

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

API NUMBER: 051 24353

Approval Date: 05/16/2018

Expiration Date: 11/16/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 28 Twp: 10N Rge: 6W

County: GRADY

SPOT LOCATION:

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 286 650

Lease Name: WHB CATTLE 33-10-6

Well No: 3WH

Well will be 286 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

WHB CATTLE LP
3000 NE 63RD STREET
OKLAHOMA CITY OK 73121

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

Name	Depth	Name	Depth
1 WOODFORD	10540	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 255248

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201803604
201803601

Special Orders:

Total Depth: 15793

Ground Elevation: 1311

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 100

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: 1B

Liner required for Category: 1B

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

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: 18-34512

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 33 Twp 10N Rge 6W County GRADY

Spot Location of End Point: SE SW SW SW

Feet From: SOUTH 1/4 Section Line: 65

Feet From: WEST 1/4 Section Line: 400

Depth of Deviation: 9827

Radius of Turn: 573

Direction: 185

Total Length: 5066

Measured Total Depth: 15793

True Vertical Depth: 10540

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

Notes:

Category

Description

DEEP SURFACE CASING

5/11/2018 - 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

5/11/2018 - 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

5/11/2018 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201803601

5/15/2018 - G75 - 33-10N-6W
XOTHER
X255248 WDFD
2 WELLS
NO OP. NAMED
HEARING 5-29-2018

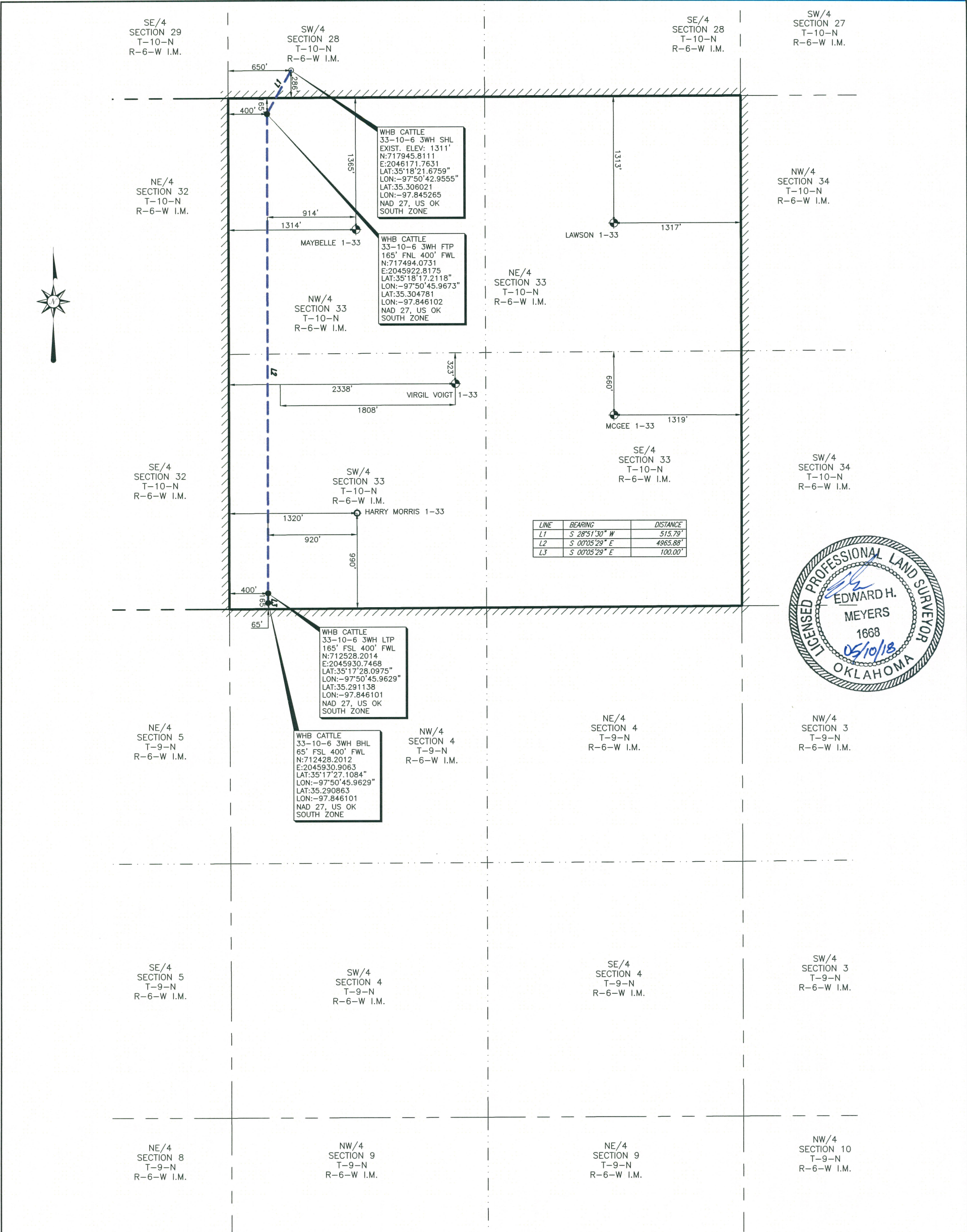
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Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

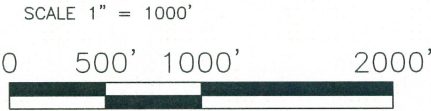
051 24353 WHB CATTLE 33-10-6 3WH

Category	Description
PENDING CD - 201803604	5/15/2018 - G75 - (E.O.) 33-10N-6W XOTHER X255248 WDFD COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL NO OP. NAMED REC 5-11-2018 (NORRIS)
SPACING - 255248	5/15/2018 - G75 - (640) 33-10N-6W EXT OTHERS EXT 242927 WDFD, OTHERS



NOTE:
1. COMBINED SCALE FACTOR: 0.999947069
2. SHL IS APPROXIMATELY 2.15 MILES N 60°53'09" W OF MUSTANG OKLAHOMA.

PERMIT PLAT OF
LINN OPERATING, INC
WHB CATTLE 33-10-6 3WH
286' FSL 650' FWL OF SECTION 28
MINCO FIELD
SECTION 33, TOWNSHIP 10 NORTH, RANGE 6 WEST I.M.
LEASE LINES
SHL: 286' FNL 650' FWL
GRADY COUNTY, OKLAHOMA



FILE: S:\OK\GRADY\PROJECTS\T10N-R06W\DWG\

LEGEND

- POINT
- SURFACE HOLE LOCATION
- PP PENETRATION POINT
- FTP FIRST TAKE POINT
- LTP LAST TAKE POINT
- BHL BOTTOM HOLE LOCATION
- OCC OKLAHOMA CORPORATION COMMISSION
- AS-DRILLED LATERAL
- SUBJECT PROPOSED LATERAL
- PROPOSED LATERAL
- LEASE LINE
- SURVEY LINE

ORIGINAL STAKE DATE: 05/04/18
ADDED LATERAL: 05/10/18

REV: - AFE NO.: - JOB NO.: 18-0121
FIELD BOOK: SERVER VER: 1 DRAWN BY: EHM

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.

05/10/18

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

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