

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

API NUMBER: 051 24697

Approval Date: 08/20/2019

Expiration Date: 02/20/2021

Horizontal Hole
Multi Unit

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 24 Twp: 6N Rge: 5W

County: GRADY

SPOT LOCATION: ☐ NW ☐ NE ☐ SE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 1615 465

Lease Name: COOLEY

Well No: 5-24-25-36XHW

Well will be 465 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

LANNIS E. SUTTON
PO BOX 82861
OKLAHOMA CITY OK 73148

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	11480	6	
2	WOODFORD	11725	7	
3			8	
4			9	
5			10	

Spacing Orders: 147146
190352
170489
607356
623417
167964

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201904143
201904144
201904155
201904154
201904153

Special Orders:

Total Depth: 25695

Ground Elevation: 1215

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 260

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 19-36885

H. SEE MEMO

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 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 5000 Average: 3000

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: DUNCAN

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: DUNCAN

HORIZONTAL HOLE 1

Sec 36 Twp 6N Rge 5W County GRADY

Spot Location of End Point: S2 S2 SE SE

Feet From: SOUTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 11248

Radius of Turn: 467

Direction: 182

Total Length: 13714

Measured Total Depth: 25695

True Vertical Depth: 12203

End Point Location from Lease,

Unit, or Property Line: 50

Notes:

Category

Description

DEEP SURFACE CASING

8/14/2019 - 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

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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.

051 24697 COOLEY 5-24-25-36XHW

Category	Description
HYDRAULIC FRACTURING	<p>8/14/2019 - G71 - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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,</p> <p>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</p>
MEMO	<p>8/14/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT</p>
PENDING CD - 201904143	<p>8/19/2019 - GC2 - (E.O) 24, 25 & 36-6N-5W EST MULTIUNIT HORIZONTAL WELL X147146 (24-6N-5W) MSSP X190352 (24-6N-5W) WDFD X167964 (25-6N-5W) MSSP X607356 (25-6N-5W) WDFD X623417 (36-6N-5W) MSSP, WDFD (MSSP ASSOCIATED COMMON SOURCE OF SUPPLY TO WDFD) 33.33% 24-6N-5W 33.34% 25-6N-5W 33.33% 36-6N-5W CONTINENTAL RESOURCES, INC. REC. 8-20-2019 (NORRIS)</p>
PENDING CD - 201904144	<p>8/19/2019 - GC2 - (E.O.) 24, 25, & 36-6N-5W X147146 (24-6N-5W) MSSP X190352 (24-6N-5W) WDFD X167964/170489 (25-6N-5W) MSSP X607356 (25-6N-5W) WDFD X623417 (36-6N-5W) MSSP, WDFD X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO BOGEY 1-12X1H, PROPOSED DOGFISH 1-31-30MXH, PROPOSED DOGFISH 1-31-30MXH*** COMPL. INT. (24N-5W) NCT 150' FNL, NCT 0' FSL, NCT 330' FEL+++ COMPL. INT. (25-6N-5W) NCT 0' FNL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (36-6N-5W) NCT 0' FNL, NCT 150' FSL, NCT 330' FEL NO OP. NAMED REC. 08/20/2019 (NORRIS)</p> <p>***S/B DOGFISH 1-31-30MXHR; WILL BE CORRECTED AT FINAL HEARING PER ATTORNEY FOR OPERATOR</p> <p>+++ S/B 24-6N-5W; WILL BE CORRECTED AT FINAL HEARING PER ATTORNEY FOR OPERATOR</p>
PENDING CD - 201904153	<p>8/20/2019 - GC2 - 24-6N-5W X190352 WDFD 4 WELLS NO OP. NAMED HEARING 9/3/2019</p>
PENDING CD - 201904154	<p>8/20/2019 - GC2 - 25-6N-5W X607356 WDFD 4 WELLS NO OP. NAMED HEARING 9/3/2019</p>
PENDING CD - 201904155	<p>8/19/2019 - GC2 - 36-6N-5W X623417 WDFD 3 WELLS NO OP. NAMED HEARING 9/3/2019</p>
SPACING - 147146	<p>8/19/2019 - GC2 - (640) 24-6N-5W EST MSSP, OTHERS EXT OTHERS</p>
SPACING - 167964	<p>8/20/2019 - GC2 - (640) 25-6N-5W EXT OTHER EXT 147146/153801 MSSP, OTHERS</p>

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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.

Category	Description
SPACING - 170489	8/19/2019 - GC2 - NPT PARAGRAPH 1 OF 167964 TO REFLECT 640 DRILLING AND SPACING UNITS.
SPACING - 190352	8/19/2019 - GC2 - (640) 24-6N-5W EST WDFD, OTHERS
SPACING - 607356	8/19/2019 - GC2 - (640) 25-6N-5W EXT 386234/190352 WDFD, OTHERS EST OTHERS
SPACING - 623417	8/19/2019 - GC2 - (640) 36-6N-5W EXT 607356/604782/380589 MSSP, WDFD, OTHERS VAC OTHERS

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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.

EXHIBIT: A (1 of 2)
 SHEET: 8.5x11
 SHL: 24-6N-5W
 BHL-5 36-6N-5W



COVER SHEET

CONTINENTAL RESOURCES, INC.

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

Section 24 Township 6N Range 5W I.M.Well: COOLEY 5-24-25-36XHWCounty GRADY State OKWell: --Operator CONTINENTAL RESOURCES, INC.

NAD-83

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W5	COOLEY 5-24-25-36XHW	599998	2066736	34° 58' 53.67" -97° 40' 19.42"	34.981574 -97.672061	1615' FNL / 465' FEL (NE/4 SEC 24)	1214.05'	1214.56'
LP-5	LANDING POINT	599997	2066541	34° 58' 53.67" -97° 40' 21.77"	34.981574 -97.672713	1615' FNL / 660' FEL (NE/4 SEC 24)	--	--
BHL-5	BOTTOM HOLE LOCATION	585785	2066565	34° 56' 33.09" -97° 40' 22.03"	34.942525 -97.672787	50' FSL / 660' FEL (SE/4 SEC 36)	--	--
X-1	COPELAND #1-36H	585941	2062724	34° 56' 34.75" -97° 41' 08.16"	34.942987 -97.685600	36-6N-5W: TD: 17,395' 215' FSL / 790' FWL	--	--
X-2	DOGFISH #1-31-30-MXH	586192	2066913	34° 56' 37.10" -97° 40' 17.83"	34.943640 -97.671621	36-6N-5W: TD: 13,686' 456' FSL / 311' FEL	--	--
X-3	DOGFISH #1-31-30-MXHR	586192	2066884	34° 56' 37.10" -97° 40' 18.18"	34.943640 -97.671717	36-6N-5W: TD: 21,930' 456' FSL / 340' FEL	--	--
X-4	BRIDWELL #1-25	594993	2065887	34° 58' 04.19" -97° 40' 29.81"	34.967830 -97.674948	25-6N-5W: TD: 14,095' 1,326' FNL / 1,320' FEL	--	--
X-5	BRIDWELL #1-25H	591245	2065365	34° 57' 27.13" -97° 40' 36.23"	34.957537 -97.676731	25-6N-5W: TD: 16,575' 220' FSL / 1,850' FEL	--	--
X-6	COOLEY #1-24H	596083	2065295	34° 58' 14.99" -97° 40' 36.88"	34.970830 -97.676912	25-6N-5W: TD: 16,920' 233' FNL / 1,910' FEL	--	--

NAD-27

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W5	COOLEY 5-24-25-36XHW	599956	2098333	34° 58' 53.42" -97° 40' 18.29"	34.981504 -97.671747	1615' FNL / 465' FEL (NE/4 SEC 24)	1214.05'	1214.56'
LP-5	LANDING POINT	599955	2098137	34° 58' 53.42" -97° 40' 20.63"	34.981505 -97.672399	1615' FNL / 660' FEL (NE/4 SEC 24)	--	--
BHL-5	BOTTOM HOLE LOCATION	585743	2098161	34° 56' 32.84" -97° 40' 20.91"	34.942455 -97.672474	50' FSL / 660' FEL (SE/4 SEC 36)	--	--
X-1	COPELAND #1-36H	585899	2094320	34° 56' 34.50" -97° 41' 07.03"	34.942917 -97.685286	36-6N-5W: TD: 17,395' 215' FSL / 790' FWL	--	--
X-2	DOGFISH #1-31-30-MXH	586150	2098509	34° 56' 36.85" -97° 40' 16.71"	34.943569 -97.671307	36-6N-5W: TD: 13,686' 456' FSL / 311' FEL	--	--
X-3	DOGFISH #1-31-30-MXHR	586150	2098480	34° 56' 36.85" -97° 40' 17.05"	34.943570 -97.671404	36-6N-5W: TD: 21,930' 456' FSL / 340' FEL	--	--
X-4	BRIDWELL #1-25	594951	2097484	34° 58' 03.94" -97° 40' 28.68"	34.967761 -97.674634	25-6N-5W: TD: 14,095' 1,326' FNL / 1,320' FEL	--	--
X-5	BRIDWELL #1-25H	591203	2096961	34° 57' 26.88" -97° 40' 35.10"	34.957468 -97.676417	25-6N-5W: TD: 16,575' 220' FSL / 1,850' FEL	--	--
X-6	COOLEY #1-24H	596041	2096892	34° 58' 14.74" -97° 40' 35.75"	34.970761 -97.676598	25-6N-5W: TD: 16,920' 233' FNL / 1,910' FEL	--	--

REVISIONS

No.	DATE	STAKED	BY	DESCRIPTION	COMMENTS
00	8-9-19	**--19	HDG	ISSUED FOR APPROVAL	--
01	8-13-19	**--19	HDG	MOVED PAD SOUTH	REV'D ALL EXHIBITS

Certificate of Authorization No. 7318



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

EXHIBIT: A (2 of 2)

SHEET: 8.5x14

SHL: 24-6N-5W

BHL-5 36-6N-5W

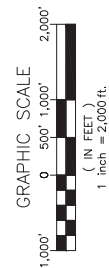
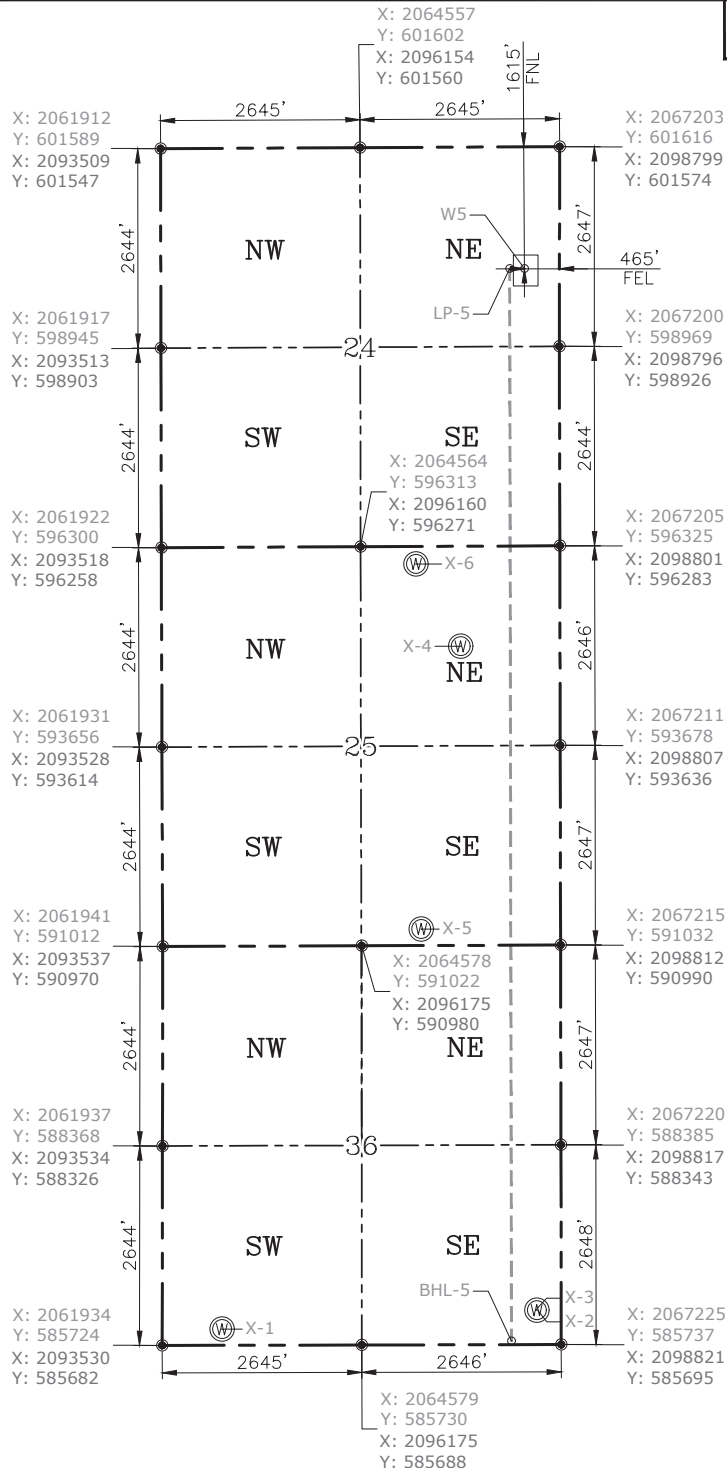
PETRO LAND SERVICES SOUTH, LLC

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

GRADY

County Oklahoma

1615' FNL-465' FEL Section 24 Township 6N Range 5W I.M.

CONTINENTAL
RESOURCES, INC.
(OPERATOR)WELL: COOLEY
5-24-25-36XHWGPS DATUM
NAD-83
NAD-27
OK SOUTH ZONE
US FEET
SCALE:
1" = 2000'

CURRENT REV.: 1

Date Drawn: 8-13-19

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.

*Randall J. Bilyeu*

Oklahoma PLS No.1196 DATE