

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

API NUMBER: 051 24360

Approval Date: 05/17/2018

Expiration Date: 11/17/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 04 Twp: 9N Rge: 5W

County: GRADY

SPOT LOCATION: ☐ SW ☐ SE ☐ SE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 325 605

Lease Name: VIRGINIA LIBERTY 3-34-9-5

Well No: 1WXH

Well will be 325 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

AMBER RILEY & DEAN BUNTLEY
2176 E. ROCK CREEK RD.
TUTTLE OK 73089

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

Name	Depth	Name	Depth
1 WOODFORD	9560	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 419948
415281

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201803300
201803301

Special Orders:

Total Depth: 20095

Ground Elevation: 1285

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 200

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: 18-34501

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 34 Twp 10N Rge 5W County GRADY

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 65

Feet From: WEST 1/4 Section Line: 400

Depth of Deviation: 8847

Radius of Turn: 573

Direction: 5

Total Length: 10348

Measured Total Depth: 20095

True Vertical Depth: 9560

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 FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON 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 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201803300

5/17/2018 - G75 - (I.O.) 3-9N-5W & 34-10N-5W
EST MULTIUNIT HORIZONTAL WELL
X419948 WDFD, OTHER 3-9N-5W
X415281 WDFD, OTHER 34-10N-5W
50% 3-9N-5W
50% 34-10N-5W
NO OP.NAMED
REC 5-15-2018 (M. PORTER)

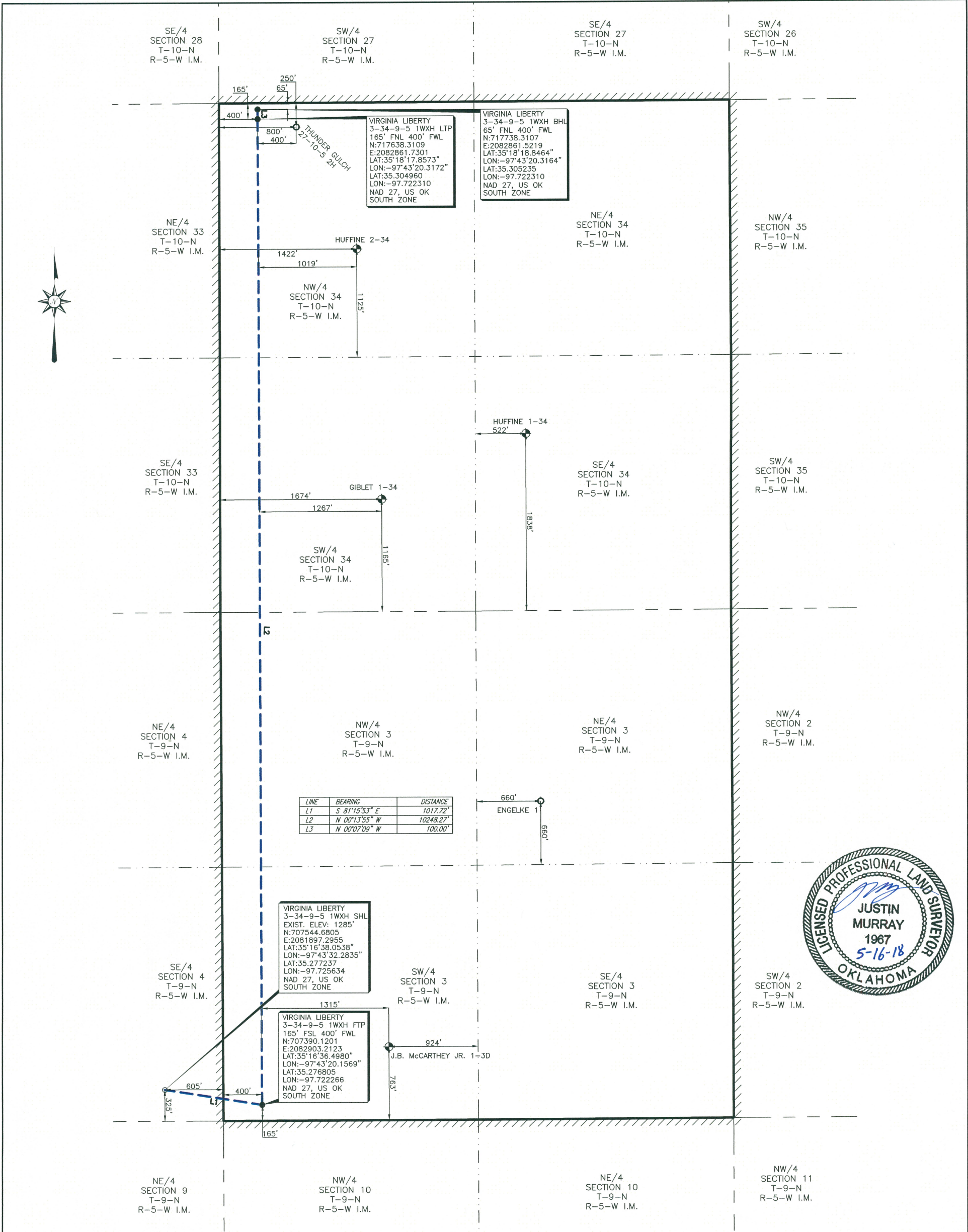
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Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

051 24360 VIRGINIA LIBERTY 3-34-9-5
1WXH

Category	Description
PENDING CD - 201803301	5/17/2018 - G75 - (I.O.) 3-9N-5W & 34-10N-5W X419948 WDFD, OTHER 3-9N-5W X415281 WDFD, OTHER 34-10N-5W COMPL. INT. (3-9N-5W) NCT 165' FSL, NCT 0' FNL, NCT 400' FWL COMPL. INT. (34-10N-5W) NCT 0' FSL, NCT 165' FNL, NCT 400' FWL NO OP.NAMED REC 5-15-2018 (M. PORTER)
SPACING - 415281	5/17/2018 - G75 - (640) 34-10N-5W EXT OTHER EST WDFD, OTHERS
SPACING - 419948	5/17/2018 - G75 - (640) 3-9N-5W EXT OTHERS EST OTHER EXT 415281 WDFD, OTHERS



LINE	BEARING	DISTANCE
L1	S 81°15'53" E	1017.72'
L2	N 00°13'55" W	10248.27'
L3	N 00°07'09" W	100.00'

VIRGINIA LIBERTY
3-34-9-5 1WXH SHL
EXIST. ELEV: 1285'
N:707544.6805
E:2081897.2955
LAT:35°16'38.0538"
LON:-97°43'32.2835"
LAT:35.277237
LON:-97.725634
NAD 27, US OK
SOUTH ZONE

VIRGINIA LIBERTY
3-34-9-5 1WXH FTP
165' FSL 400' FWL
N:707390.1201
E:2082903.2123
LAT:35°16'36.4980"
LON:-97°43'20.1569"
LAT:35.276805
LON:-97.722266
NAD 27, US OK
SOUTH ZONE

SW/4
SECTION 3
T-9-N
R-5-W I.M.

SE/4
SECTION 3
T-9-N
R-5-W I.M.

SW/4
SECTION 2
T-9-N
R-5-W I.M.

SE/4
SECTION 4
T-9-N
R-5-W I.M.

NE/4
SECTION 9
T-9-N
R-5-W I.M.

NW/4
SECTION 10
T-9-N
R-5-W I.M.

NE/4
SECTION 10
T-9-N
R-5-W I.M.

NW/4
SECTION 11
T-9-N
R-5-W I.M.

SCALE 1" = 1000'



PERMIT PLAT OF
ROAN RESOURCES, LLC.
VIRGINIA LIBERTY 3-34-9-5 1WXH
325' FSL 605' FEL OF SECTION 4
MINCO FIELD

SECTION 3, TOWNSHIP 9 NORTH, RANGE 5 WEST I.M. &
SECTION 34, TOWNSHIP 10 NORTH, RANGE 5 WEST I.M.

LEASE LINES

SHL: 325' FSL & 605' FWL
GRADY COUNTY, OKLAHOMA

- NOTE:
1. COMBINED SCALE FACTOR: 0.999947069
 2. SHL IS APPROXIMATELY 4.97 MILES S 79°18'51" E OF TUTTLE OKLAHOMA.

FILE: S:\OK\GRADY\PROJECTS\T09N-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: 04/27/18
RESTATE DATE: 05/03/18
ADDED LATERAL: 05/16/18

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 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.
9. 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. LORAIN, 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

REV: - AFE NO.: - JOB NO.: 18-0120
FIELD BOOK: SERVER VER: 1 DRAWN BY: LLF

PROFESSIONAL LAND SURVEYOR

05/16/2018

SHEET 1 OF 1