API NUMBER: 011 24171

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

Approval Date: 02/01/2019
Expiration Date: 08/01/2020

Horizontal Hole Multi Unit Oil & Gas

## PERMIT TO DRILL

POT LOCATION:	NW NW NW	SE	FEET FROM QUARTER: FROM SECTION LINES:  Well No:	2321 3-25-36MXH	2343	Wall will be	2321 feet from neare	et unit or loses boundary
Operator Name:	MARATHON OIL CO	MPANY	Well NO.		4057205508	Well Will be	OTC/OCC Number:	1363 0
MARATHON OIL COMPANY 7301 NW EXPRESSWAY STE 225 OKLAHOMA CITY, OK			73132-1590	STEVE AND PATTY N 14112 N 2770 ROAD		MENDELL		
							()K 7	
					LOYAL	-	OK 7	3756
` '	(Permit Valid fo	r Listed Fo			Name	-		
ı	Name	r Listed Fo	Depth		Name		OK 7	
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1 !	Name	r Listed Fo	Depth		Name 6			
1 ! 2	Name	r Listed Fo	Depth		<b>Name</b> 6 7			
1 1 2 3	Name	r Listed Fo	Depth		Name 6 7 8			
1 1 2 3 4 5 5	Name	r Listed Fo	Depth 8300	on Orders:	Name 6 7 8 9		Depti	h
1 1 2 3 4 5 5	Name MISSISSIPPIAN	r Listed Fo	Depth	on Orders:	Name 6 7 8 9			
1 I 2 3 4 5 pacing Orders:	Name MISSISSIPPIAN 650409 649377	r Listed Fo	Depth 8300	on Orders:	Name 6 7 8 9	In	Depti	h 689235
1 I 2 3 4	Name MISSISSIPPIAN 650409 649377	r Listed Fo	Depth 8300	on Orders:	Name 6 7 8 9	In	Depti ocreased Density Orders:	h 689235

Total Depth: 16680 Ground Elevation: 1248 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 190

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: 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 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: CHICKASHA

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: CHICKASHA

## HORIZONTAL HOLE 1

Sec 36 Twp 17N Rge 10W County BLAINE

Spot Location of End Point: SW SW SW SE
Feet From: SOUTH 1/4 Section Line: 50
Feet From: EAST 1/4 Section Line: 2500

Depth of Deviation: 8197 Radius of Turn: 573 Direction: 182

Total Length: 7583

Measured Total Depth: 16680

True Vertical Depth: 9243

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

Notes:

Category Description

DEEP SURFACE CASING 12/17/2018 - 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 12/17/2018 - 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; 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 - 689235 2/1/2019 - G56 - 25-17N-10W

X650409 MSSP 6 WELLS MARATHON OIL CO.

1/4/2019

INCREASED DENSITY - 689236 2/1/2019 - G56 - 36-17N-10W

X649377 MSSP 3 WELLS

MARATHON OIL CO.

1/4/2019

Category Description

INTERMEDIATE CASING 12/17/2018 - 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 12/17/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2

- OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201809336 2/1/2019 - G56 - (I.O.) 25 & 36-17N-10W

EST MULTIUNIT HORIZONTAL WELL

X650409 MSSP 25-17N-10W X649377 MSSP 36-17N-10W

33% 25-17N-10W 67% 36-17N-10W MARATHON OIL CO.

REC 12/17/2018 (P. PORTER)

PENDING CD - 201809337 2/1/2019 - G56 - (I.O.) 25 & 36-17N-10W

X650409 MSSP 25-17N-10W X649377 MSSP 36-17N-10W

COMPL INT (25-17N-10W) NCT 150' FNL, NCT 0' FSL ,NCT 330' FEL COMPL INT (36-17N-10W) NCT 0' FNL, NCT 150' FSL, NCT 330' FEL

NO OP NAMED

REC 12/17/2018 (P. PORTER)

SPACING - 649377 2/1/2019 - G56 - (640)(HOR) 36-17N-10W

VAC OTHER

VAC 121396 MSSNC, MNNG, MSSSD NW4

EST MSSP, OTHERS COMPL INT NCT 660' FB

(COEXIST SP. ORDER # 121396 MSSNC, MNNG, MSSSD SW4, NE4, SE4)

SPACING - 650409 2/1/2019 - G56 - (640)(HOR) 25-17N-10W

VAC OTHER

VAC 121396 MSSNC, MNNG, MSSSD W2

VAC 121396 MNNG SE4 EXT 644205 MSSP, OTHERS COMPL INT NCT 660' FB

(COEXIST SP. ORDER # 121396 MSSNC, MNNG, MSSSD NE4 & ORDER # 121396 MSSNC,

MSSSD SE4)

