API NUMBER: 051 24354

Oil & Gas

Horizontal Hole

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

Approval Date: 05/16/2018
Expiration Date: 11/16/2018

## PERMIT TO DRILL

WELL LOCATION:	Sec:	28	Twp:	10N	Rge:	6W	County	: GRA	DY		
SPOT LOCATION:	SW	SE	S	W	SW		FEET FROM QUARTER:	FROM	SOUTH	FROM	WEST
							SECTION LINES:		286		675

Lease Name: WHB CATTLE 33-10-6 Well No: 3MH Well will be 286 feet from nearest unit or lease boundary.

Operator ROAN RESOURCES LLC Telephone: 4052412237 OTC/OCC Number: 24127 0

ROAN RESOURCES LLC 14701 HERTZ QUAIL SPRINGS PKWY

OKLAHOMA CITY, OK 73134-2641

WHB CATTLE LP 3000 NE 63RD STREET

OKLAHOMA CITY OK 73121

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	10465 6	3	
2		7	7	
3		8	3	
4		9	)	
5		1	0	
Spacing Orders:	173190	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201803602 Special Orders:

201803601

Total Depth: 15788 Ground Elevation: 1311 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 100

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

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?  $\quad \mbox{Y}$ 

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 1B

Liner required for Category: 1B

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

B. Solidification of pit contents.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-34511

H. SEE MEMO

PIT 2 INFORMATION

Type of Pit System: ON SITE

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: 3

Liner required for Category: 3
Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

## **HORIZONTAL HOLE 1**

Sec 33 Twp 10N Rge 6W County **GRADY** SW Spot Location of End Point: SE SW SW Feet From: SOUTH 1/4 Section Line: 65 Feet From: WEST 1/4 Section Line: 530

Depth of Deviation: 9823 Radius of Turn: 573 Direction: 182

Total Length: 5065

Measured Total Depth: 15788

True Vertical Depth: 10508

End Point Location from Lease.

Unit, or Property Line: 65

Notes:

**MEMO** 

Category Description

DEEP SURFACE CASING 5/11/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS

OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR

SURFACE CASING

HYDRAULIC FRACTURING 5/11/2018 - 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

5/11/2018 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO

VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201803601 5/15/2018 - G75 - 33-10N-6W

XOTHER X173190 MSSP 2 WELLS NO OP. NAMED HEARING 5-29-2018

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.

051 24354 WHB CATTLE 33-10-6 3MH

Category Description

5/15/2018 - G75 - (E.O.) 33-10N-6W XOTHER PENDING CD - 201803602

X173190 MSSP

COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL

NO OP. NAMED

REC 5-11-2018 (NORRIS)

**SPACING - 173190** 5/15/2018 - G75 - (640) 33-10N-6W

EXT OTHERS EST OTHERS

EXT 144013 MSSP, OTHERS

