API NUMBER: 017 25353

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

Approval Date: 01/14/2019
Expiration Date: 07/14/2020

Surface Water used to Drill: Yes

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

\_\_\_\_\_

Horizontal Hole Multi Unit Oil & Gas

## PERMIT TO DRILL

Lease Name:	CHEYENNE-ARAPAHO	D BIA 1307	,	Well No: 1-20-1	7 MXH	Well w	vill be 373 fe	et from nearest un	it or lease boundary
Operator Name:	MARATHON OIL C			Tele	ephone: 4057	05508		C Number:	1363 0
MADATI	IONI OIL COMPANI	v				CHEYENNE ARA	APAHO TRIBE	ES .	
MARATHON OIL COMPANY 7301 NW EXPRESSWAY STE 225						C/O DAMON DUNBAR			
7301 NW	EXPRESSWAY S		100 RED MC			OON CIRCLE			
OKLAHO	MA CITY,	OK	73132-1590						
ormation (c)	) (Dougoit Valid f	or Liotod Fo	armetiana Only)			CONCHO		OK 7302	2
ormation(s	, ,	or Listed Fo	ormations Only):	:					2
	Name	or Listed Fo	Depth	:		Name		OK 7302.	2
1	, ,	or Listed Fo	• ,	:	6				2
1 2	Name	or Listed Fo	Depth	:	7				2
	Name	or Listed Fo	Depth	:					2
1 2 3	Name	or Listed Fo	Depth	:	7				2
1 2 3 4 5	Name	or Listed Fo	<b>Depth</b> 9328		7 8 9 10		Increased De	Depth	2
1 2 3 4	Name MISSISSIPPIAN	or Listed Fo	<b>Depth</b> 9328	: Exception Orders:	7 8 9 10		Increased De	Depth	2
1 2 3 4 5	Name MISSISSIPPIAN 644920	or Listed Fo	<b>Depth</b> 9328		7 8 9 10		Increased De	Depth	2
1 2 3 4 5	Name MISSISSIPPIAN  644920 646207	or Listed Fo	<b>Depth</b> 9328		7 8 9 10		Increased De	Depth	2

Fresh Water Supply Well Drilled: Yes

Approved Method for disposal of Drilling Fluids:

H. SEE MEMO

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED
Chlorides Max: 5000 Average: 3000

Under Federal Jurisdiction: Yes

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

PIT 1 INFORMATION

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

## 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 17 Twp 13N Rge 7W County CANADIAN

Spot Location of End Point: N2 NE NE NE Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 9113 Radius of Turn: 462

Direction: 1

Total Length: 7170

Measured Total Depth: 17009

True Vertical Depth: 9958

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

Notes:

Category Description

DEEP SURFACE CASING 12/29/2018 - 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 12/29/2018 - 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

LOCATION EXCEPTION - 686358 1/14/2019 - GB1 - (I.O.) 17 & N2 20-13N-7W

X644920 MSSP N2 20-13N-7W X683407 MSSP 17-13N-7W

COMPL. INT. (17-13N-7W) NCT 150' FNL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (N2 20-13N-7W) NCT 0' FNL, NCT 150' FSL, NCT 330' FEL

MARATHON OIL COMPANY

11/8/2018

MEMO 12/29/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2

- OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

 
 Category
 Description

 SPACING - 644920
 1/14/2019 - GB1 - (320)(HOR) N2 & S2 20-13N-7W AMD 630646 MSSP, OTHERS COMPL. INT. NCT 660' FB

 SPACING - 646207
 1/14/2019 - GB1 - NPT PARAGRAPH 8.2 OF 644920 TO CHANGE THE FACTS AND CIRCUMSTANCES RELATING TO BIA APPROVING LEASE

 SPACING - 683407
 1/14/2019 - GB1 - (640)(HOR) 17-13N-7W VAC 163530 MSCST, MISS EXT 645281 MSSP, OTHER COMPL. INT. NLT 660' FB

SPACING - 686443

1/14/2019 - GB1 - (I.O.) 17 & N2 20-13N-7W
EST MULTIUNIT HORIZONTAL WELL
X644920 MSSP N2 20-13N-7W
X683407 MSSP 17-13N-7W
66% 17-13N-7W
34% N2 20-13N-7W

34% N2 20-13N-7W MARATHON OIL COMPANY

11/9/2018

