

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

API NUMBER: 093 25195

Approval Date: 01/28/2019

Expiration Date: 07/28/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 31 Twp: 20N Rge: 13W County: MAJOR

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

SECTION LINES: 240 795

Lease Name: BARNES 2013 Well No: 1-31H Well will be 240 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

THE MCCAFFERTY FAMILY TRUST
3620 S. 126TH ST.
DELYNE MCCAFFERTY, TRUSTEE
FAIRMONT OK 73736

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	8858	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201809094
201900471

Special Orders:

Total Depth: 13353

Ground Elevation: 1675

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 250

Under Federal Jurisdiction: No

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

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

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

PERMIT NO: 18-35924

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 31 Twp 20N Rge 13W County BLAINE

Spot Location of End Point: S2 S2 SW SW

Feet From: SOUTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 8200

Radius of Turn: 691

Direction: 182

Total Length: 4067

Measured Total Depth: 13353

True Vertical Depth: 8935

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

Additional Surface Owner	Address	City, State, Zip
DOYL SHOLTESS	264878 E. COUNTY ROAD 46	RINGWOOD, OK 73768

Notes:

Category

Description

DEEP SURFACE CASING

12/16/2018 - 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

12/16/2018 - 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: OCCWEB.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

12/16/2018 - 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

12/16/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

This permit does not address the right of entry or settlement of surface damages.

093 25195 BARNES 2013 1-31H

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 - 201809094	1/16/2019 - GB1 - (E.O.) 31-20N-13W X201900471 MSSP COMPL. INT. NCT 240' FNL, NCT 150' FSL, NCT 660' FWL SANDRIDGE EXPLORATION AND PRODUCTION, LLC REC. 1/25/2019 (THOMAS) PER ATTORNEY FOR OPERATOR
PENDING CD - 201900471	1/25/2019 - GB1 - (E.O.)(640)(HOR) 31-20N-13W EST MSSP COMPL INT NLT 660' FB (COEXIST WITH SP #166388 MSSSD, SP # 184836 CSTR, SP. # 87492 MNNG)*** REC. 1/25/2019 (THOMAS) PER ATTORNEY FOR OPERATOR ***SP #184836 CRUNC WILL BE ADDED AT FINAL HEARING

35-093-25195

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

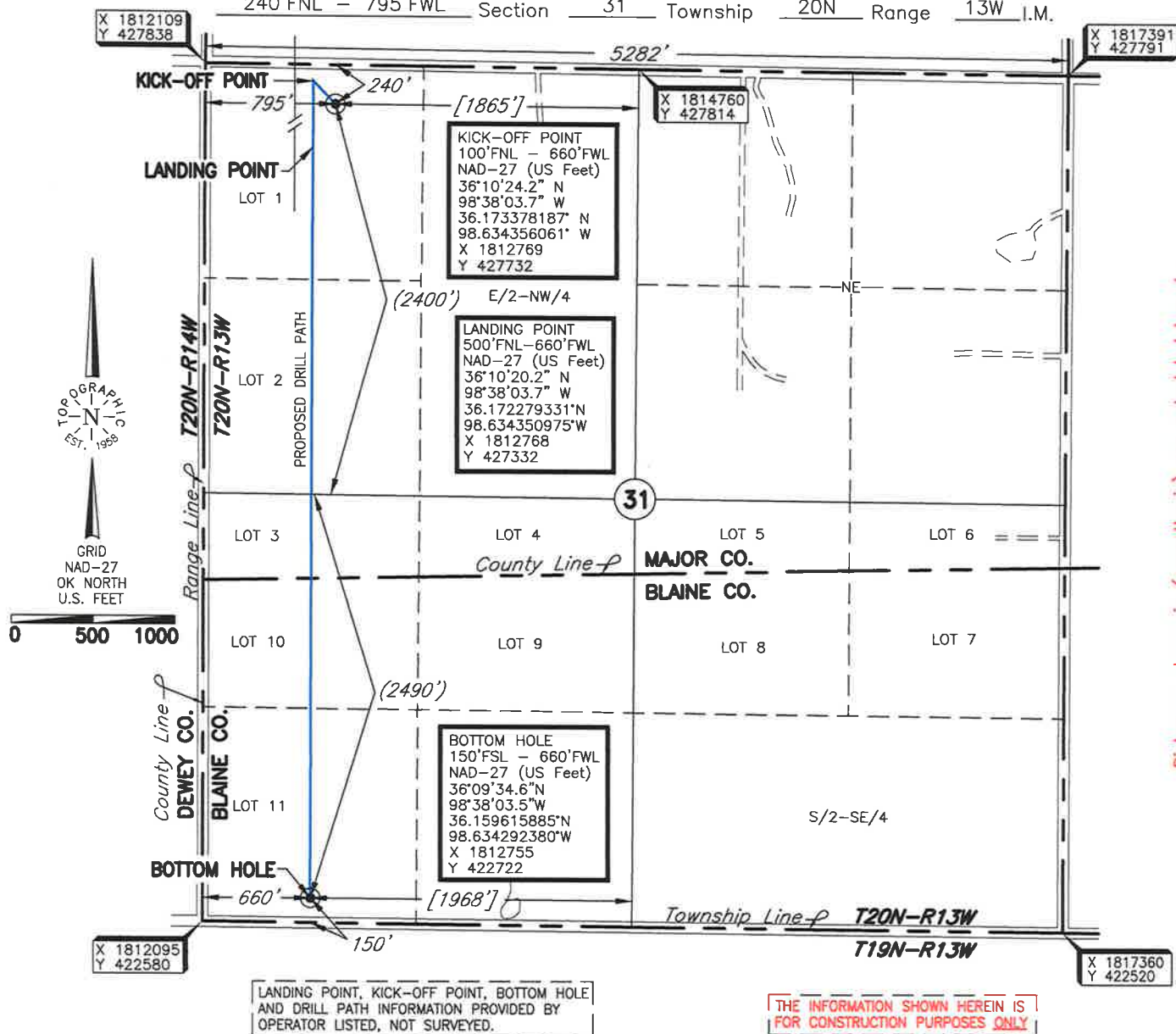
13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

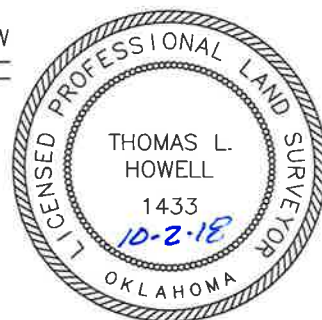
MAJOR

County, Oklahoma

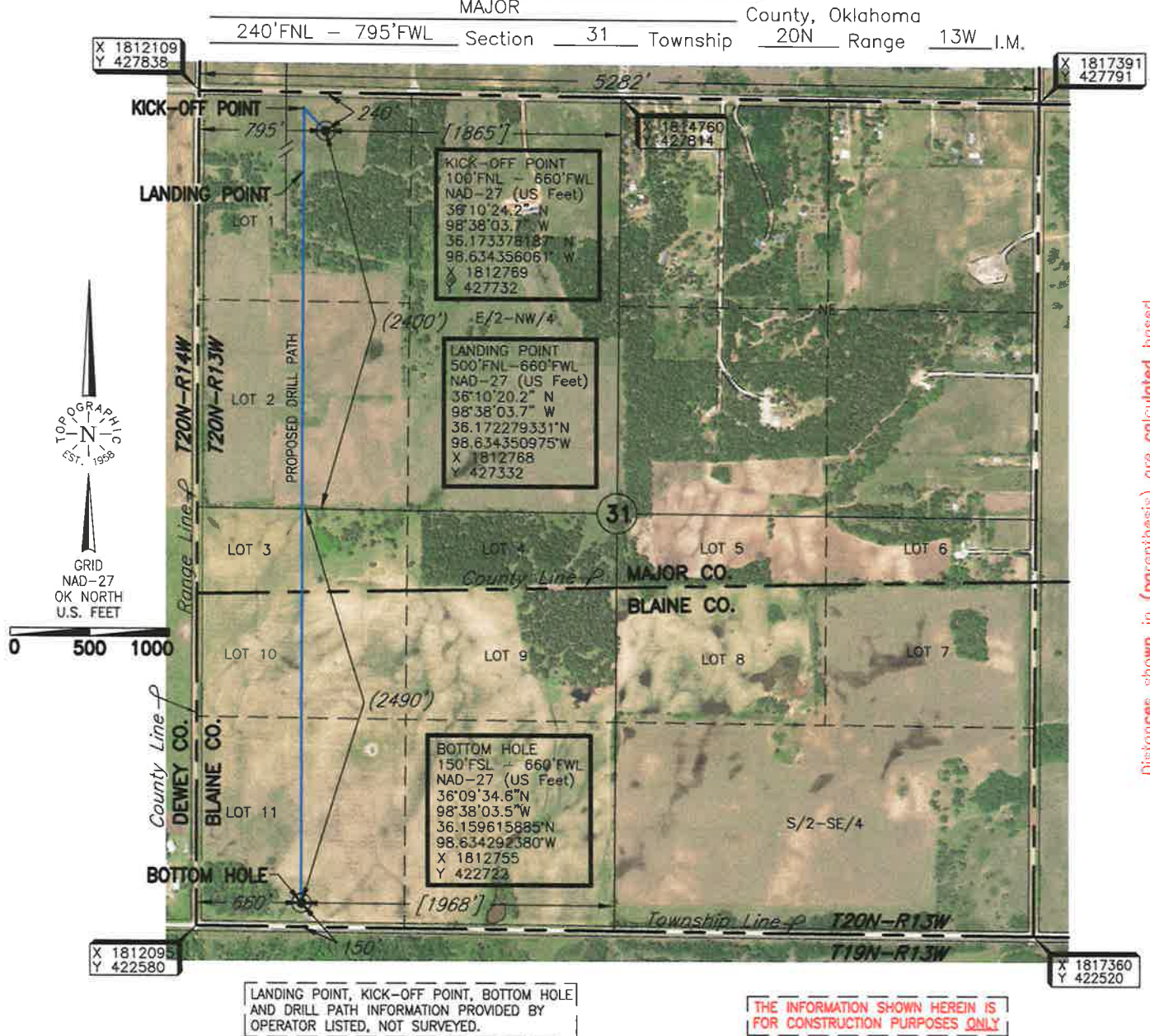
240' FNL - 795' FWL Section 31 Township 20N Range 13W I.M.



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



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
MAJOR



Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC

Lease Name: BARNES 2013

Well No.: 1-31H

ELEVATION:

1675' Gr. at Stake (NGVD 29)

Topography & Vegetation Location fell in rolling sandy pasture, ±250' East of pipeline.

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 Seiling, Ok., go North on U.S. Hwy. 281 ±2.5 miles, East ±4 miles, South ±1 mile,
East ±12 miles to the NW Corner of Section 31, T20N - R13W.

DATUM: NAD-27
LAT: 36°10'22.8"N
LONG: 98°38'02.0"W
LAT: 36.172992836°N
LONG: 98.633896952°W
STATE PLANE
COORDINATES (US FEET):
ZONE: OK NORTH
X: 1812904
Y: 427591

Date of Drawing: October 2, 2018
Invoice # 302826 Date Staked: September 18, 2018 TAW

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.

Oklahoma Reg. No. 1433



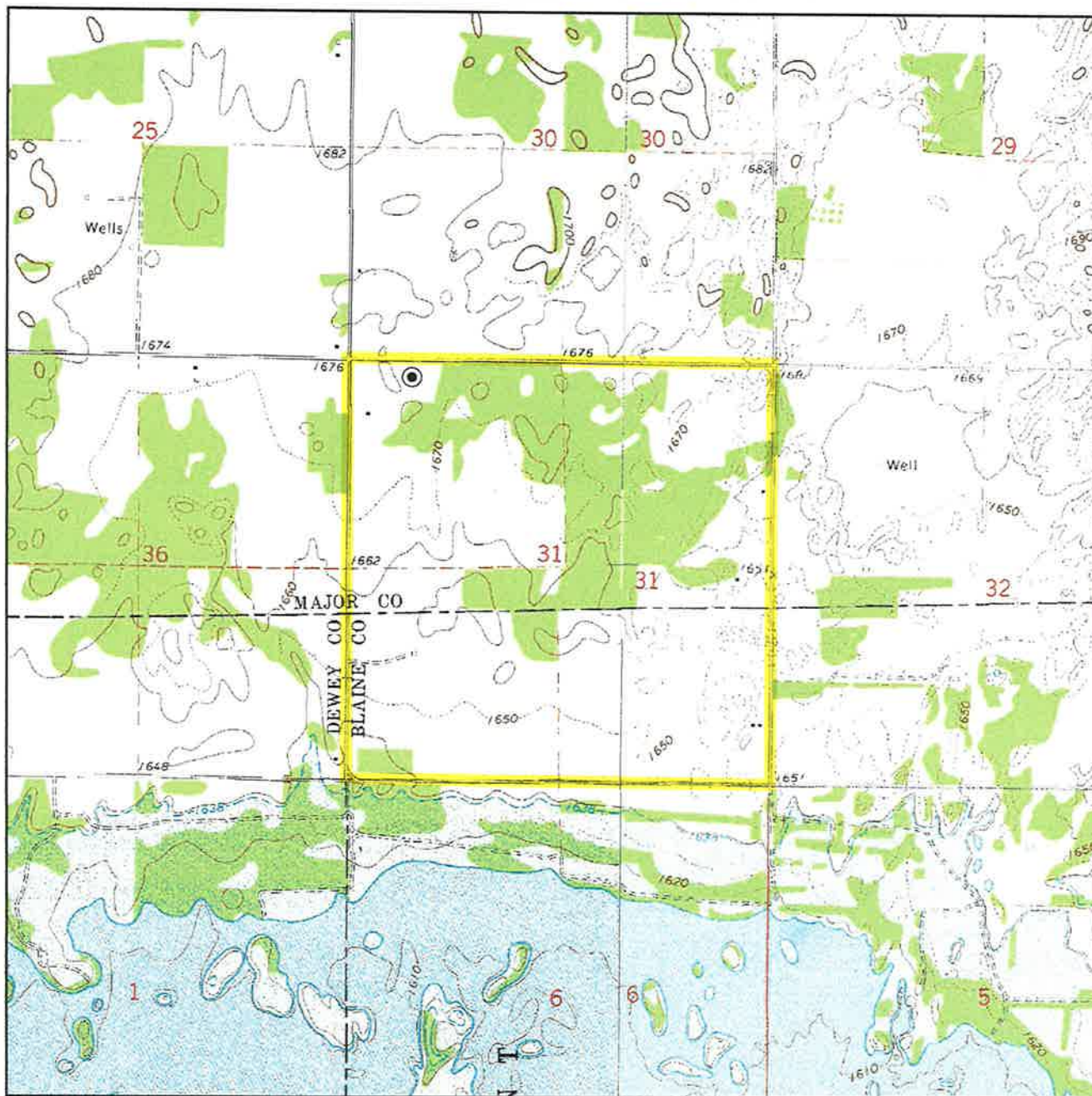
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry

13800 Wireless Way, Oklahoma City, OK 73134 www.topographic.com

Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

LOCATION & ELEVATION VERIFICATION MAP



Sec. 31 Twp. 20N Rng. 13W IM

County MAJOR State OK

Operator SANDRIDGE EXPLORATION & PRODUCTION, LLC

Description 240'FNL - 795'FWL

Lease BARNES 2013 1-31H

Elevation 1675' Gr. at Stake

Above Background Data from
U.S.G.S. Topographic Map
Scale: 1"=2000'

Contour Interval 10'

When elevation is shown hereon it is the ground
elevation of the location stake.
Review this plat and inform us immediately of
any possible discrepancy.

LAND SURVEYORS OF OKLAHOMA

October 2, 2018

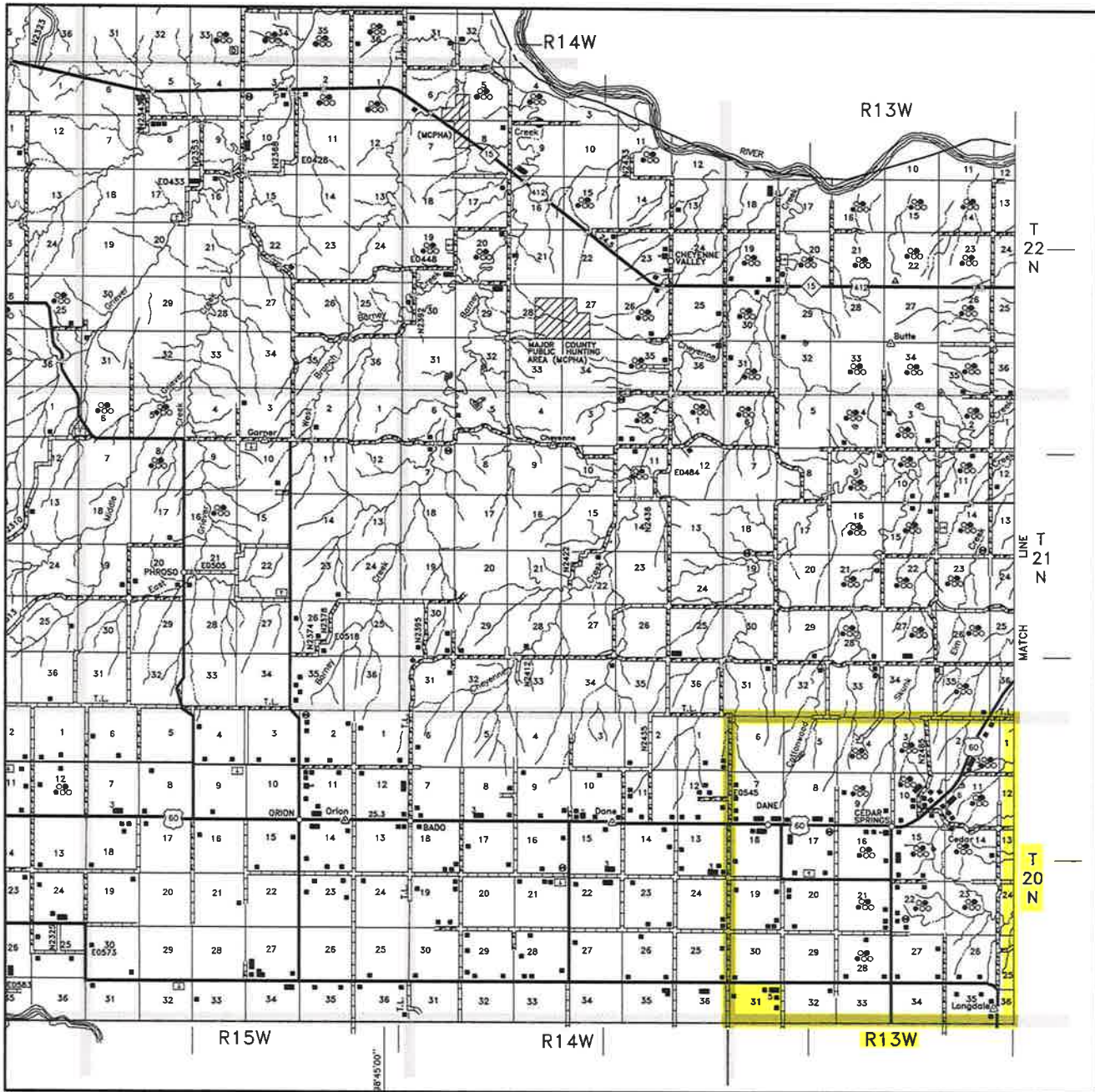
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VICINITY MAP



Scale: 1" = 3 Miles

Sec. 31 Twp. 20N Rng. 13W IM

County MAJOR State OK

Operator SANDRIDGE EXPLORATION & PRODUCTION, LLC

LAND SURVEYORS OF OKLAHOMA