

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

API NUMBER: 071 24910 A

Approval Date: 06/26/2019
Expiration Date: 12/26/2020

Straight Hole Oil & Gas

Amend reason: MOVE SHL

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 19 Twp: 25N Rge: 1E County: KAY
SPOT LOCATION: S2 NE SE NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 1818 330

Lease Name: ETU Well No: 19-4 Well will be 330 feet from nearest unit or lease boundary.
Operator Name: SNR NORTHERN OKLAHOMA OPERATING LLC Telephone: 4056085610 OTC/OCC Number: 24280 0

SNR NORTHERN OKLAHOMA OPERATING LLC
PO BOX 18251
OKLAHOMA CITY, OK 73154-0251

ROBERT O BURR, ET AL
5477 GULF STAR CT
FORT COLLINS CO 80528

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

	Name	Depth	Name	Depth
1	TONKAWA	2296	6	
2	LAYTON	3136	7	
3	SKINNER	3956	8	
4	MISSISSIPPI CHAT	4186	9	
5	MISSISSIPPI LIME	4216	10	

Spacing Orders: 65738
611591

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 5000 Ground Elevation: 959

Surface Casing: 260

Depth to base of Treatable Water-Bearing FM: 210

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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: 5000 Average: 3000

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

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36722
H. CLOSED SYSTEM=STEEL PITS (REQUIRED - CHIKASKIA RIVER)

Notes:

This permit does not address the right of entry or settlement of surface damages.
The duration of this permit is 18 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
HYDRAULIC FRACTURING	<p>6/19/2019 - G71 - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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,</p> <p>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</p>
SPACING - 611591	<p>12/17/2019 - G56 - (UNIT) SE4 NE4 19-25N-1E CLARIFY/MODIFY 65738 TO INCLUDE MSSLM</p>
SPACING - 65738	<p>12/17/2019 - G56 - (UNIT) SE4 NE4 19-25N-1E EST EAST TONKAWA UNIT FOR TNKW, LYTN, SKNR, MSSCT, OTHERS</p>

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 Wireless Way, Okla. City, OK, 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

KAY

County, Oklahoma

API 071-24910 A

1818'FNL-330'FEL

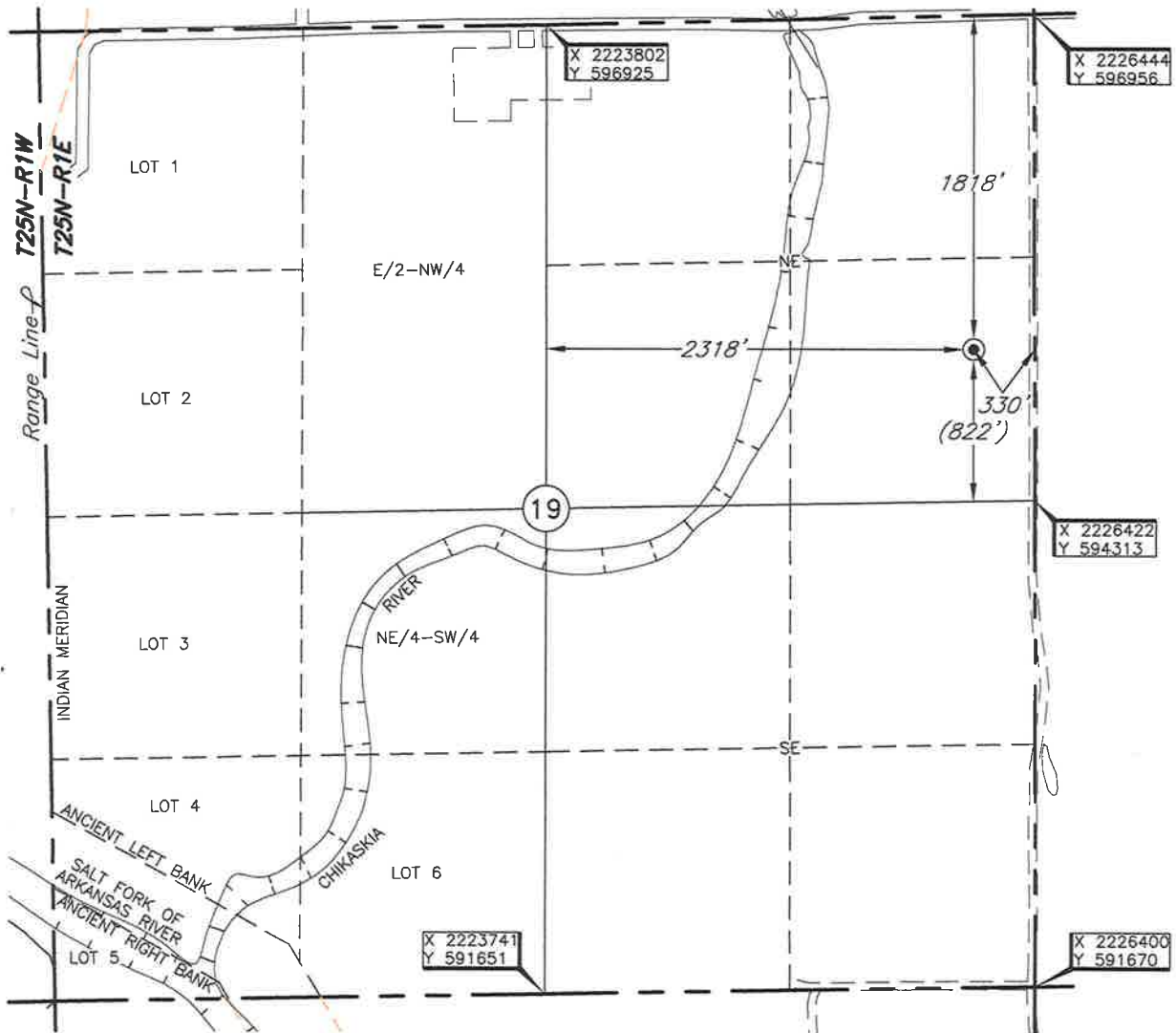
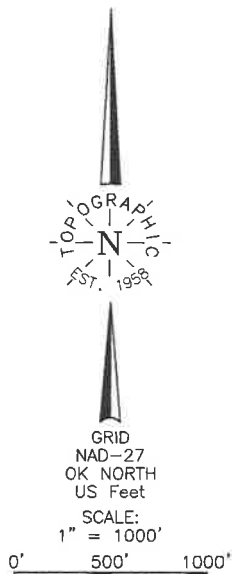
Section 19

Township

25N

Range

1E I.M.



Distances shown in (parenthesis) are calculated based upon the Quarter Section being 2640 feet, those shown in [brackets] are based on GLO (General Land Office) distances and have not been measured.

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

Operator: SIENA NATURAL RESOURCES

Lease Name: ETU

Well No.: 19-4

ELEVATION:

961' Gr. at Stake

Topography & Vegetation Location fell in sloped wheat field

Good Drill Site? Yes

Reference Stakes or Alternate Location
Stakes Set None

Best Accessibility to Location From East off lease road

Distance & Direction

from Hwy Jct or Town From the Jct. of US. Hwy. 77 S & US. Hwy. 77 E in Tonkawa, Okla., go ±5.5 miles East on US. Hwy. 77, then ±3 miles South, then ±1 mile West to the NE Cor. of Sec. 19-T25N-R1E

Revision ☒ A

Date of Drawing: Dec. 19, 2019

Project # 127639

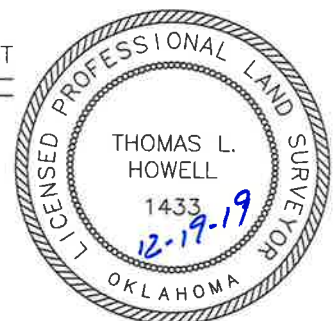
Date Staked: Dec. 18, 2019

ST

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 Lic. No. 1433



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

DATUM: NAD-27
LAT: 36°37'56.8"N
LONG: 97°13'46.1"W
LAT: 36.63244307°N
LONG: 97.22946203°W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 2226099
Y: 595134

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

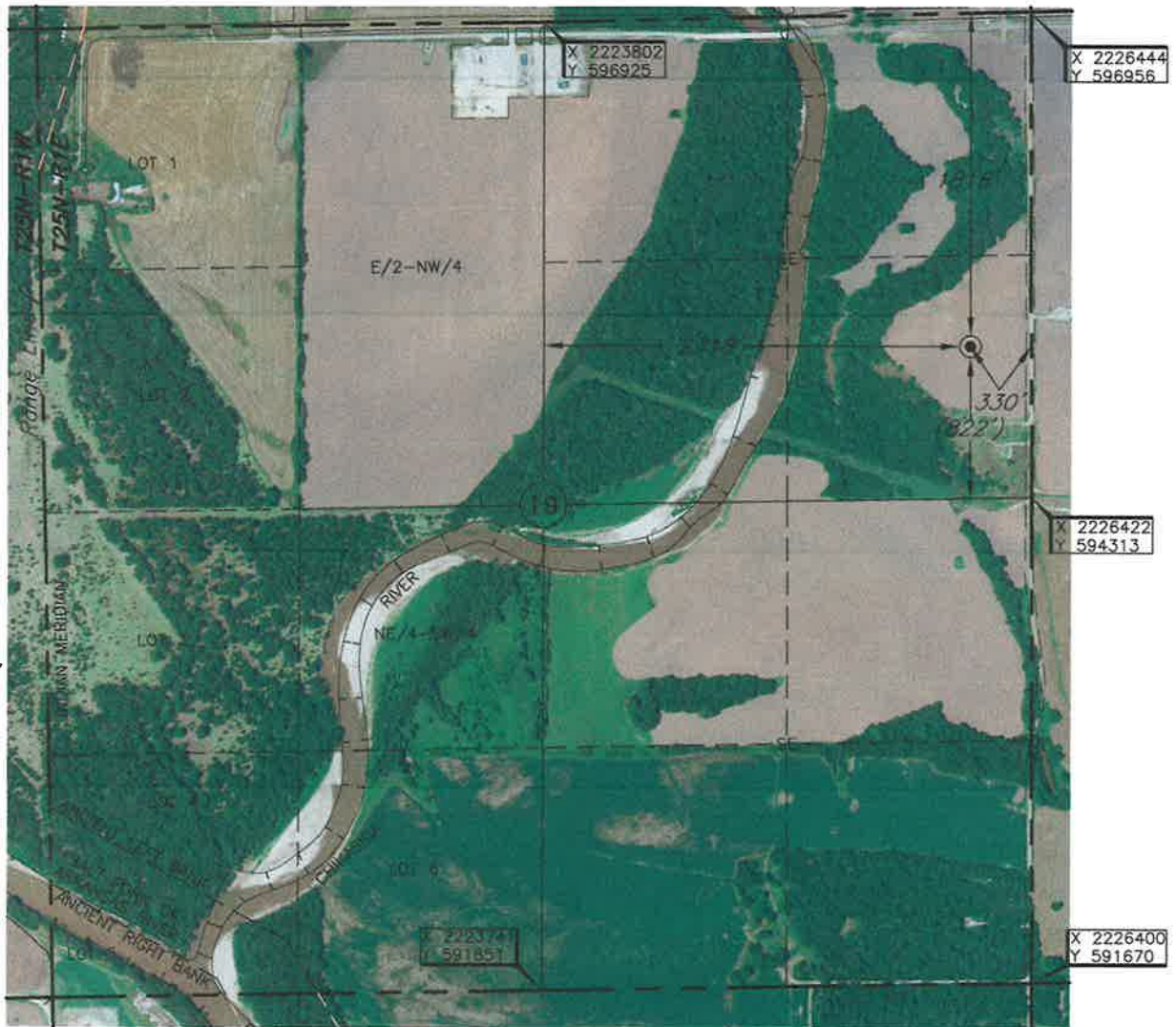
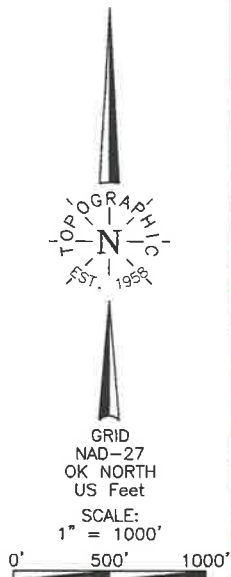
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County, Oklahoma

1818'FNL-330'FEL Section 19 Township 25N Range 1E I.M.



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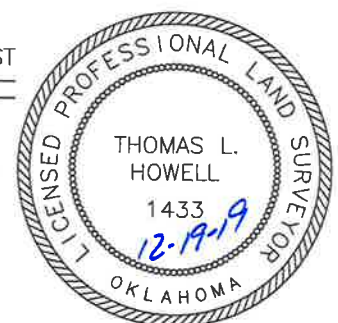
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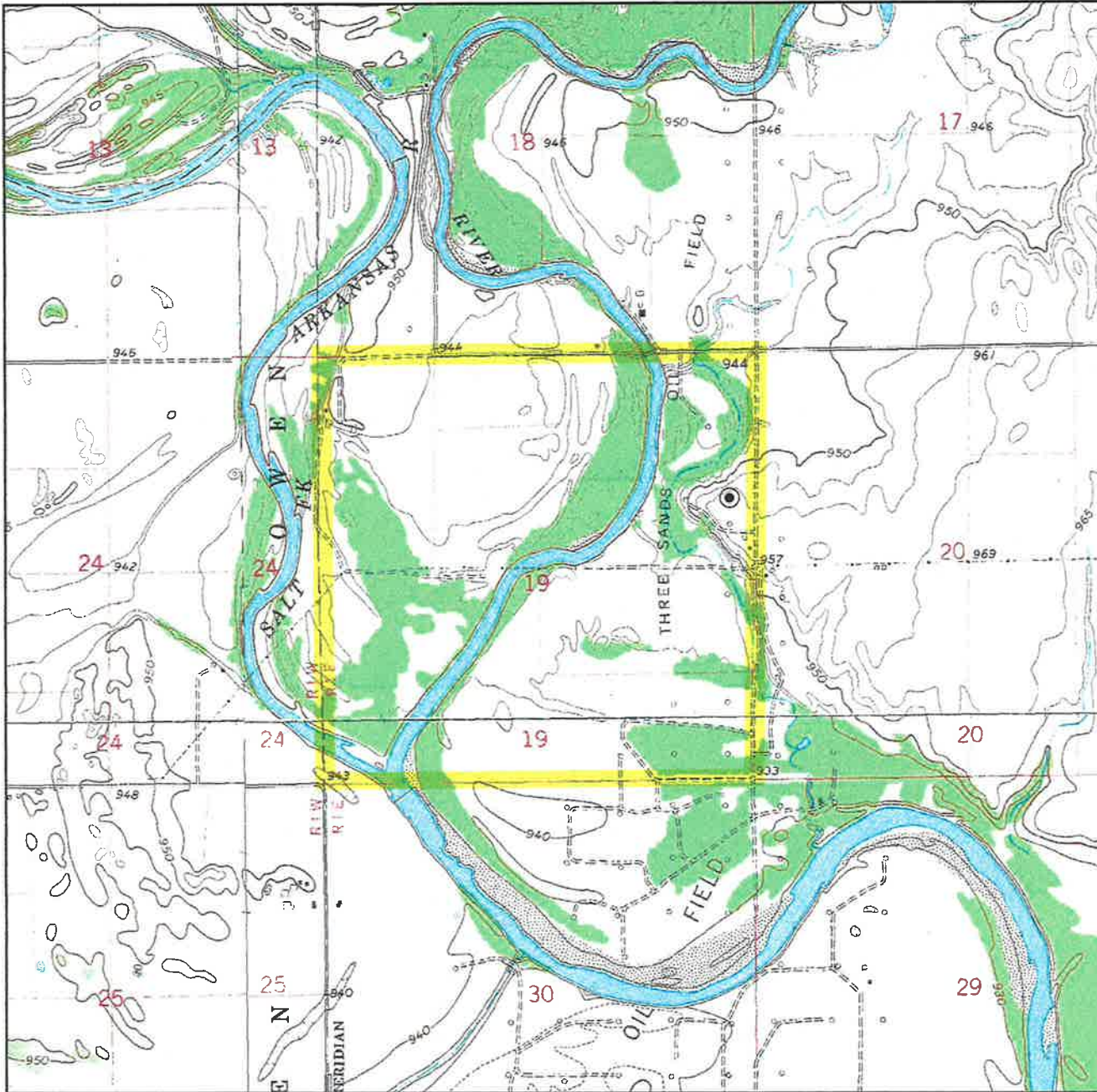
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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. 19 Twp. 25N Rng. 1E I.M.

County KAY State OK

Operator SIENA NATURAL RESOURCES

Description 1818'FNL-330'FEL

Lease ETU 19-4

Elevation 961' 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

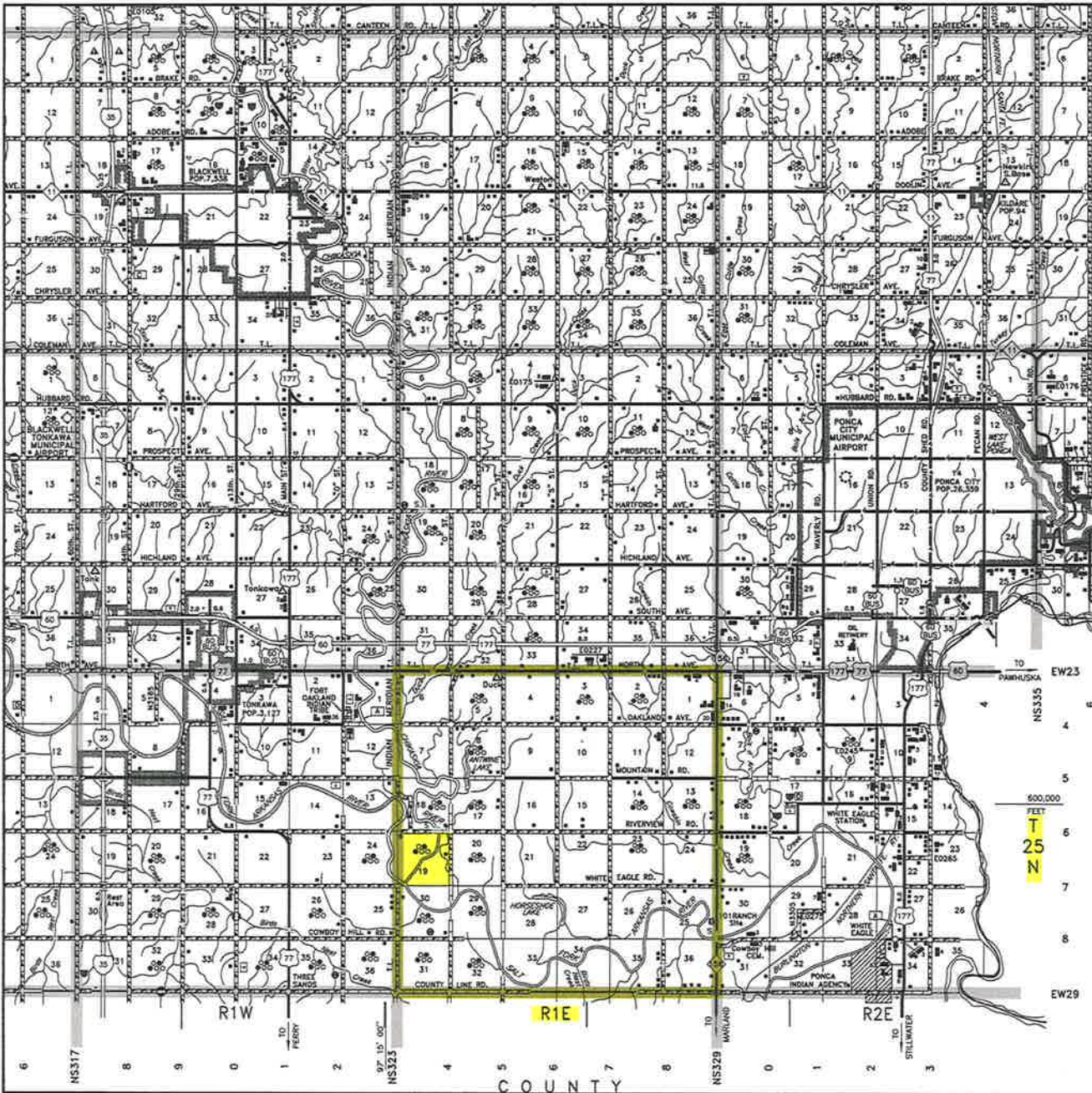
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Dec. 19, 2019

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VICINITY MAP



Scale: 1" = 3 Miles

Sec. 19 Twp. 25N Rng. 1E I.M.

County KAY State OK

Operator SIENA NATURAL RESOURCES



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

LAND SURVEYORS OF OKLAHOMA