

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

API NUMBER: 017 25213

Approval Date: 04/19/2018

Expiration Date: 10/19/2018

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: 162 750

Lease Name: MCNEFF 22-27-10-5

Well No: 4XH

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

Operator Name: LINN OPERATING LLC

Telephone: 2818404010; 4052412

OTC/OCC Number: 22182 0

LINN OPERATING LLC
600 TRAVIS ST STE 1400
HOUSTON, TX 77002-3005

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

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

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

Spacing Orders: 654976
419868

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201802242
201802244
201802248
201802246

Special Orders:

Total Depth: 19445

Ground Elevation: 1194

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 220

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: Yes

Surface Water used to Drill: No

PIT 1 INFORMATION

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

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: 18-34281

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 27 Twp 10N Rge 5W 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: 380

Depth of Deviation: 7982

Radius of Turn: 575

Direction: 182

Total Length: 10560

Measured Total Depth: 19445

True Vertical Depth: 8900

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

Notes:

Category

Description

DEEP SURFACE CASING

4/10/2018 - 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

4/10/2018 - 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

4/10/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (CANADIAN RIVER), PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201802242

4/12/2018 - G60 - (I.O.) 22 & 27-10N-5W
EST MULTIUNIT HORIZONTAL WELL
X654976 WDFD 22-10N-5W
X419868 WDFD 27-10N-5W
50% 22-10N-5W
50% 27-10N-5W
LINN ENERGY OPERATING, LLC.
REC. 4/17/18 (MINMIER)

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

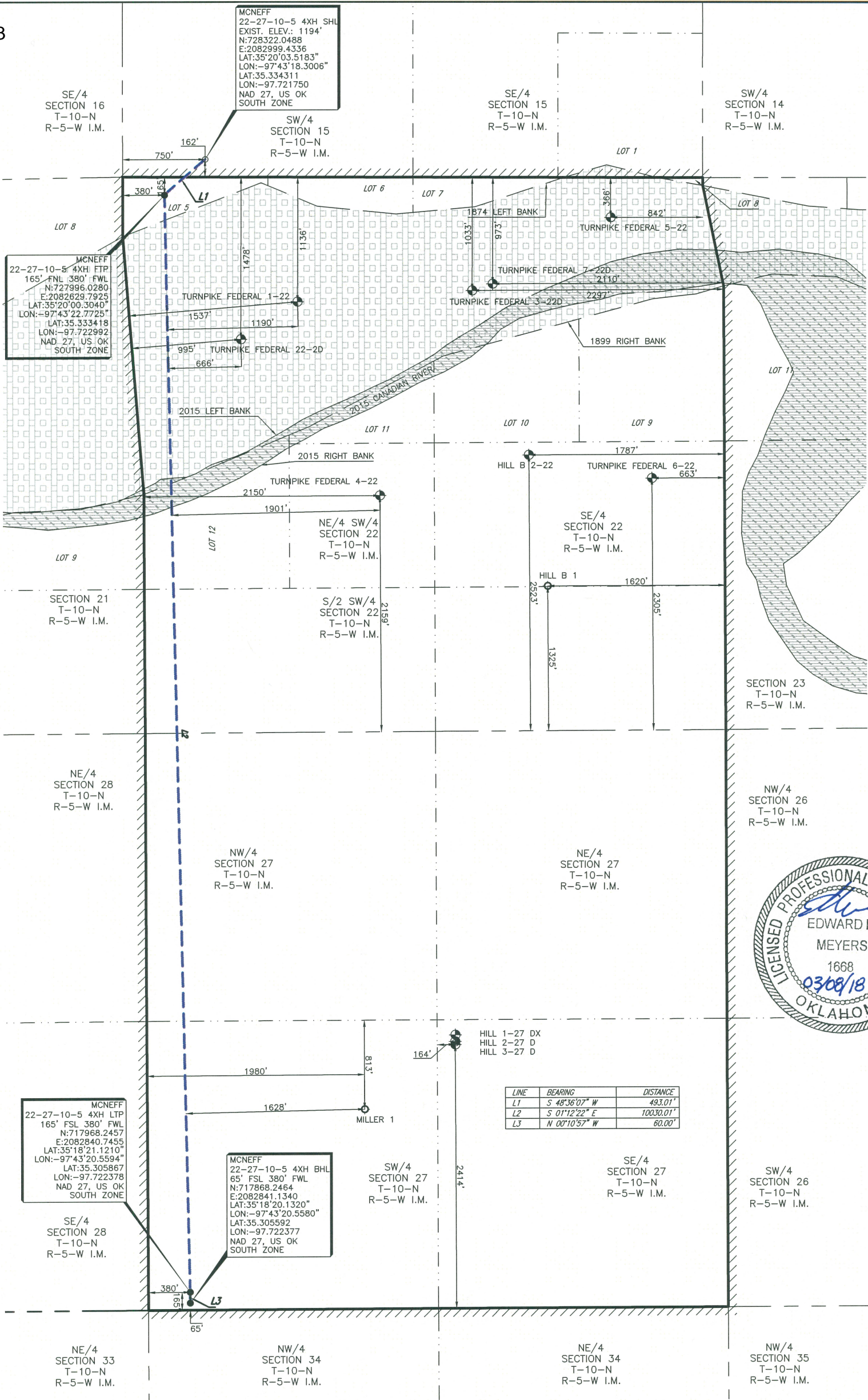
017 25213 MCNEFF 22-27-10-5 4XH

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

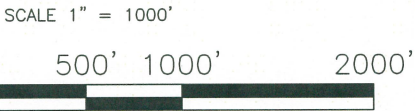
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

Category	Description
PENDING CD - 201802244	4/12/2018 - G60 - (I.O.) 22 & 27-10N-5W X654976 WDFD 22-10N-5W X419868 WDFD 27-10N-5W COMPL. INT. (27-10N-5W) NCT 165' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (22-10N-5W) NCT 0' FSL, NCT 165' FNL, NCT 330' FWL LINN OPERATING, LLC REC. 4/17/18 (MINMIER)
PENDING CD - 201802246	4/12/2018 - G60 - 22-10N-5W X654976 WDFD 3 WELLS LINN OPERATING, LLC. REC. 4/17/18 (MINMIER)
PENDING CD - 201802248	4/12/2018 - G60 - 27-10N-5W X419868 WDFD 3 WELLS NO OP. NAMED REC. 4/17/18 (MINMIER)
SPACING - 419868	4/12/2018 - G60 - (640) 27-10N-5W VAC OTHERS EXT 415281 WDFD, OTHERS
SPACING - 654976	4/12/2018 - G60 - (640)(HOR) 22-10N-5W EXT 649768 WDFD POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL

3501725213



LINE	BEARING	DISTANCE
L1	S 48°36'07\"	493.01'
L2	S 01°12'22\"	10030.01'
L3	N 00°10'57\"	60.00'



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 RIGHTS TO TITLE THAT ARE SUBSTANTIALLY AFFECTED BY RIPARIAN LAW RELATED TO THE CHANGE IN THE COURSE OF THE RIVER. LEGAL COUNSEL SHOULD BE CONSULTED 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 3.95 MILES S 02°12'32\" E OF MUSTANG OKLAHOMA.

PERMIT PLAT OF
LINN OPERATING, INC
MCNEFF 27-22-10-5 4XH
750' FWL 162' FSL OF SECTION 15
MINCO FIELD
SECTION 22, TOWNSHIP 10 NORTH, RANGE 5 WEST I.M. &
SECTION 27, TOWNSHIP 10 NORTH, RANGE 5 WEST I.M.
LEASE LINES
SHL: 750 FWL' 162' FNL
GRADY/CANADIAN COUNTY, OKLAHOMA

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
POINT	EXISTING WELLHEAD
PROPOSED WELL LOCATION SET	
SURFACE LOCATION OBTAINED FROM OCC	

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
mob. (432) 528-0074
jwatson@windearthwater.com

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

ORIGINAL STAKE DATE: 02/26/18
ADDED LATERAL: 03/08/18

REV:	AFE NO.: -	JOB NO.: 18-0045
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.
Edward H. Meyers
PROFESSIONAL LAND SURVEYOR
03/08/18
SHEET 1 OF 1