API NUMBER: 019 26379

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

Approval Date: 03/19/2020
Expiration Date: 09/19/2021

Straight Hole Oil & Gas

PERMIT TO DRILL

		Township: 2	S Range	e: 2VV	County:	CARTE	K .					
SPOT LOCATION:	NE SW NW	/ SE	FEET FROM QUARTE	R: FROM	SOUTH	FROM	EAST					
			SECTION LINE	S:	1763		2254					
Lease Name:	SW WILDCAT JIM DEE	ESE UNIT		Well No:	20-2			Well will be	1763	feet from nearest unit	or lease bou	ndary.
Operator Name:	MACK ENERGY CO			Telephone:	5802525	5580; 580	02525580			OTC/OCC Num	ber: 117	39 0
MACK ENERG	GY CO											
PO BOX 400						в	RADY / DRIV	VER CO TC C	RAIGH	EAD		
DUNCAN,		OK 7	73534-0400			P	O BOX 576					
						A	RDMORE			OK 73402		
						┚┖						
Formation(a)	(Darmit \/alid for I	isted Form	otiona Onlyk									
Formation(s)	(Permit Valid for L		ations Only):			7						
Name	(Permit Valid for L	Code	.,	Depth]						
. ,	(Permit Valid for L		.,	Depth 2600								
Name 1 DEESE	(Permit Valid for L	Code	SS	•	otion Orde	rs: No	Exceptions		Inc	creased Density Orders:	No Density (Orders
Name 1 DEESE	701901	Code	SS	2600	otion Order	rs: No	Exceptions		Inc	creased Density Orders: Special Orders:	No Density O	
Name 1 DEESE Spacing Orders:	701901 Pers: No Pending	Code	Loc	2600		13.	<u> </u>	Depth		•	No Special C	
Name 1 DEESE Spacing Orders: Pending CD Numbe Total Depth: 44	701901 Pers: No Pending	Code 404DEE	Loc	2600 ation Excep		1170		Depth or disposal of Dr	n to base o	Special Orders: of Treatable Water-Bearin	No Special C	
Name 1 DEESE Spacing Orders: Pending CD Numbe Total Depth: 4-	701901 Pers: No Pending 400 Ground	Code 404DEE	Loc	2600 ation Excep		1170	proved Method f	·	n to base o	Special Orders: of Treatable Water-Bearin ds:	No Special C	
Name 1 DEESE Spacing Orders: Pending CD Numbe Total Depth: 4- Under I	701901 ers: No Pending 400 Ground Federal Jurisdiction: No	Code 404DEE	Loc	2600 ation Excep		1170 Ap	proved Method f Evaporation/dewa	or disposal of Dr	illing Fluid	Special Orders: of Treatable Water-Bearin ds: pit.	No Special C	Orders

Category of Pit: 2

Pit Location Formation: WELLINGTON

Pit Location is: BED AQUIFER

Liner not required for Category: 2

PIT 1 INFORMATION

Type of Pit System: ON SITE

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 <u>is</u> located in a Hydrologically Sensitive Area.

NOTES:	
Category	Description
HYDRAULIC FRACTURING	3/2/2020 - GC2 - 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
SPACING - 701901	3/19/2020 - GC2 - (UNIT) W2 NW4 SE4 7-2S-2W EST SW WILDCAT JIM DEESE OPERATING UNIT FOR THE DEESS