API NUMBER: 111 27529

Oil & Gas

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

Approval Date: 05/28/2019
Expiration Date: 11/28/2020

PERMIT TO DRILL

							SECTION LINES:		330		825
SPOT LOCATION:	W2	SE		SW	SW		FEET FROM QUARTER:	FROM	SOUTH	FROM	WEST
WELL LOCATION:	Sec:	02	iwp:	14N	Rge:	13E	: County	: OKIV	IULGEE		

Lease Name: DILLINGHAM RANCH Well No: 5-2 Well will be 330 feet from nearest unit or lease boundary.

Operator Name: Telephone: 9184522735 OTC/OCC Number: 20789 0

MONARCH ENERGY COMPANY LLC

PO BOX 70

Straight Hole

EUFAULA, OK 74432-0070

DILLINGHAM RANCH LC C/O MARK MOEHLE, BOK 499 WEST SHERIDAN AVE.

OKLAHOMA CITY OK 73102

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

	Name	Depth		Name	Depth
1	SENORA	395	6	UNION VALLEY	2095
2	RED FORK	795	7	CANEY	2275
3	BARTLESVILLE	1185	8	WOODFORD	2425
4	воосн	1585	9	WILCOX	2505
5	DUTCHER	1855	10		

Spacing Orders: No Spacing Location Exception Orders: Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 2595 Ground Elevation: 759 Surface Casing: 90 Depth to base of Treatable Water-Bearing FM: 40

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

PIT 1 INFORMATION Approved Method for disposal of Drilling Fluids:

Type of Pit System: ON SITE A. Evaporation/dewater and backfilling of reserve pit.

Type of Mud System: AIR

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?

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: 4

Liner not required for Category: 4

Pit Location is NON HSA

Pit Location Formation: WEWOKA

Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

Notes:

Category Description

HYDRAULIC FRACTURING 5/9/2019 - 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

SPACING 5/24/2019 - G75 - FORMATIONS UNSPACED; 160-ACRE LEASE (SW4)