

API NUMBER: 051 24772

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

Approval Date: 03/06/2020
Expiration Date: 09/06/2021

Multi Unit Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 32 Township: 7N Range: 6W County: GRADY

SPOT LOCATION: ☐ SE ☐ NW ☐ NE ☐ NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 375 940

Lease Name: CUNNINGHAM Well No: 5-32-5XHW Well will be 375 feet from nearest unit or lease boundary.
Operator Name: CONTINENTAL RESOURCES INC Telephone: 4052349020; 4052349000; OTC/OCC Number: 3186 0

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

JERRY D. WEAVER & HELEN WEAVER
1529 COUNTY ROAD 1400
CHICKASHA OK 73018

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

	Name	Code	Depth
1	MISSISSIPPIAN	359MSSP	13582
2	MISSISSIPPI LIME	351MSSLM	13978
3	WOODFORD	319WDFD	14020

Spacing Orders: 204268 Location Exception Orders: No Exceptions Increased Density Orders: No Density Orders
621556

Pending CD Numbers: 202000359
202000360
202000366
202000364
Special Orders: No Special Orders

Total Depth: 23950 Ground Elevation: 1074 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 600

Deep surface casing has been approved

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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 20-37267
H. SEE MEMO

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: 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

This permit does not address the right of entry or settlement of surface damages.
The duration of this permit is 18 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.

MULTI UNIT HOLE 1						
Section: 5		Township: 6N		Range: 6W		Total Length: 10169
County: GRADY					Measured Total Depth: 23950	
Spot Location of End Point: S2		S2	S2	SE	True Vertical Depth: 14357	
Feet From: SOUTH		1/4 Section Line: 50			End Point Location from	
Feet From: EAST		1/4 Section Line: 1320			Lease,Unit, or Property Line: 50	

NOTES:	
Category	Description
DEEP SURFACE CASING	2/24/2020 - GC2 - 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	2/24/2020 - GC2 - 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: OCCWEB.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
MEMO	2/24/2020 - GC2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - WEST FORK OF BITTER CREEK), OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 202000359	3/6/2020 - G56 - (I.O.) 32-7N-6W & 5-6N-6W ESTABLISH MULTIUNIT HORIZONTAL WELL X204268 MSSLM, WDFD 32-7N-6W X204268 WDFD 5-6N-6W X621556 MSSP 5-6N-6W (MSSLM, MSSP ARE ADJACENT COMMON SOURCES OF SUPPLY TO WDFD) 50% 32-7N-5W 50% 5-6N-6W CONTINENTAL RESOURCES, INC. REC 3/3/2020 (P. PORTER)
PENDING CD - 202000360	3/6/2020 - G56 - (I.O.) 32-7N-6W & 5-6N-6W X204268 MSSLM, WDFD 32-7N-6W X204268 WDFD 5-6N-6W X621556 MSSP 5-6N-6W COMPL INT (32-7N-6W) NCT 150' FNL, NCT 0' FSL, NCT 660' FEL COMPL INT (5-6N-6W) NCT 0' FNL, NCT 150' FSL, NCT 660' FEL CONTINENTAL RESOURCES, INC. REC 3/3/2020 (P. PORTER)
PENDING CD - 202000364	3/6/2020 - G56 - 32-7N-6W X204268 WDFD 5 WELLS NO OP NAMED REC 3/3/2020 (P. PORTER)
PENDING CD - 202000366	3/6/2020 - G56 - 5-6N-6W X621556 WDFD 5 WELLS NO OP NAMED REC 3/3/2020 (P. PORTER)
SPACING - 204268	3/6/2020 - G56 - (640) 32-7N-8W & 5-6N-6W EXT OTHERS EXT 156047 MSSLM, OTHERS EXT 172459 WDFD, OTHERS (VAC MSSLM 5-6N-6W BY 621556)
SPACING - 621556	3/6/2020 - G56 - (640) 5-6N-6W VAC OTHER VAC 204268 MSSLM, OTHERS EXT 610599 MSSP, OTHERS

This permit does not address the right of entry or settlement of surface damages.
The duration of this permit is 18 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.

051 24772 CUNNINGHAM 5-32-5XHW

EXHIBIT: A (2 of 4)
 SHEET: 8.5x11
 SHL: 32-7N-6W
 BHL-5 5-6N-6W
 BHL-6 5-6N-6W



COVER SHEET CONTINUED...

CONTINENTAL RESOURCES, INC.

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

Section 32 Township 7N Range 6W I.M. Well: CUNNINGHAM 5-32-5XHW
 County GRADY State OK Well: CUNNINGHAM 6-32-5XHM
 Operator CONTINENTAL RESOURCES, INC.

NAD-27						EXISTING ELEVATION	DESIGN ELEVATION
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		
W5	CUNNINGHAM 5-32-5XHW	622202	2045038	35° 02' 34.71" -97° 50' 58.36"	35.042976 -97.849544	375' FNL / 940' FEL (NE/4 SEC 32)	1072.79'
LP-5	LANDING POINT	622201	2044658	35° 02' 34.71" -97° 51' 02.93"	35.042975 -97.850813	375' FNL / 1320' FEL (NE/4 SEC 32)	---
BHL-5	BOTTOM HOLE LOCATION	612032	2044650	35° 00' 54.12" -97° 51' 03.20"	35.015033 -97.850889	50' FSL / 1320' FEL (SE/4 SEC 5)	---
W6	CUNNINGHAM 6-32-5XHM	622202	2045068	35° 02' 34.71" -97° 50' 58.00"	35.042976 -97.849444	375' FNL / 910' FEL (NE/4 SEC 32)	1072.93'
LP-6	LANDING POINT	622204	2045648	35° 02' 34.72" -97° 50' 51.02"	35.042977 -97.847506	375' FNL / 330' FEL (NE/4 SEC 32)	---
BHL-6	BOTTOM HOLE LOCATION	612034	2045640	35° 00' 54.12" -97° 50' 51.30"	35.015035 -97.847583	50' FSL / 330' FEL (SE/4 SEC 5)	---
X-1	REYNOLDS-BOLES #1-32	619800	2044257	35° 02' 10.97" -97° 51' 07.79"	35.036380 -97.852163	32-7N-6W: TD: 13,100' 2,500' FSL / 1,713' FEL	---
X-2	NUNN #1-32H	617498	2043651	35° 01' 48.21" -97° 51' 15.12"	35.030057 -97.854201	32-7N-6W: TD: 17,323' 200' FSL / 2,310' FEL	---
X-3	HARTLEY #2-29H	622296	2042144	35° 02' 35.68" -97° 51' 33.16"	35.043244 -97.859210	32-7N-6W: TD: 18,791' 275' FNL / 1,485' FWL	---
X-4	HARTLEY #3-29H	622089	2043503	35° 02' 33.61" -97° 51' 16.82"	35.042670 -97.854673	32-7N-6W: TD: 18,453' 485' FNL / 2,475' FEL	---
X-5	HARTLEY #1-29H	622268	2041089	35° 02' 35.42" -97° 51' 45.84"	35.043172 -97.862735	32-7N-6W: TD: 18,350' 300' FNL / 430' FWL	---
X-6	CHESTER #3-32-5XHS	622089	2043703	35° 02' 33.61" -97° 51' 14.42"	35.042671 -97.854005	32-7N-6W: TD: 23,045' 485' FNL / 2,275' FEL	---
X-7	CHESTER #2-32-5XHS	622296	2042143	35° 02' 35.68" -97° 51' 33.17"	35.043244 -97.859213	32-7N-6W: TD: 23,004' 275' FNL / 1,484' FWL	---
X-8	MISER ET AL UNIT #1	612946	2041883	35° 01' 03.21" -97° 51' 36.46"	35.017557 -97.860127	5-6N-6W: TD: 13,200' 970' FSL / 1,210' FWL	---
X-9	HUMPHREY #1	615939	2041332	35° 01' 32.82" -97° 51' 43.03"	35.025783 -97.861952	5-6N-6W: TD: 12,988' 1,351' FNL / 660' FWL	---
X-10	CUNNINGHAM #1-5H	612199	2043400	35° 00' 55.80" -97° 51' 18.23"	35.015499 -97.855064	5-6N-6W: TD: 19,114' 220' FSL / 2,570' FEL	---
X-11	CHESTER #1-32H	616979	2045262	35° 01' 43.05" -97° 50' 55.76"	35.028624 -97.848823	5-6N-6W: TD: 18,425' 325' FNL / 699' FEL	---

Certificate of Authorization No. 7318



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

CURRENT REV.: 2

EXHIBIT: A (3 of 4)
SHEET: 8.5x14
SHL: 32-7N-6W
BHL-5 5-6N-6W

PETRO LAND SERVICES SOUTH, LLC

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



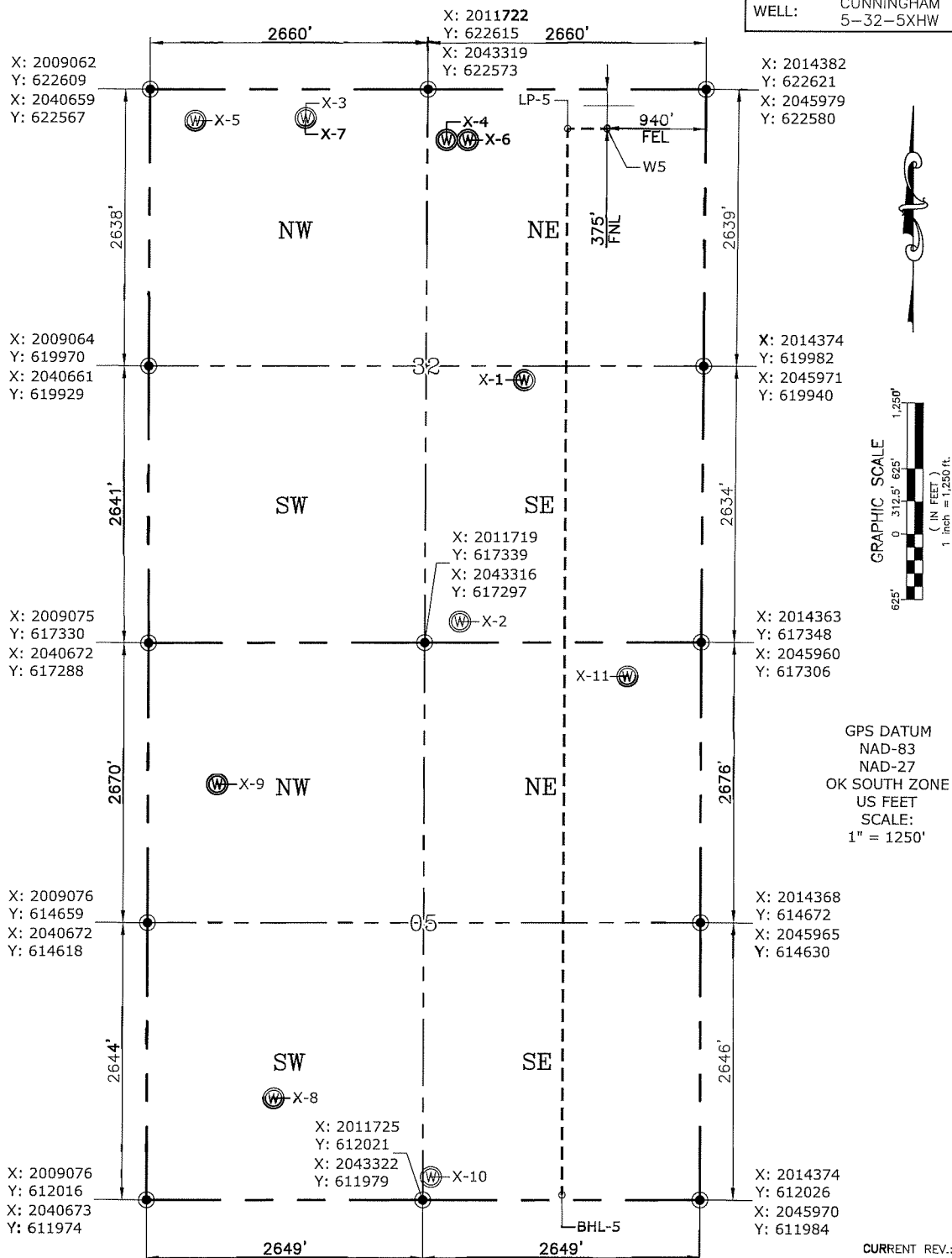
CONTINENTAL
RESOURCES, INC.
(OPERATOR)

GRADY

County Oklahoma

375' FNL-940' FEL Section 32 Township 7N Range 6W I.M.

WELL: CUNNINGHAM
5-32-5XHW



GPS DATUM
NAD-83
NAD-27
OK SOUTH ZONE
US FEET
SCALE:
1" = 1250'

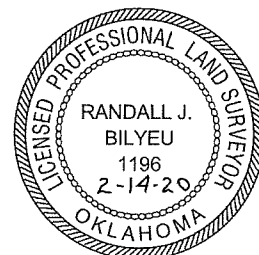
CURRENT REV.: 2

Date Drawn: 2-14-20

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