API NUMBER: 073 26328

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:	16	Twp:	16N	Rge:	7W	County:	KINGFISHER
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SPOT LOCATION: NW NW SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 1115 1102

Lease Name: FIRESTONE 1607 Well No: 3-21MH Well will be 1102 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

CHARLENE MCINTOSH 4413 NORTH VERMONT AVE

OKLAHOMA CITY OK 73112

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

	Name	Depth		Name	Dept	h
1	MISSISSIPPIAN (LESS CHESTER)	7485	6			
2			7			
3			8			
4			9			
5			10			
Spacing Orders:	652847	Location Exception Orders:	669724		Increased Density Orders:	670019
			671414			685798
			685802			

Pending CD Numbers: Special Orders:

Total Depth: 13775 Ground Elevation: 1044 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 200

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

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 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 21 Twp 16N Rge 7W County KINGFISHER

Spot Location of End Point: SW SE SW SE
Feet From: SOUTH 1/4 Section Line: 50
Feet From: EAST 1/4 Section Line: 1870

Depth of Deviation: 7513
Radius of Turn: 462
Direction: 185

Total Length: 4742

Measured Total Depth: 12981
True Vertical Depth: 8236
End Point Location from Lease,
Unit, or Property Line: 50

Additional Surface Owner	Address	City, State, Zip
RONALD FIRESTONE	1456 CR 1190	TUTTLE, OK 73089
SHERYL TURNER	139 BLUE MOON COURT	SPRINGTOWN, TX 76082
WESLEY FIRESTONE	1345 CR 1300	CHICKASHA, OK 73112
ROBERT FIRESTONE	1120 SEQUOYAH TRAIL	NORMAN, OK 73071

Notes:

Category Description

DEEP SURFACE CASING 10/26/2018 - GA8 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS

OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR

OR SURFACE CASING

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 CLOSER THAN 600' TO MUEGGENBORG 1-21 WELL OR ANY OTHER WELLS IN THE

UNIT

MARATHON OIL COMPANY

12-22-2017

Category Description

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 10/31/2018 - 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

LOCATION EXCEPTION - 669724 10/31/2018 - G56 - (I.O.) 21-16N-7W

X652847 MSNLC

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

MARATHON OIL COMPANY

11/3/2017

LOCATION EXCEPTION - 685802 11/1/2018 - G56 - EXTEND 669724 TO 11/3/2019

MEMO 10/26/2018 - GA8 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS REQUIRED (KINGFISHER

CREEK), PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 652847 10/31/2018 - G56 - (640)(HOR) 21-16N-7W

EXT 646887 MSNLC, OTHER

COMPL INT NLT 660' FB (COEXIST WITH SP # 494881 MSSLM)

