API NUMBER: 073 26468

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

Approval Date:	03/05/2019
Expiration Date:	09/05/2020

20944 0

Well will be 690 feet from nearest unit or lease boundary.

OTC/OCC Number:

Horizontal Hole Multi Unit Oil & Gas

## PERMIT TO DRILL

			<u>I EI (WIII I C</u>	
ELL LOCATION:	Sec: 16 Twp: 15N Rge:	BW County: KII	NGFISHER	
POT LOCATION:	NE SW NE NW	FEET FROM QUARTER: FROM	NORTH FRO	M WEST
		SECTION LINES:	690	1850
Lease Name:	FREDERICK	Well No:	1508 4H-4X	
Operator Name:	NEWFIELD EXPLORATION MID-	CON INC	Telephone:	2812105100; 9188781

FREDERICK & MARTHA BREDEL

26612 N 2780 RD

KINGFISHER OK 73750

NEWFIELD EXPLORATION MID-CON INC 24 WATERWAY AVE ST 900

THE WOODLANDS, TX 77380-2764

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

	Name	Depth		Name	Dej	oth
1	MISSISSIPPIAN	8885	6			
2			7			
3			8			
4			9			
5			10			
Spacing Orders.	634773 687541	Location Exception Orders:	687542	Increased Density Orders:		688335
			686475			686476

Pending CD Numbers: Special Orders:

Total Depth: 19836 Ground Elevation: 1146 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 300

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

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

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 is not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: CHICKASHA

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36154

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

**Liner not required for Category: C**Pit Location is NON HSA

Pit Location Formation: CHICKASHA

## HORIZONTAL HOLE 1

Sec 04 Twp 15N Rge 8W County KINGFISHER

Spot Location of End Point: NE NW NW NE
Feet From: NORTH 1/4 Section Line: 85
Feet From: EAST 1/4 Section Line: 2291

Depth of Deviation: 8594 Radius of Turn: 598

Direction: 5

Total Length: 10303

Measured Total Depth: 19836
True Vertical Depth: 9454
End Point Location from Lease,
Unit, or Property Line: 85

Notes:

Category Description

DEEP SURFACE CASING 1/31/2019 - 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

EXCEPTION TO RULE - 686475 3/5/2019 - G56 - (I.O.) 4 & 9-15N-8W

X165:10-3-28(C)(2)(B) MSSP MAY BE CLOSER THAN 600' TO FRANKS 1, FREDERICK 1H-4X,

BREDEL 1-9 AND/OR PROPOSED WELLS

NEWFIELD EXPLOR. MID-CON.

11/9/2018

HYDRAULIC FRACTURING 1/31/2019 - 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

INCREASED DENSITY - 686476 3/5/2019 - G56 - 9-15N-8W

X634773 MSSP

7 WELLS

NEWFIELD EXPLOR. MID-CON. INC.

11/9/2018

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1. Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

073 26468 FREDERICK 1508 4H-4X

Category Description

INCREASED DENSITY - 688335 3/5/2019 - G56 - 4-15N-8W

X634773 MSSP

7 WELLS

NEWFIELD EXPLOR. MID-CON. INC.

12/14/2018

INTERMEDIATE CASING 1/31/2019 - G71 - 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

LOCATION EXCEPTION - 687542 3/5/2019 - G56 - (I.O.) 4 & 9-15N-8W

X634773 MSSP

COMPL INT (9-15N-8W) NCT 0' FNL, NCT 165' FSL, NCT 1980' FEL COMPL INT (4-15N-8W) NCT 0' FSL, NCT 165' FNL, NCT 1980' FEL

NEWFIELD EXPLOR. MID-CON. INC.

12/3/2018

MEMO 1/31/2019 - G71 - PIT 1 & 2 - CLOSED SYSTEM = STEEL PITS (REQUIRED - DEAD INDIAN

CREEK), WBM/CUTTINGS & OBM CUTTINGS CAPTURED IN STEEL HALF PITS, WBM CUTTINGS WILL BE SOIL FARMED, WBM & OBM CUTTINGS TRANSFERRED TO R360 587498 (31-12N-8W),

CANADIAN CO, PIT 2 - OBM TO VENDOR

SPACING - 634773 3/5/2019 - G56 - (640)(HOR) 4 & 9-15N-8W

EXT 608292 MSSP COMPL INT NLT 660' FB

(COEXIST WITH SP # 324671 CSTRU, MNNG, MSSLM 9-15N-8W; SP # 231191 CSTRU, MNNG,

MSSLM 4-15N-8W)

SPACING - 687541 3/5/2019 - G56 - (I.O.) 4 & 9-15N-8W

ESTABLISH MULTIUNIT HORIZONTAL WELL

X634773 MSSP 50% 4-15N-8W 50% 9-15N-8W

NEWFIELD EXPLOR. MID-CON. INC.

12/3/2018

