

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

API NUMBER: 043 23558 A

Approval Date: 10/02/2017
Expiration Date: 04/02/2018

Horizontal Hole Oil & Gas

Amend reason: ADD FORMATION

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 16N Rge: 14W

County: DEWEY

SPOT LOCATION: ☐ NW ☐ NW ☐ NW ☐ SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 2381 231

Lease Name: NORTH LITSCH

Well No: 1-16-9XH

Well will be 231 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

JIMMIE LITSCH AND PEGGY LITSCH
PO BOX 85
FAY OK 73646

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	10946	6	
2	WOODFORD	12340	7	
3	HUNTON	12425	8	
4			9	
5			10	

Spacing Orders: 575659
576226
657634
646074
670137

Location Exception Orders: 669733

Increased Density Orders: 670671

Pending CD Numbers:

Special Orders:

Total Depth: 20284

Ground Elevation: 1765

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 320

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: ON SITE

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: 1B

Liner required for Category: 1B

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 17-33193

H. SEE MEMO

E. Haul to Commercial pit facility: Sec. 31 Twn. 12N Rng. 8W Cnty. 17 Order No: 587498

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: ON SITE

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: 3

Liner required for Category: 3

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 09 Twp 16N Rge 14W County DEWEY

Spot Location of End Point: N2 NW NW NW

Feet From: NORTH 1/4 Section Line: 30

Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 11863

Radius of Turn: 477

Direction: 2

Total Length: 7672

Measured Total Depth: 20284

True Vertical Depth: 12425

End Point Location from Lease,
Unit, or Property Line: 30

Notes:

Category

Description

DEEP SURFACE CASING

9/22/2017 - 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

9/22/2017 - 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

INCREASED DENSITY - 670671

10/3/2018 - G58 - 16-16N-14W
X575659 WDFD
1 WELL
CONTINENTAL RESOURCES, INC
12/1/2017

INTERMEDIATE CASING

9/22/2017 - 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

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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.

043 23558 NORTH LITSCH 1-16-9XH

Category	Description
LOCATION EXCEPTION - 669733	10/3/2018 - G58 - (I.O.) 16 & 9-16N-14W X646074 MSSP 16-16N-14W X575659 WDFD, HNTN 16-16N-14W X657634 MSSP 9-16N-14W X576226 WDFD, HNTN 9-16N-14W (MSSP, HNTN ARE ADJACENT COMMON SOURCES OF SUPPLY TO WDFD) COMPL. INT. 16-16N-14W NCT 1320' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. 9-16N-14W NCT 0' FSL, NCT 150' FNL, NCT 330' FWL CONTINENTAL RESOURCES, INC. 11/3/2017
MEMO	9/22/2017 - G71 - PITS 1 & 2 - CONCRETE LINED PITS PER OPERATOR REQUEST, PIT 1 – CUTTINGS WILL BE SOIL FARMED, PIT 2 – OBM RETURNED TO VENDOR, OBM CUTTINGS TO ORDER 587498, 31-12N-8W, CANADIAN CO
SPACING - 575659	10/3/2018 - G58 - (640) 16-16N-14W EST WDFD EXT 99559 HNTN, MSSLM (VAC BY 646074)
SPACING - 576226	10/3/2018 - G58 - (640) 9-16N-14W EXT 575441 WDFD EXT 99559 HNTN, MSSLM (VAC BY 657634), OTHERS EXT OTHERS
SPACING - 646074	10/3/2018 - G58 - (640)/(640)(HOR) 16-16N-14W VAC 176080 CSTR, OTHERS VAC 575659 MSSLM EST (640) MSSP EST (640)(HOR) OTHERS
SPACING - 657634	10/3/2018 - G58 - (640) 9-16N-14W VAC OTHER VAC 576226 MSSLM, OTHERS EST OTHER EXT 646074 MSSP, OTHERS
SPACING - 670137	10/3/2018 - G58 - (I.O.) 16 & 9-16N-14W EST MULTIUNIT HORIZONTAL WELL X646074 MSSP 16-16N-14W X575659 WDFD, HNTN 16-16N-14W X657634 MSSP 9-16N-14W X576226 WDFD, HNTN 9-16N-14W (MSSP, HNTN ARE ADJACENT COMMON SOURCES OF SUPPLY TO WDFD) 66.67% 9-16N-14W 33.33% 16-16N-14W CONTINENTAL RESOURCES, INC. 11/16/2017

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