

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

API NUMBER: 151 24537

Approval Date: 07/26/2018

Expiration Date: 01/26/2019

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 25 Twp: 27N Rge: 13W County: WOODS  
SPOT LOCATION: ☐ SW ☐ NW ☐ NE ☐ NW FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 350 1430

Lease Name: MURROW 2713 Well No: 2-25H Well will be 350 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

LOREN KORELL  
TRUSTEE, KORELL FAMILY REVOCABLE TRUST  
64 PRAIRIE RIDGE RD.  
HIGHLAND RANCH CO 80126

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	5517	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 636629

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201804185  
201804184

Special Orders:

Total Depth: 11008 Ground Elevation: 1365 Surface Casing: 650 Depth to base of Treatable Water-Bearing FM: 400

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: 18-34846  
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 25 Twp 27N Rge 13W County WOODS

Spot Location of End Point: S2 S2 SE SW

Feet From: SOUTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 1980

Depth of Deviation: 5125

Radius of Turn: 382

Direction: 175

Total Length: 5282

Measured Total Depth: 11008

True Vertical Depth: 5517

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

Notes:

Category

Description

HYDRAULIC FRACTURING

7/11/2018 - 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](http://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](http://FRACFOCUS.ORG)

PENDING CD - 201804184

7/25/2018 - G57 - 25-27N-13W  
X636629 MSSP  
1 WELL  
SANDRIDGE EXPLORATION AND PRODUCTION, LLC.  
REC 6-18-2018 (DENTON)

PENDING CD - 201804185

7/25/2018 - G57 - (I.O.) 25-27N-13W  
X636629 MSSP  
COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 660' FWL  
NO OP. NAMED  
REC 6-18-2018 (DENTON)

SPACING - 636629

7/25/2018 - G57 - (640)(HOR) 25-27N-13W  
VAC 605633 MSSP  
EXT 627977 MSSP  
POE TO BHL NCT 660' FB

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151 24537 MURROW 2713 2-25H

# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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

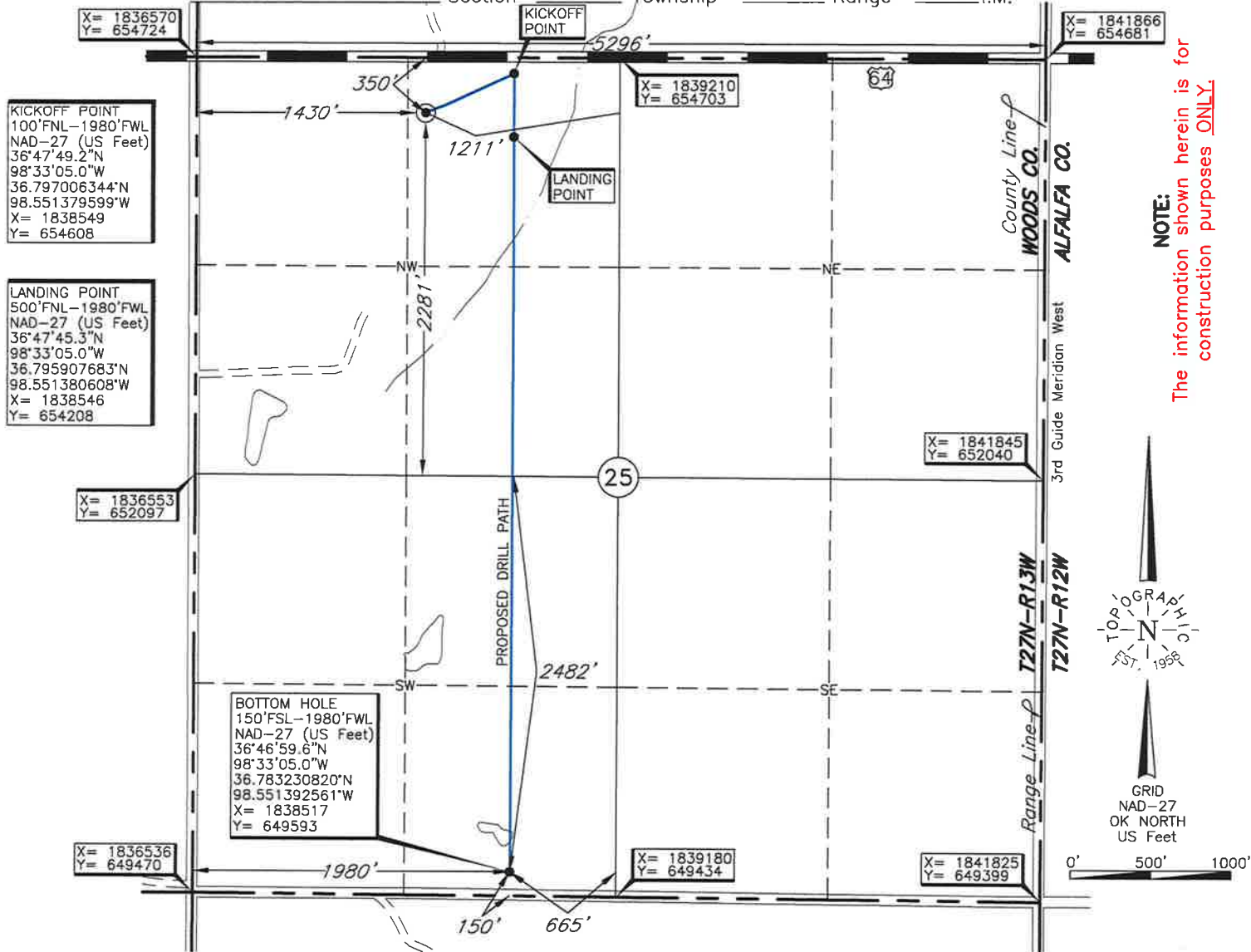
API: 151 24537

Certificate of Authorization No. 1293 LS

WOODS

County, Oklahoma

350'FNL-1430'FWL Section 25 Township 27N Range 13W I.M.



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

Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC

Lease Name: MURROW 2713

Well No.: 2-25H

**ELEVATION:**

1365' Gr. at Stake

Topography & Vegetation Loc. fell in terraced pasture.

Good Drill Site? Yes Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From North off US Hwy. 64

Distance & Direction from Hwy Jct or Town From Alva, OK, go East on US Hwy. 64 ±6 miles to the NW Cor. of Sec. 25-T27N-R13W.

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

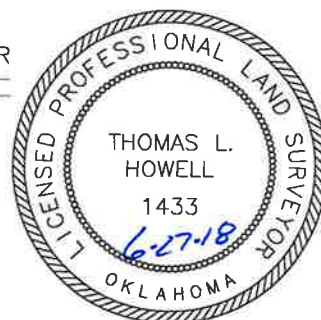
DATUM: NAD-27  
LAT: 36°47'46.8"N  
LONG: 98°33'11.7"W  
LAT: 36.796322973°N  
LONG: 98.553258364°W  
STATE PLANE  
COORDINATES: (US Feet)  
ZONE: OK NORTH  
X: 1837997  
Y: 654363

Invoice # 296952 Date of Drawing: June 26, 2018  
Date Staked: June 25, 2018 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



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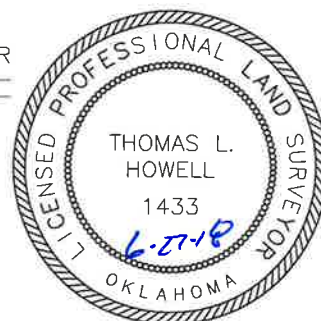
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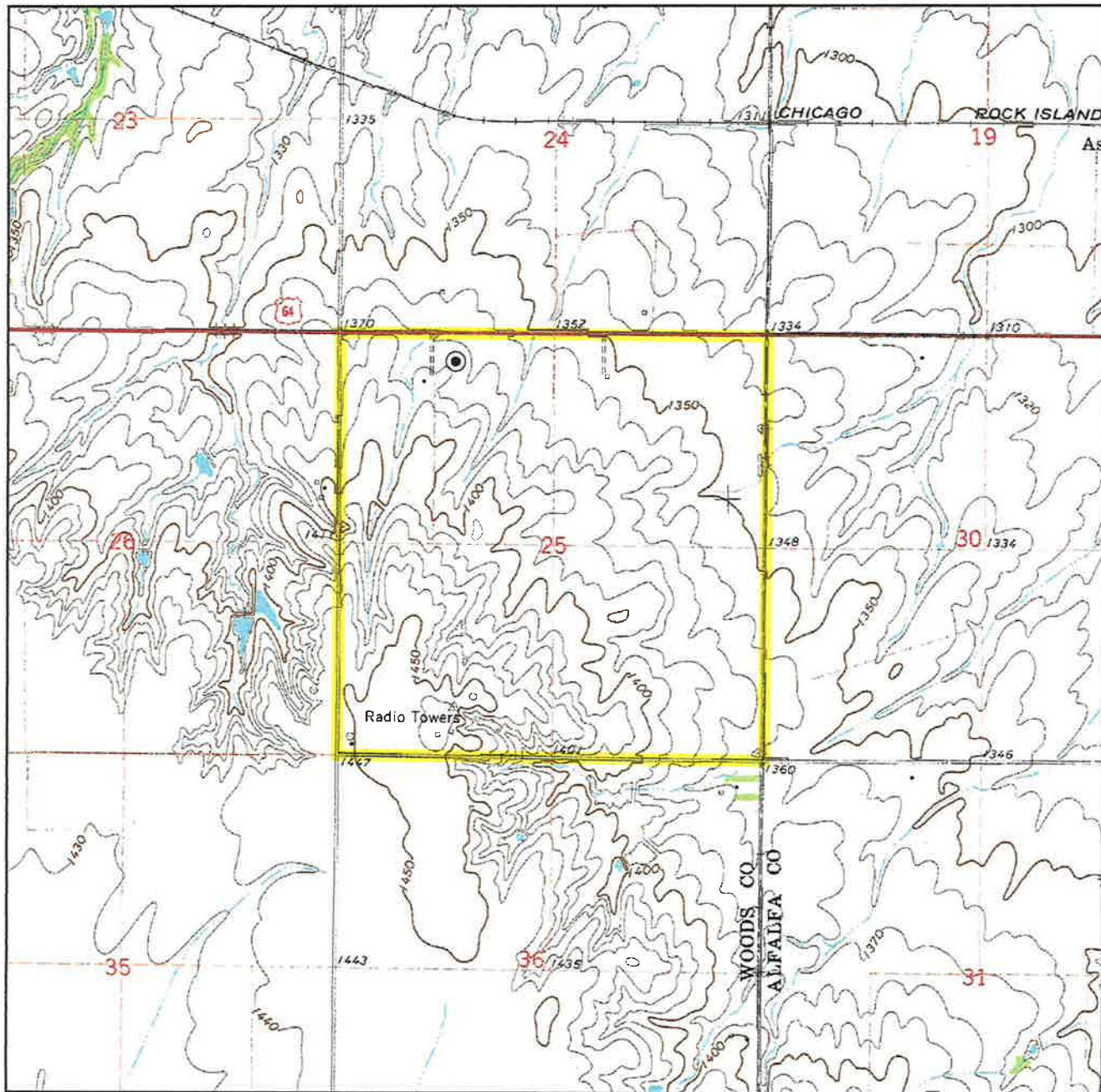
# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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. 25 Twp. 27N Rng. 13W IM

County WOODS State OK

Operator SANDRIDGE EXPLORATION & PRODUCTION, LLC

Description 350'FNL-1430'FWL

Lease MURROW 2713 2-25H

Elevation 1365' 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.



**TOPOGRAPHIC**  
LOYALTY INNOVATION LEGACY

**LAND SURVEYORS OF OKLAHOMA**

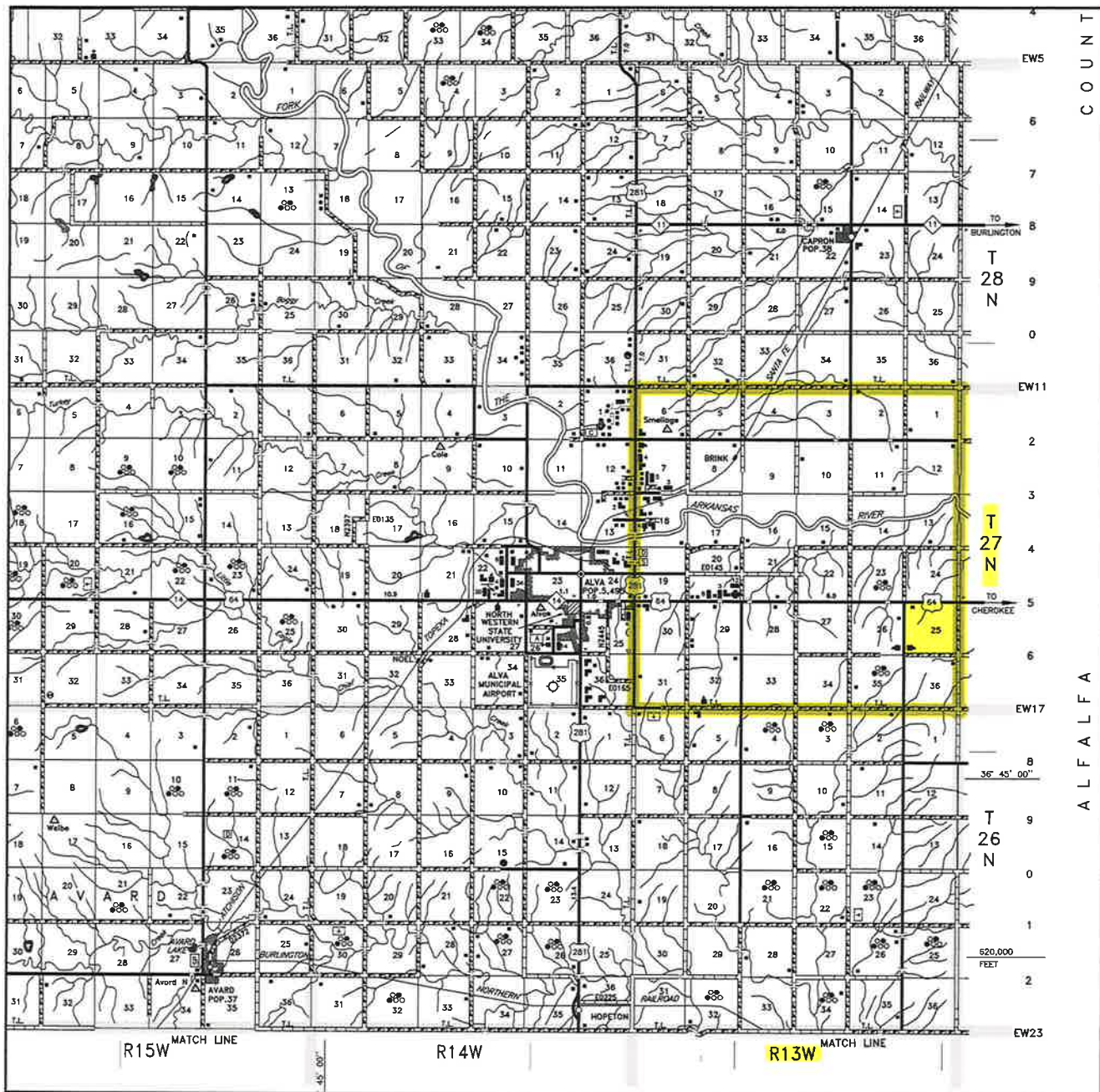
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## VICINITY MAP



Scale: 1" = 3 Miles

Sec. 25 Twp. 27N Rng. 13W IM

County WOODS State OK

Operator SANDRIDGE EXPLORATION & PRODUCTION, LLC



LAND SURVEYORS OF OKLAHOMA