API NUMBER: 051 24631

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

Approval Date: 05/10/2019
Expiration Date: 11/10/2020

3186 0

Well will be 1636 feet from nearest unit or lease boundary.

OTC/OCC Number:

Horizontal Hole Multi Unit Oil & Gas

## PERMIT TO DRILL

										PERIVII	1 10	DRILL	
WELL	LOCATION:	Sec:	13	Twp: 7	N F	Rge: 6\	N	Coun	ty: GR	ADY			
SPOT	LOCATION:	NW	NW	NE NE		SW	FEET	FROM QUARTER:	FROM	SOUTH	FROM	WEST	
							SECTI	ON LINES:		2392		1636	
Le	ase Name: H	HEALEY						V	Vell No:	4-13-12X	HW		
	perator ame:	CONT	INEN	ΓAL RES	OURC	ES INC				Teleph	none:	4052349020	4052349

JEREMY & ROSALIND RENEE HOWE 2177 COUNTY STREET 2920

D. One time land application -- (REQUIRES PERMIT)

H. SEE MEMO

CHICKASHA OK 73018

CONTINENTAL RESOURCES INC
PO BOX 269000
OKLAHOMA CITY, OK 73126-9000

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

,	Name	Depth	Name	Dep	th
1	MISSISSIPPI LIME	12116	6		
2	WOODFORD	12362	7		
3			8		
4			9		
5			10		
Spacing Orders:	567315	Location Exception Orders:		Increased Density Orders:	694614
	582004				694827
	163257				

Pending CD Numbers: 201900945 Special Orders:

201900946

Total Depth: 20276 Ground Elevation: 1186 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 330

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

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? N

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: CHICKASHA

PERMIT NO: 19-36617

#### 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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is NON HSA

Pit Location Formation: CHICKASHA

#### **HORIZONTAL HOLE 1**

Sec 12 Twp 7N Rge 6W County **GRADY** Spot Location of End Point: N2 N2 N2 NW Feet From: NORTH 1/4 Section Line: 50 Feet From: WEST 1/4 Section Line: 1320

Depth of Deviation: 11886 Radius of Turn: 495 Direction: 355

Total Length: 7612

Measured Total Depth: 20276

True Vertical Depth: 12362

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

Notes:

Category Description

DEEP SURFACE CASING 5/9/2019 - 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 5/9/2019 - 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

INCREASED DENSITY - 694614 5/10/2019 - GB1 - 12-7N-6W

X567315 WDFD 4 WFLLS

CONTINENTAL RESOURCES INC

4/12/2019

INCREASED DENSITY - 694827 5/10/2019 - GB1 - 13-7N-6W

X582004 WDFD

4 WELLS

CONTINENTAL RESOURCES INC

4/17/2019

Category Description

MEMO 5/9/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST. PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201900945 5/10/2019 - GB1 - (I.O.) 12 & 13-7N-6W

X163257 MSSLM 12 & 13-7N-6W X582004 WDFD 13-7N-6W X567315 WDFD 12-7N-6W

X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO WILLIAMS 4-25-24-13XHW

COMPL. INT. (13-7N-6W) NCT 1320' FSL, NCT 0' FNL, NCT 660' FWL

COMPL. INT. (12-7N-6W) NCT 0' FSL, NCT 150' FNL, NCT 660' FWL CONTINENTAL RESOURCES

INC

REC. 3/5/2019 (P. PORTER)

PENDING CD - 201900946 5/10/2019 - GB1 - (I.O.) 12 & 13-7N-6W

EST MULTIUNIT HORÍZONTAL WELL X163257 MSSLM 12 & 13-7N-6W X582004 WDFD 13-7N-6W X567315 WDFD 12-7N-6W

(MSSLM ASSOCIATED COMMON SOURCE OF SUPPLY TO WDFD)

33% 13-7N-6W

67% 12-7N-6W

CONTINENTAL RESOURCES INC REC. 3/5/2019 (P. PORTER)

SPACING - 163257 5/10/2019 - GB1 - (640) 12 & 13-7N-6W

**EXT OTHERS** 

EXT 151109 MSSLM, OTHERS

SPACING - 567315 5/10/2019 - GB1 - (640) 12-7N-6W

EST WDFD, OTHERS

SPACING - 582004 5/10/2019 - GB1 - (640) 13-7N-6W

**EST OTHER** 

EXT 568015/202656 WDFD, OTHERS

EXHIBIT: <u>A (1 of 2)</u>

SHEET: 8.5x14 13-7N-6W SHL: 12-7N-6W BHL-4



## COVER SHEET

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

Section	13 Township	$\frac{7N}{}$ Range $\frac{6W}{}$ I.M.	Well:	HEALEY 4-13-12XHW
County	GRADY	StateOK	Well:	

Operator CONTINENTAL RESOURCES, INC.

		NAD-	-83					
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATIO
W4	HEALEY 4-13-12XHW	635636	2031808	35° 04' 47.09" -97° 47' 18.28"	35.079746 -97.788411	2392' FSL / 1636' FWL (SW/4 SEC 13)	1190.97'	1185.91
LP-4	LANDING POINT	635636	2031491	35° 04' 47.09" -97° 47' 22.09"	35.079747 -97.789469	2392' FSL / 1320' FWL (SW/4 SEC 13)		
BHL-4	BOTTOM HOLE LOCATION	643759	2031465	35° 06' 07.44" -97° 47' 22.20"	35.102066 -97.789501	50' FNL / 1320' FWL (NW/4 SEC 12)		
X-1	MCCALLA #1-12	639848	2032610	35° 05' 28.72" -97° 47' 08.52"	35.091312 -97.785701	12-7N-6W:   TD: UNKNOWN   1,320' FSL / 2,450' FWL		
X-2	HEALEY #1-12H	638727	2032474	35° 05′ 17.65″ -97° 47′ 10.18″	35.088235 -97.786162	12-7N-6W:   TD: 16,722'   200' FSL / 2,310' FWL		
X-3	SS MCCALLA #1-12HS	638805	2030689	35° 05′ 18.45″ -97° 47′ 31.67″	35.088458 -97.792129	12-7N-6W:   TD: 16,931'   280' FSL / 525' FWL		
X-4	NEWKIRK #1-13	637204	2032808	35° 05′ 02.57″ -97° 47′ 06.21″	35.084048 -97.785057	13-7N-6W:   TD: 7,525'   1,324' FNL / 2,640' FWL		
X-5	MCCALLA #1	637672	2031867	35° 05' 07.22" -97° 47' 17.52"	35.085339 -97.788200	13-7N-6W:   TD: 12,925'   855' FNL / 1,700' FWL		
X-6	BIRT #1-13H	633488	2030561	35° 04' 25.86" -97° 47' 33.34"	35.073851 -97.792593	13-7N-6W:   TD: 16,140'   245' FSL / 385' FWL		
X-7	BIRT #2-13-12XHS	633584	2031816	35° 04' 26.79" -97° 47' 18.24"	35.074109 -97.788399	13-7N-6W:   TD: 22,370'   340' FSL / 1,640' FWL		

		NAD-	-27					
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W4	HEALEY 4-13-12XHW	635594	2063405	35' 04' 46.85" -97' 47' 17.13"	35.079680 -97.788092	2392' FSL / 1636' FWL (SW/4 SEC 13)	1190.97'	1185.91'
LP-4	LANDING POINT	635594	2063088	35' 04' 46.85" -97' 47' 20.94"	35.079681 -97.789150	2392' FSL / 1320' FWL (SW/4 SEC 13)		
BHL-4	BOTTOM HOLE LOCATION	643717	2063062	35' 06' 07.20" -97' 47' 21.05"	35.102000 -97.789182	50' FNL / 1320' FWL (NW/4 SEC 12)		
X-1	MCCALLA #1-12	639805	2064207	35° 05' 28.49" -97° 47' 07.37"	35.091246 -97.785382	12-7N-6W:   TD: UNKNOWN   1,320' FSL / 2,450' FWL		
X-2	HEALEY #1-12H	638685	2064071	35' 05' 17.41" -97' 47' 09.04"	35.088169 -97.785844	12-7N-6W:   TD: 16,722'   200' FSL / 2,310' FWL		
X-3	SS MCCALLA #1-12HS	638763	2062286	35' 05' 18.21" -97' 47' 30.52"	35.088392 -97.791810	12-7N-6W:   TD: 16,931'   280' FSL / 525' FWL		
X-4	NEWKIRK #1-13	637162	2064405	35° 05' 02.33" -97° 47' 05.06"	35.083982 -97.784739	13-7N-6W:   TD: 7,525'   1,324' FNL / 2,640' FWL		
X-5	MCCALLA #1	637630	2063464	35' 05' 06.98" -97' 47' 16.37"	35.085273 -97.787881	13-7N-6W:   TD: 12,925'   855' FNL / 1,700' FWL		
X-6	BIRT #1-13H	633446	2062158	35° 04' 25.62" -97° 47' 32.19"	35.073785 -97.792275	13-7N-6W:   TD: 16,140'   245' FSL / 385' FWL		
X-7	BIRT #2-13-12XHS	633542	2063413	35° 04′ 26.55″ -97° 47′ 17.09″	35.074043 -97.788081	13-7N-6W:   TD: 22,370'   340' FSL / 1,640' FWL		

Certificate of Authorization No. 7318

Date Staked: \*\*-\*\*-19 Date Drawn: 4-15-19



R E	REVISIONS							
No.	DATE	BY	DESCRIPTION	COMMENTS				
00	4-15-19	HDG	ISSUED FOR APPROVAL					

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

SHEET:

SHL:

BHL-4

8.5x14

13-7N-6W

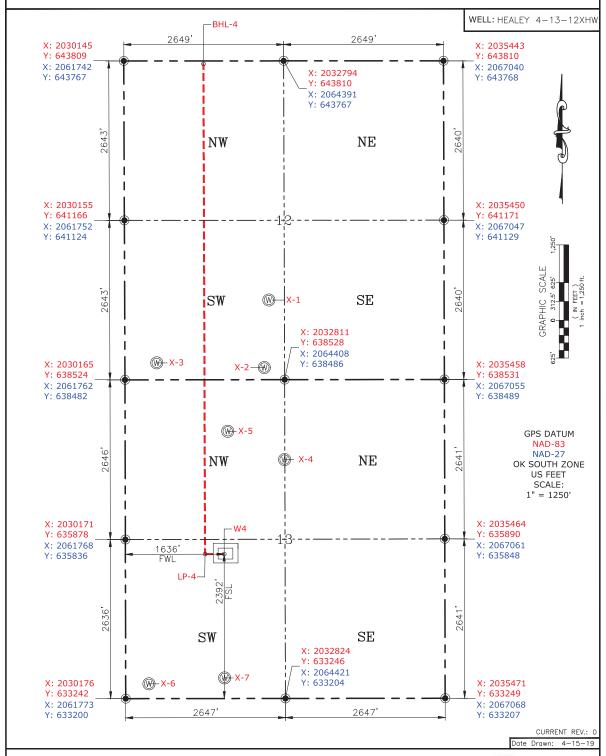
12-7N-6W

## PETRO LAND SERVICES SOUTH, LLC 10400 VINEYARD BLVD. SUITE C, OKLA. CITY, OKLA. 73120 \* OFFICE (405) 212-3108

GRADY \_ County Oklahoma 2392' FSL-1636' FWL Section 13\_\_\_ Township  $\frac{7N}{}$  Range  $\frac{6W}{}$  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:**

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