

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

API NUMBER: 017 25383

Approval Date: 02/04/2019

Expiration Date: 08/04/2020

Horizontal Hole  
Oil & Gas  
Multi Unit

PERMIT TO DRILL

WELL LOCATION: Sec: 32 Twp: 11N Rge: 8W

County: CANADIAN

SPOT LOCATION: ☐ SW ☐ NE ☐ NE ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 345 2225

Lease Name: MIDDLEGROUND 32-5-11-8

Well No: 4WXH

Well will be 345 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

JIMMIE LEE & SHELLY R. VICKREY  
296 CS 2790  
MINCO OK 73059

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

Name	Depth	Name	Depth
1 WOODFORD	12365	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 659498

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201810841  
201810842  
201810833  
201900412

Special Orders:

Total Depth: 22925

Ground Elevation: 1303

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 340

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: 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.

B. Solidification of pit contents.

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

PERMIT NO: 19-36115

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 05 Twp 10N Rge 8W County GRADY

Spot Location of End Point: SW SW SE SW

Feet From: SOUTH 1/4 Section Line: 65

Feet From: WEST 1/4 Section Line: 1500

Depth of Deviation: 11735

Radius of Turn: 573

Direction: 185

Total Length: 10290

Measured Total Depth: 22925

True Vertical Depth: 12365

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

Notes:

Category

Description

DEEP SURFACE CASING

1/23/2019 - 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

1/23/2019 - 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](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

1/23/2019 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201810833

2/4/2019 - G75 - 32-11N-8W  
X659498 WDFD  
4 WELLS  
NO OP. NAMED  
HEARING 2-5-2019

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 25383 MIDDLEGROUND 32-5-11-8  
4WXH

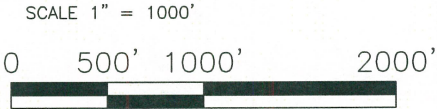
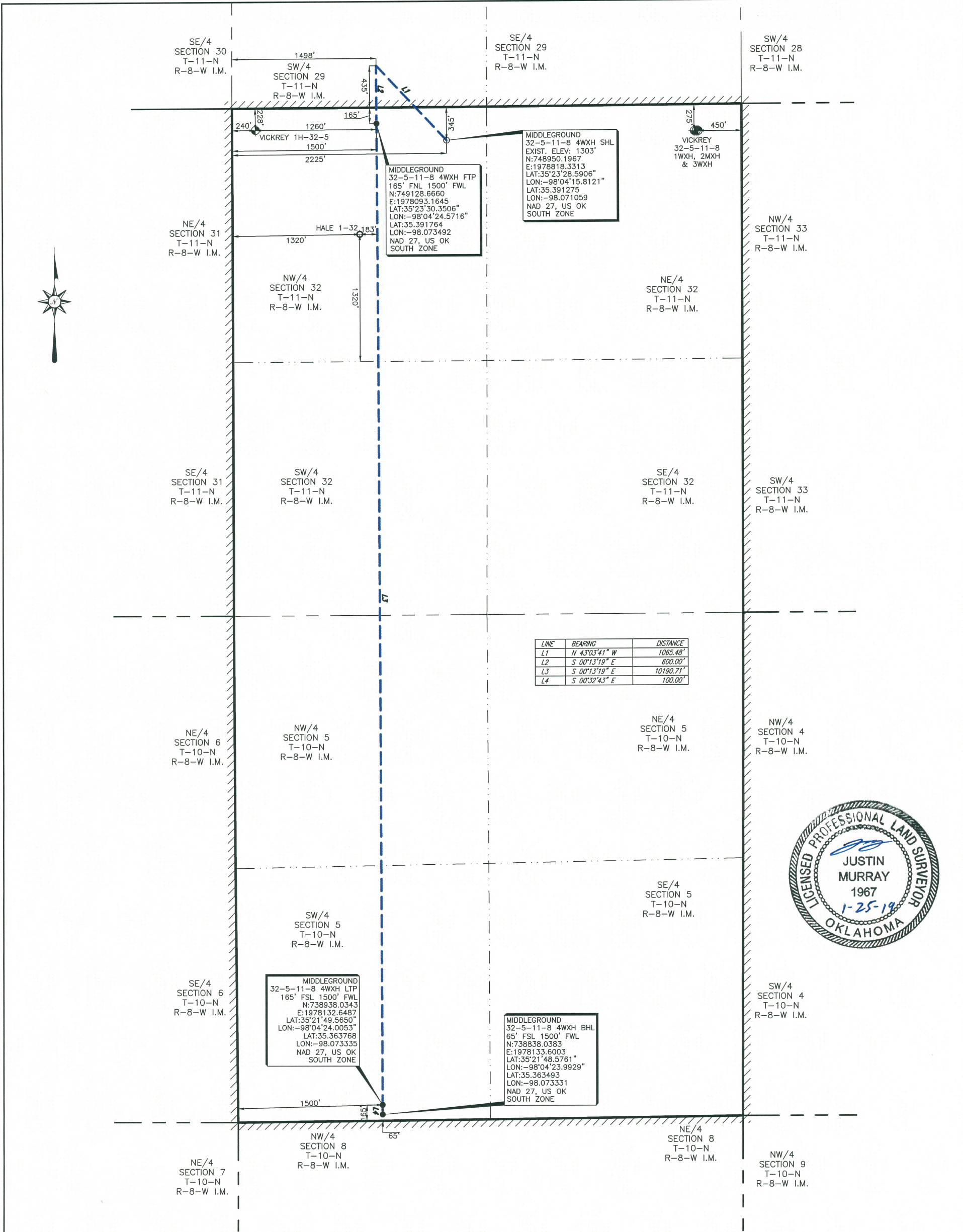
Category	Description
PENDING CD - 201810841	2/4/2019 - G75 - (E.O.) 32-11N-8W & 5-10N-8W EST MULTIUNIT HORIZONTAL WELL X659498 WDFD 50% 32-11N-8W 50% 5-10N-8W ROAN RESOURCES, LLC REC 1-25-2019 (THOMAS)
PENDING CD - 201810842	2/4/2019 - G75 - (E.O.) 32-11N-8W & 5-10N-8W X659498 WDFD X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO EXISTING/PROPOSED WELL COMPL. INT. (32-11N-8W) NCT 150' FNL, NCT 0' FSL, NCT 660' FWL COMPL. INT. (5-10N-8W) NCT 0' FNL, NCT 150' FSL, NCT 660' FWL ROAN RESOURCES, LLC REC 1-25-2019 (THOMAS)
PENDING CD - 201900412	2/4/2019 - G75 - 5-10N-8W X659498 WDFD 4 WELLS NO OP. NAMED HEARING 2-5-2019
SPACING - 659498	2/4/2019 - G75 - (640)(HOR) 32-11N-8W & 5-10N-8W VAC OTHER VAC 144223 WDFD 32-11N-8W VAC 559071 WDFD 5-10N-8W EST WDFD, OTHER POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL

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PERMIT PLAT OF  
ROAN RESOURCES, LLC  
**MIDDLEGROUND 32-5-11-8 4WXH**  
**345' FNL 2225' FWL OF SECTION 32**  
MINCO FIELD  
SECTION 32, TOWNSHIP 11 NORTH, RANGE 8 WEST I.M. &  
SECTION 5, TOWNSHIP 10 NORTH, RANGE 8 WEST I.M.  
**LEASE LINES**  
**SHL: 345' FNL 2225' FWL**  
GRADY/CANADIAN COUNTY, OKLAHOMA

NOTE:  
1. COMBINED SCALE FACTOR: 0.999947069  
2. SHL IS APPROXIMATELY 7.58 MILES S 89°46'51" W  
OF UNION CITY OKLAHOMA.

FILE: S:\OK\GRADY\PROJECTS\T11N-RO8W\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. Loraine, Ste. 220  
Midland, Texas 79701  
tel. (432) 520-2400  
fax. (432) 520-2404



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

STAKED WELLS: 12/28/18  
ADDED LATERAL: 01/03/19  
CHANGED WELL NAME: 01/25/19

REV: 1 AFE NO.: - JOB NO.: 18-0359  
FIELD BOOK: SERVER VER: 1 DRAWN BY: 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 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.

01/25/19

SHEET 1 OF 1