API NUMBER: 073 26326

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: 11/01/2018
Expiration Date: 05/01/2020

PERMIT TO DRILL

WELL LOCATION: Sec: 28 Twp: 16N Rge: 7W County: KINGFISHER

SPOT LOCATION: NE NE NW NW FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 266 1121

Lease Name: FIRESTONE 1607 Well No: 2-21MH Well will be 266 feet from nearest unit or lease boundary.

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

MARATHON OIL COMPANY 7301 NW EXPRESSWAY STE 225

OKLAHOMA CITY, OK 73132-1590

STEPHENS LAND COMPANY 4 BEECHWOOD LANE

HUTCHISON KS 67502

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

Depth Name Depth MISSISSIPPIAN (LESS CHESTER) 7485 1 6 2 7 8 3 4 9 5 10 652847 Spacing Orders: Location Exception Orders: 669725 Increased Density Orders: 670019 671414 685798 685804

Pending CD Numbers: Special Orders:

Total Depth: 12822 Ground Elevation: 1088 Surface Casing: 470 Depth to base of Treatable Water-Bearing FM: 220

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: 5000 Average: 3000

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: BISON

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: BISON

## **HORIZONTAL HOLE 1**

Sec 21 Twp 16N Rge 7W County KINGFISHER

Spot Location of End Point: NE NW NE NW
Feet From: NORTH 1/4 Section Line: 50
Feet From: WEST 1/4 Section Line: 1670

Depth of Deviation: 7023 Radius of Turn: 462

Direction: 3

Total Length: 5073

Measured Total Depth: 12822
True Vertical Depth: 7762
End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category Description

EXCEPTION TO RULE - 671414 11/1/2018 - G56 - (I.O.) 21-16N-7W

X165:10-3-28(C)(2)(B) MSNLC (FIRESTONE 1607 4-21MH)

MAY BE CLOSÉR THÁN 600' TO MUEGGENBORG 1-21 WELL OR ANY OTHER WELLS IN THE

UNIT

MARATHON OIL COMPANY

12-22-2017

HYDRAULIC FRACTURING 10/26/2018 - 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

INCREASED DENSITY - 670019 10/30/2018 - G56 - (I.O.) 21-16N-7W

X652847 MSNLC

9 WELLS

MARATHON OIL COMPANY

11/14/2017

INCREASED DENSITY - 685798 11/1/2018 - G56 - EXTEND 670019 TO 11/14/2019

Category Description

LOCATION EXCEPTION - 669725 10/30/2018 - G56 - (I.O.) 21-16N-7W

X652847 MSNLC

COMPL INT NCT 150' FSL, NCT 150' FNL, NCT 330' FWL

MARATHON OIL COMPANY

11/3/2017

LOCATION EXCEPTION - 685804 11/1/2018 - G56 - EXTEND 669725 TO 11/3/2019

MEMO 10/26/2018 - GA8 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2

- OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 652847 10/30/2018 - G56 - (640)(HOR) 21-16N-7W

EXT 646887 MSNLC, OTHER COMPL INT NLT 660' FB

(COEXIST WITH SP # 494881 MSSLM)

