

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

API NUMBER: 017 25156

Approval Date: 01/09/2018

Expiration Date: 07/09/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 15 Twp: 10N Rge: 5W

County: CANADIAN

SPOT LOCATION: ☐ SW ☐ SE ☐ SW ☐ SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 162 800

Lease Name: MCNEFF 15-10-5

Well No: 1H

Well will be 162 feet from nearest unit or lease boundary.

Operator Name: LINN OPERATING LLC

Telephone: 4052412237; 4052412

OTC/OCC Number: 22182 0

LINN OPERATING LLC
14701 HERTZ QUAIL SPRINGS PKWY
OKLAHOMA CITY, OK 73134-2641

LARRY E. MCNEFF AND JANE M. MCNEFF
12800 SOUTH MUSTANG ROAD
MUSTANG OK 73064

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

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

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201707926
201707927
201800246

Special Orders:

Total Depth: 14116

Ground Elevation: 1192

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 170

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: Yes

Surface Water used to Drill: No

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

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: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

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

PERMIT NO: 17-33671

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: CLOSED Closed System Means Steel Pits

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: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 15 Twp 10N Rge 5W County CANADIAN

Spot Location of End Point: NW NW NE NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 1500

Depth of Deviation: 8300

Radius of Turn: 550

Direction: 5

Total Length: 4950

Measured Total Depth: 14116

True Vertical Depth: 8900

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category

Description

DEEP SURFACE CASING

1/3/2018 - 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

1/3/2018 - 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

1/3/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - CANADIAN RIVER), PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201707926

1/3/2018 - G60 - (640)(HOR) 15-10N-5W
VAC 464094 MSSLM W2 NW4
VAC 111177 SCMR N2
EXT 663709 MSSP, WDFD
(COEXIST WITH SP. 499678 MSSP SE4; SP. ORDER 450017 MSSP SW4)
REC. 12/19/17 (MILLER)

This permit does not address the right of entry or settlement of surface damages.

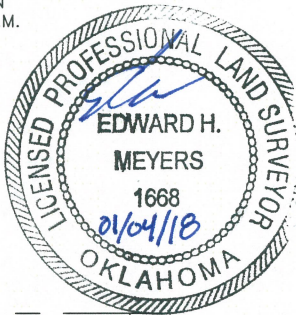
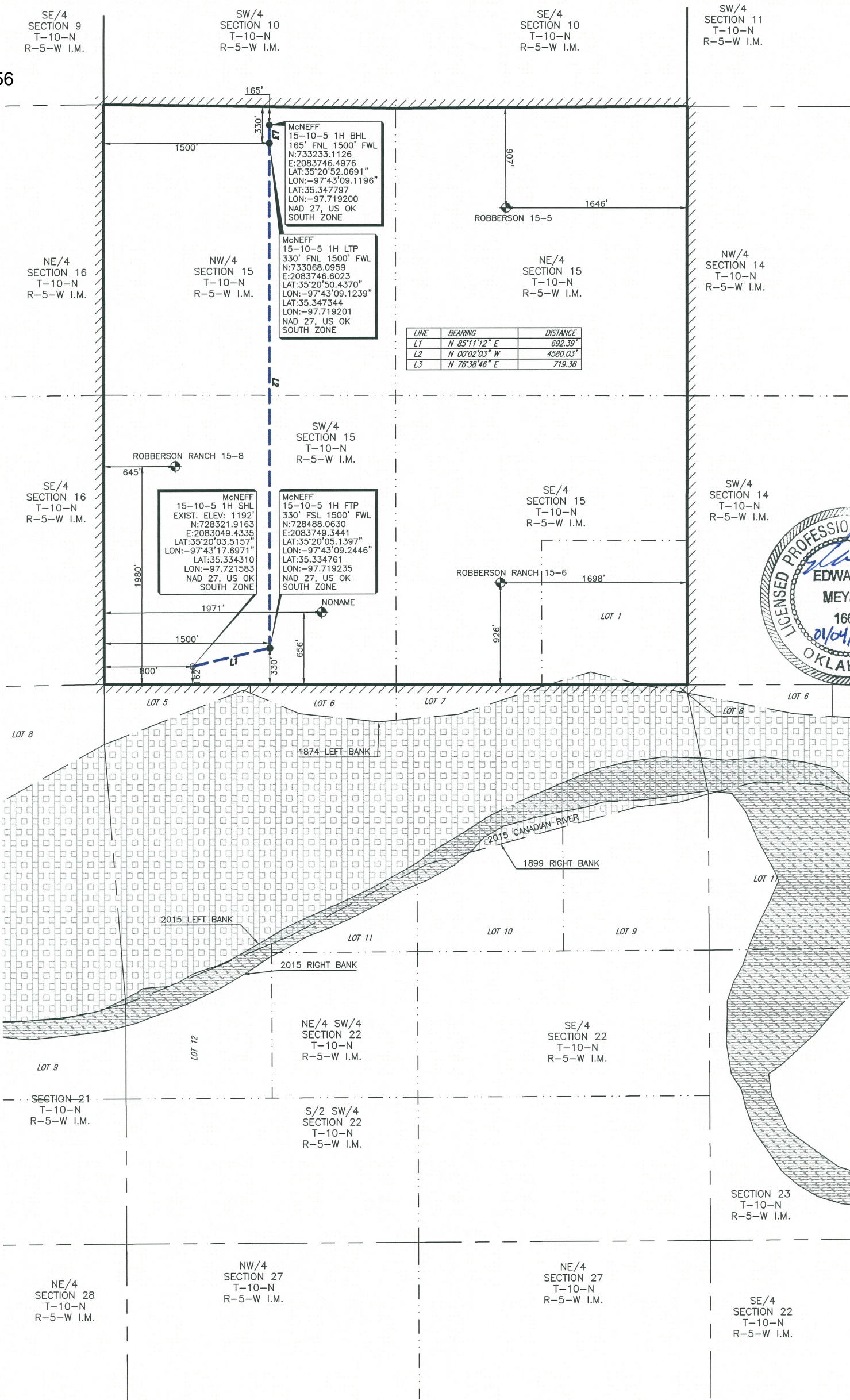
017 25156 MCNEFF 15-10-5 1H

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.

Category	Description
PENDING CD - 201707927	1/3/2018 - G60 - (I.O.) 15-10N-5W X201707926 MSSP COMPL. INT. NCT 330' FNL, NCT 330' FSL, NCT 1500' FWL NO OP. NAMED REC. 12/19/17 (MILLER)
PENDING CD - 201800246	1/9/2018 - G60 - 15-10N-5W X165:10-3-28(C)(2)(B) MSSP MAY BE CLOSER THAN 600' TO THE ROBBERSON RANCH 15-7 WELL LINN OPERATING, LLC. HEARING 1/30/18

3501725156



RIVER SURVEY NOTE:
THE SECTION BOUNDARY SHOWN HEREON REPRESENTS THE CORRELATION BETWEEN THE SECTION CORNERS FOUND OF RECORD AND THE ORIGINAL GLO SURVEYS OF 1873 & 1874 "NORTH BANK OF THE RIVER" AND 1899 "SOUTH BANK OF THE RIVER." DUE TO THE MOVEMENT OF THE CANADIAN RIVER AND THE INSTABILITY OF ITS BANKS THE EXACT BOUNDARY OF THE GOVERNMENT LOTS IS NOT REPRESENTED HEREON. THERE MAY BE NOTES TO TITLE THAT ARE SUBSTANTIALLY AFFECTED BY RIPARIAN LAW RELATED TO THE CHANGE IN THE COURSE OF THE RIVER. LEGAL COUNSEL SHOULD BE SOUGHT BEFORE RELYING ON THE INFORMATION SHOWN HEREON RELATING TO THE DIVISION OF ACTUAL PROPERTY RIGHTS. ADDITIONALLY THE ORIGINAL GLO SURVEYS STATED ABOVE NEVER CROSSED SAID RIVER.

- NOTE:
1. COMBINED SCALE FACTOR: 0.999947069
 2. SHL IS APPROXIMATELY 3.93 MILES S 02°23'08" E OF MUSTANG OKLAHOMA.

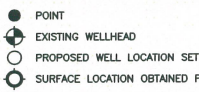
PERMIT PLAT OF
LINN OPERATING, INC
McNEFF 15-10-5 1H
162' FSL 800' FWL OF SECTION 15
MINCO FIELD
SECTION 15, TOWNSHIP 10 NORTH, RANGE 5 WEST I.M.
LEASE LINES
SHL: 162' FSL & 800' FWL
CANADIAN COUNTY, OKLAHOMA

SCALE 1" = 1000'



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



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

ORIGINAL STAKE DATE: 09/06/17
ADDED LATERAL: 12/16/17
MOVED SHL: 12/21/17
CORRECTED FTP CALLS: 01/04/18

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.
- 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
LAND & DEVELOPMENT SERVICES
PROFESSIONAL LAND SURVEYORS
200 N. Lorraine, Ste. 220
Midland, Texas 79701
Tel: (432) 520-2400
Fax: (432) 520-2404
mob: (432) 528-0074
jwatson@jfwatsonwater.com



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

REV: 2 AFE NO.: - JOB NO.: 17-0171
FIELD BOOK: SERVER VER: 1 DRAWN BY: EHM

PROFESSIONAL LAND SURVEYOR

01/04/18

SHEET 1 OF 1