

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

API NUMBER: 011 23800

Approval Date: 05/10/2017

Expiration Date: 11/10/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 14N Rge: 12W

County: BLAINE

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 521 620

Lease Name: LORENE

Well No: 1-8-5XH

Well will be 521 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

LORENE BARNETT  
901 POPLAR RD  
STARKVILLE MS 39759

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

	Name	Depth	Name	Depth
1	CHESTER	11358	6	
2	MISS'AN (EX CHESTER)	11460	7	
3	MISSISSIPPIAN SOLID	12240	8	
4	KINDERHOOK	13000	9	
5	WOODFORD	13050	10	

Spacing Orders: 652870  
579767  
139124

Location Exception Orders: 662292

Increased Density Orders:

Pending CD Numbers: 201600790

Special Orders:

Total Depth: 23503

Ground Elevation: 1648

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 160

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 BED AQUIFER

Pit Location Formation: MARLOW

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-32546

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 BED AQUIFER

Pit Location Formation: MARLOW

## HORIZONTAL HOLE 1

Sec 05 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: 12221

Radius of Turn: 472

Direction: 12

Total Length: 10541

Measured Total Depth: 23503

True Vertical Depth: 13050

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

### Notes:

#### Category

#### Description

#### DEEP SURFACE CASING

5/5/2017 - 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

5/5/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK [HTTP://FRACFOCUS.ORG/](http://fracfocus.org/) WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE

#### INTERMEDIATE CASING

5/5/2017 - 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

#### LOCATION EXCEPTION - 662292

5/9/2017 - G64 - (I.O.) 8 & 5-14N-12WL  
X652870 MSNLC, WDFD 8-14N-12W  
X579767 MSSSD, KDRK, WDFD 5-14N-12W  
X139124 CSTR 5-14N-12W  
SHL (8-14N-12W) NCT 200' FSL, NCT 1320' FWL \*\*  
COMPL. INT. (8-14N-12W) NCT 150' FSL, NCT 0' FNL, NCT 330' FWL  
COMPL. INT. (5-14N-12W) NCT 0' FSL, NCT 150' FNL, NCT 330' FWL  
CONTINENTAL RESOURCES, INC.  
3-30-2017

\*\*S/B IN NW4 17-14N-12W; WILL BE CORRECTED AT HEARING FOR FINAL ORDER PER OPERATOR

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 23800 LORENE 1-8-5XH

Category	Description
MEMO	5/5/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 201600790	5/9/2017 - G64 - (I.O.) 8 & 5-14N-12W EST MULTIUNIT HORIZONTAL WELL X652870 MSNLC, WDFD 8-14N-12W X579767 MSSSD, KDRK, WDFD 5-14N-12W X139124 CSTR 5-14N-12W XOTHER (CSTR & WDFD ASSOCIATED COMMON SOURCES OF SUPPLY TO MSNLC, MSSSD, KDRK) 50% 8-14N-12W 50% 5-14N-12W CONTINENTAL RESOURCES, INC. REC. 2-6-2017 (THOMAS)
SPACING - 139124	5/9/2017 - G64 - (640) 5-14N-12W EXT 102663 CSTR EXT OTHERS
SPACING - 579767	5/9/2017 - G64 - (640) 5-14N-12W EXT OTHER EST MSSSD
SPACING - 652870	5/9/2017 - G64 - (640) 8-14N-12W VAC 102663/107747 MSSLM EST MSNLC EXT OTHER

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.

API: 011 23800

# COVER SHEET



CONTINENTAL RESOURCES, INC.  
LORENE #1-8-5XH  
LORENE #2-8-5XH  
LORENE #3-8-5XH  
Sec. 17 Twp. 14N Rng. 12W  
County : Blaine State of Oklahoma

SHEET	REVISE DATE	BY	COMMENTS
EXHIBIT A	4/20/17	JH	REV. SHL/HS, UPDATED PLATS, REV. AC

GPS DATUM  
NAD - 27  
NAD - 83  
OK NORTH ZONE

provided by,  
Arkoma Surveying and Mapping, PLLC  
P.O. Box 238 Wilburton, OK 74578  
Ph. 918-465-5711 Fax 918-465-5030  
Certificate of Authorization No. 5348  
Expires June 30, 2018

Invoice #6489  
Date Staked: 02/20/17



# Well Location Plat

Operator : CONTINENTAL RESOURCES, INC.

EXHIBIT "A"

S.H.L. Sec. 17-14N-12W I.M.

B.H.L. Sec. 5-14N-12W I.M.

BLAINE COUNTY

(SHEET 1 OF 3)

## NAD 83

Point	Northing	Easting	Elevation	Latitude/Longitude	Latitude/Longitude	Description	Pad Elevation
20	264380	1817632	0.0			1/2" IR NWc 5-14N-12W	
21	259111	1817605	0.0			RD OCCP NWc 8-14N-12W	
22	253830	1817607	0.0			RD OCCP SWc 8-14N-12W	
23	248579	1817599	0.0			RD OCCP SWc 19-14N-12W	
24	264334	1822916	0.0			1/2" IR NEc 5-14N-12W	
25	259052	1822900	0.0			3/8" IR NEc 8-14N-12W	
26	256418	1822891	0.0			3/8" IR E/4 8-14N-12W	
27	253787	1822882	0.0			3/8" IR SEc 8-14N-12W	
28	248523	1822837	0.0			1/2" IR SEc 19-14N-12W	
50	257098	1820910	0.0	LAT:35°42'18.86"N LON:98°29'49.57"W	LAT:35.70523996 LON:-98.49710342	AC - OTC/OCC NA HW COWAN 1 OCC STATUS: PA, TVD: -	
51	258405	1822231	0.0	LAT:35°42'31.86"N LON:98°29'33.62"W	LAT:35.70884882 LON:-98.49267349	AC - MUSTANG FUEL COWAN 1-8 OCC STATUS: PA, TVD: 11260'	
52	255140	1818927	0.0	LAT:35°41'59.40"N LON:98°30'13.49"W	LAT:35.69983279 LON:-98.50374743	AC - NEWFIELD EXPL. BARNETT 1-8 OCC STATUS: AC, TVD: 11440'	
53	255118	1821587	0.0	LAT:35°41'59.32"N LON:98°29'41.48"W	LAT:35.69981120 LON:-98.49485594	AC - CHESAPEAKE COWAN 3-8 OCC STATUS: PA, TVD: 11450'	
54	264898	1821592	0.0	LAT:35°43'17.45"N LON:98°29'41.67"W	LAT:35.72151372 LON:-98.49490736	AC - COTTON PETRO. BAILEY 1 OCC STATUS: PA, TVD: 11050'	
55	259266	1822551	0.0	LAT:35°42'40.39"N LON:98°29'29.81"W	LAT:35.71121859 LON:-98.49161294	AC - CLR BARNETT #1-5H OCC STATUS: AC, TVD: 17921'	
100	253304	1818226	±1650.0	LAT:35°41'41.21"N LON:98°30'21.86"W	LAT:35.69478078 LON:-98.50607343	A. LORENE #1-8-5XH 521' FNL - 620' FWL	1649.0
101	253305	1818421	±1650.0	LAT:35°41'41.22"N LON:98°30'19.50"W	LAT:35.69478472 LON:-98.50541675	B. LORENE #2-8-5XH 519' FNL - 815' FWL	1649.0
102	253304	1818451	±1650.0	LAT:35°41'41.22"N LON:98°30'19.14"W	LAT:35.69478448 LON:-98.50531571	C. LORENE #3-8-5XH 519' FNL - 845' FWL	1649.0
200	253787	1817937	0.0	LAT:35°41'45.97"N LON:98°30'25.40"W	LAT:35.69610175 LON:-98.50705589	A. HEEL SLOT 41' FNL - 330' FWL	
201	253785	1818357	0.0	LAT:35°41'45.97"N LON:98°30'20.31"W	LAT:35.69610389 LON:-98.50564145	B. HEEL SLOT 49' FNL - 750' FWL	
202	253782	1818777	0.0	LAT:35°41'45.96"N LON:98°30'15.22"W	LAT:35.69610053 LON:-98.50422698	C. HEEL SLOT 49' FNL - 1170' FWL	
300	264328	1817961	0.0	LAT:35°43'30.21"N LON:98°30'25.78"W	LAT:35.72505946 LON:-98.50715979	A. BOTTOM HOLE LOC. 50' FNL - 330' FWL	
301	264324	1818381	0.0	LAT:35°43'30.20"N LON:98°30'20.68"W	LAT:35.72505537 LON:-98.50574483	B. BOTTOM HOLE LOC. 50' FNL - 750' FWL	
302	264320	1818801	0.0	LAT:35°43'30.18"N LON:98°30'15.59"W	LAT:35.72505127 LON:-98.50432986	C. BOTTOM HOLE LOC. 50' FNL - 1170' FWL	

survey and plat by,

Arkoma Surveying and Mapping, PLLC

P.O. Box 238 Wilburton, OK 74578

Ph. 918-465-5711 Fax 918-465-5030

Certificate of Authorization No. 5348

Expires June 30, 2018

Invoice #6489

Date Staked : 04/13/16 By : R.L.

Date Drawn : 04/19/16 By : R.S.



# Well Location Plat

Operator : CONTINENTAL RESOURCES, INC.

EXHIBIT "A"  
S.H.L. Sec. 17-14N-12W I.M.  
B.H.L. Sec. 5-14N-12W I.M.  
BLAINE COUNTY  
(SHEET 2 OF 3)

NAD 27

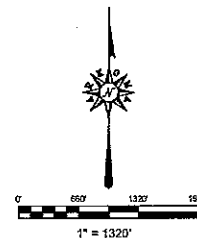
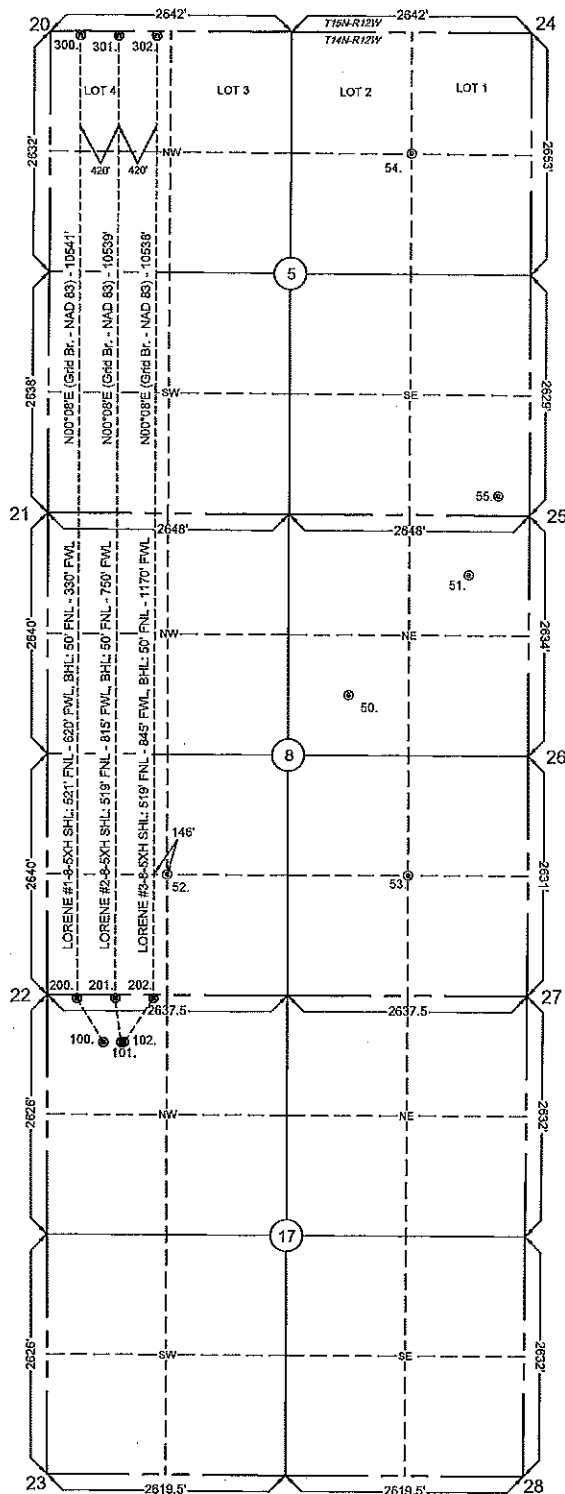
Point	Northing	Easting	Elevation	Latitude/Longitude	Latitude/Longitude	Description	Pad Elevation
20	264356	1849232	0.0			1/2" IR NWc 5-14N-12W	
21	259086	1849205	0.0			RD OCCP NWc 8-14N-12W	
22	253806	1849208	0.0			RD OCCP SWc 8-14N-12W	
23	248554	1849199	0.0			RD OCCP SWc 19-14N-12W	
24	264310	1854516	0.0			1/2" IR NEc 5-14N-12W	
25	259027	1854500	0.0			3/8" IR NEc 8-14N-12W	
26	256393	1854492	0.0			3/8" IR E/4 8-14N-12W	
27	253763	1854482	0.0			3/8" IR SEc 8-14N-12W	
28	248499	1854438	0.0			1/2" IR SEc 19-14N-12W	
50	257073	1852510	0.0	LAT:35°42'18.69"N LON:98°29'48.31"W	LAT:35.70519253 LON:-98.49675331	AC - OTC/OCC NA HW COWAN 1 OCC STATUS: PA, TVD: -	
51	258380	1853832	0.0	LAT:35°42'31.69"N LON:98°29'32.36"W	LAT:35.70880149 LON:-98.49232345	AC - MUSTANG FUEL COWAN 1-8 OCC STATUS: PA, TVD: 11260'	
52	255115	1850527	0.0	LAT:35°41'59.23"N LON:98°30'12.23"W	LAT:35.69978519 LON:-98.50339722	AC - NEWFIELD EXPL. BARNETT 1-8 OCC STATUS: AC, TVD: 11440'	
53	255094	1853167	0.0	LAT:35°41'59.15"N LON:98°29'40.22"W	LAT:35.69976366 LON:-98.49450610	AC - CHESAPEAKE COWAN 3-8 OCC STATUS: PA, TVD: 11450'	
54	262993	1853192	0.0	LAT:35°43'17.28"N LON:98°29'40.40"W	LAT:35.72146667 LON:-98.49455684	AC - COTTON PETRO. BAILEY 1 OCC STATUS: PA, TVD: 11050'	
55	259241	1854151	0.0	LAT:35°42'40.22"N LON:98°29'28.55"W	LAT:35.71117133 LON:-98.49126287	AC - CLR BARNETT #1-5H OCC STATUS: AC, TVD: 17921'	
100	253280	1849827	±1650.0	LAT:35°41'41.04"N LON:98°30'20.60"W	LAT:35.69473304 LON:-98.50572329	A. LORENE #1-8-5XH 521' FNL - 620' FWL	1649.0
101	253280	1850022	±1650.0	LAT:35°41'41.05"N LON:98°30'18.24"W	LAT:35.69473698 LON:-98.50506664	B. LORENE #2-8-5XH 519' FNL - 815' FWL	1649.0
102	253280	1850052	±1650.0	LAT:35°41'41.05"N LON:98°30'17.88"W	LAT:35.69473674 LON:-98.50496561	C. LORENE #3-8-5XH 519' FNL - 845' FWL	1649.0
200	253762	1849538	0.0	LAT:35°41'45.79"N LON:98°30'24.14"W	LAT:35.69605403 LON:-98.50670567	A. HEEL SLOT 41' FNL - 330' FWL	
201	253761	1849958	0.0	LAT:35°41'45.80"N LON:98°30'19.05"W	LAT:35.69605619 LON:-98.50529129	B. HEEL SLOT 49' FNL - 750' FWL	
202	253757	1850378	0.0	LAT:35°41'45.79"N LON:98°30'13.96"W	LAT:35.69605283 LON:-98.50387688	C. HEEL SLOT 49' FNL - 1170' FWL	
300	264303	1849562	0.0	LAT:35°43'30.04"N LON:98°30'24.51"W	LAT:35.72501239 LON:-98.50680865	A. BOTTOM HOLE LOC. 50' FNL - 330' FWL	
301	264299	1849982	0.0	LAT:35°43'30.03"N LON:98°30'19.42"W	LAT:35.72500832 LON:-98.50539375	B. BOTTOM HOLE LOC. 50' FNL - 750' FWL	
302	264296	1850402	0.0	LAT:35°43'30.02"N LON:98°30'14.32"W	LAT:35.72500423 LON:-98.50397884	C. BOTTOM HOLE LOC. 50' FNL - 1170' FWL	

survey and plat by,  
Arkoma Surveying and Mapping, PLLC  
P.O. Box 238 Wilburton, OK 74578  
Ph. 918-465-5711 Fax 918-465-5030  
Certificate of Authorization No. 5348  
Expires June 30, 2018

Invoice #6489  
Date Staked : 04/13/16 By: R.L.  
Date Drawn : 04/19/16 By: R.S.



EXHIBIT "A"  
S.H.L. Sec. 17-14N-12W I.M.  
B.H.L. Sec. 5-14N-12W I.M.  
BLAINE COUNTY  
(SHEET 3 OF 3)



GPS DATUM  
NAD - 27  
NAD - 83  
OK NORTH ZONE

Quadrant 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.  
NOTE: X and Y data shown herein for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey.  
Please note that this location was staked on the ground under the orders of a Licensed Professional Engineer, and the accuracy of this survey is not guaranteed.  
Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined.  
GPS data is observed from RTK - GPS.

survey and plat by,  
Arkoma Surveying and Mapping, PLLC  
P.O. Box 238 Wilburton, OK 74578  
Ph. 918-465-5711 Fax 918-465-5030  
Certificate of Authorization No. 5348  
Expires June 30, 2018

Invoice #6489  
Date Staked : 04/13/16 By : R.L.  
Date Drawn : 04/19/16 By : R.S.

**Certification:**

This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

*Lance G. Mathis* 04/24/17  
LANCE G. MATHIS OK LPLS 1664

