

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

API NUMBER: 017 25226

Approval Date: 05/23/2018

Expiration Date: 11/23/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

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

County: CANADIAN

SPOT LOCATION: ☐ NE ☐ NE ☐ NE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 2370 295

Lease Name: BARBARO 5-8-10-5

Well No: 3XH

Well will be 295 feet from nearest unit or lease boundary.

Operator Name: ROAN RESOURCES LLC

Telephone: 4052412237

OTC/OCC Number: 24127 0

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

CAROLE ANN HANNA
10005 S CZECH HALL RD
MUSTANG OK 73064

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

Name	Depth	Name	Depth
1 WOODFORD	8900	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 654578

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201803459
201803460
201803444
201803445

Special Orders:

Total Depth: 19445

Ground Elevation: 1313

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 650

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: Yes

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: 18-34537

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 08 Twp 10N Rge 5W County CANADIAN

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 65

Feet From: EAST 1/4 Section Line: 400

Depth of Deviation: 8700

Radius of Turn: 575

Direction: 181

Total Length: 7871

Measured Total Depth: 17474

True Vertical Depth: 8900

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

Notes:

Category

Description

DEEP SURFACE CASING

5/17/2018 - 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

5/17/2018 - 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

5/17/2018 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201803444

5/23/2018 - G58 - 8-10N-5W
X654578 WDFD
5 WELLS
NO OP. NAMED
REC 5/22/2018 (FOREMAN)

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.

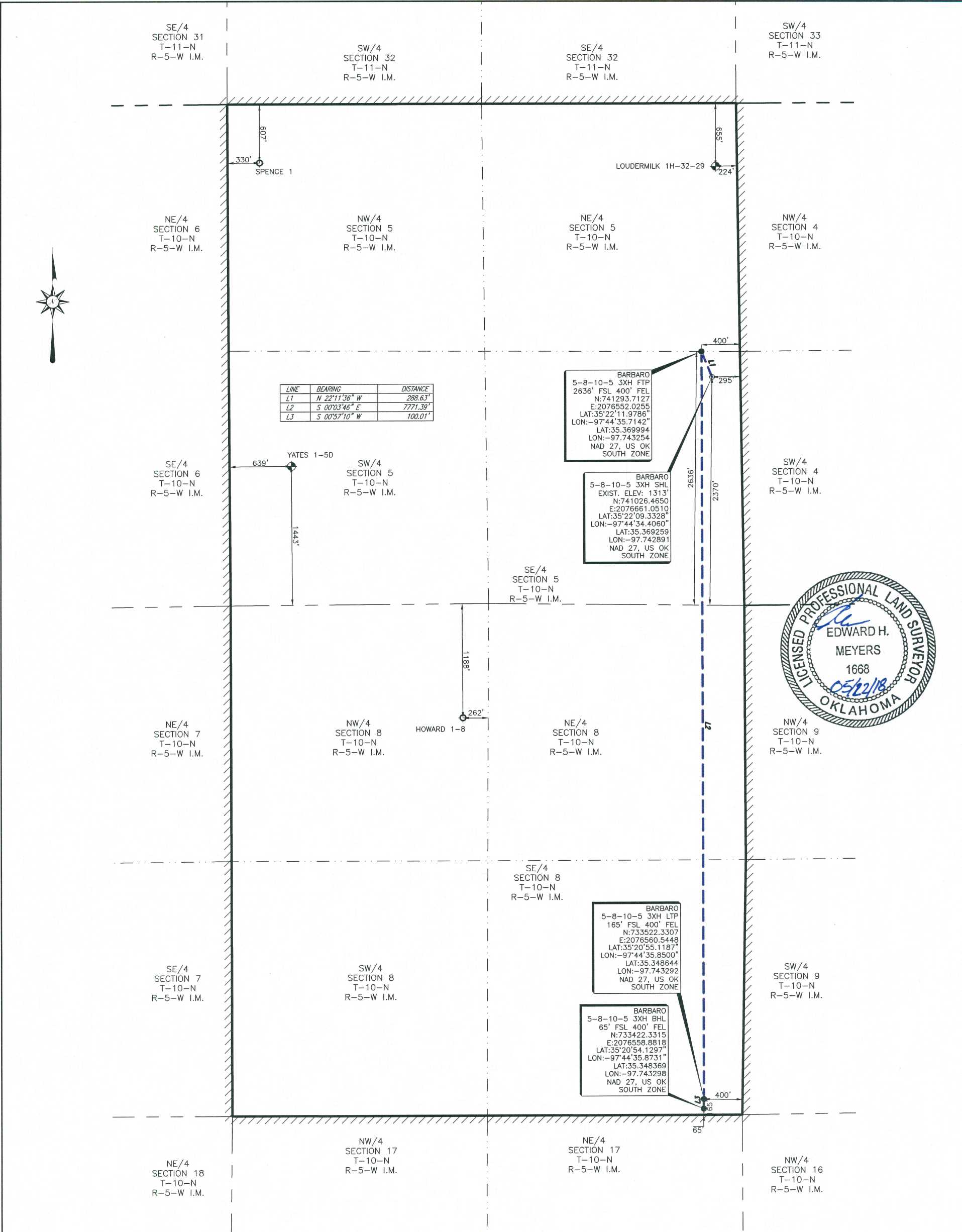
017 25226 BARBARO 5-8-10-5 3XH

Category	Description
PENDING CD - 201803445	5/23/2018 - G58 - 5-10N-5W X654578 WDFD 5 WELLS NO OP. NAMED REC 5/22/2018 (FOREMAN)
PENDING CD - 201803459	5/23/2018 - G58 - (E.O.) 5 & 8-10N-5W EST MULTIUNIT HORIZONTAL WELL X654578 WDFD (5 & 8-10N-5W) 33% 5-10N-5W 67% 8-10N-5W NO OP. NAMED REC 5/11/2018 (NORRIS)
PENDING CD - 201803460	5/23/2018 - G58 - (E.O.) 5 & 8-10N-5W X654578 WDFD (5 & 8-10N-5W) COMPL. INT. (5-10N-5W) NCT 2640' FSL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (8-10N-5W) NCT 0' FNL, NCT 150' FSL, NCT 330' FEL NO OP. NAMED REC 5/11/2018 (NORRIS)
SPACING - 654578	5/23/2018 - G58 - (640)(HOR) 5 & 8-10N-5W EST WDFD COMPL. INT. NCT 165' FNL & FSL, NCT 330' FEL & FWL (EXIST CONCURRENTLY WITH PRODUCING NON-HORIZONTAL DRILLING AND SPACING UNITS AND COEXIST WITH EXISTING NON-HORIZONTAL DRILLING AND SPACING UNITS)

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
BARBARO 5-8-10-5 3XH
2370' FSL 295' FEL OF SECTION 5
MINCO FIELD
SECTION 5, TOWNSHIP 10 NORTH, RANGE 5 WEST I.M. &
SECTION 8, TOWNSHIP 10 NORTH, RANGE 5 WEST I.M.
LEASE LINES
SHL: 2845' FNL 295' FEL
CANADIAN COUNTY, OKLAHOMA

NOTE:
1. COMBINED SCALE FACTOR: 0.999947069
2. SHL IS APPROXIMATELY 1.87 MILES S 34°09'09" 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
EXISTING WELLHEAD
PROPOSED WELL LOCATION SET
SURFACE LOCATION OBTAINED FROM OCC

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

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 LORAIN #220
MIDLAND, TX 79701
(432) 520-2400

ORIGINAL STAKE DATE: 04/10/18
ADDED LATERAL: 05/14/18
REVISED LATERAL (MOVED SHL): 05/21/18

REV: 1 AFE NO.: - JOB NO.: 18-0085
FIELD BOOK: SERVER VER: 1 DRAWN BY: JMM/LLF

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 COMPLIES 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 OR 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
PROFESSIONAL LAND SURVEYOR

05/21/18

SHEET 1 OF 1