

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

API NUMBER: 051 24686 B

Approval Date: 08/05/2019

Expiration Date: 02/05/2021

Horizontal Hole Oil & Gas
Multi Unit

Amend reason: CHANGE WELL NUMBER; CHANGE SHL & BHL,
UPDATE ORDERS, BTW & FORMATION DEPTHS; ADD SECTION
27 TO MU

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 27 Twp: 6N Rge: 5W County: GRADY
SPOT LOCATION: ☐ NW ☐ NE ☐ NW ☐ SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 2385 1805

Lease Name: GALVIN Well No: 5-27-22-15XHW Well will be 1805 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

COMMISSIONERS OF THE LAND OFFICE STATE OF
OKLAHOMA
P.O. BOX 26910
OKLAHOMA CITY OK 73126

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	12110	6	
2	WOODFORD	12489	7	
3	HUNTON	12600	8	
4			9	
5			10	

Spacing Orders: 147146 Location Exception Orders: Increased Density Orders: 702496
590519
106361
595406 702805

Pending CD Numbers: 201903619
201905036
201905046
201903620
Special Orders:

Total Depth: 25690 Ground Elevation: 1109 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 270

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36773
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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 15 Twp 6N Rge 5W County GRADY

Spot Location of End Point: NE NW NW NE

Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 2178

Depth of Deviation: 11769

Radius of Turn: 477

Direction: 355

Total Length: 13172

Measured Total Depth: 25690

True Vertical Depth: 12651

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

Notes:

Category

Description

DEEP SURFACE CASING

7/11/2019 - 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

7/11/2019 - 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 - 702496

10/1/2019 - GB1 - 22-6N-5W
X590519 WDFD
9 WELLS
NO OP. NAMED
9/19/2019

INCREASED DENSITY - 702805

10/21/2019 - GB1 - 27-6N-5W
X595406 WDFD
4 WELLS
NO OP. NAMED
9/25/2019

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 24686 GALVIN 5-27-22-15XHW

MEMO	7/11/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - LAFLIN CREEK), PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 201903619	7/30/2019 - GB1 - (I.O.)(640) 15-6N-5W EXT 626437 WDFD REC. 8/5/2019 (M. PORTER)
PENDING CD - 201903620	7/30/2019 - GB1 - 15-6N-5W X201903619 WDFD 4 WELLS NO OP. NAMED REC. 8/5/2019 (M. PORTER)
PENDING CD - 201905036	10/21/2019 - GB1 - (I.O.) 15, 22 & 27-6N-5W EST MULTIUNIT HORIZONTAL WELL X595406 MSSP, WDFD 27-6N-5W X106361 HNTN 27-6N-5W X147146 MSSP, HNTN 15 & 22-6N-5W X590519 WDFD 22-6N-5W X201903619 WDFD 15-6N-5W (MSSP, HNTN ADJACENT COMMON SOURCES OF SUPPLY TO WDFD) 21% 27-6N-5W 40% 22-6N-5W 39% 15-6N-5W CONTINENTAL RESOURCES, INC REC. 10/28/2019 (MILLER)
PENDING CD - 201905046	10/21/2019 - GB1 - (I.O.) 15, 22 & 27-6N-5W X595406 MSSP, WDFD 27-6N-5W X103361 HNTN 27-6N-5W *** X147146 MSSP, HNTN 15 & 22-6N-5W X590519 WDFD 22-6N-5W X201903619 WDFD 15-6N-5W X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO GOOD MARTIN 4-10-3XH, GOOD MARTIN 5-10-3XH, GOOD MARTIN 6-10-3XH; GALVIN 6-27-22-15XHW, SPARKS 3-22-27-34XHW COMPL. INT. (27-6N-5W) NCT 1320' FSL, NCT 0' FNL, NCT 1320' FEL COMPL. INT. (22-6N-5W) NCT 0' FSL, NCT 0' FNL, NCT 1320' FEL COMPL. INT. (15-6N-5W) NCT 0' FSL, NCT 150' FNL, NCT 1320' FEL CONTINENTAL RESOURCES, INC REC. 10/28/2019 (MILLER)
	*** S/B 106361; WILL CORRECTED AT HEARING PER ATTORNEY
SPACING - 106361	10/21/2019 - GB1 - (640) 27-6N-5W EST HNTN, OTHERS
SPACING - 147146	7/30/2019 - GB1 - (640) 15 & 22-06N-05W EXT 131103 HNTN, OTHERS EST MSSP, OTHERS
SPACING - 590519	7/30/2019 - GB1 - (640) 22-6N-5W EXT OTHER EXT 587940 WDFD, OTHERS
SPACING - 595406	10/21/2019 - GB1 - (640) 27-6N-5W EXT 167964/VAR/190352 MSSP, WDFD, OTHERS
WATERSHED STRUCTURE	10/21/2019 - GB1 - WELL WITHIN 1/2 MILE OF AN OKLAHOMA CONSERVATION COMMISSION WATERSHED STRUCTURE. CONTACT THE LOCAL CONSERVATION DISTRICT OFFICE AT (405) 224-0523 PRIOR TO DRILLING

EXHIBIT: A (1 of 4)
 SHEET: 8.5x14
 SHL: 27-6N-5W
 BHL-5 15-6N-5W
 BHL-6 15-6N-5W



COVER SHEET

CONTINENTAL RESOURCES, INC.

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

Section: 27 Township: 6N Range: 5W I.M. Well: GALVIN 5-27-22-15XHW
 County: GRADY State: OK Well: GALVIN 6-27-22-15XHW
 Operator: CONTINENTAL RESOURCES, INC.

NAD-83							
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE	EXISTING ELEVATION	DESIGN ELEVATION
W5	GALVIN 5-27-22-15XHW	593375	2054837	34° 57' 48.32" -97° 42' 42.63"	34.983478 -97.711848	2385' FSL / 1805' FEL (SE/4 SEC 27)	1115.44' / 1108.72'
LP-5	LANDING POINT	593999	2054881	34° 57' 54.89" -97° 42' 44.74"	34.985192 -97.712429	2280' FNL / 1980' FEL (NE/4 SEC 27)	---
PI-5	POINT OF INTERSECT	598279	2054457	34° 58' 37.03" -97° 42' 47.05"	34.978553 -97.713089	2000' FSL / 2178' FEL (SE/4 SEC 22)	---
BHL-5	BOTTOM HOLE LOCATION	606805	2054432	35° 00' 01.36" -97° 42' 47.05"	35.000379 -97.713070	50' FNL / 2178' FEL (NE/4 SEC 15)	---
W6	GALVIN 6-27-22-15XHW	593376	2055137	34° 57' 48.52" -97° 42' 39.05"	34.983478 -97.710847	2385' FSL / 1505' FEL (SE/4 SEC 27)	1103.73' / 1108.72'
LP-6	LANDING POINT	594480	2055485	34° 57' 59.43" -97° 42' 34.82"	34.985508 -97.709672	1800' FNL / 1155' FEL (NE/4 SEC 27)	---
PI-6	POINT OF INTERSECT	598280	2055381	34° 58' 37.02" -97° 42' 35.94"	34.978649 -97.709984	2000' FSL / 1254' FEL (SE/4 SEC 22)	---
BHL-6	BOTTOM HOLE LOCATION	606803	2055356	35° 00' 01.32" -97° 42' 35.95"	35.000367 -97.709985	50' FNL / 1254' FEL (NE/4 SEC 15)	---
X-1	GOOD #1	604502	2055288	34° 59' 38.58" -97° 42' 38.85"	34.994044 -97.710235	15-6N-5W: TD: 13,850' 2,352' FNL / 1,331' FEL	---
X-2	SPRUEY #1-15	603099	2052147	34° 59' 24.77" -97° 43' 14.63"	34.990214 -97.720735	15-6N-5W: TD: 13,778' 1,529' FSL / 829' FWL	---
X-3	GOOD MARTIN #5-10-3XH	608555	2054271	34° 59' 58.90" -97° 42' 49.00"	34.996694 -97.713610	15-6N-5W: TD: 20,041' 300' FNL / 2,340' FEL	---
X-4	GOOD MARTIN #3-10-3XH	608557	2052932	34° 59' 58.96" -97° 43' 03.09"	34.996711 -97.718081	15-6N-5W: TD: 17,821' 300' FNL / 1,820' FWL	---
X-5	GOOD MARTIN #1-10-3XH	608560	2051812	34° 59' 59.02" -97° 43' 20.96"	34.999727 -97.722489	15-6N-5W: TD: 20,102' 300' FNL / 300' FWL	---
X-6	GOOD MARTIN #4-10-3XH	608557	2052977	34° 59' 58.95" -97° 43' 04.55"	34.999710 -97.717931	15-6N-5W: TD: 20,268' 300' FNL / 1,665' FWL	---
X-7	GOOD MARTIN #2-10-3XH	608560	2051657	34° 59' 59.02" -97° 43' 20.42"	34.999727 -97.722336	15-6N-5W: TD: 20,242' 300' FNL / 345' FWL	---
X-8	GOOD MARTIN #6-10-3XH	608555	2054318	34° 59' 58.90" -97° 42' 48.46"	34.996693 -97.713460	15-6N-5W: TD: 20,170' 300' FNL / 2,295' FEL	---
X-9	PAYNE #1-22	600170	2055097	34° 58' 55.72" -97° 42' 39.29"	34.982144 -97.710813	22-6N-5W: TD: 13,750' 1,400' FNL / 1,534' FEL	---
X-10	GRIBI #1-22	598098	2052640	34° 58' 35.28" -97° 43' 08.86"	34.978486 -97.719134	22-6N-5W: TD: 12,990' 1,820' FSL / 1,320' FWL	---
X-11	GALVIN #1-22-27XH	601270	2051770	34° 59' 06.89" -97° 43' 19.23"	34.985181 -97.722009	22-6N-5W: TD: 19,835' 300' FNL / 450' FWL	---
X-12	SPARKS #1-27H	591162	2052138	34° 57' 28.90" -97° 43' 15.17"	34.957474 -97.720881	27-6N-5W: TD: 17,443' 200' FSL / 800' FWL	---

REVISIONS

No.	DATE	STAKED	BY	DESCRIPTION	COMMENTS
00	6-21-19	7-16-19	TJW	ISSUED FOR APPROVAL	---
01	8-1-19	8-6-19	HDG	MOVED PAD SOUTH	REV'D ALL EXHIBITS
02	8-8-19	8-8-19	HDG	REV'D ACCESS & FACILITIES	REV'D EXHIBITS B,F,G,H,I & A
03	9-23-19	9-24-19	TJW	REV'D SHL'S	REV'D EXS. A1,A2,B,C,D,E,F,H,I & A
04	10-11-19	**--19	HDG	MOVED PAD SOUTH	REV'D ALL EXHIBITS
05	10-15-19	10-15-19	HDG	REV'D SHL'S	REV'D EXHIBITS A(1-4),B,F,G(1-2),H,I & "A"
06	10-16-19	**--19	HDG	EXTENDED PAD 50' EAST	REV'D EXHIBITS A(1-2),B,F,G(1-2),H,I & A

Certificate of Authorization No. 7318



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

EXHIBIT: A (2 of 4)
 SHEET: 8.5x11
 SHL: 27-6N-5W
 BHL-5 15-6N-5W
 BHL-6 15-6N-5W



COVER SHEET

CONTINENTAL RESOURCES, INC.

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

Section 27 Township 6N Range 5W I.M.

Well: GALVIN 5-27-22-15XHW

County GRADY State OK

Well: GALVIN 6-27-22-15XHW

Operator CONTINENTAL RESOURCES, INC.

NAD-27

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W5	GALVIN 5-27-22-15XHW	593333	2086433	34° 57' 48.27" -97° 42' 41.52"	34.963409 -97.711533	2385' FSL / 1805' FEL (SE/4 SEC 27)	1115.44'	1108.72'
LP-5	LANDING POINT	593957	2086257	34° 57' 54.44" -97° 42' 43.61"	34.965123 -97.712113	2280' FNL / 1980' FEL (NE/4 SEC 27)	--	--
PI-5	POINT OF INTERSECT	598237	2086053	34° 58' 36.78" -97° 42' 45.91"	34.976884 -97.712753	2000' FSL / 2178' FEL (SE/4 SEC 22)	--	--
BHL-5	BOTTOM HOLE LOCATION	606763	2086029	35° 00' 01.12" -97° 42' 45.92"	35.000310 -97.712754	50' FNL / 2178' FEL (NE/4 SEC 15)	--	--
W6	GALVIN 6-27-22-15XHW	593334	2086733	34° 57' 48.27" -97° 42' 37.91"	34.963409 -97.710532	2385' FSL / 1505' FEL (SE/4 SEC 27)	1103.73'	1108.72'
LP-6	LANDING POINT	594438	2087082	34° 57' 59.18" -97° 42' 33.69"	34.966438 -97.709357	1800' FNL / 1155' FEL (NE/4 SEC 27)	--	--
PI-6	POINT OF INTERSECT	598238	2086977	34° 58' 36.77" -97° 42' 34.81"	34.976880 -97.709669	2000' FSL / 1254' FEL (SE/4 SEC 22)	--	--
BHL-6	BOTTOM HOLE LOCATION	606781	2086953	35° 00' 01.07" -97° 42' 34.81"	35.000299 -97.709669	50' FNL / 1254' FEL (NE/4 SEC 15)	--	--
X-1	GOOD #1	604460	2086884	34° 59' 38.31" -97° 42' 35.71"	34.993975 -97.709920	15-6N-5W: TD: 13,850' 2,352' FNL / 1,331' FEL	--	--
X-2	SPVEY #1-15	603057	2083743	34° 59' 24.52" -97° 43' 13.51"	34.990145 -97.720420	15-6N-5W: TD: 13,778' 1,529' FSL / 829' FWL	--	--
X-3	GOOD MARTIN #5-10-3XH	606513	2085868	34° 59' 58.65" -97° 42' 47.86"	34.999625 -97.713295	15-6N-5W: TD: 20,041' 300' FNL / 2,340' FEL	--	--
X-4	GOOD MARTIN #3-10-3XH	606515	2084529	34° 59' 58.71" -97° 43' 03.96"	34.999642 -97.717765	15-6N-5W: TD: 17,821' 300' FNL / 1,620' FWL	--	--
X-5	GOOD MARTIN #1-10-3XH	606518	2083209	34° 59' 58.77" -97° 43' 19.82"	34.999659 -97.722173	15-6N-5W: TD: 20,102' 300' FNL / 300' FWL	--	--
X-6	GOOD MARTIN #4-10-3XH	606515	2084574	34° 59' 58.71" -97° 43' 03.41"	34.999642 -97.717615	15-6N-5W: TD: 20,268' 300' FNL / 1,665' FWL	--	--
X-7	GOOD MARTIN #2-10-3XH	606518	2083254	34° 59' 58.77" -97° 43' 19.28"	34.999658 -97.722022	15-6N-5W: TD: 20,242' 300' FNL / 345' FWL	--	--
X-8	GOOD MARTIN #6-10-3XH	606513	2085913	34° 59' 58.65" -97° 42' 47.32"	34.999625 -97.713144	15-6N-5W: TD: 20,170' 300' FNL / 2,295' FEL	--	--
X-9	PAYNE #1-22	600128	2086694	34° 58' 55.47" -97° 42' 38.15"	34.982076 -97.710598	22-6N-5W: TD: 13,750' 1,400' FNL / 1,534' FEL	--	--
X-10	GRIBI #1-22	598054	2084237	34° 58' 35.03" -97° 43' 07.75"	34.976397 -97.718818	22-6N-5W: TD: 12,990' 1,820' FSL / 1,320' FWL	--	--
X-11	GALVIN #1-22-27XH	601228	2083367	34° 59' 06.44" -97° 43' 18.10"	34.985123 -97.721693	22-6N-5W: TD: 19,635' 300' FNL / 450' FWL	--	--
X-12	SPARKS #1-27H	591140	2083733	34° 57' 26.66" -97° 43' 14.04"	34.957404 -97.720566	27-6N-5W: TD: 17,443' 200' FSL / 800' FWL	--	--

Certificate of Authorization No. 7318



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

CURRENT REV.: 6

EXHIBIT: A (3 of 4)
SHEET: 8.5x14
SHL: 27-6N-5W
BHL-5 15-6N-5W

PETRO LAND SERVICES SOUTH, LLC

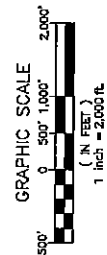
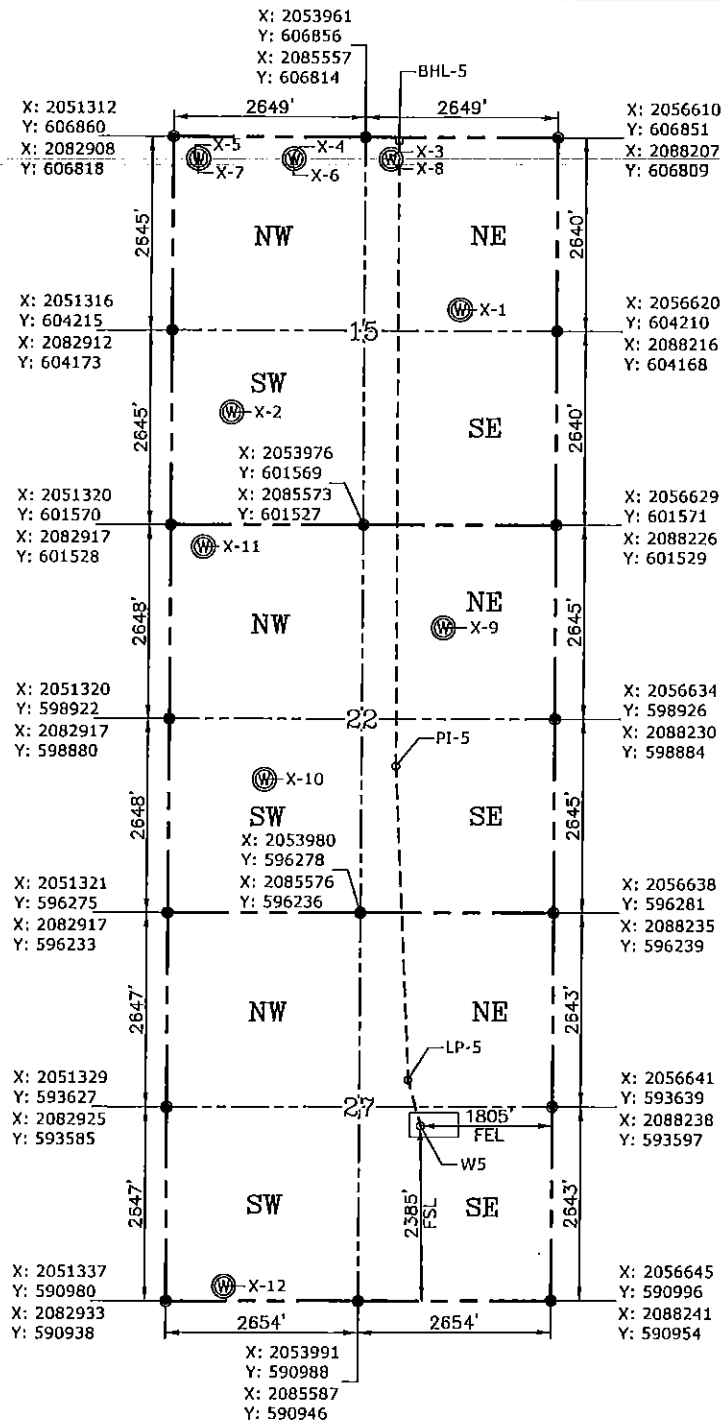
10400 VINEYARD BLVD. SUITE C, OKLA. CITY, OKLA. 73120 * OFFICE (405) 212-3108
Certificate of Authorization No. 7318



CONTINENTAL
RESOURCES, INC.
(OPERATOR)

GRADY County Oklahoma
2385' FSL-1805' FEL Section 27 Township 6N Range 5W I.M.

WELL: GALVIN
5-27-22-15XHW



GPS DATUM
NAD-83
NAD-27
OK SOUTH ZONE
US FEET
SCALE:
1" = 2000'

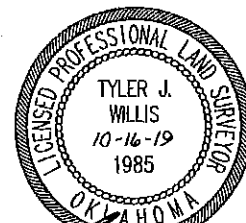
CURRENT REV.: 6

Date Drawn: 10-16-19

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, 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.



Tyler J. Willis
Oklahoma PLS No.1985 DATE