

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

API NUMBER: 073 26079

Approval Date: 05/29/2018

Expiration Date: 11/29/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 25 Twp: 15N Rge: 9W

County: KINGFISHER

SPOT LOCATION:

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 310 820

Lease Name: LORETTA

Well No: 1-25H

Well will be 310 feet from nearest unit or lease boundary.

Operator Name: CIMAREX ENERGY CO

Telephone: 9185851100

OTC/OCC Number: 21194 0

CIMAREX ENERGY CO
202 S CHEYENNE AVE STE 1000
TULSA, OK 74103-3001

JAMES WITTROCK, ET AL
26283 NORTH 2770 ROAD
KINGFISHER OK 73750

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: 643680

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201803551

Special Orders:

Total Depth: 14451

Ground Elevation: 1197

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 470

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: 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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: CHICKASHA

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

PERMIT NO: 18-34564

H. CLOSED SYSTEM=STEEL PITS (REQUIRED - DEAD INDIAN CREEK)

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.

HORIZONTAL HOLE 1

Sec 25 Twp 15N Rge 9W County KINGFISHER

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 450

Depth of Deviation: 8567

Radius of Turn: 573

Direction: 5

Total Length: 4984

Measured Total Depth: 14451

True Vertical Depth: 10245

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category

Description

DEEP SURFACE CASING

5/29/2018 - 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

5/29/2018 - 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

INTERMEDIATE CASING

5/29/2018 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES

PENDING CD - 201803551

5/29/2018 - G57 - (I.O.) 25-15N-9W
X643680 MSSP
COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 330' FEL
NO OP. NAMED
REC 5-21-2018 (FOREMAN)

SPACING - 643680

5/29/2018 - G57 - (640) 25-15N-9W
EXT OTHER
EST MSSP
POE TO BHL (MSSP) NCT 660' FB
(COEXIST WITH SP. ORDER 149991 CSTCU, SP. ORDER 430693 CRLMC, SP. ORDER 148798 MNNG, SP. ORDER 166936 MSSSD)

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

073 26079 LORETTA 1-25H

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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.

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

API: 073 26079

KINGFISHER

County, Oklahoma

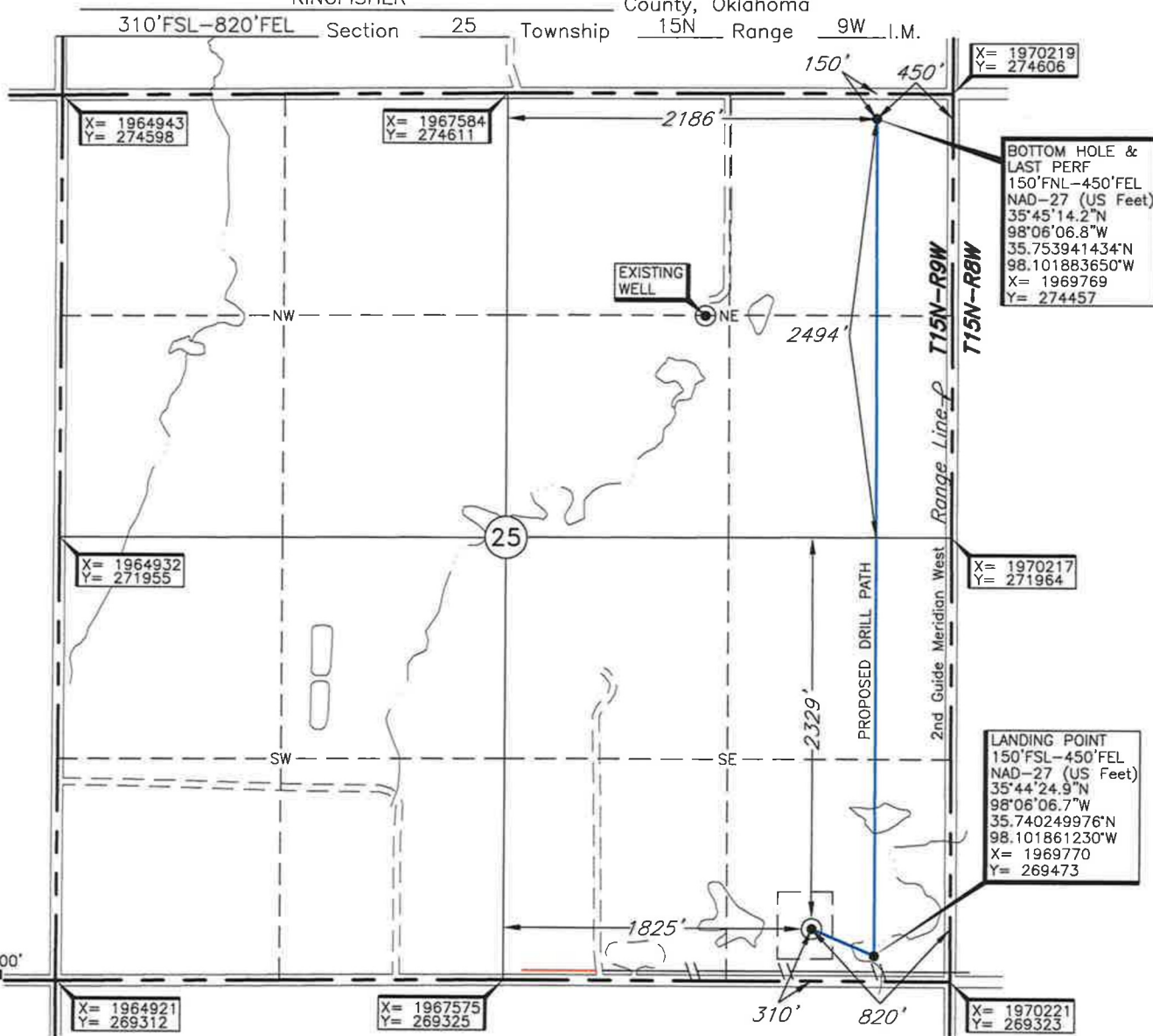
310'FSL-820'FEL Section 25 Township 15N Range 9W I.M.

NOTE:
The information shown herein is for
construction purposes ONLY.

0' 500' 1000'



GRID
NAD-27
OK NORTH
US Feet



LANDING POINT, BOTTOM HOLE, AND DRILL PATH INFORMATION
PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

Operator: CIMAREX ENERGY CO.

Lease Name: LORETTA

Well No.: 1-25H

ELEVATION:

1197' Gr. at Stake NGVD29

Topography & Vegetation Loc. fell in sloped pasture; ±252' North of E-W pipeline; ±242' NW of top bank of creek

Good Drill Site? Yes Reference Stakes or Alternate Location
Stakes Set None

Best Accessibility to Location From South off county road.

Distance & Direction
from Hwy Jct or Town From Okarche, OK, go West ± 7 miles, then North ±1 mile to
the SE Cor. of Sec. 25-T5N-R9W.

Revision ☒ A

Date of Drawing: May 23, 2018

Invoice # 293756

Date Staked: May 15, 2018

TR

DATUM: NAD-27
LAT: 35°44'26.5"N
LONG: 98°06'11.2"W
LAT: 35.740688960°N
LONG: 98.103108942°W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1969400
Y: 269634

CERTIFICATE:

I, T. Wayne Fisch an Oklahoma Licensed Land
Surveyor and an authorized agent of Topographic Land
Surveyors of Oklahoma, do hereby certify to the
information shown herein

T. Wayne Fisch
Oklahoma Lic. No. 1378

