API NUMBER: 071 24924

Directional Hole Oil & Gas

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

Approval Date: 02/10/2021
Expiration Date: 08/10/2022

# PERMIT TO DRILL

WELL LOCATION: Section: 32 Township: 26N Range: 2E County: KAY

SPOT LOCATION: SW SE NE NE FEET FROM QUARTER: FROM **NORTH** FROM **EAST**

SECTION LINES: **1245** **600**

**Lease Name:** **OTTO** **Well No:** **3-33** **Well will be** **600** **feet from nearest unit or lease boundary.**

**Operator Name:** **AEXCO PETROLEUM INC** Telephone: 3038319226 OTC/OCC Number: 17342 0

AEXCO PETROLEUM INC
1675 BROADWAY STE 1900
DENVER, CO 80202-4631

MCDONALD SERVICES, LLC
339 SOUTH PINE STREET
PONCA CITY OK 74601

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

| | Name | Code | Depth |
|---|---|---|---|
| 1 | MISSISSIPPI CHAT | 401MSSCT | 3670 |
| 2 | MISSISSIPPI LIME | 351MSSLM | 3680 |

Spacing Orders: 423430 Location Exception Orders: 716408 Increased Density Orders: 716513

Pending CD Numbers: No Pending Working interest owners' notified: *** Special Orders: No Special Orders

Total Depth: 4475 Ground Elevation: 975 **Surface Casing: 450** Depth to base of Treatable Water-Bearing FM: 210

Under Federal Jurisdiction: No
Fresh Water Supply Well Drilled: No
Surface Water used to Drill: Yes

**Approved Method for disposal of Drilling Fluids:**

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 21-37521

H. (Other) CLOSED SYSTEM - STEEL PITS PER OPERATOR REQUEST

## PIT 1 INFORMATION

**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:** AP/TE DEPOSIT
**Pit Location Formation:** TERRACE

## DIRECTIONAL HOLE 1

Section: 33 Township: 26N Range: 2E Meridian: IM
County: KAY
Spot Location of End Point: SW NE SW NW
Feet From: **NORTH** 1/4 Section Line: 1891
Feet From: **WEST** 1/4 Section Line: 879

Measured Total Depth: 4475
True Vertical Depth: 4100
End Point Location from Lease, Unit, or Property Line: 879

**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 | [2/4/2021 - GC2] - OCC 165:10-3-10 REQUIRES:<br><br>1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN;<br><br>2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS. FORM 6000NHF SHALL BE USED AND IS FOUND AT THIS LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,<br><br>3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG |
| INCREASED DENSITY - 716513 (202002032) | [2/8/2021 - GC2] - (IRR UNIT) N2, SE4, & E2 SW4 33 & W2 NW4 34-26N-2E<br>X423430 MSSLM N2 33-26N-2E<br>1 WELL<br>NO OP. NAMED<br>1-22-2021 |
| LOCATION EXCEPTION - 716408 (202002033) | [2/8/2021 - GC2] - (I.O.)(IRR UNIT) N2, SE4, & E2 SW4 33 & W2 NW4 34-26N-2E<br>X423430 MSSCT, MSSLM N2 33-26N-2E<br>COMPL. INT. NCT 660' FNL, NCT 660' FWL<br>NO OP. NAMED<br>1-14-2021 |
| SPACING - 423430 | [2/8/2021 - GC2] - (640)(IRR UNIT) N2, SE4, & E2 SW4 33 & W2NW4 34-26N-2E<br>EST MSSCT, MISSLM, OTHERS |

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# WELL LOCATION

OTTO #3-33
AXECO PETROLEUM INC.
SECTION 32, TOWNSHIP 26N, RANGE 2E, I.M.
KAY COUNTY, OKLAHOMA

GRID
NAD-27
OK NORTH
US FEET

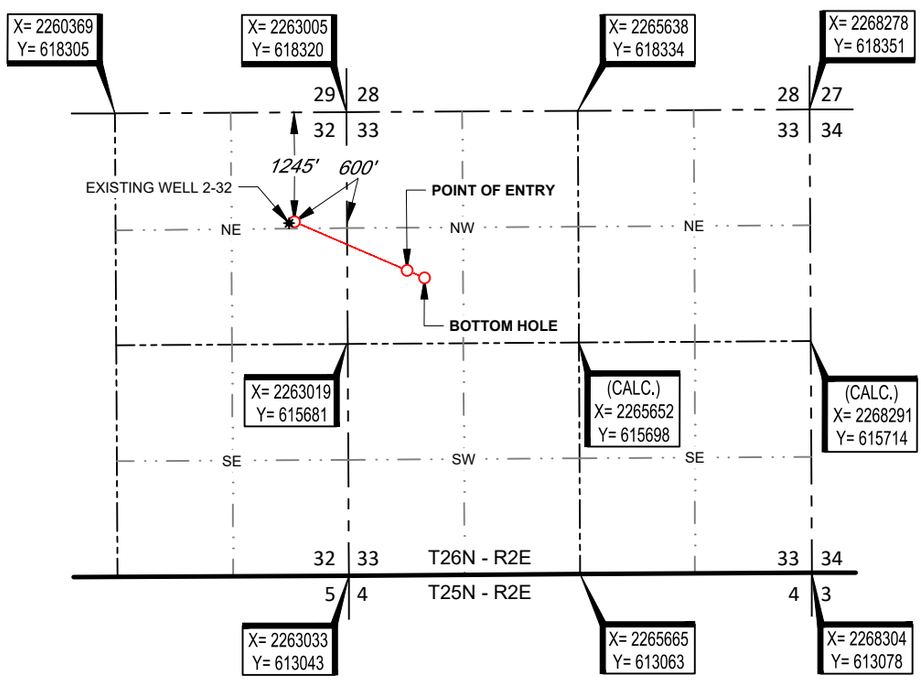
SCALE: 1" = 2000'

0' 1000' 2000'

## LEGEND

- SECTION LINE
- TOWNSHIP LINE
- QUARTER SECTION LINE
- 16TH LINE
- PROPOSED WELL BORE
- EXISTING WELL

| SURFACE LOCATION | POINT OF ENTRY | BOTTOM HOLE |
|---|---|---|
| 1245' FNL & 600' FEL | MD: 4001.05' | MD: 4473.37' |
| NAD-27 | TVD: 3680' | TVD: 4100' |
| X= 2262411 | 1805' FNL & 681' FWL | 1891' FNL & 879' FWL |
| Y= 617072 | SECTION 33 | SECTION 33 |
| LAT.: 36°41'30.6" N | NAD-27 | NAD-27 |
| LONG.: 97°06'18.1" W | X= 2263695 | X= 2263894 |
| LAT.: 36.691844° N | Y= 616519 | Y= 616433 |
| LONG.: 97.105027° W | LAT.: 36°41'25.1" N | LAT.: 36°41'24.2" N |
| ELEV: 975' | LONG.: 97°06'02.4" W | LONG.: 97°06'00.0" W |
| | LAT.: 36.690293° N | LAT.: 36.690053° N |
| | LONG.: 97.100665° W | LONG.: 97.099991° W |




NOTE:
TOPOGRAPHY FELL ON LEVEL EXISTING PAD,
15' NORTH AND 60' E OF OTTO # 2 WELL HEAD.

N 08°01'22" E 11112.45' TO PONCA CITY
AIRPORT RUNWAY #35.

LICENSED PROFESSIONAL LAND SURVEYOR
DAN W.
ROGERS
1200
OKLAHOMA

SURVEYOR'S CERTIFICATE:
I, DAN W. ROGERS, AN OKLAHOMA LICENSED LAND SURVEYOR AND AN AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, DO HEREBY CERTIFY TO THE INFORMATION SHOWN HEREIN.

Dan W. Rogers, P.L.S. No. 1200
Authorized Agent of Topographic Land Surveyors


TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
13800 WIRELESS WAY • OKLAHOMA CITY, OKLAHOMA 73134
TELEPHONE: (405) 843-4847 OR (800) 654-3219
CERTIFICATE OF AUTHORIZATION NO. 1292 LS
WWW.TOPOGRAPHIC.COM


LEASE NAME & WELL NO. OTTO #3-33

SECTION 32 TWP 26N RGE 2E MERIDIAN I.M.
COUNTY KAY STATE OKLAHOMA
DESCRIPTION 1245' FNL & 600' FEL

| OTTO #3-33 | REVISION: INT | DATE |
|---|---|---|
| | KEU | 01/26/2021 |
| DATE: 01/20/2021 | KEU | 02/03/2021 |
| FILE:LO_OTTO_#3-33_NAD27_REV2 | | |
| DRAWN BY: KEU | | |
| SHEET : 1 OF 2 | | |

NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 14"
2. ALL BEARINGS SHOWN HEREON ARE GRID ACCORDING TO THE RESULTS OF STATIC GPS OBSERVATIONS PROCESSED THROUGH OPUS ON THE CONTROL POINT OCCUPIED WHILE MEASURING SAID LINES. OPUS RESULTS ARE CORRELATED TO OKLAHOMA, NORTH ZONE, NAD 27 - HORIZONTAL AND THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT/LOCATION, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY AXECO PETROLEUM INC.. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT/LOCATION, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
4. POINT OF ENTRY, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR AS SHOWN AND ARE NOT SURVEYED LOCATIONS.
5. THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

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SCALE: 1" = 2000'

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LEGEND

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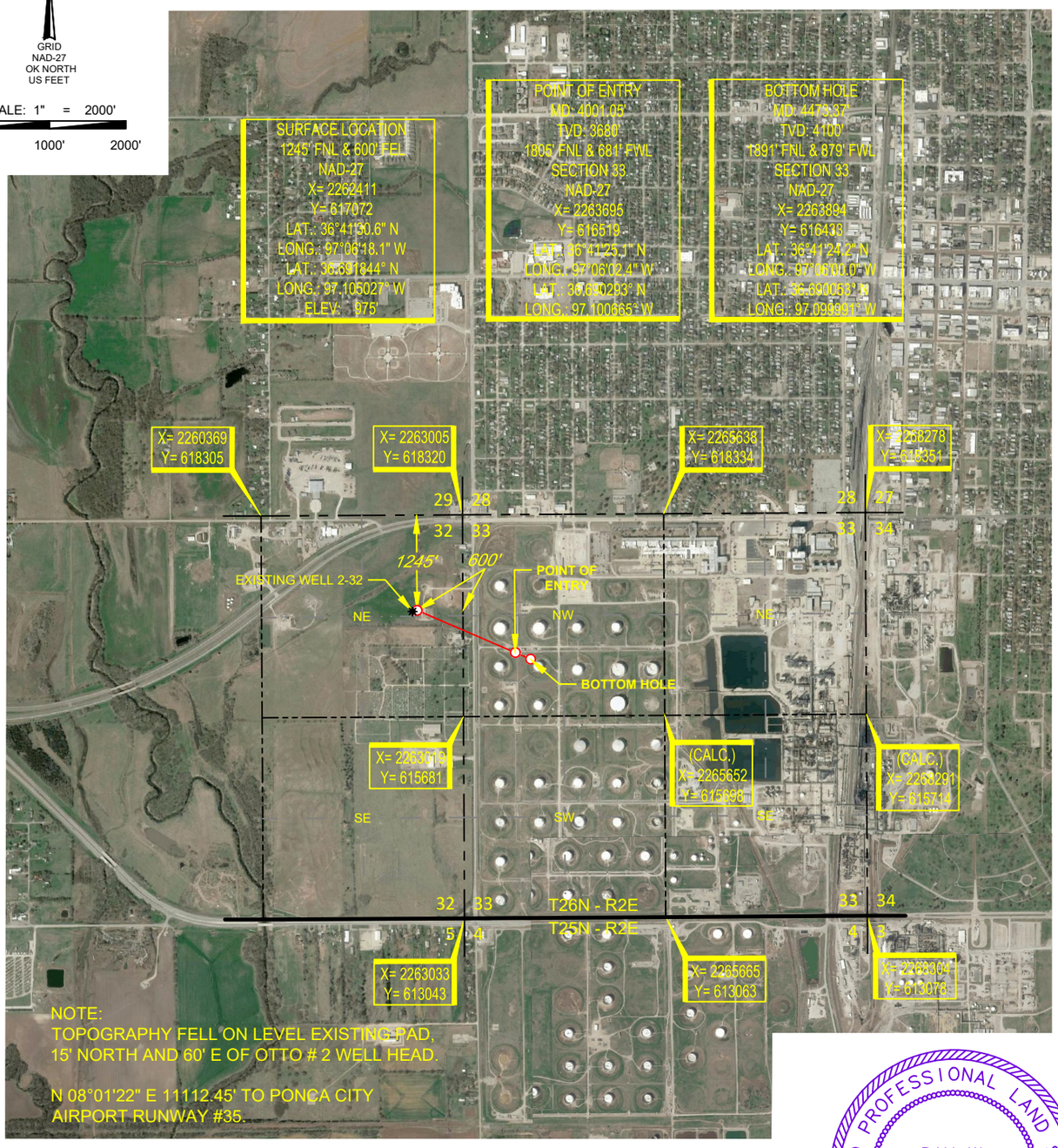


LICENSED PROFESSIONAL LAND SURVEYOR
DAN W. ROGERS
1200
OKLAHOMA

SURVEYOR'S CERTIFICATE:

I, DAN W. ROGERS, AN OKLAHOMA LICENSED LAND SURVEYOR AND AN AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, DO HEREBY CERTIFY TO THE INFORMATION SHOWN HEREIN.

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LEASE NAME & WELL NO. OTTO #3-33

SECTION 32 TWP 26N RGE 2E MERIDIAN I.M.

COUNTY KAY STATE OKLAHOMA

DESCRIPTION 1245' FNL & 600' FEL

| OTTO #3-33 | REVISION: | |
|---|---|---|
| | INT | DATE |
| | KEU | 01/26/2021 |
| DATE: 01/20/2021 | KEU | 02/03/2021 |
| FILE:LO_OTTO_#3-33_NAD27_REV2 | | |
| DRAWN BY: KEU | | |
| SHEET : 2 OF 2 | | |

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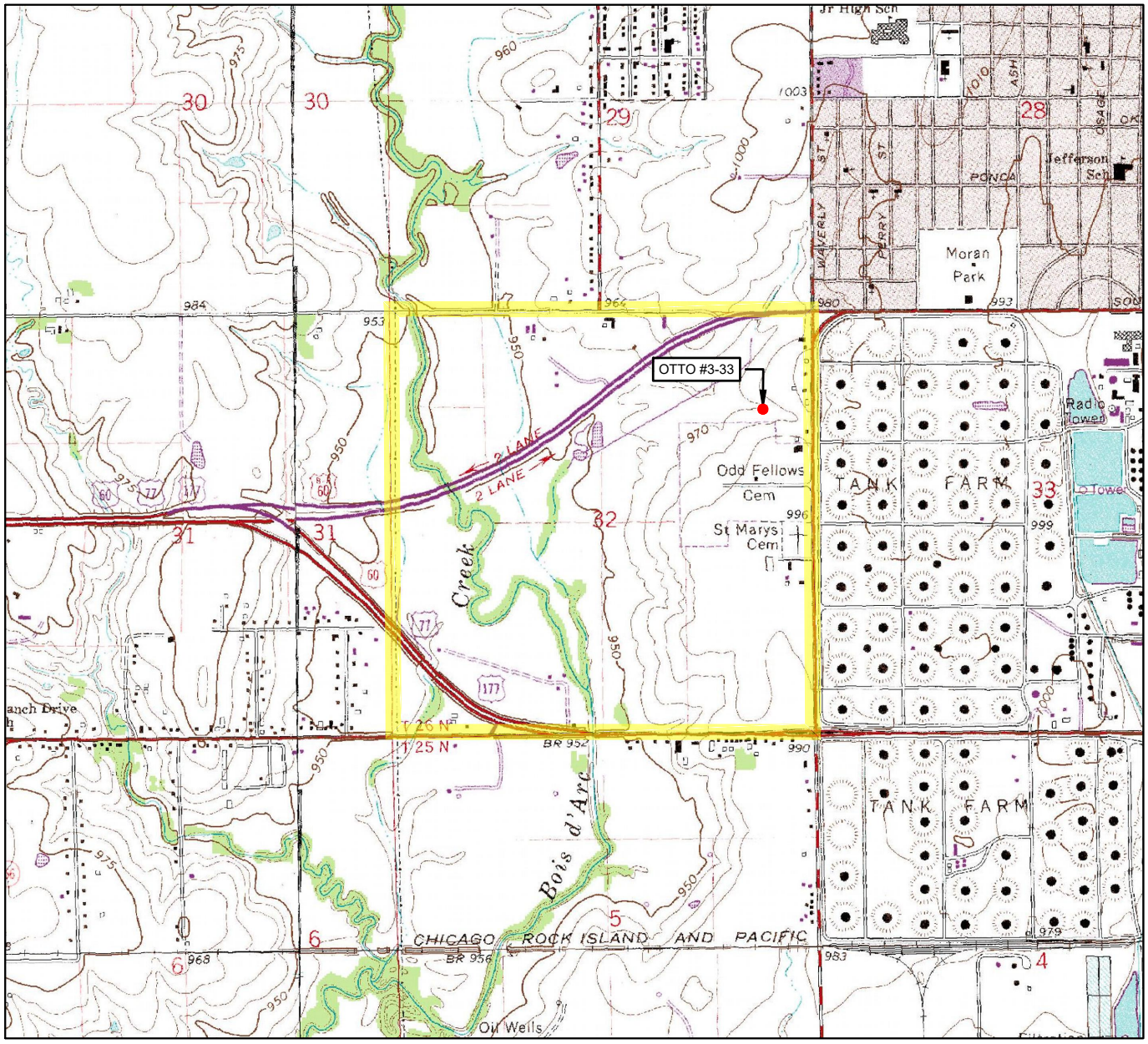
# LOCATION & ELEVATION VERIFICATION MAP




LEASE NAME & WELL NO. OTTO #3-33

SECTION 32 TWP 26N RGE 2E MERIDIAN I.M.

COUNTY KAY STATE OKLAHOMA

DESCRIPTION 1245' FNL & 600' FEL

ELEVATION 975'

SCALE: 1" = 2000'

0' 1000' 2000'

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ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM, NORTH ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET AND THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.

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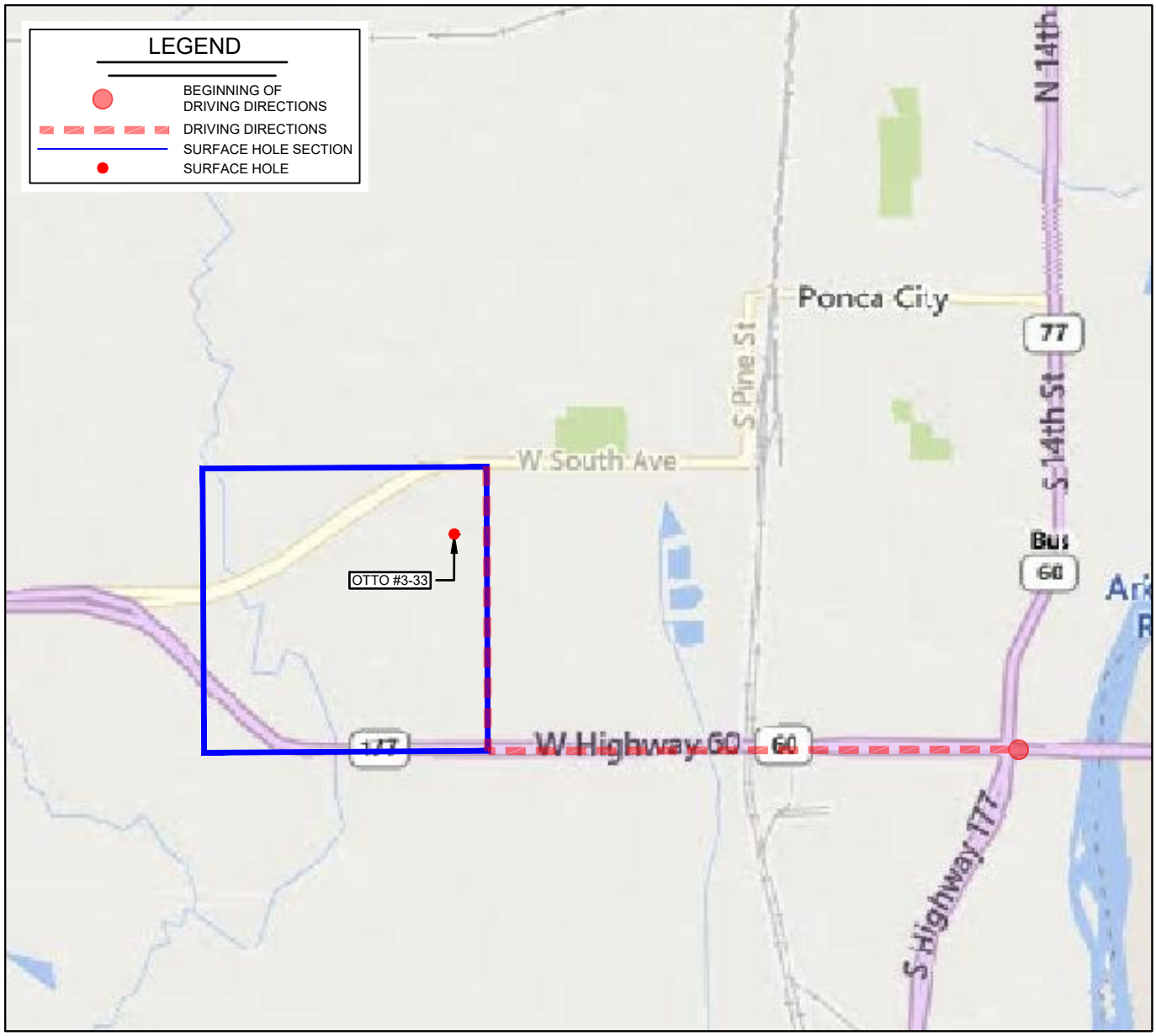
# VICINITY MAP




LEASE NAME & WELL NO. OTTO #3-33

SECTION 32 TWP 26N RGE 2E MERIDIAN I.M.

COUNTY KAY STATE OKLAHOMA

DESCRIPTION 1245' FNL & 600' FEL

DISTANCE & DIRECTION

FROM THE JCT OF US HWY 177 AND US HWY 60 ON THE SOUTH SIDE OF PONCA CITY, OK, GO WEST ON US HWY 60 FOR 1.8 MILES, THEN GO NORTH 1.0 MILE TO THE NE CORNER OF SECTION 32, T26N, R2E.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY AXECO PETROLEUM INC.. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

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SCALE: 1" = 3000'

0' 1500' 3000'

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