18"	N35.880978 W98.441440	11-16N-12W:NE4 TD: 9,384' 1,270' FSL / 1,320' FEL	
X2	LYDIA-1-11	318402	1866835		N35*52'25.92" W98*26'58.06"	N35.873867 W98.449462	11-16N-12W:W2W2E2SW4 TD: 9,450' 1,320' FSL / 1,520' FEL	
Х3	BIXLER BIA-1-11H	317312	1866352		N35*52'15.12" W98*27'03.87"	N35.870867 W98.451075	11-16N-12W:SE4SW4SW4 TD: 15,864' 230' FSL / 1,050' FWL	
X4	CHIPMUNK 11_2-16N-12W	317430	1865795		N35*52'16.26" W98*27'10.65"	N35.871184 W98.452959	11-16N-12W:NE4SW4SW4SW4 TD: 20,349' 348' FSL / 491' FWL	
X5	HESSEL UNIT-1	313110	1869227		N35*51'33.70" W98*26'28.71"	N35.859360 W98.441308	14-16N-12W:SE4 TD: 9,525' 1,320' FSL / 1,320' FWL	
Х6	SAWYER-1	315760	1866614		N35*51'59.78" W98*27'00.60"	N35.866605 W98.450166	14-16N-12W:NW4 TD: 9,481' 1,320' FSL / 1,320' FWL	
X7	BOSTON-1-14	316421	1866082		N35*52'06.30" W98*27'07.10"	N35.868416 W98.451973	14-16N-12W:W2E2NW4NW4 TD: 9,525' 1,980' FSL / 785' FWL	
X8	RUTH ANN-1-14	313321	1866605		N35*51'35.65" W98*27'00.58"	N35.859904 W98.450160	14-16N-12W:S2S2N2SW4 TD: 9,500' 1,520' FSL / 1,320' FWL	

Certificate of Authorization No. 7318

Date Staked: 11-28-17 Date Drawn: 11-28-17



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

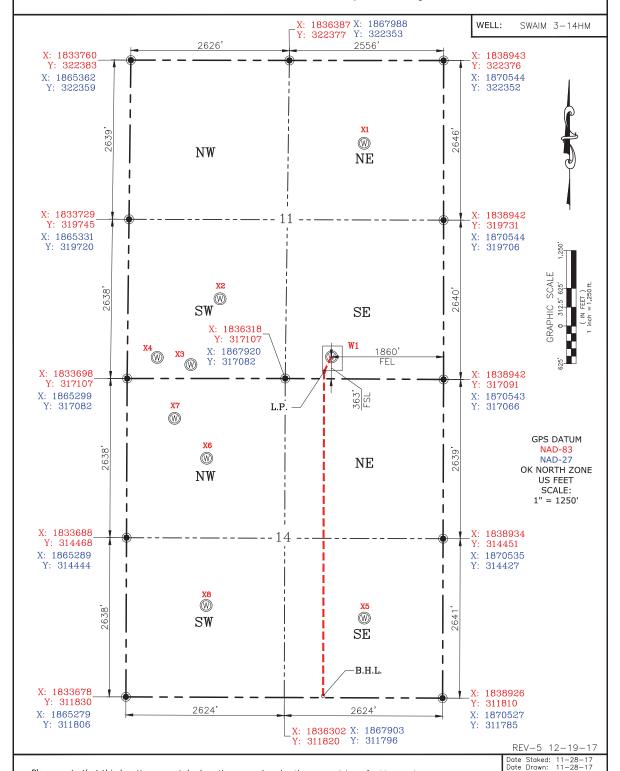
R E	REVISIONS						
No.	DATE	BY	DESCRIPTION	COMMENTS			
02	11-30-2017	MJL	REV. OWNER NAME	REV. EXHIBITS "F" & "G"			
03	12-7-2017	MJL	REV. DRIVING DIRECTIONS	REV. EXHIBITS "B" & "C"			
04	12-18-2017	MJL	REV. SHL CALLOUT	THIS SHEET ONLY			
05	12-19-2017	MJL	REV. SHL CALLOUT	REV. EXHIBITS "A (2 of 2)" & "B"			

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

BLAINE _ County Oklahoma 363' FSL-1,860 FEL Section $\frac{11}{1}$ Township $\frac{16N}{1}$ Range $\frac{12W}{1}$ I.M.



CONTINENTAL RESOURCES,INC (OPERATOR)



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:

EXHIBIT: <u>A (2 of 2)</u>

SHEET: ___

SHL:

BHL:

8.5×14

11-16N-12W

14-16N-12W

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