I NUMBER: 051 24698 zontal Hole Oil & Gas	OIL & GAS	CORPORATION CONSERVATIO P.O. BOX 52000 MA CITY, OK 73 (Rule 165:10-3-1	) 3152-2000	Approval Date: Expiration Date:	08/21/2019 02/21/2021
i Unit					
	<u> </u>	PERMIT TO DRI	<u>_L</u>		
VELL LOCATION: Sec: 33 Twp: 7N Rge	: 5W County: GRAD	Y			
SPOT LOCATION: NE NW SE SW			EST		
	SECTION LINES:		49		
Lease Name: ETHEL MAE 0605		1-4-9MXH		l be 1120 feet from neares	st unit or lease boundary.
Operator MARATHON OIL COMPANY Name:		Telephone: 4057	285228	OTC/OCC Number:	1363 0
		7			
MARATHON OIL COMPANY			NICKEY O. CROS	KEY & JEAN M. CROS	ΚEY
PO BOX 68			1565 HIGHWAY 6	2	
OKLAHOMA CITY, OK	77001-0068		CHICKASHA		3018
			СПІСКАЗПА		5010
2 3 4 5 Spacing Orders: <sup>188337</sup>	Location Exception O	7 8 9 10		Increased Density Orders:	
153801					
Pending CD Numbers: 201903757 201903756				Special Orders:	
Total Depth: 22454 Ground Elevation	n: 1154 Surface C	asing: 1500	Γ	Pepth to base of Treatable Water	-Bearing FM: 370
Under Federal Jurisdiction: No	Fresh Water S	Supply Well Drilled:	ło	Surface Water u	sed to Drill: Yes
PIT 1 INFORMATION		Appro	ved Method for disposal of	Drilling Fluids:	
Type of Pit System: CLOSED Closed System Me	ans Steel Pits				
Type of Mud System: WATER BASED			ne time land application (	REQUIRES PERMIT)	PERMIT NO: 19-3682
Chlorides Max: 5000 Average: 3000		H. SI	E MEMO		
Is depth to top of ground water greater than 10ft belo	w base of pit? Y				
Within 1 mile of municipal water well? N					
Wellhead Protection Area? N					
Pit is located in a Hydrologically Sensitive Ard	ea.				
Category of Pit: C					
Liner not required for Category: C					
Pit Location is BED AQUIFER					
Pit Location Formation: DUNCAN					

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 BED AQUIFER Pit Location Formation: DUNCAN

## HORIZONTAL HOLE 1

Sec	09	Twp	6N	Rge	5٧	V C	ounty	GRADY
Spot I	Locatior	of En	d Point	:: S\	Ν	SW	SE	SW
Feet I	From:	SOL	JTH	1/4 Se	ctior	n Line:	50	
Feet I	From:	WE	ST	1/4 Se	ctior	n Line:	14	80
Depth of Deviation: 11543								
Radius of Turn: 477								
Direction: 185								
Total Length: 10162								
Measured Total Depth: 22454								
True Vertical Depth: 12039								
End Point Location from Lease,								
Unit, or Property Line: 50								

	Notes:			
	Category	Description		
	DEEP SURFACE CASING	8/7/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS O CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OI SURFACE CASING		
	HYDRAULIC FRACTURING	8/7/2019 - G71 - OCC 165:10-3-10 REQUIRES:		
		1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPEN WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFF WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY	SET OPERATORS WITH	
		2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAUL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRIC "FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,		
		3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING ING TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CO HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING I	ONCLUSION THE	
	MEMO	8/7/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUI LAKE), PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTER		
	PENDING CD - 201903756	8/20/2019 - GC2 - (I.O.) 4 & 9-6N-5W EST MULTIUNIT HORIZONTAL WELL X188337 MSSP 4-6N-5W X153801 MSSP 9-6N-5W 50% 4-6N-5W 50% 9-6N-5W NO OP. NAMED REC. 8-6-2019 (NORRIS)		
	051 24698 ETHEL MAE 0605 1-4-9MXH			

051 24698 ETHEL MAE 0605 1-4-9MXH

Category	Description
PENDING CD - 201903757	8/20/2019 - GC2 - (I.O.) 4 & 9-6N-5W X188337 MSSP 4-6N-5W X153801 MSSP 9-6N-5W COMPL. INT. (4-6N-5W) NCT 150' FNL, NCT 0' FSL, NCT 1,000' FWL COMPL. INT. (9-6N-5W) NCT 0' FNL, NCT 150' FSL, NCT 1,000' FWL NO OP. NAMED REC. 8-6-2019 (NORRIS)
SPACING - 153801	8/20/2019 - GC2 - (640) 9-6N-5W EXT 147146 MSSP, OTHERS EXT OTHER
SPACING - 188337	8/20/2019 - GC2 - (640) 4-6N-5W EXT OTHERS EXT 147146 MSSP, OTHER EST OTHER
WATERSHED STRUCTURE	8/7/2019 - G71 - WELL WITHIN 1/2 MILE OF AN OKLAHOMA CONSERVATION COMMISSION WATERSHED STRUCTURE. CONTACT THE LOCAL CONSERVATION DISTRICT OFFICE AT (405) 224-0523 PRIOR TO DRILLING

