

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

API NUMBER: 017 25333

Approval Date: 11/26/2018

Expiration Date: 05/26/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 10N Rge: 5W

County: CANADIAN

SPOT LOCATION: ☐ NW ☐ NE ☐ NE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 2410 355

Lease Name: BARBARO 5-32-29-10-5

Well No: 2WXH

Well will be 355 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

CAROLE ANN HANNA
10005 S. CZECH RD.
MUSTANG OK 73064

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

Name	Depth	Name	Depth
1 WOODFORD	8855	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 654578
670371

Location Exception Orders:

Increased Density Orders: 678934

Pending CD Numbers: 201809123
201809124
201809120
201809119

Special Orders:

Total Depth: 22055

Ground Elevation: 1310

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 640

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.

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

PERMIT NO: 18-35781

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 29 Twp 11N Rge 5W County CANADIAN

Spot Location of End Point: NW NW NW NE

Feet From: NORTH 1/4 Section Line: 65

Feet From: EAST 1/4 Section Line: 2440

Depth of Deviation: 8030

Radius of Turn: 573

Direction: 340

Total Length: 13125

Measured Total Depth: 22055

True Vertical Depth: 8855

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

Notes:

Category

Description

DEEP SURFACE CASING

11/9/2018 - 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

11/9/2018 - 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 - 678934

11/21/2018 - G75 - 5-10N-5W
X654578 WDFD
5 WELLS
ROAN RESOURCES LLC
6-8-2018

MEMO

11/9/2018 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

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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.

017 25333 BARBARO 5-32-29-10-5 2WXH

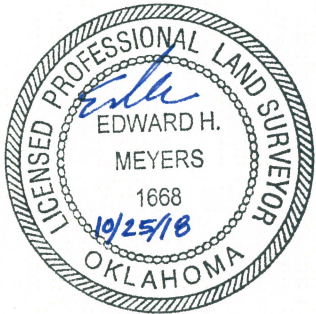
Category	Description
PENDING CD - 201809119	11/21/2018 - G75 - 29-11N-5W X670371 WDFD 4 WELLS NO OP. NAMED HEARING 11-27-2018
PENDING CD - 201809120	11/21/2018 - G75 - 32-11N-5W X670371 WDFD 4 WELLS NO OP. NAMED HEARING 11-27-2018
PENDING CD - 201809123	11/21/2018 - G75 - (E.O.) 5-10N-5W, 32 & 29-11N-5W EST MULTIUNIT HORIZONTAL WELL X654578 WDFD 5-10N-5W X670371 WDFD 32 & 29-11N-5W 20% 5-10-5W 40% 32-11N-5W 40% 29-11N-5W ROAN RESOURCES LLC REC 11-9-2018 (MILLER)
PENDING CD - 201809124	11/21/2018 - G75 - (E.O.) 5-10N-5W, 32 & 29-11N-5W X654578 WDFD 5-10N-5W X670371 WDFD 32 & 29-11N-5W COMPL. INT. (5-10-5W) NCT 2640' FSL, NCT 0' FNL, NCT 660' FEL COMPL. INT. (32-11N-5W) NCT 0' FSL, NCT 0' FNL, NCT 660' FEL COMPL. INT. (29-11N-5W) NCT 0' FSL, NCT 150' FNL, NCT 660' FEL ROAN RESOURCES LLC REC 11-9-2018 (MILLER)
SPACING - 654578	11/21/2018 - G75 - (640)(HOR) 5-10N-5W EST WDFD POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL
SPACING - 670371	11/21/2018 - G75 - (640)(HOR) 29 & 32-11N-5W EST WDFD, OTHER POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL (COEXIST SP. ORDER 232389 WDFD)

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

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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.

API 017-25333



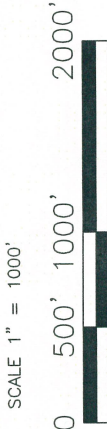
PERMIT PLAT OF
ROAN RESOURCES, LLC
BARBARO 5-32-29-10-5 2WXH
2410' FSL 355' FEL OF SECTION 5

MINCO FIELD
N/2 SECTION 5, TOWNSHIP 10 NORTH, RANGE 5 WEST I.M. &
SECTIONS 32 & 29, TOWNSHIP 11 NORTH, RANGE 5 WEST I.M.

LEASE LINES
SHL: 228' FSL 355' FEL
CANADIAN COUNTY, OKLAHOMA

LINE	BEARING	DISTANCE
L1	S 80°19'15" W	2115.71'
L2	N 00°18'59" W	600.00'
L3	N 00°18'59" W	13025.12'
L4	N 00°08'48" W	100.00'

NOTE:
1. COMBINED SCALE FACTOR: 0.999947069
2. SHL IS APPROXIMATELY 1.87 MILES S 34°34'37" W OF MUSTANG OKLAHOMA.



FILE: S:\OK\GRADY\PROJECTS\T10N-R05W\DWG\

LEGEND	
SHL	SURFACE HOLE LOCATION
PP	PENETRATION POINT
FTP	FIRST TAKE POINT
LTP	LAST TAKE POINT
BHL	BOTTOM HOLE LOCATION
OCC	OKLAHOMA CORPORATION COMMISSION
POINT	POINT
EXISTING WELLHEAD	EXISTING WELLHEAD
PROPOSED WELL LOCATION SET	PROPOSED WELL LOCATION SET
SURFACE LOCATION OBTAINED FROM OCC	SURFACE LOCATION OBTAINED FROM OCC

AS-DRILLED LATERAL
SUBJECT PROPOSED LATERAL
PROPOSED LATERAL
LEASE LINE
SURVEY LINE

ORIGINAL STAKE DATE: 04/10/18
ADDED LATERAL: 05/14/18
MOVED SHL & REVISED LATERAL: 10/25/18

NOTE:
1. BEARINGS, DISTANCES & ACREAGE ARE GRID, NAD 27 US OK SOUTH ZONE AND ARE OBTAINED BY NORMAL GPS TECHNIQUES.
2. ELEVATIONS ARE BASED ON NAVD 88 COMPUTED USING GEOID 12B.
3. THIS SURVEY IS FOR AN OIL & GAS SUB-SURFACE LEASE AND IS NOT A BOUNDARY SURVEY.
4. LOCATION OF ADJOINING WELLS OUTSIDE LEASE BOUNDARY ARE APPROXIMATED FROM OKLAHOMA CORPORATION COMMISSION DATA.
5. DOWNHOLE INFORMATION PROVIDED BY THE CLIENT.
6. THIS SURVEY COMPLES WITH THE US PUBLIC LAND SURVEY SYSTEM AND MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, EFFECTIVE JULY 25, 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.
I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED 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.

John F. Watson & Company
LAND & DEVELOPMENT SERVICES
PROFESSIONAL LAND SURVEYORS
200 N. Lorraine, Ste. 220
Midland, Texas 79701
off: (432) 520-2400
fax: (432) 520-2404



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

REV: 1 AFE NO.: - JOB NO.: 18-0104
FIELD BOOK: SERVER VER: 1 DRAWN BY: LLF

PROFESSIONAL LAND SURVEYOR

10/25/18

SHEET 1 OF 1