

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

API NUMBER: 093 25132

Approval Date: 03/07/2018

Expiration Date: 09/07/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 30 Twp: 20N Rge: 15W

County: MAJOR

SPOT LOCATION:

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 200 440

Lease Name: WOODRING

Well No: 30-31-2H

Well will be 200 feet from nearest unit or lease boundary.

Operator Name: COMANCHE EXPLORATION CO LLC

Telephone: 4057555900

OTC/OCC Number: 20631 0

COMANCHE EXPLORATION CO LLC  
6520 N WESTERN AVE STE 300  
OKLAHOMA CITY, OK 73116-7334

WOODRING TRUST  
KITTY & MICHELLE STEWART  
101 E. ASH SE , P.O. BOX 349  
FAIRVIEW OK 73737

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	8000	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 649817

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201800919  
201800920

Special Orders:

Total Depth: 14547

Ground Elevation: 1670

**Surface Casing: 800**

Depth to base of Treatable Water-Bearing FM: 410

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: 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 ALLUVIAL

Pit Location Formation: ALLUVIUM

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

PERMIT NO: 18-33961

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

## HORIZONTAL HOLE 1

Sec 31 Twp 20N Rge 15W County MAJOR

Spot Location of End Point: S2 S2 SW SW

Feet From: SOUTH 1/4 Section Line: 135

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 7959

Radius of Turn: 1100

Direction: 178

Total Length: 4860

Measured Total Depth: 14547

True Vertical Depth: 9515

End Point Location from Lease,  
Unit, or Property Line: 135

### Notes:

#### Category

#### Description

#### DEEP SURFACE CASING

2/27/2018 - 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

2/27/2018 - 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: [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

2/27/2018 - 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

2/27/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

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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.

093 25132 WOODRING 30-31-2H

Category	Description
PENDING CD - 201800919	3/6/2018 - G57 - (I.O.) 31-20N-15W X649817 MSSP COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL NO OP. NAMED REC 2-26-2018 (M. PORTER)
PENDING CD - 201800920	3/6/2018 - G57 - 31-20N-15W X649817 MSSP 1 WELL NO OP. NAMED REC 2-26-2018 (MILLER)
SPACING - 649817	2/27/2018 - G57 - (640)(HOR) 31-20N-15W EXT 610999 MSSP, OTHER POE TO BHL NCT 660' FB (COEXIST WITH SP. ORDER #69016/69064 CSTR, ORDER #176503 MSSLM)