

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

API NUMBER: 087 22192

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

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: 190 950

Lease Name: **COMMANDO 12-13-5-4** Well No: **1WXH** Well will be **190** feet from nearest unit or lease boundary.  
Operator Name: **ROAN RESOURCES LLC** Telephone: 4052412150 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 WOODFORD	9816	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 665796  
662899

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201807343  
201807344

Special Orders:

Total Depth: 20376

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: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 30000 Average: 5000

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: C**

**Liner not required for Category: C**

Pit Location is BED AQUIFER

Pit Location Formation: duncan

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 18-35614

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: 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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

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: S2 SW SE SE

Feet From: SOUTH 1/4 Section Line: 65

Feet From: EAST 1/4 Section Line: 990

Depth of Deviation: 8912

Radius of Turn: 575

Direction: 181

Total Length: 10560

Measured Total Depth: 20376

True Vertical Depth: 9816

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

Notes:

Category

Description

DEEP SURFACE CASING

11/1/2018 - GA8 - 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

11/1/2018 - GA8 - 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](http://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](http://FRACFOCUS.ORG)

MEMO

11/1/2018 - GA8 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS REQUIRED (FIN CREEK) , PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

This permit does not address the right of entry or settlement of surface damages.

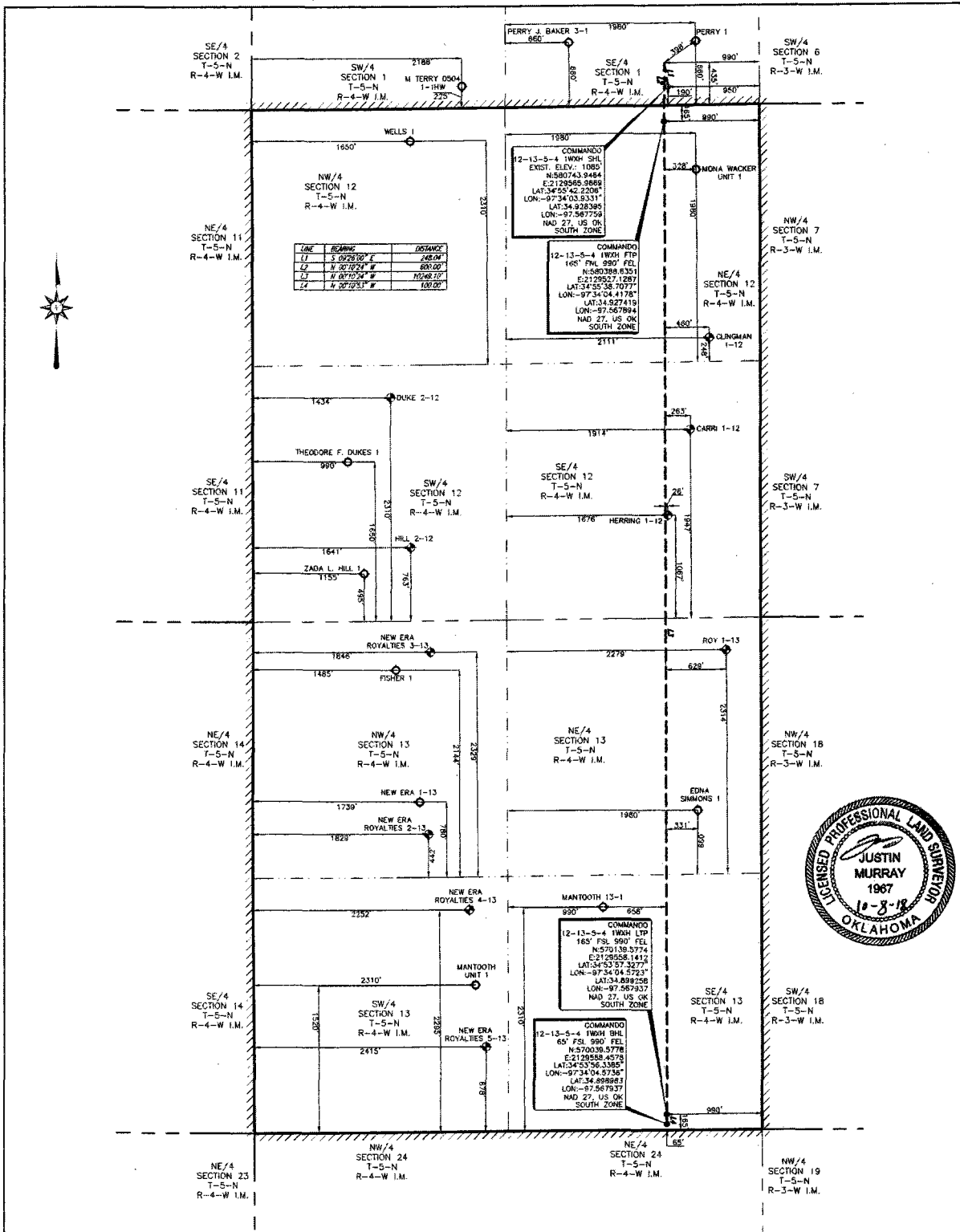
The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

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.

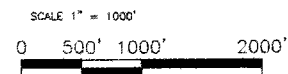
087 22192 COMMANDO 12-13-5-4 1WXH

Category	Description
PENDING CD - 201807343	11/5/2018 - G56 - (I.O.) 12 & 13-5N-4W ESTABLISH MULTIUNIT HORIZONTAL WELL X665796 WDFD 12-5N-4W X662899 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 10/9/2018 (DENTON)
PENDING CD - 201807344	11/5/2018 - G56 - (I.O.) 12 & 13-5N-4W X665796 WDFD 12-5N-4W X662899 WDFD 13-5N-4W COMPL INT (12-5N-4W) NCT 150' FNL, NCT 0' FSL, NCT 330' FEL COMPL INT (13-5N-4W) NCT 0' FNL, NCT 150' FSL, NCT 330' FEL ROAN RESOURCES LLC REC 10/9/2018 (DENTON)
SPACING - 662899	11/5/2018 - G56 - (640)(HOR) 13-5N-4W EST WDFD, OTHERS POE TO BHL NCT 165' FNL/FSL, NCT 330' FEL/FWL (COEXIST WITH SP # 355444/404523)
SPACING - 665796	11/5/2018 - G56 - (640)(HOR) 12-5N-4W EST WDFD, OTHERS POE TO BHL NCT 165' FNL/FSL, NCT 330' FEL/FWL (COEXIST WITH SP # 410530)

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.



PERMIT PLAT OF  
 ROAN RESOURCES, LLC.  
**COMMANDO 12-13-5-4 1WXH**  
**190' FSL 950' FEL OF SECTION 1**  
 GOLDEN TREND FIELD  
 SECTION 12, TOWNSHIP 5 NORTH, RANGE 4 WEST I.M. &  
 SECTION 13, TOWNSHIP 5 NORTH, RANGE 4 WEST I.M.  
**LEASE LINES**  
**SHL: 190' FNL 950' FEL**  
 MCCLAIN COUNTY, OKLAHOMA



NOTE:  
 1. COMBINED SCALE FACTOR: 0.99990195  
 2. SHL IS APPROXIMATELY 6.76 MILES N 16°42'48" E OF LINDESEY, OKLAHOMA.

FILE: S:\OK\MCCLAIN\PROJECTS\105M-RO-4W.DWG

**LEGEND**

SM	SURFACE WELL LOCATION	●	POINT
FP	PRODUCTION POINT	○	EXISTING WELLHEAD
FT	FIRST TIME POINT	○	PROPOSED WELL LOCATION SET
LTP	LAST TIME POINT	○	PROPOSED LEASE LINE
BT	BRITISH WELLS LOCATION	○	LEASE LINE
OC	OKLAHOMA CORPORATION COMMISSION	○	SURVEY DATE

John F. Watson & Company  
 LAND & DEVELOPMENT SERVICES  
 PROFESSIONAL LAND SURVEYORS  
 200 N LORRAINE, SUITE 100  
 MIDLAND, TX 79701  
 (432) 520-2400

CA#5957 EXPIRATION 6-30-2019  
 200 N LORRAINE #220  
 MIDLAND, TX 79701  
 (432) 520-2400

STAKED WELL: 06/30/18  
 MOVED LATERAL: 10/08/18

REV: - AFE NO. - JOB NO.: 16-0284  
 FIELD RECORD SERVER WDR: 1 DRAWN BY: LIF

NOTE:  
 1. BEARINGS, DISTANCES & ANGLES ARE GIVEN AND BY US IN SOUTH ZONE AND ARE OBTAINED BY NORMAL GPS TECHNIQUES.  
 2. ELEVATIONS ARE BASED ON NAD 83 COMPLETED USING 0200 128.  
 3. THIS SURVEY IS FOR THE SHL & LFP SURFACE LEASE AND IS NOT A BOUNDARY SURVEY.  
 4. LOCATION OF ADJACENT WELLS, OFFICE LEASE OR BOUNDARY ARE APPROXIMATED FROM OKLAHOMA CORPORATION COMMISSION DATA.  
 5. BOUNDARY MONUMENTS PROVIDED BY THE CLIENT.  
 6. THIS SURVEY COMPLIES WITH THE US PUBLIC LAND SURVEY SYSTEM AND MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS SET BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, EFFECTIVE JULY 23, 2013.  
 7. THIS IS NOT A BOUNDARY SURVEY.  
 8. THIS PERMIT PLAT HAS BEEN PREPARED FROM A SURVEY PLAT ON FILE IN THE OFFICE OF JOHN F. WATSON & COMPANY, MIDLAND, TEXAS.  
 9. THE UNDERSIGNED TO HEREBY CERTIFY THAT THE SURVEY INFORMATION FURNISHED ON THIS PLAT WAS OBTAINED FROM ACTUAL FIELD NOTES OF ON-THE-GROUND SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

10/08/18  
 JUSTIN MURRAY  
 PROFESSIONAL LAND SURVEYOR