

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

API NUMBER: 051 24707

Approval Date: 08/29/2019

Expiration Date: 02/28/2021

Horizontal Hole
Multi Unit

Oil & Gas

PERMIT TO DRILL

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

County: GRADY

SPOT LOCATION: ☐ NW ☐ NW ☐ NE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 2597 1155

Lease Name: SPARKS

Well No: 4-22-27XHW

Well will be 1155 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 WOODFORD | 12145 | 6 | |
| 2 | | 7 | |
| 3 | | 8 | |
| 4 | | 9 | |
| 5 | | 10 | |

Spacing Orders: 590519
595406

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201903804
201903805
201903621
201903799

Special Orders:

Total Depth: 20179

Ground Elevation: 1150

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 280

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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: 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

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

PERMIT NO: 19-36762

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 27 Twp 6N Rge 6W County GRADY

Spot Location of End Point: SW SW SE SE

Feet From: SOUTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 1155

Depth of Deviation: 11994

Radius of Turn: 411

Direction: 180

Total Length: 7540

Measured Total Depth: 20179

True Vertical Depth: 12212

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

Notes:

Category

Description

DEEP SURFACE CASING

7/22/2019 - 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

7/22/2019 - 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

7/22/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201903621

8/29/2019 - G56 - 22-6N-5W
X590519 WDFD
9 WELLS
NO OP NAMED
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.

051 24707 SPARKS 4-22-27XHW

| Category | Description |
|------------------------|--|
| PENDING CD - 201903799 | 8/29/2019 - G56 - 27-6N-5W X595406 WDFD 4 WELLS NO OP NAMED REC 8/6/2019 (NORRIS) |
| PENDING CD - 201903804 | 8/29/2019 - G56 - (I.O.) 22 & 27-6N-5W ESTABLISH MULTIUNIT HORIZONTAL WELL X590519 WDFD 22-6N-5W X595406 WDFD 27-6N-5W 33% 22-6N-5W 67% 27-6N-5W CONTINENTAL RESOURCES, INC. REC 8/27/2019 (P. PORTER) |
| PENDING CD - 201903805 | 8/29/2019 - G56 - (I.O.) 22 & 27-6N-5W X590519 WDFD 22-6N-5W X595406 WDFD 27-6N-5W X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO EXISTING AND/OR PROPOSED WELLS COMPL INT (22-6N-5W) NCT 150' FNL, NCT 0' FSL, NCT 660' FEL COMPL INT (27-6N-5W) NCT 0' FNL, NCT 150' FSL, NCT 660' FEL CONTINENTAL RESOURCES, INC. REC 8/6/2019 (NORRIS) |
| SPACING - 590519 | 8/29/2019 - G56 - (640) 22-6N-5W EXT 587940/153801 WDFD |
| SPACING - 595406 | 8/29/2019 - G56 - (640) 27-6N-5W EXT 167964/VAR/190352 WDFD, OTHERS |

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



051-24707

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 4-22-27XHW

County GRADY State OK

Well: GALVIN 6-22-15XHW

Operator CONTINENTAL RESOURCES, INC.

NAD-83

| POINT | WELL NAME | NORTHING | EASTING | LATITUDE LONGITUDE | LATITUDE LONGITUDE | | EXISTING ELEVATION | DESIGN ELEVATION |
|-------|--------------------------|----------|---------|-----------------------------------|-------------------------|--|-----------------------|---------------------|
| W4 | SPARKS 4-22-27XHW | 598877 | 2055479 | 34° 58' 42.92" -97° 42' 34.75" | 34.978588 -97.709652 | 2597' FSL / 1155' FEL (SE/4 SEC 22) | 1145.73' | 1149.95' |
| LP-4 | LANDING POINT | 598582 | 2055479 | 34° 58' 40.00" -97° 42' 34.75" | 34.977778 -97.709653 | 2302' FSL / 1155' FEL (SE/4 SEC 22) | -- | -- |
| BHL-4 | BOTTOM HOLE LOCATION | 591042 | 2055490 | 34° 57' 25.43" -97° 42' 34.89" | 34.957063 -97.709691 | 50' FSL / 1155' FEL (SE/4 SEC 27) | -- | -- |
| W6 | GALVIN 6-22-15XHW | 598907 | 2055479 | 34° 58' 43.21" -97° 42' 34.75" | 34.978671 -97.709651 | 2627' FSL / 1155' FEL (SE/4 SEC 22) | 1146.56' | 1149.95' |
| LP-6 | LANDING POINT | 598907 | 2055380 | 34° 58' 43.22" -97° 42' 35.93" | 34.978672 -97.709982 | 2627' 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' 38.56" -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: 06-20-19



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

REVISIONS

| No. | DATE | BY | DESCRIPTION | COMMENTS |
|-----|----------|-----|---------------------|----------|
| 00 | 06-20-19 | TJW | ISSUED FOR APPROVAL | -- |
| | | | | |
| | | | | |
| | | | | |

EXHIBIT: A (2 of 4)
 SHEET: 8.5x11
 SHL: 22-6N-5W
 BHL-4 27-6N-5W
 BHL-6 15-6N-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 22 Township 6N Range 5W I.M. Well: SPARKS 4-22-27XHW
 County GRADY State OK Well: GALVIN 6-22-15XHW
 Operator CONTINENTAL RESOURCES, INC.

NAD-27

| POINT | WELL NAME | NORTHING | EASTING | LATITUDE LONGITUDE | LATITUDE LONGITUDE | | EXISTING ELEVATION | DESIGN ELEVATION |
|-------|--------------------------|----------|---------|-----------------------------------|-------------------------|--|-----------------------|---------------------|
| W4 | SPARKS 4-22-27XHW | 598835 | 2087075 | 34° 58' 42.67" -97° 42' 33.61" | 34.978519 -97.709336 | 2597' FSL / 1155' FEL (SE/4 SEC 22) | 1145.73' | 1149.95' |
| LP-4 | LANDING POINT | 598540 | 2087076 | 34° 58' 39.75" -97° 42' 33.61" | 34.977709 -97.709337 | 2302' FSL / 1155' FEL (SE/4 SEC 22) | -- | -- |
| BHL-4 | BOTTOM HOLE LOCATION | 591000 | 2087086 | 34° 57' 25.18" -97° 42' 33.75" | 34.956993 -97.709376 | 50' FSL / 1155' FEL (SE/4 SEC 27) | -- | -- |
| W6 | GALVIN 6-22-15XHW | 598865 | 2087075 | 34° 58' 42.97" -97° 42' 33.61" | 34.978602 -97.709336 | 2627' FSL / 1155' FEL (SE/4 SEC 22) | 1146.56' | 1149.95' |
| LP-6 | LANDING POINT | 598865 | 2086976 | 34° 58' 42.97" -97° 42' 34.80" | 34.978603 -97.709667 | 2627' FSL / 1254' FEL (SE/4 SEC 22) | -- | -- |
| BHL-6 | BOTTOM HOLE LOCATION | 606761 | 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 | 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: 06-20-19



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

CURRENT REV.: 0

EXHIBIT: A (3 of 4)SHEET: 8.5x14SHL: 22-6N-5WBHL-4 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. 7318CONTINENTAL
RESOURCES, INC.
(OPERATOR)

GRADY

County Oklahoma

2597' FSL-1155' FEL Section 22 Township 6N Range 5W I.M.

WELL: SPARKS 4-22-27XHW

X: 2051320
Y: 601570
X: 2082917
Y: 601528

X-11

X: 2053976
Y: 601569
X: 2085573
Y: 601527X: 2056629
Y: 601571
X: 2088226
Y: 601529

NW

X-9

NE

X: 2051320
Y: 598922
X: 2082917
Y: 598880

X-10

W4

LP-4

X: 2056634
Y: 598926
X: 2088230
Y: 598884

SW

SE

X: 2051321
Y: 596275
X: 2082917
Y: 596233X: 2053980
Y: 596278
X: 2085576
Y: 596236X: 2056638
Y: 596281
X: 2088235
Y: 596239

NW

NE

X: 2051329
Y: 593627
X: 2082925
Y: 593585

SW

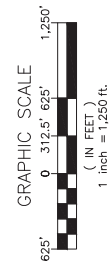
SE

X: 2056641
Y: 593639
X: 2088238
Y: 593597X: 2051337
Y: 590980
X: 2082933
Y: 590938

X-12

X: 2053991
Y: 590988
X: 2085587
Y: 590946

BHL-4

X: 2056645
Y: 590996
X: 2088241
Y: 590954GPS DATUM
NAD-83
NAD-27
OK SOUTH ZONE
US FEET
SCALE:
1" = 1250'

CURRENT REV.: 0

Date Drawn: 06-20-19

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