

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

API NUMBER: 087 22199

Approval Date: 12/13/2018
Expiration Date: 06/13/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 01 Twp: 5N Rge: 4W County: MCCLAIN
SPOT LOCATION: SE SW SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 190 970

Lease Name: **COMMANDO 12-13-5-4** Well No: **2MXH** Well will be **190** feet from nearest unit or lease boundary.
Operator Name: **ROAN RESOURCES LLC** Telephone: 4058968453 OTC/OCC Number: 24127 0

ROAN RESOURCES LLC
14701 HERTZ QUAIL SPRINGS PKWY
OKLAHOMA CITY, OK 73134-2641

MITZI JENEENE TERRY
15579 160TH
LINDSAY OK 73052

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

	Name	Depth	Name	Depth
1	SYCAMORE	9728	6	
2	WOODFORD	9851	7	
3			8	
4			9	
5			10	

Spacing Orders: 665796
662899

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201809715
201809716

Special Orders:

Total Depth: 20288

Ground Elevation: 1085

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

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: 18-35644

H. SEE MEMO

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.

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 BED AQUIFER
Pit Location Formation: DUNCAN

HORIZONTAL HOLE 1

Sec 13 Twp 5N Rge 4W County MCCLAIN
Spot Location of End Point: SE SE SW SE
Feet From: SOUTH 1/4 Section Line: 65
Feet From: EAST 1/4 Section Line: 1400
Depth of Deviation: 9158
Radius of Turn: 573
Direction: 183
Total Length: 10230
Measured Total Depth: 20288
True Vertical Depth: 9851
End Point Location from Lease,
Unit, or Property Line: 65

Notes:

Table with 2 columns: Category, Description. Rows include DEEP SURFACE CASING, HYDRAULIC FRACTURING, and MEMO with detailed descriptions of operations and requirements.

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Category	Description
PENDING CD - 201809715	<p>11/27/2018 - G56 - (E.O.) 12 & 13-5N-4W ESTABLISH MULTIUNIT HORIZONTAL WELL X665796 SCMR, WDFD 12-5N-4W X662899 SCMR, WDFD 13-5N-4W (SCMR IS AN ADJACENT COMMON SOURCE OF SUPPLY TO WDFD)*** 50% 12-5N-4W 50% 13-5N-4W ROAN RESOURCES LLC REC 11/26/2018 (THOMAS)</p> <p>***WILL BE CORRECTED TO SCMR AS THE TARGET FORMATION PER ATTORNEY FOR OPERATOR</p>
PENDING CD - 201809716	<p>11/27/2018 - G56 - (E.O.) 12 & 13-5N-4W X665796 SCMR, WDFD 12-5N-4W X662899 SCMR, WDFD 13-5N-4W COMPL INT (12-5N-4W) NCT 150' FNL, NCT 0' FSL, NCT 660' FEL COMPL INT (13-5N-4W) NCT 0' FNL, NCT 150' FSL, NCT 660' FEL ROAN RESOURCES LLC REC 11/26/2018 (THOMAS)</p>
SPACING - 662899	<p>11/27/2018 - G56 - (640)(HOR) 13-5N-4W EST SCMR, WDFD, OTHER POE TO BHL (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL POE TO BHL (SCMR) NCT 660' FB (COEXIST WITH SP # 126185 MSSP, # 355444 SCMR, WDFD, # 404523 SCMR, WDFD, # 341280 SCMR)</p>
SPACING - 665796	<p>11/27/2018 - G56 - (640)(HOR) 12-5N-4W EST SCMR, WDFD, OTHER POE TO BHL (SCMR) NCT 660' FB, POE TO BHL (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL (COEXIST WITH SP # 410530 SCMR, WDFD)</p>

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