

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

API NUMBER: 093 25124

Approval Date: 01/24/2018

Expiration Date: 07/24/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 31 Twp: 20N Rge: 14W County: MAJOR

SPOT LOCATION: NE NE NE NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 275 225

Lease Name: MISSION 2014 Well No: 1-31H Well will be 225 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

BILL R. KEETON & ELEANOR JOAN KEETON
241998 E. 590 RD.
LONGDALE OK 73755

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

Name	Depth	Name	Depth
1 MISS'AN LM	9003	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 141045

Location Exception Orders: 667614

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 13753

Ground Elevation: 1672

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 300

Under Federal Jurisdiction: Yes

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

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: 10000 Average: 5000

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

Is depth to top of ground water greater than 10ft below base of pit? Y

H. SEE MEMO

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

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 31 Twp 20N Rge 14W County DEWEY

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 430

Depth of Deviation: 8510

Radius of Turn: 750

Direction: 182

Total Length: 4065

Measured Total Depth: 13753

True Vertical Depth: 9073

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

Notes:

Category

Description

DEEP SURFACE CASING

11/6/2017 - 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

11/6/2017 - 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

11/6/2017 - 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

LOCATION EXCEPTION - 667614

12/14/2017 - G75 - (I.O.) 31-20N-14W
X141045 MPLM
COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FEL
SANDRIDGE EXPLOR. & PROD., LLC
8-29-2017

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
MEMO	11/6/2017 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT
SPACING - 141045	12/14/2017 - G75 - (640) 31-20N-14W EXT OTHER EXT 125423 MPLM (BASE OF MCSTR TO TOP WDFD PER ORDER)

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.

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

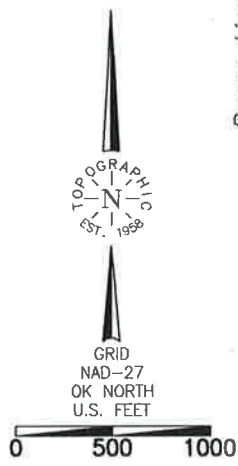
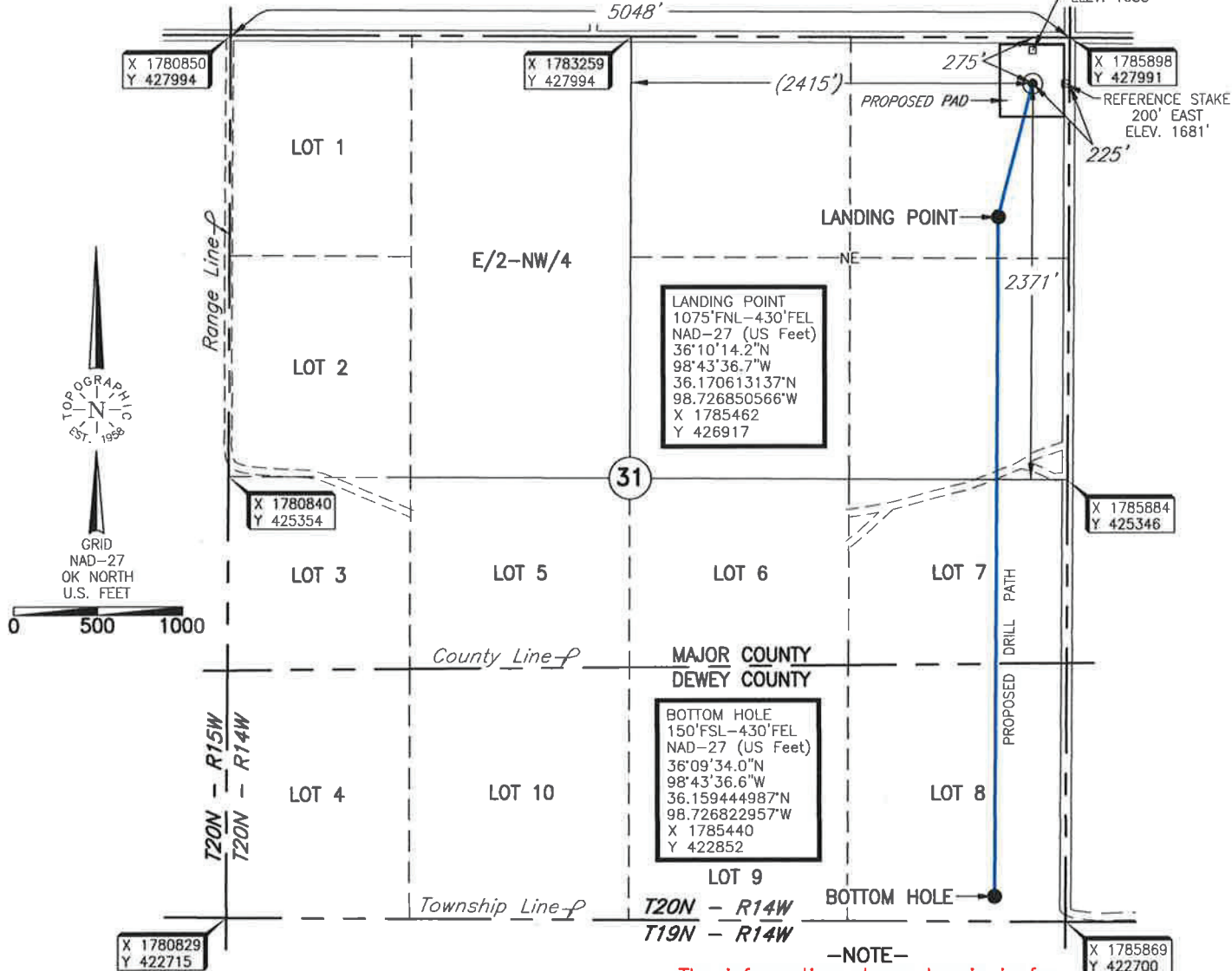
API 093-25124

MAJOR

County, Oklahoma

275'FNL - 225'FEL Section 31 Township 20N Range 14W I.M.

REFERENCE STAKE
200' NORTH
ELEV. 1688'



LANDING POINT
1075'FNL-430'FEL
NAD-27 (US Feet)
36°10'14.2"N
98°43'36.7"W
36.170613137°N
98.726850566°W
X 1785462
Y 426917

BOTTOM HOLE
150'FSL-430'FEL
NAD-27 (US Feet)
36°09'34.0"N
98°43'36.6"W
36.159444987°N
98.726822957°W
X 1785440
Y 422852

-NOTE-
The information shown herein is for construction purposes ONLY.
[LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.]

Operator: SANDRIDGE EXPLORATION AND PRODUCTION, LLC
 Lease Name: MISSION 2014
 Topography & Vegetation: Location fell in sloped grass pasture; ±217' South of E-W Water Line; ±233' South of E-W Fence and Powerline.
 Good Drill Site? Yes Reference Stakes Set (1) 200' North Elev.: 1688' (2) 200' East Elev. 1681'
 Best Accessibility to Location: From North off county road
 Distance & Direction: From Seiling, Ok., go North on U.S. Hwy. 281 ±2.5 miles towards Chester, Ok., then ±4 miles East, then ±1 mile South, then ±6 miles East to the NE corner of Section 31, T20N - R14W.

ELEVATION:
1672' Gr. at Stake (NGVD29)

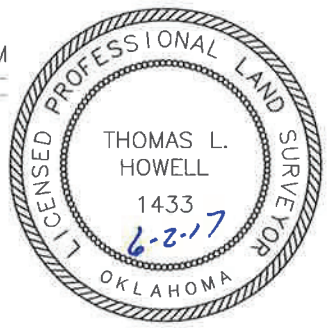
DATUM: NAD-27
 LAT: 36°10'22.1"N
 LONG: 98°43'34.2"W
 LAT: 36.172815017°N
 LONG: 98.726160898°W
 STATE PLANE
 COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1785672
 Y: 427717

Date of Drawing: May 30, 2017
 Invoice # 276412 Date Staked: May 23, 2017 RKM

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.