

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

API NUMBER: 017 25168

Approval Date: 01/26/2018

Expiration Date: 07/26/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 12 Twp: 10N Rge: 7W

County: CANADIAN

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 250 217

Lease Name: BARBOUR 2-10-7

Well No: 1H

Well will be 217 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

ELAINE W. ALBERS
18835 SW 104TH
UNION CITY OK 73090

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

Name	Depth	Name	Depth
1 WOODFORD	10700	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 368453

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201800187

Special Orders:

Total Depth: 15906

Ground Elevation: 1244

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: 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: 18-33818

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 02 Twp 10N Rge 7W County CANADIAN

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 65

Feet From: EAST 1/4 Section Line: 400

Depth of Deviation: 10102

Radius of Turn: 477

Direction: 350

Total Length: 5055

Measured Total Depth: 15906

True Vertical Depth: 10700

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

Notes:

Category

Description

DEEP SURFACE CASING

1/24/2018 - 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

1/24/2018 - 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

1/24/2018 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201800187

1/26/2018 - G75 - (E.O.) 2-10N-7W
XOTHER
X368453 WDFD
COMPL. INT. 165' FSL, NCT 165' FNL, NCT 330' FEL
LINN OP., LLC
REC 1-23-2018 (JACKSON)

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.

017 25168 BARBOUR 2-10-7 1H

Category	Description
SPACING - 368453	1/26/2018 - G75 - (640) 2-10N-7W EXT OTHERS EST WDFD, OTHERS

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.

SE/4
SECTION 27
T-11-N
R-7-W I.M.

SW/4
SECTION 26
T-11-N
R-7-W I.M.

SE/4
SECTION 26
T-11-N
R-7-W I.M.

SW/4
SECTION 25
T-11-N
R-7-W I.M.

API 017- 25168

NE/4
SECTION 34
T-11-N
R-7-W I.M.

NW/4
SECTION 35
T-11-N
R-7-W I.M.

NE/4
SECTION 35
T-11-N
R-7-W I.M.

NW/4
SECTION 36
T-11-N
R-7-W I.M.

SE/4
SECTION 34
T-11-N
R-7-W I.M.

SW/4
SECTION 35
T-11-N
R-7-W I.M.

SE/4
SECTION 35
T-11-N
R-7-W I.M.

SW/4
SECTION 36
T-11-N
R-7-W I.M.

NE/4
SECTION 3
T-10-N
R-7-W I.M.

NW/4
SECTION 2
T-10-N
R-7-W I.M.

NE/4
SECTION 2
T-10-N
R-7-W I.M.

NW/4
SECTION 1
T-10-N
R-7-W I.M.

SE/4
SECTION 3
T-10-N
R-7-W I.M.

SW/4
SECTION 2
T-10-N
R-7-W I.M.

SE/4
SECTION 2
T-10-N
R-7-W I.M.

SW/4
SECTION 1
T-10-N
R-7-W I.M.

NE/4
SECTION 10
T-10-N
R-7-W I.M.

NW/4
SECTION 11
T-10-N
R-7-W I.M.

NE/4
SECTION 11
T-10-N
R-7-W I.M.

NW/4
SECTION 12
T-10-N
R-7-W I.M.

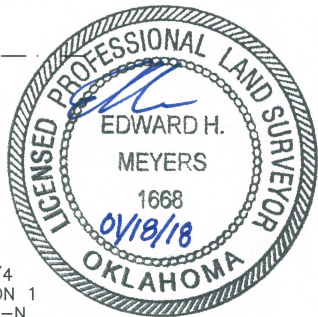
LINE	BEARING	DISTANCE
L1	N 55°53'43" W	742.02'
L2	N 00°19'30" E	4955.24'
L3	N 00°19'27" E	100.00'

BARBOUR
2-10-7 1H BHL
65' FNL 400' FEL
N:743760.9901
E:2029019.3155
LAT:35°22'37.2046"
LON:-97°54'09.5927"
LAT:35.377001
LON:-97.902665
NAD 27, US OK
SOUTH ZONE

BARBOUR
2-10-7 1H LTP
165' FNL 400' FEL
N:743660.9905
E:2029018.7498
LAT:35°22'36.2156"
LON:-97°54'09.6007"
LAT:35.376727
LON:-97.902567
NAD 27, US OK
SOUTH ZONE

BARBOUR
2-10-7 1H FTP
165' FSL 400' FEL
N:738705.8264
E:2028990.6451
LAT:35°21'47.2089"
LON:-97°54'09.9977"
LAT:35.363114
LON:-97.902777
NAD 27, US OK
SOUTH ZONE

BARBOUR
2-10-7 1H SHL
EXIST. ELEV: 1244'
N:738289.7725
E:2029605.0472
LAT:35°21'43.0882"
LON:-97°54'02.5850"
LAT:35.361969
LON:-97.900718
NAD 27, US OK
SOUTH ZONE



SCALE 1" = 1000'



- NOTE:
1. COMBINED SCALE FACTOR: 0.999947069
 2. SHL IS APPROXIMATELY 2.89 MILES S 44°55'32" E OF UNION CITY OKLAHOMA.

PERMIT PLAT OF
LINN OPERATING, INC
BARBOUR 2-10-7 1H
250' FNL 217' FWL OF SECTION 12
MINCO FIELD
SECTION 2, TOWNSHIP 10 NORTH, RANGE 7 WEST I.M.
LEASE LINES
SHL: 250' FSL & 217' FEL
CANADIAN COUNTY, OKLAHOMA

FILE: S:\OK\GRADY\PROJECTS\T10N-R07W\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

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
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: 12/14/18
ADDED LATERAL DATE: 01/18/18

REV: - AFE NO.: - JOB NO.: 17-0210
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 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.

PROFESSIONAL LAND SURVEYOR

01/18/18

SHEET 1 OF 1