API NUMBER: 011 24110

Oil & Gas

Horizontal Hole

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

Approval Date: 10/18/2018 04/18/2020 **Expiration Date** 

PERMIT TO DRILL

WELL LOCATION:	Sec:	27	Twp:	17N	Rge:	11W	County:	BLAINE

SPOT LOCATION: SE FEET FROM QUARTER: WEST sw Isw lsw SOUTH FROM SECTION LINES: 261 332

Lease Name: BUCHER 1711 Well No: 1-34MH Well will be 261 feet from nearest unit or lease boundary.

MARATHON OIL COMPANY Operator OTC/OCC Number: Telephone: 4057205508 1363 0 Name:

MARATHON OIL COMPANY 7301 NW EXPRESSWAY STE 225

OKLAHOMA CITY. OK 73132-1590 UNITED STATES GYPSUM COMPANY 550 WEST ADAMS STREET

**CHICAGO** IL 60661

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

Depth Name Depth MISSISSIPPIAN (LESS CHESTER) 1 9900 6 2 7 3 8 4 9 10 671660 Spacing Orders: Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201806020 Special Orders:

201806019

Total Depth: 15672 Ground Elevation: 1525 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 40

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

Approved Method for disposal of Drilling Fluids: PIT 1 INFORMATION

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?

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: DOG CREEK

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

H. SEE MEMO

## 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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is NON HSA

Pit Location Formation: DOG CREEK

## HORIZONTAL HOLE 1

Sec 34 Twp 17N Rge 11W County **BLAINE** 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: 9862 Radius of Turn: 477 Direction: 181

Total Length: 5061

Measured Total Depth: 15672

True Vertical Depth: 10579

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

Notes:

Category Description

DEEP SURFACE CASING 10/16/2018 - GA8 - 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 10/16/2018 - GA8 - 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

INTERMEDIATE CASING 10/16/2018 - GA8 - 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 10/16/2018 - GA8 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 -

OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

Category Description

PENDING CD - 201806019 10/16/2018 - G75 - 34-17N-11W

X671660 MSNLC, OTHERS

4 WELLS NO OP. NAMED

REC 9-17-2018 (THOMAS)

PENDING CD - 201806020 10/16/2018 - G75 - (I.O.) 34-17N-11W

X671660 MSNLC, OTHERS COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FWL MARATHON OIL CO.

REC 9-17-2018 (THOMAS)

**SPACING - 671660** 10/16/2018 - G75 - (640)(HOR) 34-17N-11W

**EXT OTHER** 

EST MSNLC, OTHERS POE TO BHL NLT 660' FB

