

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

API NUMBER: 011 24218

Approval Date: 06/04/2019

Expiration Date: 12/04/2020

Horizontal Hole  
Multi Unit

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 33 Twp: 15N Rge: 12W

County: BLAINE

SPOT LOCATION: ☐ SE ☐ NE ☐ NW ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 405 1486

Lease Name: ANGUS TRUST

Well No: 5-33-4XHW

Well will be 405 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

JANE CRAWFORD, TRUSTEE  
3378 COYOTEE RD. NE  
PIEDMONT OK 73078

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

	Name	Depth	Name	Depth
1	MISSISSIPPI SOLID	12040	6	
2	KINDERHOOK	12497	7	
3	WOODFORD	12958	8	
4			9	
5			10	

Spacing Orders: 579753  
579708

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201901163  
201901162  
201901154  
201901155

Special Orders:

Total Depth: 22584

Ground Elevation: 1637

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 130

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: 8000 Average: 5000

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: MARLOW

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

PERMIT NO: 19-36429

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: MARLOW

## HORIZONTAL HOLE 1

Sec 04 Twp 14N Rge 12W County BLAINE

Spot Location of End Point: S2 S2 S2 SE

Feet From: SOUTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 1320

Depth of Deviation: 12209

Radius of Turn: 477

Direction: 178

Total Length: 9626

Measured Total Depth: 22584

True Vertical Depth: 12958

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

### Notes:

#### Category

#### Description

#### DEEP SURFACE CASING

5/9/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

#### HYDRAULIC FRACTURING

5/9/2019 - 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](http://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](http://FRACFOCUS.ORG)

#### INTERMEDIATE CASING

5/9/2019 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES

#### MEMO

5/9/2019 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

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.

011 24218 ANGUS TRUST 5-33-4XHW

Category	Description
PENDING CD - 201901154	5/17/2019 - G75 - 33-15N-12W X579753 WDFD 2 WELLS NO OP. NAMED HEARING 6-19-2019
PENDING CD - 201901155	5/17/2019 - G75 - 4-14N-12W X579708 WDFD 2 WELLS NO OP. NAMED HEARING 6-19-2019
PENDING CD - 201901162	5/17/2019 - G75 - (E.O.) 33-15N-12W & 4-14N-12W X579753 MSSSD, KDRK, WDFD 33-15N-12W X579708 MSSSD, KDRK, WDFD 4-14N-12W COMPL. INT. (33-15N-12W) NCT 150' FNL, NCT 0' FSL, NCT 660' FEL COMPL. INT. (4-14N-12W) NCT 0' FNL, NCT 150' FSL, NCT 660' FEL CONTINENTAL RESOURCES, INC. REC 6-4-2019 (NORRIS)
PENDING CD - 201901163	5/17/2019 - G75 - (E.O.) 33-15N-12W & 4-14N-12W EST MULTIUNIT HORIZONTAL WELL X579753 MSSSD, KDRK, WDFD 33-15N-12W X579708 MSSSD, KDRK, WDFD 4-14N-12W (MSSSD, KDRK ADJACENT COMMON SOURCES OF SUPPLY TO WDFD) 50% 33-15N-12W 50% 4-14N-12W CONTINENTAL RESOURCES, INC. REC 6-4-2019 (NORRIS)
SPACING - 579708	5/17/2019 - G75 - (640) 4-14N-12W EXT OTHERS EST MSSSD, KDRK, OTHERS EXT 572487 WDFD
SPACING - 579753	5/17/2019 - G75 - (640) 33-15N-12W EXT OTHERS EST MSSSD, KDRK, 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.

EXHIBIT: A (1 of 2)  
SHEET: 8.5x14  
SHL: 33-15N-12W  
BHL-5 4-14N-12W



API 011-24218

## COVER SHEET

### CONTINENTAL RESOURCES, INC.

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

Section 33 Township 15N Range 12W I.M.  
County BLAINE State OK  
Operator CONTINENTAL RESOURCES, INC.

Well: ANGUS TRUST 5-33-4XHW  
Well: --

NAD-83								
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W5	ANGUS TRUST 5-33-4XHW	269194	1826735	35° 44' 18.78" -98° 28' 39.66"	35.738549 -98.477683	405' FNL / 1486' FEL (NE/4 SEC 33)	1635.23'	1636.76'
LP-5	LANDING POINT	269194	1826901	35° 44' 18.78" -98° 28' 37.64"	35.738551 -98.477124	405' FNL / 1320' FEL (NE/4 SEC 33)	--	--
BHL-5	BOTTOM HOLE LOCATION	259112	1826813	35° 42' 39.07" -98° 28' 38.11"	35.710854 -98.477252	50' FSL / 1320' FEL (SE/4 SEC 4)	--	--
X-1	ANGUS TRUST #8-33-4XH	269265	1826182	35° 44' 19.46" -98° 28' 46.38"	35.738738 -98.479549	33-15N-12W:   TD: 22,595'   335' FNL / 2,040' FEL	--	--
X-2	ANGUS TRUST #9-33-4XH	269265	1826212	35° 44' 19.46" -98° 28' 46.01"	35.738739 -98.479448	33-15N-12W:   TD: 22,438'   335' FNL / 2,010' FEL	--	--
X-3	ANGUS TRUST #10-33-4XH	269265	1826242	35° 44' 19.46" -98° 28' 45.65"	35.738739 -98.479347	33-15N-12W:   TD: 22,455'   335' FNL / 1,980' FEL	--	--
X-4	ANGUS TRUST #11-33-4XH	269400	1827254	35° 44' 20.84" -98° 28' 33.38"	35.739123 -98.475938	33-15N-12W:   TD: 22,372'   198' FNL / 969' FEL	--	--
X-5	ANGUS TRUST #12-33-4XH	269400	1827284	35° 44' 20.84" -98° 28' 33.01"	35.739123 -98.475837	33-15N-12W:   TD: 22,539'   198' FNL / 939' FEL	--	--
X-6	TULSA ROYALTIES #1	260425	1824274	35° 42' 51.94" -98° 28' 08.98"	35.714428 -98.485827	4-14N-12W:   TD: 11,181'   1,370' FSL / 1,370' FWL	--	--
X-7	ROACH #1-4H	259257	1825211	35° 42' 40.44" -98° 28' 57.55"	35.711233 -98.482653	4-14N-12W:   TD: 17,926'   200' FSL / 2,310' FWL	--	--
X-8	ANGUS TRUST #1-4-33XH	259587	1827248	35° 42' 43.79" -98° 28' 32.86"	35.712165 -98.475795	4-14N-12W:   TD: 22,164'   524' FSL / 889' FEL	--	--

NAD-27								
POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W5	ANGUS TRUST 5-33-4XHW	269169	1858336	35° 44' 18.61" -98° 28' 38.40"	35.738503 -98.477332	405' FNL / 1486' FEL (NE/4 SEC 33)	1635.23'	1636.76'
LP-5	LANDING POINT	269169	1858502	35° 44' 18.62" -98° 28' 36.38"	35.738505 -98.476773	405' FNL / 1320' FEL (NE/4 SEC 33)	--	--
BHL-5	BOTTOM HOLE LOCATION	259087	1858414	35° 42' 38.90" -98° 28' 36.85"	35.710807 -98.476903	50' FSL / 1320' FEL (SE/4 SEC 4)	--	--
X-1	ANGUS TRUST #8-33-4XH	269241	1857782	35° 44' 19.29" -98° 28' 45.11"	35.738692 -98.479198	33-15N-12W:   TD: 22,595'   335' FNL / 2,040' FEL	--	--
X-2	ANGUS TRUST #9-33-4XH	269241	1857812	35° 44' 19.29" -98° 28' 44.75"	35.738692 -98.479097	33-15N-12W:   TD: 22,438'   335' FNL / 2,010' FEL	--	--
X-3	ANGUS TRUST #10-33-4XH	269240	1857842	35° 44' 19.29" -98° 28' 44.39"	35.738692 -98.478996	33-15N-12W:   TD: 22,455'   335' FNL / 1,980' FEL	--	--
X-4	ANGUS TRUST #11-33-4XH	269375	1858854	35° 44' 20.67" -98° 28' 32.12"	35.739076 -98.475588	33-15N-12W:   TD: 22,372'   198' FNL / 969' FEL	--	--
X-5	ANGUS TRUST #12-33-4XH	269375	1858884	35° 44' 20.67" -98° 28' 31.75"	35.739076 -98.475487	33-15N-12W:   TD: 22,539'   198' FNL / 939' FEL	--	--
X-6	TULSA ROYALTIES #1	260400	1855874	35° 42' 51.77" -98° 29' 07.72"	35.714380 -98.485478	4-14N-12W:   TD: 11,181'   1,370' FSL / 1,370' FWL	--	--
X-7	ROACH #1-4H	259233	1856811	35° 42' 40.27" -98° 28' 56.29"	35.711186 -98.482304	4-14N-12W:   TD: 17,926'   200' FSL / 2,310' FWL	--	--
X-8	ANGUS TRUST #1-4-33XH	259562	1858849	35° 42' 43.62" -98° 28' 31.61"	35.712118 -98.475446	4-14N-12W:   TD: 22,164'   524' FSL / 889' FEL	--	--

Certificate of Authorization No. 7318

Date Staked: \*\*--\*\*--19  
Date Drawn: 3-19-19



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

#### REVISIONS

No.	DATE	BY	DESCRIPTION	COMMENTS
00	3-19-19	HOG	ISSUED FOR APPROVAL	--

