API NUMBER: 051 24469

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: 09/10/2018
Expiration Date: 03/10/2019

PERMIT TO DRILL

WELL LOCATION:	Sec:	11	Twp:	9N	Rge:	6W	County:	GRADY
		$\overline{}$	\neg	$\overline{}$		\neg		

SPOT LOCATION: SW SE NE NW FEET FROM QUARTER: FROM NORTH FROM WEST SECTION LINES: 1250 2180

Lease Name: OSBORN 2-35-9-6 Well No: 5MXH Well will be 1250 feet from nearest unit or lease boundary.

Operator ROAN RESOURCES LLC Telephone: 4058968453 OTC/OCC Number: 24127 0

ROAN RESOURCES LLC

14701 HERTZ QUAIL SPRINGS PKWY

OKLAHOMA CITY, OK 73134-2641

LEON OSBORN

508 E ROCK CREEK ROAD

TUTTLE OK 73089

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

	Name	Depth	Name	Dep	th
1	MISSISSIPPIAN	10460	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	256715 144013	Location Exception Orders:		Increased Density Orders:	680252 680253

Pending CD Numbers: 201806089

201806091

Total Depth: 21048 Ground Elevation: 1302 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 360

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No 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? Y

Within 1 mile of municipal water well? N
Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 2

Liner not required for Category: 2
Pit Location is BED AQUIFER
Pit Location Formation: DUNCAN

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: 18-35243

Special Orders:

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.

DUNCAN

Category of Pit: 3
Liner required for Category: 3
Pit Location is BED AQUIFER

Pit Location Formation:

HORIZONTAL HOLE 1

Sec 35 Twp 10N Rge 6W County **GRADY** NW Spot Location of End Point: NW ΝE ΝE Feet From: NORTH 1/4 Section Line: 65 Feet From: WEST 1/4 Section Line: 2160

Depth of Deviation: 9790 Radius of Turn: 575 Direction: 180

Total Length: 10355

Measured Total Depth: 21048

True Vertical Depth: 10488

End Point Location from Lease,
Unit, or Property Line: 65

Notes:

Category Description

DEEP SURFACE CASING 8/22/2018 - 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

HYDRAULIC FRACTURING 8/22/2018 - 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

INCREASED DENSITY - 680252 9/10/2018 - G58 - 2-9N-6W

X144013 MSSP 5 WELLS ROAN RESOURCES LLC

7/16/2018

INCREASED DENSITY - 680253 9/10/2018 - G58 - 35-10N-6W

X256715 MSSP 5 WELLS

ROAN RESOURCES LLC

7/16/2018

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.

Category Description

MEMO 8/22/2018 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201806089 9/10/2018 - G58 - (I.O.) 2-9N-6W & 35-10N-6W

EST MULTIUNIT HORÍZONTAL WELL

X144013 MSSP 2-9N-6W X256715 MSSP 35-10N-6W

50% 2-9N-6W 50% 35-10N-6W NO OP. NAMED

REC 8/20/2018 (P. PORTER)

PENDING CD - 201806091 9/10/2018 - G58 - (I.O.) 2-9N-6W & 35-10N-6W

X144013 MSSP 2-9N-6W X256715 MSSP 35-10N-6W

X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO EXISTING/PROPOSED WELL

COMPL. INT. 2-9N-6W NCT 150' FSL, NCT 0' FNL, NCT 1320' FWL COMPL. INT. 35-10N-6W NCT 0' FSL, NCT 150' FNL, NCT 1320' FWL

NO OP. NAMED

REC 8/20/2018 (P. PORTER)

SPACING - 144013 9/10/2018 - G58 - (640) 2-9N-6W

EXT OTHERS EST MSSP, OTHERS

SPACING - 256715 9/10/2018 - G58 - (640) 35-10N-6W

EXT OTHER EST OTHERS

EXT 253223 MSSP, OTHERS

