

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

API NUMBER: 073 25886

Approval Date: 01/08/2018

Expiration Date: 07/08/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 22 Twp: 15N Rge: 9W

County: KINGFISHER

SPOT LOCATION: ☐ NW ☐ NW ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 275 1185

Lease Name: QUENTIN

Well No: 1-22H

Well will be 275 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

PATRICIA KAY SANTO
4927 E 870 ROAD
OKARCHE OK 73762

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN (EX CHESTER)	9638	6	
2	WOODFORD	10245	7	
3			8	
4			9	
5			10	

Spacing Orders: 652230

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201708303
201708305

Special Orders:

Total Depth: 14362

Ground Elevation: 1210

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 370

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: 17-33644

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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 22 Twp 15N Rge 9W County KINGFISHER

Spot Location of End Point: S2 SE SE SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 8980

Radius of Turn: 478

Direction: 170

Total Length: 4632

Measured Total Depth: 14362

True Vertical Depth: 10340

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

Notes:

Category	Description
DEEP SURFACE CASING	12/21/2017 - 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	12/21/2017 - 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	12/21/2017 - 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 - 201708303	1/3/2018 - G58 - (I.O.) 22-15N-9W X652230 MSNLC 1 WELL NO OP. NAMED REC 1/3/2018 (THOMAS)
PENDING CD - 201708305	1/3/2018 - G58 - (I.O.) 22-15N-9W X652230 MSNLC, WDFD COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 250' FEL NO OP. NAMED REC 1/3/2018 (THOMAS)
SPACING - 652230	1/3/2018 - G58 - (640)(HOR) 22-15N-9W EXT 642657 MSNLC, WDFD COMPL. INT. (MSNLC) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

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073 25886 QUENTIN 1-22H

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS

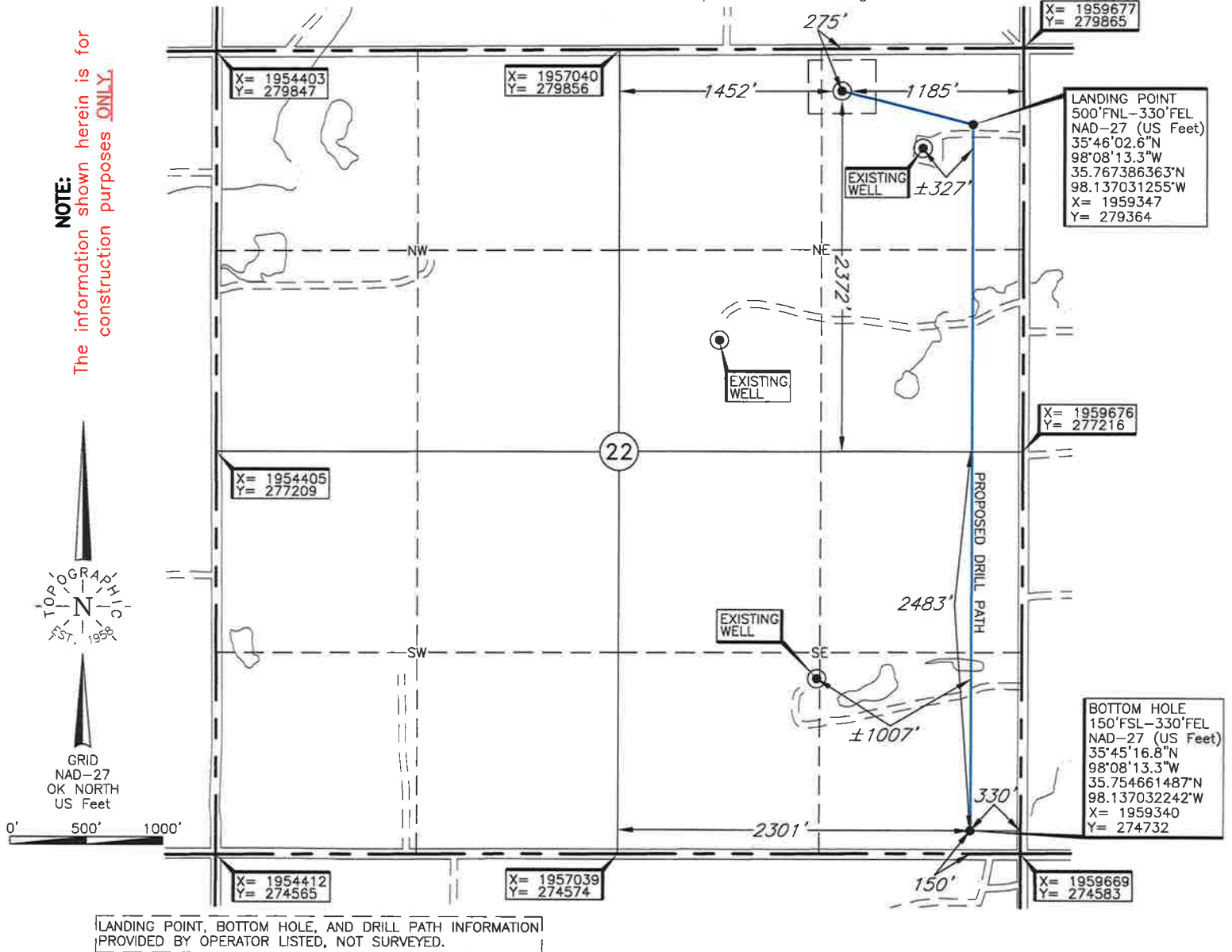
073-25886

KINGFISHER

County, Oklahoma

275'FNL-1185'FEL Section 22 Township 15N Range 9W I.M.

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



Operator: CIMAREX ENERGY CO.

Lease Name: QUENTIN

Well No.: 1-22H

ELEVATION:

1210' Gr. at Stake NGVD29

Topography & Vegetation Loc. fell in terraced wheat field

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

Best Accessibility to Location From North off county road.

Distance & Direction
from Hwy Jct or Town From the junction of US Hwy. 81 and St. Hwy. 33 in Kingfisher, OK, go West ±10.5 miles
on St. Hwy 33, then South ±6.0 miles, then West ±1.0 miles to the NE corner of Section 22, T15N-R9W.

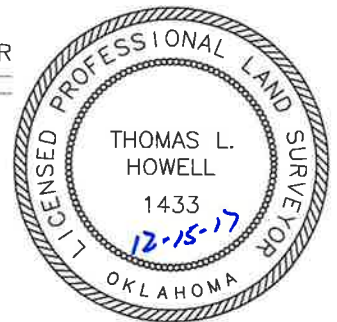
DATUM: NAD-27
LAT: 35°46'04.8"N
LONG: 98°08'23.7"W
LAT: 35.767993254°N
LONG: 98.139913731°W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1958492
Y: 279586

Invoice # 285320B Date of Drawing: Dec. 15, 2017
Date Staked: Dec. 13, 2017 TR

CERTIFICATE:

I, Thomas L. Howell an Oklahoma Licensed Land
Surveyor and an authorized agent of Topographic Land
Surveyors of Oklahoma, do hereby certify to the
information shown herein

Thomas L. Howell
Oklahoma Lic. No. 1433



This information was
gathered with a GPS receiver
with ±1 foot Horiz./Vert. accuracy.