

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

API NUMBER: 011 23635 A

Approval Date: 08/12/2016

Expiration Date: 02/12/2017

Horizontal Hole Oil & Gas

Amend reason: SURFACE CASING

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 19 Twp: 16N Rge: 12W

County: BLAINE

SPOT LOCATION: ☐ NW ☐ SE ☐ SW ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 400 1710

Lease Name: GLENWOOD PEARL FIU

Well No: 1-19H

Well will be 400 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

RUSSEL IVINS
RT 1 BOX 375
FAY OK 73646

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

	Name	Depth	Name	Depth
1	OSWEGO	8590	6	
2	MISSISSIPPIAN	11442	7	
3	HUNTON	11700	8	
4			9	
5			10	

Spacing Orders: 639375

Location Exception Orders: 644157

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 15857

Ground Elevation: 1647

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 170

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

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 BED AQUIFER

Pit Location Formation: MARLOW

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 16-31470

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: 250000

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 BED AQUIFER

Pit Location Formation: MARLOW

HORIZONTAL HOLE 1

Sec 19 Twp 16N Rge 12W County BLAINE

Spot Location of End Point: N2 NE NW NE

Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 1650

Depth of Deviation: 10785

Radius of Turn: 409

Direction: 1

Total Length: 4429

Measured Total Depth: 15857

True Vertical Depth: 11700

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

Notes:

Category

Description

HYDRAULIC FRACTURING

8/9/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK [HTTP://FRACFOCUS.ORG/](http://fracfocus.org/) WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE.

INTERMEDIATE CASING

8/9/2016 - 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

LOCATION EXCEPTION - 644157

8/11/2016 - G60 - (I.O.) 19-16N-12W
X639375 MSSP
SHL NCT 200' FNL, NCT 330' FEL 30-16N-12W **
POE TO BHL NCT 150' FSL, NCT 150' FNL, NCT 330' FEL
CONTINENTAL RESOURCES INC.
8-14-16

MEMO

8/9/2016 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 639375

8/11/2016 - G60 - (640)(HOR) 19-16N-12W
EST OSWG, MSSP, HNTN, OTHERS
COMPL. INT. NLT 660' FB
(COEXIST WITH SP. ORDER 399933 CSTR, MISS, HNTN; SP. ORDER 524854 CSTR, MISS, HNTN)

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011 23635 GLENWOOD PEARL FIU 1-19H