

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

API NUMBER: 093 25176

Approval Date: 11/16/2018

Expiration Date: 05/16/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 26 Twp: 21N Rge: 16W

County: MAJOR

SPOT LOCATION: ☐ SE ☐ NW ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 388 683

Lease Name: KRAMER

Well No: 1-23H

Well will be 388 feet from nearest unit or lease boundary.

Operator Name: RIVIERA OPERATING LLC

Telephone: 2818404234; 4052412

OTC/OCC Number: 22182 0

RIVIERA OPERATING LLC
600 TRAVIS ST STE 1700
HOUSTON, TX 77002-3005

DALE M. RUMSEY
P.O. BOX 6235
PEORIA AZ 85385

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

Name	Depth	Name	Depth
1 MISSISSIPPI LIME	8645	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 333644

Location Exception Orders:

Increased Density Orders: 686393

Pending CD Numbers: 201806983

Special Orders:

Total Depth: 14110

Ground Elevation: 1825

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 460

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

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: 8000 Average: 5000

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

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

PERMIT NO: 18-35673

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 23 Twp 21N Rge 16W County MAJOR

Spot Location of End Point: N2 N2 NE NE

Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 8180

Radius of Turn: 572

Direction: 360

Total Length: 5031

Measured Total Depth: 14110

True Vertical Depth: 8778

End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category

Description

DEEP SURFACE CASING

11/2/2018 - 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

11/2/2018 - 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

INCREASED DENSITY - 686393

11/16/2018 - G58 - 23-21N-16W
X333644 MSSLM
1 WELL
NO OP. NAMED
11/8/2018

MEMO

11/2/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

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

093 25176 KRAMER 1-23H

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 - 201806983	11/16/2018 - G58 - (I.O.) 23-21N-16W X333644 MSSLM COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FEL NO OP. NAMED REC 10/15/2018 (M. PORTER)
SPACING - 333644	11/16/2018 - G58 - (640) 23-21N-16W EXT 145279/326680 MSSLM

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

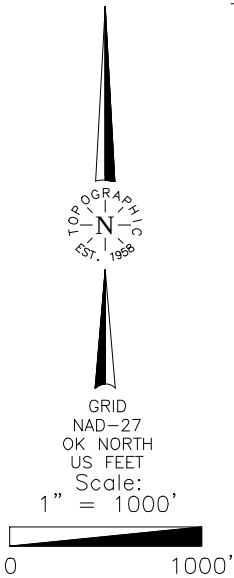
Certificate of Authorization No. 1293 LS

MAJOR

County, Oklahoma

093-25176

388'FNL-683'FEL Section 26 Township 21N Range 16W I.M.



KICK OFF POINT, FIRST TAKE POINT, LAST TAKE POINT, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

X 1738111
Y 470755

X 1740732
Y 470697

PROPOSED
BOTTOM HOLE
50'FNL-660'FEL
36°17'22.8" N
98°52'23.1" W
36.289652784" N
98.873078338" W
X: 1742692
Y: 470604

PROPOSED
LAST TAKE POINT
165'FNL-660'FEL
36°17'21.6" N
98°52'23.1" W
36.289336094" N
98.873077862" W
X: 1742691
Y: 470489

X 1743353
Y 470639

X 1738076
Y 468118

X 1743324
Y 468019

X 1738042
Y 465480

X 1740668
Y 465439

PROPOSED
FIRST TAKE POINT
165'FSL-660'FEL
36°16'33.0" N
98°52'23.2" W
36.275832315" N
98.873111628" W
X: 1742637
Y: 465573

X 1743295
Y 465398

PROPOSED
SURFACE HOLE
388'FNL-683'FEL
36°16'27.5" N
98°52'23.5" W
36.274313962" N
98.873196598" W
X: 1742607
Y: 465021

PROPOSED
KICK OFF POINT
405'FNL-661'FEL
36°16'27.4" N
98°52'23.2" W
36.274265628" N
98.873121184" W
X: 1742629
Y: 465003

X 1743260
Y 462777

X 1738005
Y 462841

X 1740598
Y 460179

X 1743226
Y 460157

X 1737969
Y 460202

Operator: LINN OPERATING, LLC.

Lease Name: KRAMER

Topography & Vegetation Location fell in grass pasture

Good Drill Site? Yes

Reference Stakes or Alternate Location
Stakes Set None

Best Accessibility to Location From south off trail road
Distance & Direction From Hwy Jct or Town From Chester, Oklahoma, go ±3 miles North on US Hwy 281, then ±2.5 miles East to the South Quarter Corner of Section 26, T21N-R16W, then go north on trail road thru said Section 26 to location.

Well No.: 1-23H

ELEVATION:
1825' Gr. at Stake

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

Date of Drawing: Oct. 15, 2018

Invoice # 304906

Date Staked: Sept. 27, 2018

NB

CERTIFICATE:

I, _____ an Oklahoma Licensed Land Surveyor and an authorized Agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein.

Oklahoma Lic. No. _____

DATUM: NAD-27
LAT: 36°16'27.5" N
LONG: 98°52'23.5" W
LAT: 36.274313962° N
LONG: 98.873196598° W
STATE PLANE
COORDINATES (US FEET):
ZONE: OK NORTH
X: 1742607
Y: 465021

This information was gathered with a GPS receiver with a not foot accuracy.

PRELIMINARY