

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

API NUMBER: 017 25185

Approval Date: 02/27/2018

Expiration Date: 08/27/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 32 Twp: 11N Rge: 7W

County: CANADIAN

SPOT LOCATION: ☐ NE ☐ NW ☐ NE ☐ NE FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 270 932

Lease Name: JD HOPPINS COTCH

Well No: 4-32H

Well will be 270 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

RAYMOND L. PAPPE TRUST
10120 S. SHARTEL DRIVE
OKLAHOMA CITY OK 73139

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

Name	Depth	Name	Depth
1 WOODFORD	11150	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201800975
201800981
201800976

Special Orders:

Total Depth: 15844

Ground Elevation: 1320

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 350

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: DOG CREEK

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

PERMIT NO: 18-33942

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 32 Twp 11N Rge 7W County CANADIAN

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 400

Depth of Deviation: 10408

Radius of Turn: 382

Direction: 175

Total Length: 4835

Measured Total Depth: 15844

True Vertical Depth: 11150

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

Notes:

Category

Description

DEEP SURFACE CASING

2/26/2018 - 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

2/26/2018 - 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

PENDING CD - 201800975

2/27/2018 - G57 - (640)(HOR) 32-11N-7W
EST WDFD, OTHERS
POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL
REC 2-20-2018 (JOHNSON)

PENDING CD - 201800976

2/27/2018 - G57 - 32-11N-7W
X201800975 WDFD
3 WELLS
NO OP. NAMED
IHC 3-19-2018

PENDING CD - 201800981

2/27/2018 - G57 - (I.O.) 32-11N-7W
X201800975 WDFD
COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FEL
NO OP. NAMED
REC 2-20-2018 (JOHNSON)

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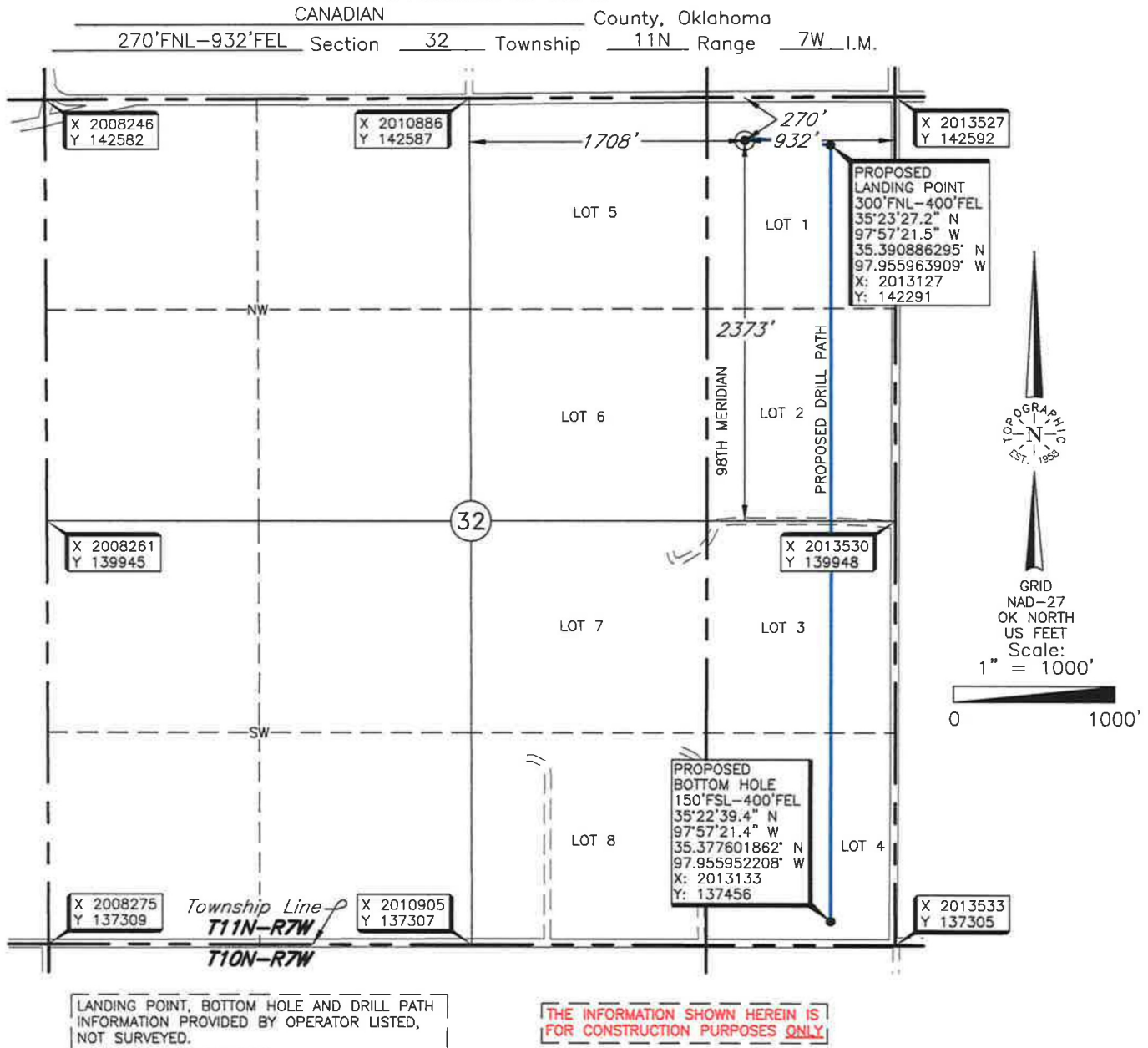
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

017 25185 JD HOPPINS SCOTCH 4-32H

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: 017 25185



Operator: CIMAREX ENERGY CO.

Lease Name: JD HOPPINS COTCH

Well No.: 4-32H

ELEVATION:

1320' Gr. at Stake (NGVD 29)

Topography & Vegetation Loc. fell in 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 Union City, Oklahoma, go ± 1 mile West to the Northeast Corner of Section 32,
T11N-R7W.

DATUM: NAD-27
LAT: 35°23'27.5\" N
LONG: 97°57'27.9\" W
LAT: 35.390966585\" N
LONG: 97.957748458\" W

STATE PLANE
COORDINATES (US FEET):
ZONE: OK NORTH
X: 2012595
Y: 142320

Date of Drawing: Feb. 8, 2018

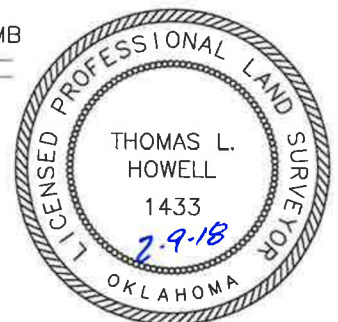
Invoice # 288151D Date Staked: Feb. 5, 2018

NMB

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 Reg. No. 1433



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