

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

API NUMBER: 017 25385

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 2265

Lease Name: MIDDLEGROUND 32-5-11-8 Well No: 6MXH 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 MISSISSIPPIAN	12296	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 659498

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201810839
201810840
201810833
201900412

Special Orders:

Total Depth: 22856 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: 19-36117

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 SW SE

Feet From: SOUTH 1/4 Section Line: 65

Feet From: EAST 1/4 Section Line: 2370

Depth of Deviation: 11679

Radius of Turn: 573

Direction: 175

Total Length: 10277

Measured Total Depth: 22856

True Vertical Depth: 12296

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

Notes:

Category

Description

DEEP SURFACE CASING

1/17/2019 - 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

1/17/2019 - 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; 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

1/17/2019 - 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 MSSP
2 WELLS
NO OP. NAMED
HEARING 2-5-2019

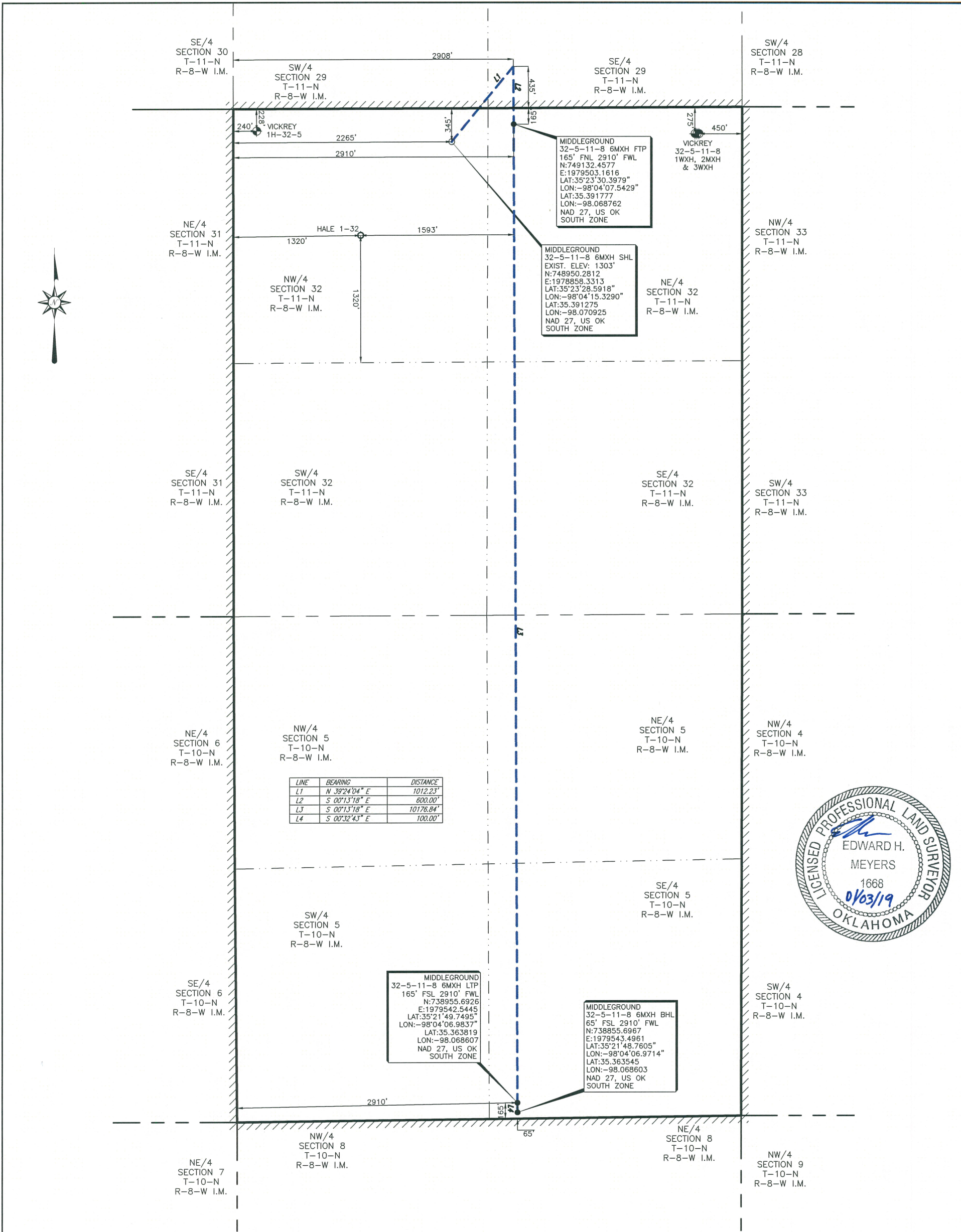
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Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

017 25385 MIDDLEGROUND 32-5-11-8 6MXH

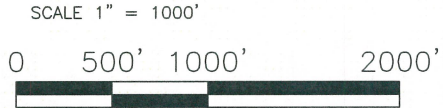
Category	Description
PENDING CD - 201810839	2/4/2019 - G75 - (E.O.) 32-11N-8W & 5-10N-8W EST MULTIUNIT HORIZONTAL WELL X659498 MSSP 50% 32-11N-8W 50% 5-10N-8W ROAN RESOURCES, LLC REC 1-7-2019 (NORRIS)
PENDING CD - 201810840	2/4/2019 - G75 - (E.O.) 32-11N-8W & 5-10N-8W X659498 MSSP X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO EXISTING/PROPOSED WELL COMPL. INT. (32-11N-8W) NCT 150' FNL, NCT 0' FSL, NCT 1200' FEL COMPL. INT. (5-10N-8W) NCT 0' FNL, NCT 150' FSL, NCT 1200' FEL ROAN RESOURCES, LLC REC 1-7-2019 (NORRIS)
PENDING CD - 201900412	2/4/2019 - G75 - 5-10N-8W X659498 MSSP 2 WELLS NO OP. NAMED HEARING 2-5-2019
SPACING - 659498	2/4/2019 - G75 - (640)(HOR) 32-11N-8W & 5-10N-8W VAC 138217 MSSLM 5-10N-8W VAC OTHERS EST MSSP, OTHER POE TO BHL NCT 660' FB (COEXIST SP. ORDER # 138217 CSTR, MSSLM 32-11N-8W & ORDER # 138217 CSTR 5-10N-8W)



LINE	BEARING	DISTANCE
L1	N 39°24'04" E	1012.23'
L2	S 00°13'18" E	600.00'
L3	S 00°13'18" E	10176.84'
L4	S 00°32'43" E	100.00'

MIDDLEGROUND
32-5-11-8 6MXH LTP
165' FSL 2910' FWL
N:738955.6926
E:1979542.5445
LAT:35°21'49.7495"
LON:-98°04'06.9837"
LAT:35.363819
LON:-98.068607
NAD 27, US OK
SOUTH ZONE

MIDDLEGROUND
32-5-11-8 6MXH BHL
65' FSL 2910' FWL
N:738855.6967
E:1979543.4961
LAT:35°21'48.7605"
LON:-98°04'06.9714"
LAT:35.363545
LON:-98.068603
NAD 27, US OK
SOUTH ZONE



PERMIT PLAT OF
ROAN RESOURCES, LLC
MIDDLEGROUND 32-5-11-8 6MXH
345' FNL 2265' 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 2265' FWL
CANADIAN COUNTY, OKLAHOMA

NOTE:
1. COMBINED SCALE FACTOR: 0.999947069
2. SHL IS APPROXIMATELY 7.57 MILES S 89°46'50" W
OF UNION CITY OKLAHOMA.

FILE: S:\OK\GRADY\PROJECTS\T11N-R08W\DWG\

LEGEND
● POINT
PP SURFACE HOLE LOCATION
FTP PENETRATION POINT
LTP FIRST TAKE POINT
BHL BOTTOM HOLE LOCATION
OCC OKLAHOMA CORPORATION COMMISSION

John F. Watson & Company
LAND & DEVELOPMENT SERVICES
PROFESSIONAL LAND SURVEYORS
200 N. LORAIN, 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

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

REV: - AFE NO.: - JOB NO.: 18-0361
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.

John F. Watson & Company
PROFESSIONAL LAND SURVEYOR

01/03/19

SHEET 1 OF 1