API NUMBER: 011 23952 Α

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

Approval Date: 03/13/2018 09/13/2018 Expiration Date:

248 feet from nearest unit or lease boundary.

3186 0

Horizontal Hole Oil & Gas

Amend reason: CHANGE SURFACE HOLE LOCATION; UPDATE **ORDERS**

AMEND PERMIT TO DRILL

Telephone: 4052349020; 4052349

Well will be

WELL LOCATION:	Sec:	36	Twp:	15N	Rge:	11V	V Cou	unty: Bl	AINE		
SPOT LOCATION:	NE	NW	N'	W	NW		FEET FROM QUARTE	R: FROM	NORTH	FROM	WEST
							SECTION LINES:		248		656

CONTINENTAL RESOURCES INC OTC/OCC Number:

Well No: 2-36HM

Operator Name:

Lease Name: MOWERY

CONTINENTAL RESOURCES INC CLELLA L. LOOKABAUGH LIVING TRUST PO BOX 269000

RT. 2. BOX 125 OKLAHOMA CITY.

OK 73126-9000 WATONGA OK 73772

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

	Name	Depth		Name	Dept	h
1	MISSISSIPPIAN	11043	6			
2			7			
3			8			
4			9			
5			10			
Spacing Orders:	586354	Location Exception Orders:	686779		Increased Density Orders:	669154
			694080			

Pending CD Numbers: Special Orders:

Total Depth: 16065 Ground Elevation: 1443 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 80

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

Approved Method for disposal of Drilling Fluids: PIT 1 INFORMATION

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: 18-34025

H. SEE MEMO Chlorides Max: 3000 Average: 2000

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?

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

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 36 Twp 15N Rge 11W County **BLAINE** SW Spot Location of End Point: S2 SW SW Feet From: SOUTH 1/4 Section Line: 50 WEST Feet From: 1/4 Section Line: 330

Depth of Deviation: 10891 Radius of Turn: 477 Direction: 182

Total Length: 4425

Measured Total Depth: 16065

True Vertical Depth: 11561

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

Notes:

Category Description

DEEP SURFACE CASING 3/2/2018 - 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 3/2/2018 - 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

INCREASED DENSITY - 669154 3/7/2018 - G57 - (F.O.) 36-15N-11W

X586354 MSSP 10 WELLS NO OP. NAMED

10-18-2017 (WELL SPUD 3-23-2018)

INTERMEDIATE CASING 3/2/2018 - 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

Category Description

LOCATION EXCEPTION - 686779 1/31/2019 - G57 - (F.O.) 36-15N-11W

X586354 MSSP

SHL 250' FNL, 1075' FWL

FIRST PERF 267' FNL, 1654' FWL LAST PERF 216' FSL, 1616' FWL CONTINENTAL RESOURCES, INC. 11-16-2018 (WELL SPUD 3-23-2018)

LOCATION EXCEPTION - 694080 4/5/2019 - G75 - MODIFY 686779 TO:

SHL 248' FNL, 656' FWL FIRST PERF 428' FNL, 403' FWL LAST PERF 366' FSL, 383' FWL

4-4-2019

MEMO 3/2/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 586354 3/7/2018 - G57 - (640) 36-15N-11W

EST OTHERS EXT OTHERS EXT 569413 MSSP **EXHIBIT:** A (1 of 4)

SHEET: 8.5x11

36-15N-11W SHL: 24-15N-11W BHL:

BHL-2: 36-15N-11W



COVER SHEET

CONTINENTAL RESOURCES, INC.

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

Section 36 Township 15N Range 11W I.M. Well: LOOKABAUGH 2-25-24XHM

Well: ____MOWERY 2-36HM County _____State __OK__

Operator _____CONTINENTAL RESOURCES, INC.

		NAD-	-83					
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W1	LOOKABAUGH 2-25-24XHM	269135	1870966	35° 44' 20.01" -98° 19' 43.13"	35.738893 -98.328647	248' FNL / 686' FWL (NW/4 SEC 36)	1442.17	1442.94
LP-1	LANDING POINT	269434	1871930	35° 44' 23.01" -98° 19' 31.44"	35.739724 -98.325400	50' FSL / 1,650' FWL (SW/4 SEC 25)		
BHL-1	BOTTOM HOLE LOCATION	279890	1871948	35° 46' 06.41" -98° 19' 31.65"	35.768448 -98.325458	50' FNL / 1,650' FWL (NW/4 SEC 24)		
W2	MOWERY 2-36HM	269135	1870936	35° 44′ 20.01″ -98° 19′ 43.49″	35.738892 -98.328748	248' FNL / 656' FWL (NW/4 SEC 36)	1442.06	1442.94
LP-2	LANDING POINT	269135	1870610	35° 44' 20.00" -98° 19' 47.45"	35.738889 -98.329847	248' FNL / 330' FWL (NW/4 SEC 36)		
BHL-2	BOTTOM HOLE LOCATION	264169	1870585	35° 43′ 30.89″ -98° 19′ 47.54″	35.725247 -98.329874	50' FSL / 330' FWL (SW/4 SEC 36)		
X-1	KELLY UNIT C #1	277440	1871609	35° 45' 42.17" -98° 19' 35.67"	35.761714 -98.326575	24-15N-11W:S2 S2 NW4 TD: 10,100' 2500' FNL / 1,320' FWL		
X-2	KELLY UNIT C #2	278622	1874097	35° 45′ 53.94″ -98° 19′ 05.52″	35.764984 -98.318201	24-15N-11W:E2 W2 NW4 TD: 10,100' 1,320' FNL / 1,500' FEL		
X-3	WALKER 1-24	275322	1870940	35° 45' 21.20" -98° 19' 43.69"	35.755888 -98.328804	24-15N-11W:C4 SW4 SW4 TD: 10,075' 660' FSL / 660' FWL		
X-4	LYLE CARTER #1	270707	1874230	35° 44' 35.67" -98° 19' 03.60"	35.743241 -98.317666	25-15N-11W:C4 SE4 TD: 10,170' 1320' FSL / 1320' FEL		
X-5	GIGER #1	270704	1871599	35° 44' 35.55" -98° 19' 35.50"	35.743209 -98.326529	25-15N-11W:C4 SW4 TD: 10,180' 1320' FSL / 1320' FWL		
X-6	LAIRD 1-25	272679	1872423	35° 44′ 55.11″ -98° 19′ 25.59″	35.748642 -98.323775	25-15N-11W:W2 E2 SE4 NW4 TD: 10,100' 1980' FNL / 2145' FWL		
X-7	HELM TRUST 1-25	273160	1874902	35° 44' 59.95" -98° 18' 55.54"	35.749986 -98.315427	25-15N-11W:N2 N2 SE4 NE4 TD: 10,100' 1500' FNL / 660' FEL		
X-8	H. F. LOOKABAUGH #1	265437	1871584	35° 43′ 43.46″ -98° 19′ 35.48″	35.728740 -98.326521	36-15N-11W:C4 SW4 TD: 10,300' 1320' FSL / 1320' FWL		
X-9	H. F. LOOKABAUGH #2	265435	1872904	35° 43′ 43.48″ -98° 19′ 19.46″	35.728745 -98.322073	36-15N-11W:C S2 TD: 10,250' 1320' FSL / 2640' FWL		
X-10	LEWIS #1	268067	1874220	35° 44' 09.56" -98° 19' 03.61"	35.735989 -98.317669	36-15N-11W:C NE4 SW4 TD: 10,180' 1320' FNL / 1320' FEL		
X-11	LOOKABAUGH #2	268064	1871597	35° 44' 09.44" -98° 19' 35.43"	35.735956 -98.326508	36-15N-11W:C NW4 SW4 TD: 10,250' 1320' FNL / 1320' FWL		
X-12	LOOKABAUGH 3-36	265437	1871554	35* 43' 43.46" -98* 19' 35.84"	35.728739 -98.326622	36-15N-11W:E2 W2 SW4 TD: 10,400' 1320' FSL / 1320' FWL		
X-13	LEWIS 2-36	267078	1874878	35* 43' 59.80" -98* 18' 55.60"	35.733277 -98.315443	36-15N-11W:CS2 SE4 NE4 TD: 10,130' 2310' FNL / 660' FEL		
X-14	MOWERY 1-36H	269134	1871355	35° 44' 20.01" -98° 19' 38.41"	35.738893 -98.327336	36-15N-11W:NE4 NE4 NW4 NW4 TD: 16,362' 250' FNL / 1075' FWL		

REVISIONS

Certificate of Authorization No. 7318

Date Staked: 02-15-18 Date Drawn: 02-15-18

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

	K2 1 3 1 3 N 3									
No.	DATE	BY	DESCRIPTION	COMMENTS						
00	02-15-18	MJL	ISSUED FOR APPROVAL							
01	02-15-18	MJL	WELL NAME & DRIVING DIR.	REVISED EXHIBIT "C"						
02	03-07-18	MJL	WELL LOCATION, LEASE RD. &LP	REVISED ALL EXCEPT "D & E"						

EXHIBIT: <u>A (2 of 4)</u>

SHEET: 8.5×11

SHL: $\frac{36-15N-11W}{24-15N-11W}$

BHL-2: 36-15N-11W



COVER SHEET

CONTINENTAL RESOURCES, INC.

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

Section 36 Township 15N Range 11W I.M. Well: LOOKABAUGH 2-25-24XHM

County _____BLAINE __State __OK ___Well: ___MOWERY 2-36HM

Operator _____CONTINENTAL RESOURCES, INC.

		NAD-	-27					
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W1	LOOKABAUGH 2-25-24XHM	269111	1902565	35° 44′ 19.85" -98° 19′ 41.89"	35.738847 -98.328303	248' FNL / 686' FWL (NW/4 SEC 36)	1442.17	1442.94
LP-1	LANDING POINT	269410	1903530	35° 44′ 22.84″ -98° 19′ 30.20″	35.739679 -98.325056	50' FSL / 1,650' FWL (SW/4 SEC 25)		
BHL-1	BOTTOM HOLE LOCATION	279866	1903548	35° 46' 06.25" -98° 19' 30.41"	35.768404 -98.325114	50' FNL / 1,650' FWL (NW/4 SEC 24)		
W2	MOWERY 2-36HM	269111	1902535	35° 44' 19.85" -98° 19' 42.25"	35.738847 -98.328404	248' FNL / 656' FWL (NW/4 SEC 36)	1442.06	1442.94
LP-2	LANDING POINT	269111	1902209	35° 44' 19.84" -98° 19' 46.21"	35.738844 -98.329503	248' FNL / 330' FWL (NW/4 SEC 36)		
BHL-2	BOTTOM HOLE LOCATION	264145	1902184	35° 43' 30.72" -98° 19' 46.31"	35.725201 -98.329530	50' FSL / 330' FWL (SW/4 SEC 36)		
X-1	KELLY UNIT C #1	277416	1903208	35° 45' 42.01" -98° 19' 34.43"	35.761669 -98.326230	24-15N-11W:S2 S2 NW4 TD: 10,100' 2500' FNL / 1,320' FWL		
X-2	KELLY UNIT C #2	278598	1905697	35° 45' 53.78" -98° 19' 04.28"	35.764939 -98.317856	24-15N-11W:E2 W2 NW4 TD: 10,100' 1,320' FNL / 1,500' FEL		
X-3	WALKER 1-24	275298	1902540	35° 45' 21.04" -98° 19' 42.45"	35.755843 -98.328459	24-15N-11W:C4 SW4 SW4 TD: 10,075' 660' FSL / 660' FWL		
X-4	LYLE CARTER #1	270683	1905829	35° 44' 35.51" -98° 19' 02.36"	35.743196 -98.317322	25-15N-11W:C4 SE4 TD: 10,170' 1320' FSL / 1320' FEL		
X-5	GIGER #1	270680	1903199	35° 44′ 35.39" -98° 19′ 34.27"	35.743163 -98.326185	25-15N-11W:C4 SW4 TD: 10,180' 1320' FSL / 1320' FWL		
X-6	LAIRD 1-25	272655	1904023	35° 44′ 54.95″ -98° 19′ 24.35″	35.748597 -98.323430	25-15N-11W:W2 E2 SE4 NW4 TD: 10,100' 1980' FNL / 2145' FWL		
X-7	HELM TRUST 1-25	273136	1906502	35° 44' 59.79" -98° 18' 54.30"	35.749941 -98.315083	25-15N-11W:N2 N2 SE4 NE4 TD: 10,100' 1500' FNL / 660' FEL		
X-8	H. F. LOOKABAUGH #1	265413	1903184	35° 43' 43.30" -98° 19' 34.24"	35.728694 -98.326177	36-15N-11W:C4 SW4 TD: 10,300' 1320' FSL / 1320' FWL		
X-9	H. F. LOOKABAUGH #2	265411	1904504	35° 43′ 43.32″ -98° 19′ 18.23″	35.728700 -98.321729	36-15N-11W:C S2 TD: 10,250' 1320' FSL / 2640' FWL		
X-10	LEWIS #1	268043	1905820	35° 44' 09.40" -98° 19' 02.37"	35.735943 -98.317326	36-15N-11W:C NE4 SW4 TD: 10,180' 1320' FNL / 1320' FEL		
X-11	LOOKABAUGH #2	268040	1903197	35° 44' 09.28" -98° 19' 34.19"	35.735911 -98.326164	36-15N-11W:C NW4 SW4 TD: 10,250' 1320' FNL / 1320' FWL		
X-12	LOOKABAUGH 3-36	265413	1903154	35° 43′ 43.30″ -98° 19′ 34.60″	35.728694 -98.326278	36-15N-11W:E2 W2 SW4 TD: 10,400' 1320' FSL / 1320' FWL		
X-13	LEWIS 2-36	267054	1906477	35° 43' 59.63" -98° 18' 54.36"	35.733232 -98.315100	36-15N-11W:CS2 SE4 NE4 TD: 10,130' 2310' FNL / 660' FEL		
X-14	MOWERY 1-36H	269110	1902954	35° 44' 19.85" -98° 19' 37.17"	35.738847 -98.326992	36-15N-11W:NE4 NE4 NW4 NW4 TD: 16,362' 250' FNL / 1075' FWL		

REVISIONS

Certificate of Authorization No. 7318

Date Staked: 02-15-18 Date Drawn: 02-15-18



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

No.	DATE	BY	DESCRIPTION	COMMENTS
00	02-15-18	MJL	ISSUED FOR APPROVAL	
01	02-15-18	MJL	WELL NAME & DRIVING DIR.	REVISED EXHIBIT "C"
02	03-07-18	MJL	WELL LOCATION, LEASE RD. & LP	REVISED ALL EXCEPT "D & E"

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

Continental

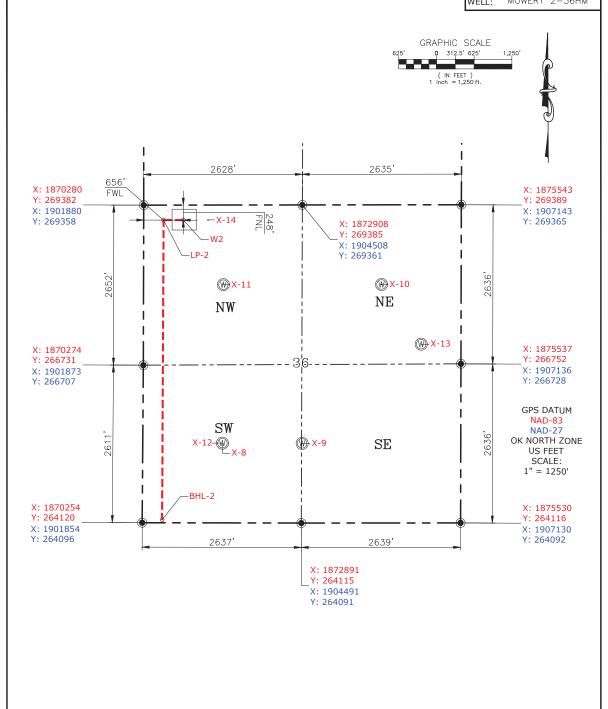
CONTINENTAL RESOURCES,INC (OPERATOR)

EXHIBIT: <u>A (4 of 4)</u> 8.5x14 SHEET: _ 36-15N-11W SHL: 36-15N-11W

BHL-2:

BLAINE _ County Oklahoma 248' FNL-656' FWL Section 36 Township _____15N___Range ____11W___I.M.

> WELL: MOWERY 2-36HM



REV-2 - 03-07-18

Date Staked: Date Drawn: 02-15-18 02-15-18

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.

