

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

API NUMBER: 051 24736 A

Approval Date: 11/21/2019  
Expiration Date: 05/21/2021

Horizontal Hole Oil & Gas  
Multi Unit

Amend reason: CHANGE BHL

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 7N Rge: 5W County: GRADY  
SPOT LOCATION: SE NE SW NE FEET FROM QUARTER: FROM NORTH FROM EAST  
SECTION LINES: 1685 1581

Lease Name: MILLS Well No: 5-16-21XHW Well will be 1581 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

THE DUSTY AND KELLY RICKS REVOCABLE TRUST,  
FREDDY CLAYTON RICKS II, TRUSTEE  
P.O. BOX 933  
BLANCHARD OK 73010

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

Name	Depth	Name	Depth
1 WOODFORD	11462	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 644200 Location Exception Orders: Increased Density Orders: 70972  
593309 705338

Pending CD Numbers: 201905015 Special Orders:  
201905016

Total Depth: 20137 Ground Elevation: 1247 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 390

Deep surface casing has been approved

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: 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 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

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36973  
H. SEE MEMO

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.

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 21 Twp 7N Rge 5W County GRADY

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 677

Depth of Deviation: 11040

Radius of Turn: 467

Direction: 170

Total Length: 8364

Measured Total Depth: 20137

True Vertical Depth: 11809

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

Notes:

Category

Description

DEEP SURFACE CASING

10/21/2019 - 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

10/21/2019 - 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: [OCCEWEB.COM/OG/OGFORMS.HTML](http://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](http://FRACFOCUS.ORG)

INCREASED DENSITY - 704972

11/21/2019 - GC2 - 16-7N-5W  
X644200 WDFD  
6 WELLS  
NO OP. NAMED  
11-7-2019

INCREASED DENSITY - 705338

11/21/2019 - GC2 - 21-7N-5W  
X593309 WDFD  
4 WELLS  
NO OP. NAMED  
11-19-2019

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 24736 MILLS 5-16-21XHW

MEMO	10/21/2019 - GC2 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - WINTER CREEK LAKE), PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 201905014	11/21/2019 - GC2 - (I.O.) 16 & 21-7N-5W X644200 WDFD, OTHER 16-7N-5W XOTHER 16-7N-5W X593309 WDFD, OTHERS 21-7N-5W X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO NABORS 1-33-28XHW AND NABORS 7-33-28XHW COMPL. INT. (16-7N-5W) NCT 660' FNL, NCT 0' FSL, NCT 660' FEL COMPL. INT. (21-7N-5W) NCT 0' FNL, NCT 150' FSL, NCT 660' FEL CONTINENTAL RESOURCES, INC. REC. 10-28-2019 (MILLER)
PENDING CD - 201905015	11/21/2019 - GC2 - (I.O.) 16 & 21-7N-5W EST MULTIUNIT HORIZONTAL WELL X644200 WDFD, OTHER 16-7N-5W XOTHER 16-7N-5W X593309 WDFD, OTHERS 21-7N-5W 33% 16-7N-5W 67% 21-7N-5W CONTINENTAL RESOURCES, INC. REC. 10-28-2019 (MILLER)
SPACING - 593309	11/21/2019 - GC2 - (640) 21-7N-5W EST WDFD, OTHERS EXT OTHERS
SPACING - 644200	11/21/2019 - GC2 - (640) 16-7N-5W VAC OTHERS VAC OTHER EXT (VER) OTHERS EST (VER) OTHERS EST (HOR) WDFD, OTHER COMPL. INT. (WDFD) NCT 330' FB

EXHIBIT: A (1 of 5)SHEET: 8.5x11SHL: 16-7N-5WBHL-E4 9-7N-5WBHL-M4 21-7N-5WBHL-M5 21-7N-5W

## COVER SHEET

## CONTINENTAL RESOURCES, INC.

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

Section 16 Township 7N Range 5W I.M.Well: EMERY 4-16-9XHWCounty GRADY State OKWell: MILLS 4-16-21XHWOperator CONTINENTAL RESOURCES, INC.Well: MILLS 5-16-21XHW

## NAD-83

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
E4	EMERY 4-16-9XHW	636839	2049635	35° 04' 58.56" -97° 43' 43.74"	35.082934 -97.728818	1745' FNL / 1581' FEL (NE/4 SEC 16)	1248.61'	1246.75'
LP-E4	LANDING POINT	636839	2049456	35° 04' 58.57" -97° 43' 45.90"	35.082935 -97.729416	1745' FNL / 1760' FEL (NE/4 SEC 16)	---	---
BHL-E4	BOTTOM HOLE LOCATION	643815	2049446	35° 06' 07.56" -97° 43' 45.80"	35.102101 -97.729388	50' FNL / 1760' FEL (NE/4 SEC 9)	---	---
M4	MILLS 4-16-21XHW	636889	2049635	35° 04' 58.86" -97° 43' 43.74"	35.083017 -97.728817	1715' FNL / 1581' FEL (NE/4 SEC 16)	1248.89'	1246.75'
LP-M4	LANDING POINT	636888	2048823	35° 04' 58.87" -97° 43' 53.52"	35.083019 -97.731532	1715' FNL / 2393' FEL (NE/4 SEC 16)	---	---
PI-M4	POINT OF INTERSECT	633301	2048914	35° 04' 23.59" -97° 43' 52.54"	35.073219 -97.731260	0' FSL / 2310' FEL (SE/4 SEC 18)	---	---
BHL-M4	BOTTOM HOLE LOCATION	628068	2049359	35° 03' 31.80" -97° 43' 47.35"	35.058833 -97.729819	50' FSL / 1881' FEL (SE/4 SEC 21)	---	---
M5	MILLS 5-16-21XHW	636899	2049635	35° 04' 59.16" -97° 43' 43.74"	35.083099 -97.728817	1685' FNL / 1581' FEL (NE/4 SEC 16)	1248.94'	1246.75'
LP-M5	LANDING POINT	636900	2049854	35° 04' 59.16" -97° 43' 41.11"	35.083099 -97.728085	1685' FNL / 1362' FEL (NE/4 SEC 16)	---	---
PI-M5	POINT OF INTERSECT	633303	2049904	35° 04' 23.58" -97° 43' 40.63"	35.073216 -97.727952	0' FSL / 1320' FEL (SE/4 SEC 16)	---	---
BHL-M5	BOTTOM HOLE LOCATION	628067	2050563	35° 03' 31.77" -97° 43' 32.87"	35.058826 -97.725796	50' FSL / 677' FEL (SE/4 SEC 21)	---	---
X-1	VIERSEN #1-9	642357	2049899	35° 05' 53.13" -97° 43' 42.80"	35.098092 -97.728555	9-7N-5W:   TD: 12,285'   1,509' FNL / 1,509' FEL	---	---
X-2	EMERY #1-9-16XH	643483	2050824	35° 06' 04.24" -97° 43' 29.22"	35.101179 -97.724783	9-7N-5W:   TD: 6,759'   385' FNL / 382' FEL	---	---
X-3	MIDDLEBERG SWD #1	640333	2047785	35° 05' 33.17" -97° 44' 05.90"	35.092547 -97.734972	9-7N-5W:   TD: 8,050'   1,752' FSL / 1,840' FWL	---	---
X-4	RICKS #7-5-4-1H	642901	2047802	35° 05' 58.57" -97° 44' 05.61"	35.099603 -97.734892	9-7N-5W:   TD: 17,012'   960' FNL / 1,870' FWL	---	---
X-5	MILLS #1-21H	628272	2046949	35° 03' 33.90" -97° 44' 16.33"	35.059416 -97.737870	21-7N-5W:   TD: 16,400'   255' FSL / 990' FWL	---	---
X-6	STRASSLE #1-28-33XH	628634	2045889	35° 03' 37.48" -97° 44' 17.04"	35.060411 -97.738067	21-7N-5W:   TD: 17,873'   617' FSL / 930' FWL	---	---
X-7	EMERY #1R-9-16XH	643450	2050794	35° 06' 03.92" -97° 43' 29.59"	35.101088 -97.724883	9-7N-5W:   TD: 21,281'   418' FNL / 412' FEL	---	---

## REVISIONS

No.	DATE	BY	DESCRIPTION	COMMENTS
00	6-19-19	HDG	ISSUED FOR APPROVAL	---
01	7-31-19	HDG	MOVED PAD NORTH	REV'D ALL EXHIBITS
02	9-16-19	HDG	REV'D ACCESS ROAD	REV'D EXHIBITS F,G & "A"
03	10-7-19	HDG	REV'D ACCESS ROAD	REV'D EXHIBITS B,F,G,H,I & "A"
04	11-12-19	HDG	REV'D X-1	REV'D EXHIBITS A1-A3
05	11-13-19	HDG	REV MILLS 4 & 5 BHL'S	REV'D EXHIBITS A1, A2, A4, & A5

Certificate of Authorization No. 7318

Date Staked: 8-2-19

Date Drawn: 11-13-19



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

EXHIBIT: A (2 of 5)SHEET: 8.5x11SHL: 16-7N-5WBHL-E4 9-7N-5WBHL-M4 21-7N-5WBHL-M5 21-7N-5W

## COVER SHEET CONTINUED...

## CONTINENTAL RESOURCES, INC.

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

Section 16 Township 7N Range 5W I.M.Well: EMERY 4-16-9XHWCounty GRADY State OKWell: MILLS 4-16-21XHWOperator CONTINENTAL RESOURCES, INC.Well: MILLS 5-16-21XHW

## NAD-27

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
E4	EMERY 4-16-9XHW	636797	2081232	35° 04' 58.32" -97° 43' 42.60"	35.082867 -97.728501	1745' FNL / 1581' FEL (NE/4 SEC 16)	1248.61'	1248.75'
LP-E4	LANDING POINT	636797	2081053	35° 04' 58.33" -97° 43' 44.76"	35.082869 -97.729099	1745' FNL / 1760' FEL (NE/4 SEC 16)	---	---
BHL-E4	BOTTOM HOLE LOCATION	643773	2081043	35° 06' 07.32" -97° 43' 44.65"	35.102034 -97.729071	50' FNL / 1760' FEL (NE/4 SEC 9)	---	---
M4	MILLS 4-16-21XHW	636827	2081232	35° 04' 58.62" -97° 43' 42.60"	35.082950 -97.728500	1715' FNL / 1581' FEL (NE/4 SEC 16)	1248.69'	1248.75'
LP-M4	LANDING POINT	636826	2080420	35° 04' 58.63" -97° 43' 52.37"	35.082953 -97.731215	1715' FNL / 2393' FEL (NE/4 SEC 16)	---	---
PI-M4	POINT OF INTERSECT	633259	2080511	35° 04' 23.35" -97° 43' 51.39"	35.073152 -97.730943	0' FSL / 2310' FEL (SE/4 SEC 16)	---	---
BHL-M4	BOTTOM HOLE LOCATION	628024	2080956	35° 03' 31.56" -97° 43' 48.21"	35.058766 -97.729502	50' FSL / 1881' FEL (SE/4 SEC 21)	---	---
M5	MILLS 5-16-21XHW	636857	2081232	35° 04' 58.92" -97° 43' 42.60"	35.083032 -97.728500	1685' FNL / 1581' FEL (NE/4 SEC 16)	1248.94'	1248.75'
LP-M5	LANDING POINT	636858	2081451	35° 04' 58.92" -97° 43' 39.97"	35.083033 -97.727769	1685' FNL / 1382' FEL (NE/4 SEC 16)	---	---
PI-M5	POINT OF INTERSECT	633260	2081501	35° 04' 23.34" -97° 43' 39.48"	35.073149 -97.727835	0' FSL / 1320' FEL (SE/4 SEC 16)	---	---
BHL-M5	BOTTOM HOLE LOCATION	628025	2082160	35° 03' 31.53" -97° 43' 31.73"	35.058759 -97.725479	50' FSL / 677' FEL (SE/4 SEC 21)	---	---
X-1	VERSEN #1-9	642314	2081296	35° 05' 52.69" -97° 43' 41.65"	35.098026 -97.728237	9-7N-5W:   TD: 12,285'   1,509' FNL / 1,509' FEL	---	---
X-2	EMERY #1-9-16XH	643441	2082421	35° 06' 04.00" -97° 43' 28.08"	35.101112 -97.724466	9-7N-5W:   TD: 6,759'   385' FNL / 382' FEL	---	---
X-3	MIDDLEBERG SWD #1	640291	2079382	35° 05' 32.93" -97° 44' 04.76"	35.092481 -97.734654	9-7N-5W:   TD: 8,050'   1,752' FSL / 1,840' FWL	---	---
X-4	RICKS #7-5-4-1H	642859	2079399	35° 05' 58.33" -97° 44' 04.47"	35.099537 -97.734574	9-7N-5W:   TD: 17,012'   980' FNL / 1,870' FWL	---	---
X-5	MILLS #1-21H	628230	2078546	35° 03' 33.68" -97° 44' 15.19"	35.059349 -97.737552	21-7N-5W:   TD: 16,400'   255' FSL / 990' FWL	---	---
X-6	STRASSLE #1-28-33XH	628592	2078486	35° 03' 37.24" -97° 44' 15.90"	35.080344 -97.737749	21-7N-5W:   TD: 17,873'   617' FSL / 930' FWL	---	---
X-7	EMERY #1R-9-16XH	643407	2082391	35° 06' 03.68" -97° 43' 28.44"	35.101022 -97.724566	9-7N-5W:   TD: 21,281'   418' FNL / 412' FEL	---	---

Certificate of Authorization No. 7318

Date Staked: 8-2-19

Date Drawn: 11-13-19



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

CURRENT REV.: 5

EXHIBIT: A (5 of 5)  
SHEET: 8.5x14  
SHL: 16-7N-5W  
BHL-M5 21-7N-5W

**PETRO LAND SERVICES SOUTH, LLC**

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



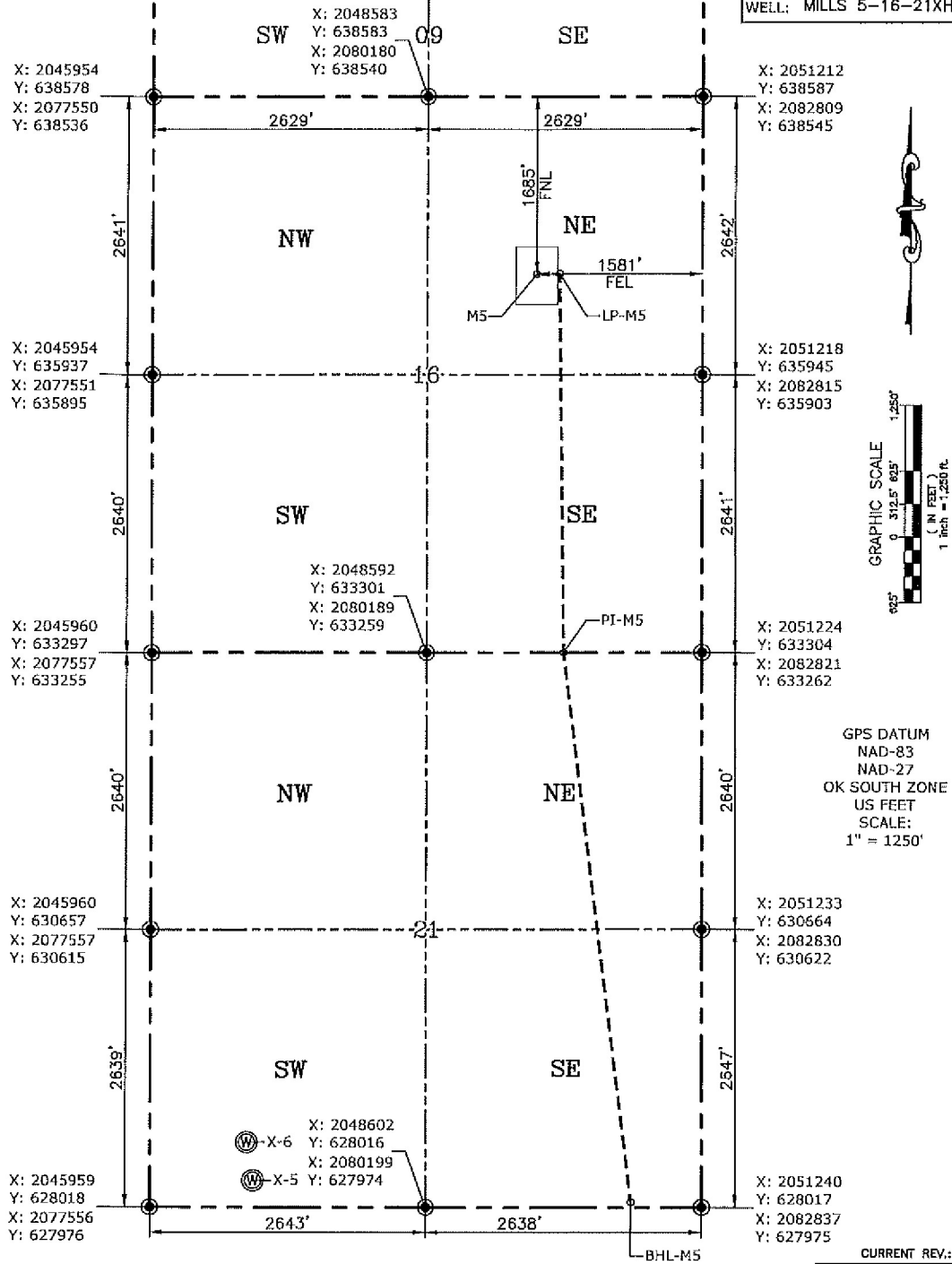
CONTINENTAL  
RESOURCES, INC.  
(OPERATOR)

GRADY

County Oklahoma

1685' FNL--1581' FEL Section 16 Township 7N Range 5W I.M.

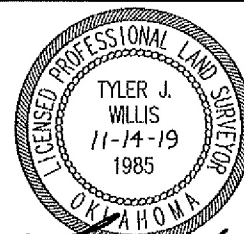
WELL: MILLS 5-16-21XHW



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, TYLER J. WILLIS 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.1985 DATE