

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

API NUMBER: 051 24393

Approval Date: 06/21/2018

Expiration Date: 12/21/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 20 Twp: 7N Rge: 6W

County: GRADY

SPOT LOCATION: ☐ SW ☐ NE ☐ NW ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 350 1687

Lease Name: SCHOOF

Well No: 4-17-8-5XHS

Well will be 350 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

J W & MARIBETH SMITH, CO-TRUSTEES
2155 COUNTY STREET 2890
CHICKASHA OK 73018

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

	Name	Depth	Name	Depth
1	SPRINGER	12391	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 164772
172459
578776

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201803473
201803474
201803466

Special Orders:

Total Depth: 25513

Ground Elevation: 1094

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 550

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: 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: 18-34594

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 05 Twp 7N Rge 6W County GRADY

Spot Location of End Point: N2 N2 NE SE

Feet From: SOUTH 1/4 Section Line: 2500

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 11748

Radius of Turn: 477

Direction: 15

Total Length: 13016

Measured Total Depth: 25513

True Vertical Depth: 12391

End Point Location from Lease,
Unit, or Property Line: 660

Notes:

Category

Description

COMPLETION INTERVAL

6/21/2018 - G58 - WILL BE LEGAL PER OP.

DEEP SURFACE CASING

6/5/2018 - 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

6/5/2018 - 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: 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

6/5/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

This permit does not address the right of entry or settlement of surface damages.

051 24393 SCHOOF 4-17-8-5XHS

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 - 201803466	6/21/2018 - G58 - 17-7N-6W X164772 SPRG 3 WELLS NO OP. NAMED REC 5/21/2018 (NORRIS)
PENDING CD - 201803473	6/21/2018 - G58 - (I.O.) 5, 8, & 17-7N-6W EST MULTIUNIT HORIZONTAL WELL X164772 SPRG 17-7N-6W X172459 SPRG 8-7N-6W X578776 SPRG 5-7N-6W 40% 17-7N-6W 40% 8-7N-6W 20% 5-7N-6W NO OP. NAMED REC 5/21/2018 (NORRIS)
PENDING CD - 201803474	6/21/2018 - G58 - (I.O.) 5, 8, & 17-7N-6W X164772 SPRG 17-7N-6W X172459 SPRG 8-7N-6W X578776 SPRG 5-7N-6W X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO PROPOSED WELL COMPL. INT. (17-7N-6W) NCT 150' FSL, NCT 0' FNL, NCT 660' FEL COMPL. INT. (8-7N-6W) NCT 0' FSL, NCT 0' FNL, NCT 660' FEL COMPL. INT. (5-7N-6W) NCT 0' FSL, NCT 2640' FNL, NCT 660' FEL NO OP. NAMED REC 5/21/2018 (NORRIS)
SPACING - 164772	6/21/2018 - G58 - (640) 17-7N-6W EST OTHERS EXT OTHERS EXT 136547 SPRG
SPACING - 172459	6/21/2018 - G58 - (640) 8-7N-6W EXT OTHERS EXT 75509 SPRG, OTHERS
SPACING - 578776	6/21/2018 - G58 - (640) 5-7N-6W EST OTHERS EXT 172459 SPRG, 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.

EXHIBIT: A (1 of 2)
SHEET: 8.5x11
SHL: 20-7N-6W
BHL-4 5-7N-6W



051-24393

COVER SHEET

CONTINENTAL RESOURCES, INC.

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

Section 20 Township 7N Range 6W I.M.

Well: SCHOOF 4-17-8-5XHS

County GRADY State OK

Well: --

Operator CONTINENTAL RESOURCES, INC.

NAD-83

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W4	SCHOOF 4-17-8-5XHS	632825	2012665	35° 04' 19.62" -97° 51' 08.65"	35.072117 -97.852404	350' FNL / 1687' FEL (NE/4 SEC 20)	1093.69'	1094.44'
LP-4	LANDING POINT	633226	2013031	35° 04' 23.58" -97° 51' 04.24"	35.073217 -97.851179	50' FSL / 1320' FEL (SE/4 SEC 17)	--	--
BHL-4	BOTTOM HOLE LOCATION	646242	2013627	35° 06' 32.31" -97° 50' 56.84"	35.108976 -97.849122	2500' FSL / 660' FEL (SE/4 SEC 5)	--	--
X-1	BETTY JEAN #1-8-5XH	638721	2011159	35° 05' 17.95" -97° 51' 26.68"	35.088320 -97.857410	8-7N-6W:SW4SE4SE4SW4 TD: 23,525' 265' FSL / 2,110' FWL	--	--
X-2	BALLARD #17-1	637798	2013675	35° 05' 08.79" -97° 50' 56.42"	35.085774 -97.849006	17-7N-6W:NE4 TD: 15,070' 1,980' FSL / 1,980' FWL	--	--
X-3	BALLARD #1-17H	633378	2013611	35° 04' 25.07" -97° 50' 57.27"	35.073631 -97.849242	17-7N-6W:SE4SW4SE4SE4 TD: 18,460' 200' FSL / 740' FEL	--	--
X-4	SCHOOF #1-17H	633424	2014000	35° 04' 25.52" -97° 50' 52.58"	35.073756 -97.847939	17-7N-6W:SW4SE4SE4SE4 TD: 17,265' 245' FSL / 350' FEL	--	--

NAD-27

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W4	SCHOOF 4-17-8-5XHS	632783	2044262	35° 04' 19.38" -97° 51' 07.50"	35.072051 -97.852084	350' FNL / 1687' FEL (NE/4 SEC 20)	1093.69'	1094.44'
LP-4	LANDING POINT	633184	2044628	35° 04' 23.34" -97° 51' 03.09"	35.073151 -97.850859	50' FSL / 1320' FEL (SE/4 SEC 17)	--	--
BHL-4	BOTTOM HOLE LOCATION	646200	2045224	35° 06' 32.08" -97° 50' 55.68"	35.108911 -97.848801	2500' FSL / 660' FEL (SE/4 SEC 5)	--	--
X-1	BETTY JEAN #1-8-5XH	638679	2042756	35° 05' 17.72" -97° 51' 25.52"	35.088255 -97.857090	8-7N-6W:SW4SE4SE4SW4 TD: 23,525' 265' FSL / 2,110' FWL	--	--
X-2	BALLARD #17-1	637756	2045271	35° 05' 08.55" -97° 50' 55.27"	35.085709 -97.848686	17-7N-6W:NE4 TD: 15,070' 1,980' FSL / 1,980' FWL	--	--
X-3	BALLARD #1-17H	633336	2045207	35° 04' 24.83" -97° 50' 56.12"	35.073565 -97.848922	17-7N-6W:SE4SW4SE4SE4 TD: 18,460' 200' FSL / 740' FEL	--	--
X-4	SCHOOF #1-17H	633382	2045597	35° 04' 25.28" -97° 50' 51.43"	35.073690 -97.847619	17-7N-6W:SW4SE4SE4SE4 TD: 17,265' 245' FSL / 350' FEL	--	--

Certificate of Authorization No. 7318

Date Staked: 05-23-18
Date Drawn: 05-23-18



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

REVISIONS

No.	DATE	BY	DESCRIPTION	COMMENTS
00	05-23-18	TJW	ISSUED FOR APPROVAL	--

EXHIBIT: A (2 of 2)
SHEET: 8.5x14
SHL: 20-7N-6W
BHL-4 5-7N-6W

PETRO LAND SERVICES SOUTH, LLC

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



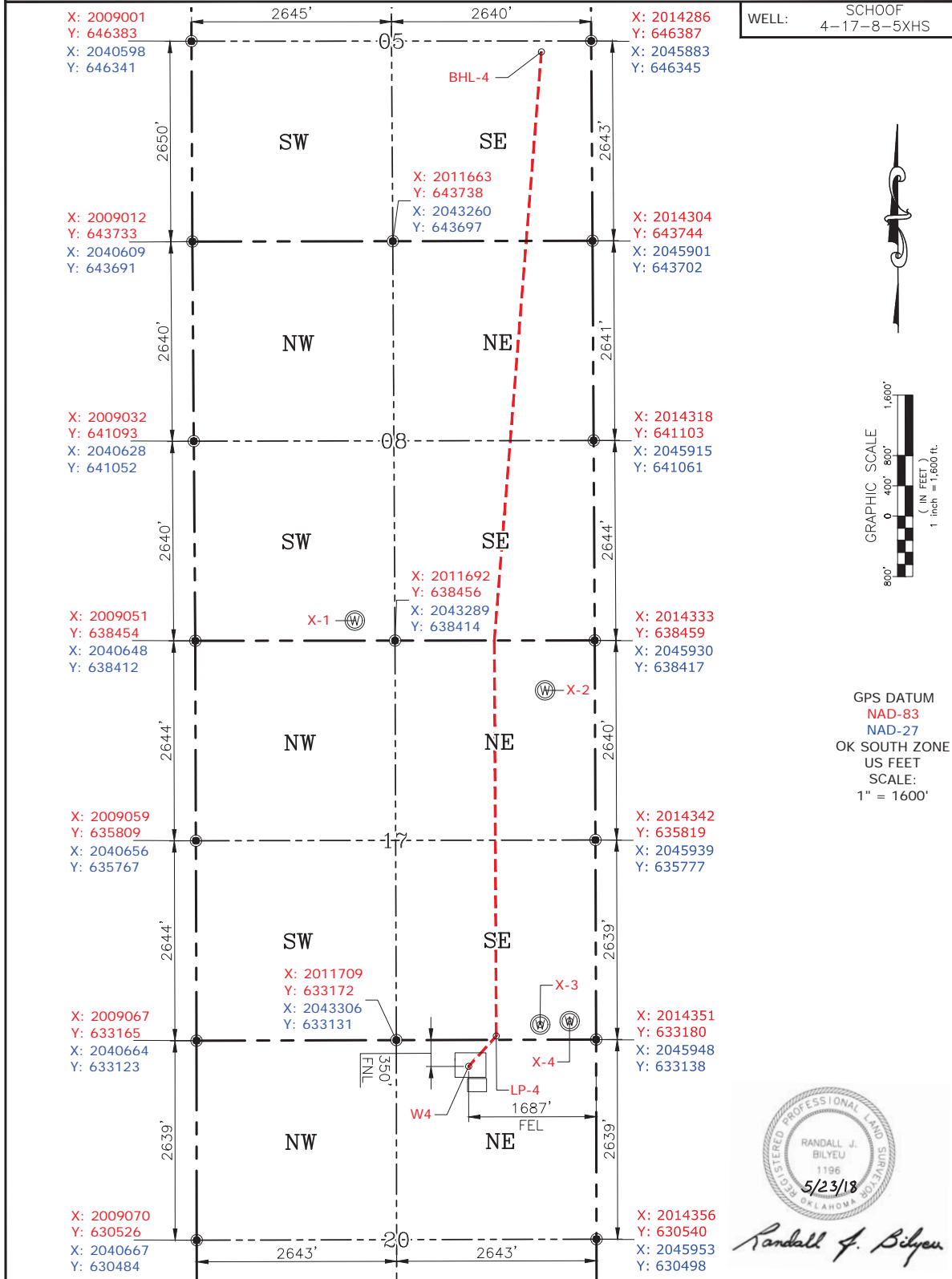
CONTINENTAL
RESOURCES, INC
(OPERATOR)

GRADY

County Oklahoma

350' FNL-1687' FEL Section 20 Township 7N Range 6W I.M.

WELL: SCHOOF
4-17-8-5XHS



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.

Date Staked: 05-23-18
Date Drawn: 05-23-18

CURRENT REV.: 0

Oklahoma PLS No.1196 DATE