API NUMBER: 011 23890

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: 11/29/2017
Expiration Date: 05/29/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	21	Twp:	16N	Rge:	13W	County:	BLAI	NE
SPOT LOCATION:	SE	SE	SI	= 1	SE	FEE	T FROM QUARTER:	FROM	SOUT

POT LOCATION: SE SE SE SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST SECTION LINES: 250 330

Lease Name: MASQUELIER 1613 Well No: 1-21MH Well will be 250 feet from nearest unit or lease boundary.

 Operator Name:
 MARATHON OIL COMPANY
 Telephone:
 7132962003
 OTC/OCC Number:
 1363
 0

MARATHON OIL COMPANY 5555 SAN FELIPE ST

HOUSTON, TX 77056-2701

PRESTON & CANDY MASQUELIER

P.O. BOX 334

FAY OK 73646

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	10271 6		
2		7		
3		8		
4		9		
5		10	0	
Spacing Orders:	669316	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201705197 Special Orders:

Total Depth: 16374 Ground Elevation: 1822 Surface Casing: 400 Depth to base of Treatable Water-Bearing FM: 270

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? $\quad \mbox{Y}$

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec. 21 Twp 16N Rge 13W County **BLAINE** Spot Location of End Point: N2 NF NF NF Feet From: NORTH 1/4 Section Line: 50 Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 10542
Radius of Turn: 477
Direction: 360
Total Length: 5083

Measured Total Depth: 16374

True Vertical Depth: 12271

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

Notes:

Category Description

HYDRAULIC FRACTURING

10/16/2017 - G57 - 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 11/27/2017 - G57 - 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 10/16/2017 - G57 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2

- OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201705197 11/14/2017 - G57 - (I.O.) 21-16N-13W

X669316 MSSP

COMPL. INT. NCT 165' FSL & FNL, NCT 330' FEL

NO OP. NAMED REC. 8-28-2017 (DUNN) Category Description

SPACING - 669316

11/14/2017 - G57 - (640)(HOR) 21-16N-13W VAC 141190 CSTR VAC 123621 MISS EXT 660363 MSSP, OTHER COMPL. INT. (MSSP) NLT 660' FB