

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

API NUMBER: 051 24672

Approval Date: 07/02/2019

Expiration Date: 01/02/2021

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 32 Twp: 6N Rge: 5W

County: GRADY

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 310 225

Lease Name: UMBACH

Well No: 1-33HW

Well will be 225 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

JOHN DAVID & SUSAN P. BENNETT, H/W
2059 COUNTY ROAD 1420
ALEX OK 73002

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	12684	6	
2	WOODFORD	13013	7	
3	HUNTON	13178	8	
4			9	
5			10	

Spacing Orders: 630983

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201903107
201903105

Special Orders:

Total Depth: 17778

Ground Elevation: 1134

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 350

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: 19-36758

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 33 Twp 6N Rge 5W County GRADY

Spot Location of End Point: S2 SW SW SW

Feet From: SOUTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 12094

Radius of Turn: 477

Direction: 175

Total Length: 4934

Measured Total Depth: 17778

True Vertical Depth: 13178

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

Notes:

Category

Description

DEEP SURFACE CASING

6/25/2019 - 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

6/25/2019 - 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

6/25/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201903105

6/27/2019 - G58 - 33-6N-5W
X630983 WDFD
5 WELLS
NO OP. NAMED
REC 7/2/2019 (NORRIS)

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 24672 UMBACH 1-33HW

Category	Description
PENDING CD - 201903107	6/27/2019 - G58 - (I.O.) 33-6N-5W X630983 MSSP, WDFD, HNTN X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO THE PIPKIN 1-28H WELL COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FWL NO OP. NAMED REC 7/2/2019 (NORRIS)
SPACING - 630983	6/27/2019 - G58 - (640)(HOR) 33-6N-5W VAC OTHERS EXT (640) OTHERS EST (640)(HOR) WDFD, OTHERS POE TO BHL NCT 330' FB

EXHIBIT: A (1 of 2)
 SHEET: 8.5x11
 SHL: 32-6N-5W
 BHL-1 33-6N-5W



COVER SHEET

CONTINENTAL RESOURCES, INC. 051-24672

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

Section 32 Township 6N Range 5W I.M.

Well: UMBACH 1-33HW

County GRADY State OK

Well: --

Operator CONTINENTAL RESOURCES, INC.

NAD-83

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W1	UMBACH 1-33HW	590648	2045815	34° 57' 21.78" -97° 44' 31.14"	34.956051 -97.741982	310' FNL / 225' FEL (NE/4 SEC 32)	1133.41'	1133.58'
LP-1	LANDING POINT	590650	2046369	34° 57' 21.79" -97° 44' 24.47"	34.956052 -97.740131	310' FNL / 330' FWL (NW/4 SEC 33)	--	--
BHL-1	BOTTOM HOLE LOCATION	585716	2046397	34° 56' 32.98" -97° 44' 24.29"	34.942495 -97.740081	50' FSL / 330' FWL (SW/4 SEC 33)	--	--

NAD-27

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W1	UMBACH 1-33HW	590606	2077411	34° 57' 21.53" -97° 44' 30.00"	34.955982 -97.741666	310' FNL / 225' FEL (NE/4 SEC 32)	1133.41'	1133.58'
LP-1	LANDING POINT	590608	2077966	34° 57' 21.54" -97° 44' 23.33"	34.955983 -97.739815	310' FNL / 330' FWL (NW/4 SEC 33)	--	--
BHL-1	BOTTOM HOLE LOCATION	585674	2077993	34° 56' 32.73" -97° 44' 23.16"	34.942426 -97.739766	50' FSL / 330' FWL (SW/4 SEC 33)	--	--

Certificate of Authorization No. 7318

Date Staked: **--19
 Date Drawn: 6-20-19



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

REVISIONS

No.	DATE	BY	DESCRIPTION	COMMENTS
00	6-20-19	HDG	ISSUED FOR APPROVAL	--

EXHIBIT: A (2 of 2)
SHEET: 8.5x14
SHL: 32-6N-5W
BHL-1 33-6N-5W

PETRO LAND SERVICES SOUTH, LLC

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



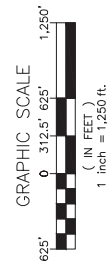
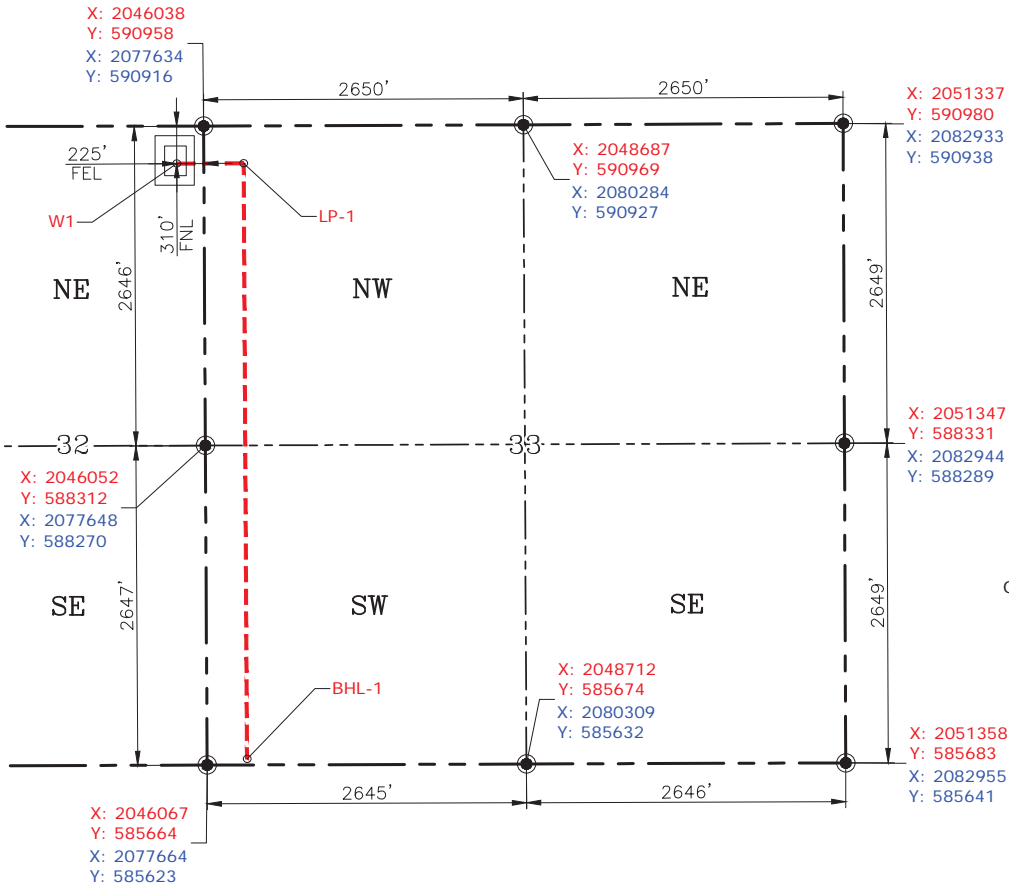
CONTINENTAL
RESOURCES, INC.
(OPERATOR)

GRADY

County Oklahoma

310' FNL-225' FEL Section 32 Township 6N Range 5W I.M.

WELL: UMBACH 1-33HW



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

CURRENT REV.: 0

Date Drawn: 6-20-19

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