

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

API NUMBER: 093 25123

Approval Date: 01/24/2018
Expiration Date: 07/24/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 31 Twp: 20N Rge: 15W County: MAJOR
SPOT LOCATION: NW NW NW NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 155 225

Lease Name: GILCHRIST 2016 Well No: 2-36H Well will be 155 feet from nearest unit or lease boundary.
Operator Name: SANDRIDGE EXPLORATION & PRODUCTION LLC Telephone: 4054295610 OTC/OCC Number: 22281 0

SANDRIDGE EXPLORATION & PRODUCTION LLC
123 ROBERT S KERR AVE STE 1702
OKLAHOMA CITY, OK 73102-6406

RICK & WANDA MONGOLD
238786 EAST CR. 54
CHESTER OK 73838

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

Name	Depth	Name	Depth
1	MISSISSIPPIAN	9420	6
2			7
3			8
4			9
5			10

Spacing Orders: 663715

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201708631
201708632

Special Orders:

Total Depth: 14732

Ground Elevation: 1671

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 410

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 10000 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 ALLUVIAL

Pit Location Formation: ALLUVIUM

Approved Method for disposal of Drilling Fluids:

E. Haul to Commercial pit facility: Sec. 33 Twn. 26N Rng. 15W Cnty. 151 Order No: 627651

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 36 Twp 20N Rge 16W County DEWEY

Spot Location of End Point: S2 S2 SW SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 8815

Radius of Turn: 900

Direction: 200

Total Length: 4503

Measured Total Depth: 14732

True Vertical Depth: 9506

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

Notes:

Category

Description

DEEP SURFACE CASING

1/8/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

1/8/2018 - 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

1/8/2018 - 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

MEMO

1/8/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

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.

Category	Description
PENDING CD - 201708631	1/11/2018 - G75 - 36-20N-16W X663715 MSSP 3 WELLS NO OP. NAMED REC 1-23-2018 (NORRIS)
PENDING CD - 201708632	1/11/2018 - G75 - (I.O.) 36-20N-16W X663715 MSSP COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 1320' FEL NO OP. NAMED REC 1-23-2018 (NORRIS)
SPACING - 663715	1/11/2018 - G75 - (640)(HOR) 36-20N-16W VAC 236070 CSTR, MPLM EXT 653280 MSSP, OTHER POE TO BHL NLT 660' FB

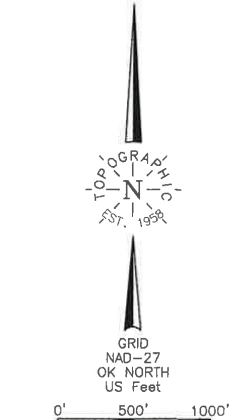
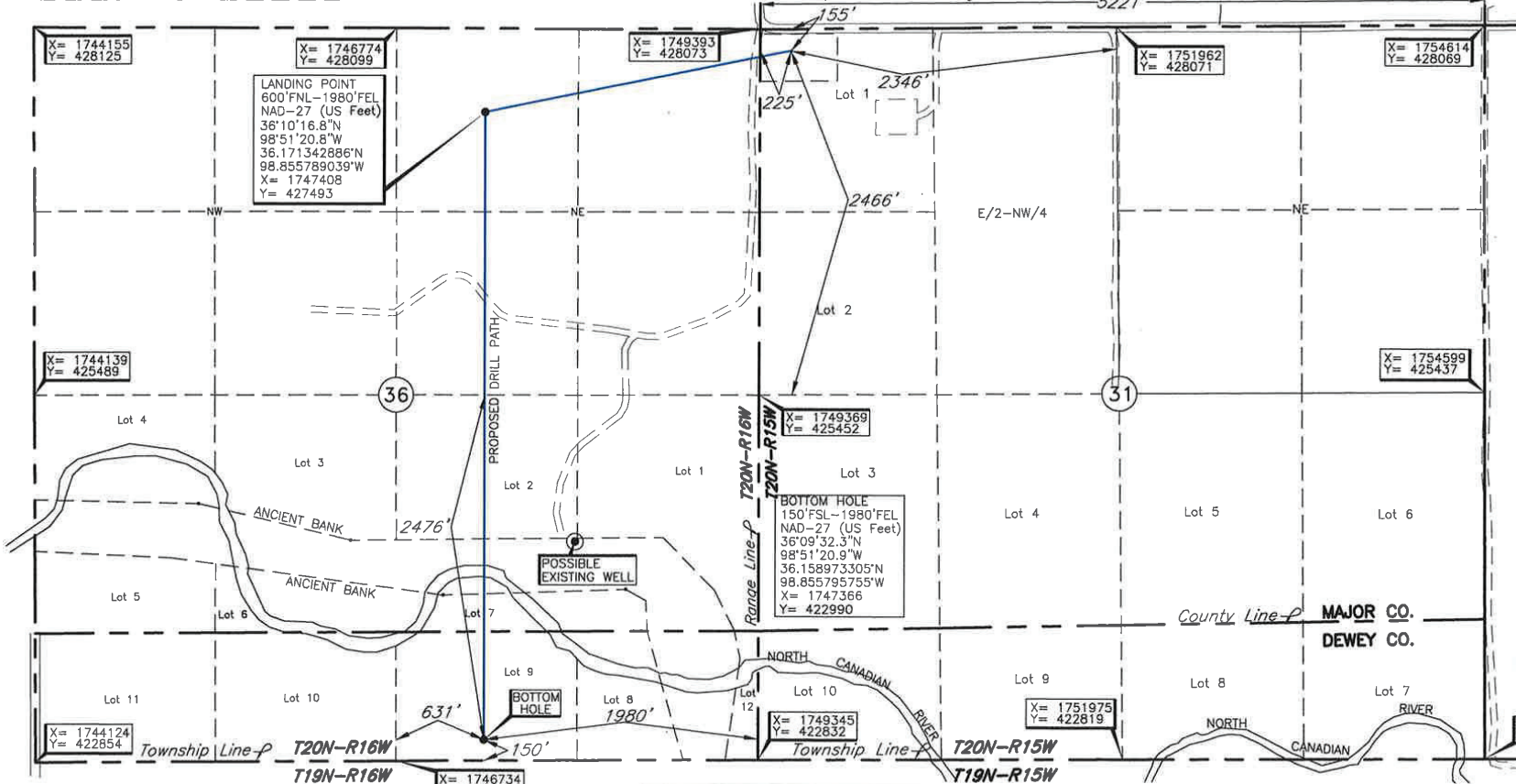
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TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
 6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
 Certificate of Authorization No. 1293 LS

API 093-25123

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

MAJOR County, Oklahoma
 155'FNL - 225'FWL Section 31 Township 20N Range 15W I.M. 5221'



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

DATUM: NAD-27
 LAT: 36°10'21.2"N
 LONG: 98°50'53.9"W
 LAT: 36.172564140°N
 LONG: 98.848317788°W
 STATE PLANE
 COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1749617
 Y: 427918

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

Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC
 Lease Name: GILCHRIST 2016
 Topography & Vegetation: Loc. fell on level pad
 Good Drill Site? Yes No
 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 Seiling, OK, go ±3.0 mi. North on US Hwy. 281, then ±4.0 mi. East on paved road, then ±1.0 mi. South to the NW Cor. of Sec. 31-T20N-R15W.

ELEVATION:
 1671' Gr. at level pad

Date Drawn: Jan. 04, 2018
 Invoice # 286463 Date Staked: Jan. 03, 2018 AC

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

