API NUMBER: 017 25315

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: 11/16/2018
Expiration Date: 05/16/2020

PERMIT TO DRILL

WELL LOCATION:	Sec:	16	Twp:	10N	Rge:	5W	County:	CANADIAN

SPOT LOCATION: SE SW SW SE FEET FROM QUARTER: FROM SOUTH FROM EAST SECTION LINES: 260 2115

Lease Name: NOWLIN 16-9-10-5 Well No: 1WXH Well will be 260 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

BRAD NOWLIN

13401 S. MUSTANG RD

MUSTANG OK 73064

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

	Name	Depth	Name	Depth
1	WOODFORD	8943 6		
2		7		
3		8		
4		9		
5		10	0	
Spacing Orders:	651795	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201808404 Special Orders:

201808405 201808402 201808403

Total Depth: 19503 Ground Elevation: 1195 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 160

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

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

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: 1A

Liner required for Category: 1A

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-35653

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 09 Twp 10N Rge 5W County CANADIAN

Spot Location of End Point: NW NW NE NE
Feet From: NORTH 1/4 Section Line: 65
Feet From: EAST 1/4 Section Line: 1050

Depth of Deviation: 8269 Radius of Turn: 575

Direction: 3

Total Length: 10330

Measured Total Depth: 19503

True Vertical Depth: 8943

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

Notes:

Category Description

DEEP SURFACE CASING 11/5/2018 - 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 11/5/2018 - 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

MEMO 11/5/2018 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201808402 11/15/2018 - G56 - 16-10N-5W

X651795 WDFD, OTHER

5 WELLS; 1 WELL MSSP, 4 WELLS WDFD

NO OP NAMED

REC 11/6/2018 (P. PORTER)

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

PENDING CD - 201808403 11/15/2018 - G56 - 9-10N-5W

X651795 WDFD, OTHER

5 WELLS; 1 WELL MSSP, 4 WELLS WDFD

NO OP NAMED

REC 11/6/2018 (P. PORTER)

11/15/2018 - G56 - (E.O.) 16 & 9-10N-5W PENDING CD - 201808404

ESTABLISH MULTIUNIT HORIZONTAL WELL X651795 WDFD, OTHER 16 & 9-10N-5W

50% 16-10N-5W

50% 9-10N-5W

ROAN RESOURCES LLC REC 11/6/2018 (P. PORTER)

11/15/2018 - G56 - (E.O.) 16 & 9-10N-5W X651795 WDFD, OTHER PENDING CD - 201808405

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

COMPL INT (16-10N-5W) NCT 150' FSL, NCT 0' FNL, NCT 1050' FEL COMPL INT (9-10N-5W) NCT 0' FSL, NCT 150' FNL, NCT 1050' FEL

ROAN RESOURCES LLC REC 11/6/2018 (P. PORTER)

SPACING - 651795 11/15/2018 - G56 - (640)(HOR) 9 & 16-10N-5W

VAC OTHERS

EST WDFD, OTHER

POE TO BHL NCT 165' FNL/FSL, NCT 330' FEL/FWL

