API NUMBER: 051 24687

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

Approval Date: 08/06/2019
Expiration Date: 02/06/2021

Horizontal Hole Oil & Gas
Multi Unit

PERMIT TO DRILL

WELL LOCATION: Sec: 22 Twp: 6N Rge: 5W County: GRADY

SPOT LOCATION: W2 E2 E2 W2 FEET FROM QUARTER: FROM **SOUTH** FROM **WEST**
SECTION LINES: **2640** **2041**

Lease Name: GALVIN **Well No: 4-22-15XHW** **Well will be 2041 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
PO BOX 26910
OKLAHOMA CITY OK 73126

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

	Name	Depth		Name	Depth
1	MISSISSIPPIAN	12069	6		
2	WOODFORD	12296	7		
3	HUNTON	12485	8		
4			9		
5			10		

Spacing Orders: 147146
590519

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201903619
201903620
201903621
201903667
201903668

Special Orders:

Total Depth: 20031 Ground Elevation: 1156 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 290

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

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits
Type of Mud System: WATER BASED
Chlorides Max: 3000 Average: 2000
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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36761
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 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 15 Twp 6N Rge 5W County GRADY

Spot Location of End Point: NW NE NE NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 2178

Depth of Deviation: 11889

Radius of Turn: 488

Direction: 3

Total Length: 7376

Measured Total Depth: 20031

True Vertical Depth: 12485

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

Notes:

Category	Description
DEEP SURFACE CASING	7/17/2019 - 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	7/17/2019 - 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
MEMO	7/17/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 201903619	8/6/2019 - GB1 - (I.O.)(640) 15-6N-5W EXT 626437 WDFD REC. 8/5/2019 (M. PORTER)

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.

Category	Description
PENDING CD - 201903620	8/6/2019 - GB1 - 15-6N-5W X201903619 WDFD 4 WELLS CONTINENTAL RESOURCES, INC REC. 8/5/2019 (M. PORTER)
PENDING CD - 201903621	8/6/2019 - GB1 - 22-6N-5W X590519 WDFD 9 WELLS CONTINENTAL RESOURCES, INC REC. 8/5/2019 (M. PORTER)
PENDING CD - 201903667	8/6/2019 - GB1 - (I.O.) 15 & 22-6N-5W EST MULTIUNIT HORIZONTAL WELL X201903619 WDFD 15-6N-5W X147146 MSSP, HNTN 15 & 22-6N-5W X590519 WDFD 22-6N-5W (MSSP, HNTN ADJACENT COMMON SOURCES OF SUPPLY TO WDFD) 33% 22-6N-5W 67% 15-6N-5W CONTINENTAL RESOURCES, INC REC. 8/5/2019 (M. PORTER)
PENDING CD - 201903668	8/6/2019 - GB1 - (I.O.) 15 & 22-6N-5W X201903619 WDFD 15-6N-5W X147146 MSSP, HNTN 15 & 22-6N-5W X590519 WDFD 22-6N-5W X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO GOOD MARTIN 3-10-3XH, GOOD MARTIN 4-10-3XH COMPL. INT. (22-6N-5W) NCT 150' FSL, NCT 0' FNL, NCT 1320' FWL COMPL. INT. (15-6N-5W) NCT 0' FSL, NCT 150' FNL, NCT 1320' FWL CONTINENTAL RESOURCES, INC REC. 8/5/2019 (M. PORTER)
SPACING - 147146	8/6/2019 - GB1 - (640) 15 & 22-6N-5W EXT 131103 HNTN, OTHERS EST MSSP, OTHERS
SPACING - 590519	8/6/2019 - GB1 - (640) 22-6N-5W EXT OTHER EXT 587940 WDFD, OTHERS

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 051-24687

EXHIBIT: A (1 of 4)
SHEET: 8.5x11
SHL: 22–6N–5W
BHL-2 27–6N–5W
BHL-4 15–6N–5W

Continental RESOURCES

COVER SHEET

CONTINENTAL RESOURCES, INC.

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

Section 22 Township 6N Range 5W I.M. Well: SPARKS 2–22–27XHW

County GRADY State OK Well: GALVIN 4–22–15XHW

Operator CONTINENTAL RESOURCES, INC.

NAD–83

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W2	SPARKS 2–22–27XHW	598887	2053361	34° 58' 43.08" –97° 43' 00.19"	34.978634 –97.716720	2610' FSL / 2041' FWL (SW/4 SEC 22)	1155.72'	1156.04'
LP–2	LANDING POINT	598888	2053795	34° 58' 43.07" –97° 42' 54.98"	34.978632 –97.715271	2610' FSL / 2475' FWL (SW/4 SEC 22)	--	--
BHL–2	BOTTOM HOLE LOCATION	591037	2053811	34° 57' 25.42" –97° 42' 55.05"	34.957062 –97.715291	50' FSL / 2475' FWL (SW/4 SEC 27)	--	--
W4	GALVIN 4–22–15XHW	598917	2053361	34° 58' 43.38" –97° 43' 00.19"	34.978716 –97.716719	2640' FSL / 2041' FWL (SW/4 SEC 22)	1155.24'	1156.04'
LP–4	LANDING POINT	598917	2053498	34° 58' 43.37" –97° 42' 58.54"	34.978715 –97.716262	2640' FSL / 2178' FWL (SW/4 SEC 22)	--	--
BHL–4	BOTTOM HOLE LOCATION	606806	2053490	35° 00' 01.41" –97° 42' 58.38"	35.000391 –97.716217	50' FNL / 2178' FWL (NW/4 SEC 15)	--	--
X–1	GOOD #1	604502	2055288	34° 59' 38.56" –97° 42' 36.85"	34.994044 –97.710235	15–6N–5W: | TD: 13,850' | 2,352' FNL / 1,331' FEL	--	--
X–2	SPIVEY #1–15	603099	2052147	34° 59' 24.77" –97° 43' 14.65"	34.990214 –97.720735	15–6N–5W: | TD: 13,778' | 1,529' FSL / 829' FWL	--	--
X–3	GOOD MARTIN #5–10–3XH	606555	2054271	34° 59' 58.90" –97° 42' 49.00"	34.999694 –97.713610	15–6N–5W: | TD: 20,041' | 300' FNL / 2,340' FEL	--	--
X–4	GOOD MARTIN #3–10–3XH	606557	2052932	34° 59' 58.96" –97° 43' 05.09"	34.999711 –97.718081	15–6N–5W: | TD: 17,821' | 300' FNL / 1,620' FWL	--	--
X–5	GOOD MARTIN #1–10–3XH	606560	2051612	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	606557	2052977	34° 59' 58.96" –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	606560	2051657	34° 59' 59.02" –97° 43' 20.42"	34.999727 –97.722338	15–6N–5W: | TD: 20,242' | 300' FNL / 345' FWL	--	--
X–8	GOOD MARTIN #6–10–3XH	606555	2054316	34° 59' 58.90" –97° 42' 48.46"	34.999693 –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 –97.710913	22–6N–5W: | TD: 13,750' | 1,400' FNL / 1,534' FEL	--	--
X–10	GRIBI #1–22	598096	2052640	34° 58' 35.28" –97° 43' 08.88"	34.976466 –97.719134	22–6N–5W: | TD: 12,990' | 1,820' FSL / 1,320' FWL	--	--
X–11	GALVIN #1–22–27XH	601270	2051770	34° 59' 06.69" –97° 43' 19.23"	34.985191 –97.722009	22–6N–5W: | TD: 19,635' | 300' FNL / 450' FWL	--	--
X–12	SPARKS #1–27H	591182	2052136	34° 57' 26.90" –97° 43' 15.17"	34.957474 –97.720881	27–6N–5W: | TD: 17,443' | 200' FSL / 800' FWL	--	--

Certificate of Authorization No. 7318

Date Staked: **–**–19
Date Drawn: 06–17–19

PLS

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

REVISIONS

No.	DATE	BY	DESCRIPTION	COMMENTS
00	06–17–19	TJW	ISSUED FOR APPROVAL	--

EXHIBIT: A (2 of 4)
SHEET: 8.5x11
SHL: 22–6N–5W
BHL-2 27–6N–5W
BHL-4 15–6N–5W

Continental RESOURCES

COVER SHEET CONTINUED...

CONTINENTAL RESOURCES, INC.

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

Section 22 Township 6N Range 5W I.M. Well: SPARKS 2–22–27XHW

County GRADY State OK Well: GALVIN 4–22–15XHW

Operator CONTINENTAL RESOURCES, INC.

NAD–27

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W2	SPARKS 2–22–27XHW	598845	2084958	34° 58' 42.83" –97° 42' 59.05"	34.978565 –97.716404	2610' FSL / 2041' FWL (SW/4 SEC 22)	1155.72'	1156.04'
LP–2	LANDING POINT	598846	2085392	34° 58' 42.83" –97° 42' 53.84"	34.978563 –97.714956	2610' FSL / 2475' FWL (SW/4 SEC 22)	--	--
BHL–2	BOTTOM HOLE LOCATION	590995	2085408	34° 57' 25.17" –97° 42' 53.91"	34.956993 –97.714976	50' FSL / 2475' FWL (SW/4 SEC 27)	--	--
W4	GALVIN 4–22–15XHW	598875	2084958	34° 58' 43.13" –97° 42' 59.05"	34.978647 –97.716404	2640' FSL / 2041' FWL (SW/4 SEC 22)	1155.24'	1156.04'
LP–4	LANDING POINT	598875	2085095	34° 58' 43.13" –97° 42' 57.41"	34.978646 –97.715947	2640' FSL / 2178' FWL (SW/4 SEC 22)	--	--
BHL–4	BOTTOM HOLE LOCATION	606764	2085086	35° 00' 01.16" –97° 42' 57.24"	35.000322 –97.715901	50' FNL / 2178' FWL (NW/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	SPIVEY #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

Date Staked: **–**–19
Date Drawn: 06–17–19

PLS

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

CURRENT REV.: 0

EXHIBIT: A (3 of 4)
SHEET: 8.5x14
SHL: 22-6N-5W
BHL-2 27-6N-5W

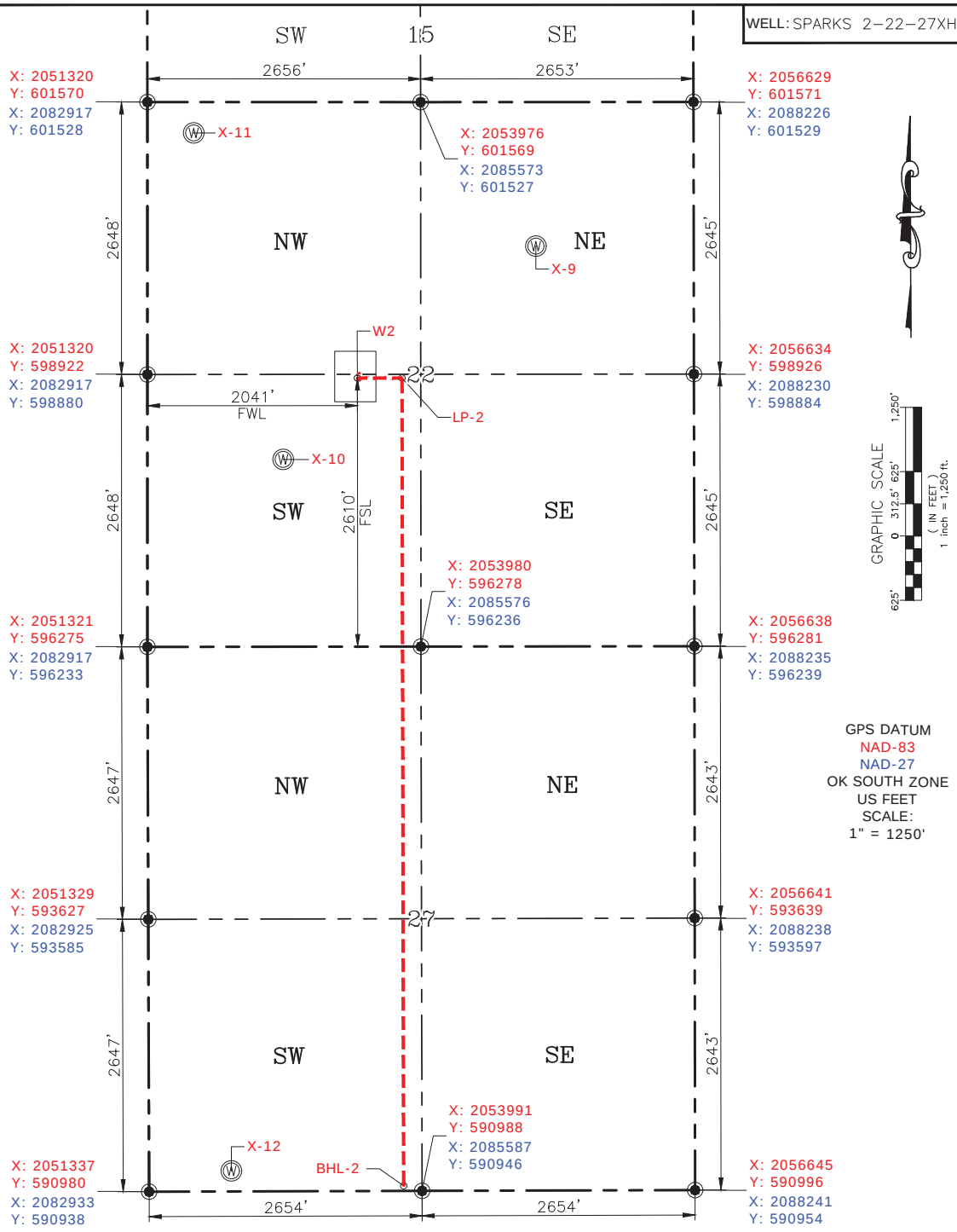
PETRO LAND SERVICES SOUTH, LLC

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

GRADY County Oklahoma
2610' FSL-2041' FWL Section 22 Township 6N Range 5W I.M.

CONTINENTAL RESOURCES, INC (OPERATOR)

WELL: SPARKS 2-22-27XHW



GRAPHIC SCALE
1,250' 625' 0 312.5' 625'
(IN FEET)
1 inch = 1,250 ft.

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

CURRENT REV.: 0
Date Drawn: 06-17-19

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.

Oklahoma PLS No.1196 DATE

EXHIBIT: A (4 of 4)
SHEET: 8.5x14
SHL: 22-6N-5W
BHL-4 15-6N-5W

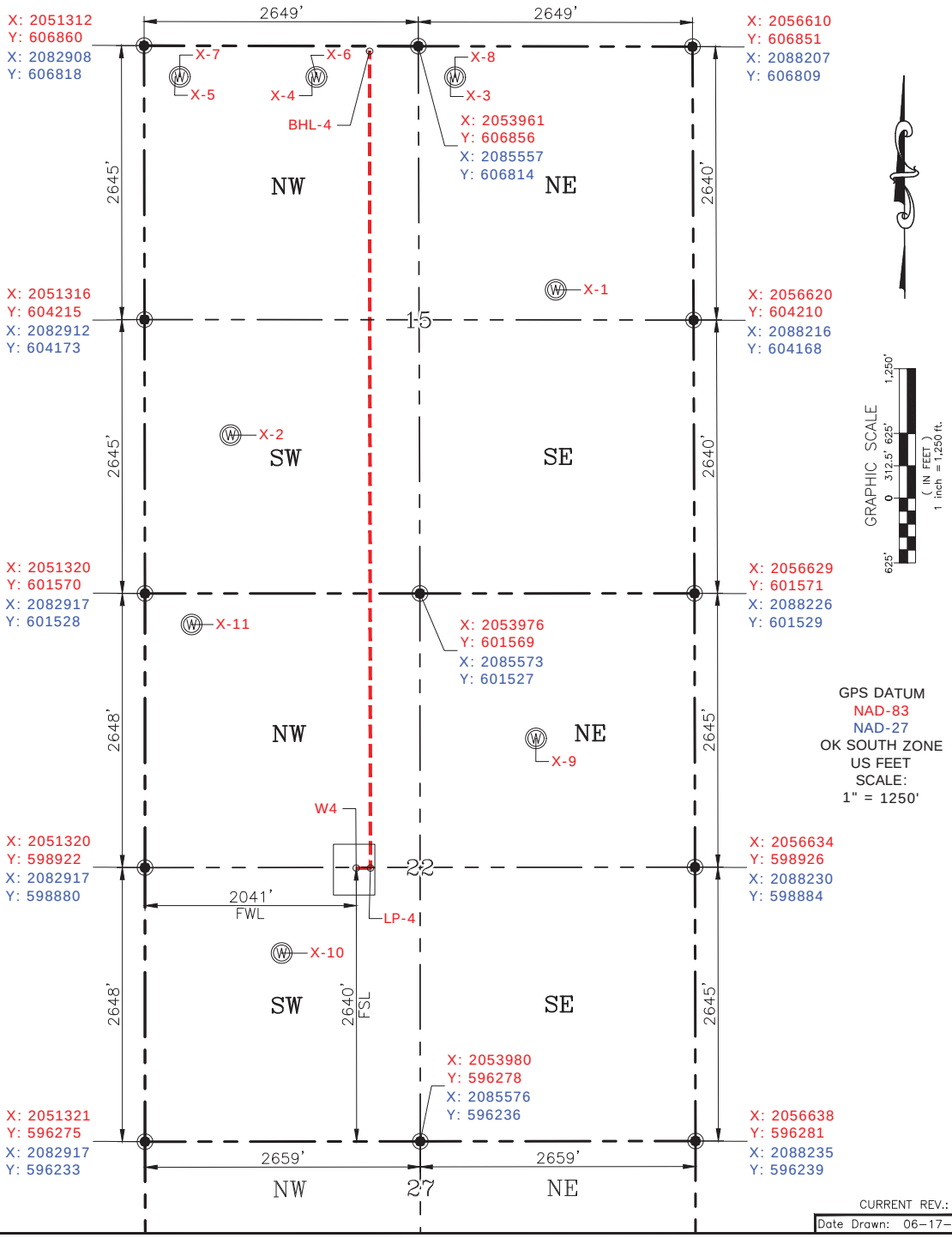
PETRO LAND SERVICES SOUTH, LLC

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

GRADY County Oklahoma
2640' FSL-2041' FWL Section 22 Township 6N Range 5W I.M.

CONTINENTAL RESOURCES, INC (OPERATOR)

WELL: GALVIN 4-22-15XHW



GRAPHIC SCALE
(IN FEET)
1 inch = 1,250 ft.
0 312.5' 625' 1,250'
625'

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

CURRENT REV.: 0
Date Drawn: 06-17-19

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.

Oklahoma PLS No.1196 DATE