

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

API NUMBER: 043 23485

Approval Date: 11/02/2016
Expiration Date: 05/02/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 24 Twp: 17N Rge: 15W County: DEWEY
SPOT LOCATION: NW NE NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 200 1800

Lease Name: BROWN Well No: 24-13-1H Well will be 200 feet from nearest unit or lease boundary.
Operator Name: COMANCHE EXPLORATION CO LLC Telephone: 4057555900 OTC/OCC Number: 20631 0

COMANCHE EXPLORATION CO LLC
6520 N WESTERN AVE STE 300
OKLAHOMA CITY, OK 73116-7334

MARY BRADFORD BROWN LIVING TRUST; MARY
BRADFORD BROWN
19 VALLEY VIEW DRIVE
BURNEYVILLE OK 73430

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

Name	Depth	Name	Depth
1	MISSISSIPPIAN	10000	6
2			7
3			8
4			9
5			10

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201604279
201604281
201604280

Special Orders:

Total Depth: 16186 Ground Elevation: 1863 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 330

Under Federal Jurisdiction: Yes Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

PIT 1 INFORMATION

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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 16-31664
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 13 Twp 17N Rge 15W County DEWEY

Spot Location of End Point: N2 NE NW NE

Feet From: NORTH 1/4 Section Line: 135

Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 10455

Radius of Turn: 248

Direction: 359

Total Length: 5342

Measured Total Depth: 16186

True Vertical Depth: 10933

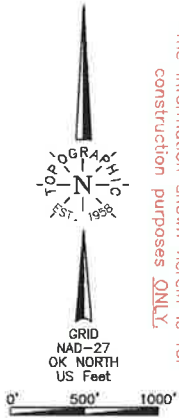
End Point Location from Lease,
Unit, or Property Line: 135

Notes:

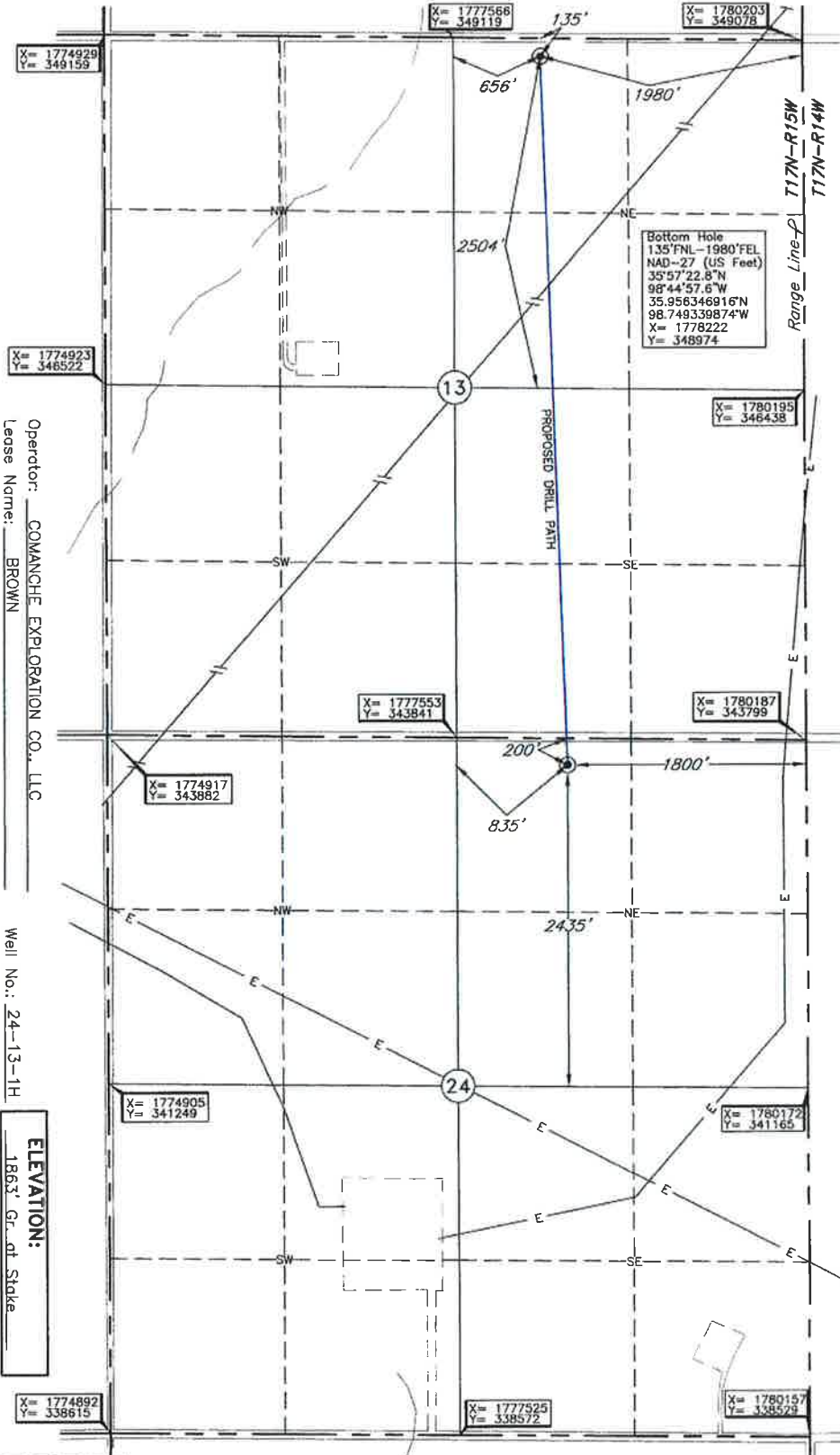
Category	Description
DEEP SURFACE CASING	10/21/2016 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING
HYDRAULIC FRACTURING	10/21/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE.
INTERMEDIATE CASING	10/21/2016 - 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 - 201604279	10/21/2016 - G64 - (640)(HOR) 13-17N-15W EST MSSP POE TO BHL NCT 660' FB (COEXIST SP. ORDER #86801 MSSLM**) REC. 10-26-2016 (M. PORTER) **SHOULD COEXIST SP. ORDER #50640 CSTR; WILL BE CORRECTED AT HEARING PER CASE PROCESSING
PENDING CD - 201604280	10/21/2016 - G64 - (I.O.) 13-17N-15W X201604279 MSSP XOTHER 1 WELL NO OP. NAMED REC. 10-26-2016 (M. PORTER)
PENDING CD - 201604281	10/21/2016 - G64 - (I.O.) 13-17N-15W X201604275 MSSP XOTHER COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 330' FEL NO OP. NAMED REC. 10-26-2016 (M. PORTER)

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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.

DEWEY County, Oklahoma
 200' FNL - 1800' FEL Section 24 Township 17N Range 15W I.M.



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



Operator: COMANCHE EXPLORATION CO., LLC
 Lease Name: BROWN
 Topography & Vegetation: Location fell in sandy grass pasture, ±198' NE of existing water well
 Good Drill Site? Yes
 Reference Stakes or Alternate Location: Stakes Set None
 Best Accessibility to Location: From North of county road
 Distance & Direction from Hwy cut or Town: From Ockwood, OK, go North ±0.75 mile, then West ±2.0 miles to the NE Cor. of Sec 24-17N-R15W.

ELEVATION:
 1863' Gr. at Stake

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

DATUM: NAD-27
 LAT: 35°56'30.0"N
 LONG: 98°44'55.1"W
 LAT: 35.941664988°N
 LONG: 98.748645766°W
 STATE PLANE COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1778386
 Y: 343628

Date of Drawing: Sep. 14, 2016
 Invoice # 264798 Date Staked: Sep. 8, 2016 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

