

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

API NUMBER: 071 24878

Approval Date: 06/15/2017

Expiration Date: 12/15/2017

Directional Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 32 Twp: 26N Rge: 2E

County: KAY

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 1260 660

Lease Name: OTTO

Well No: 2-32

Well will be 660 feet from nearest unit or lease boundary.

Operator Name: AEXCO PETROLEUM INC

Telephone: 3038631110

OTC/OCC Number: 17342 0

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

MCDONALD SERVICES, LLC
339 S. PINE ST.
PONCA CITY OK 74601

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

	Name	Depth		Name	Depth
1	HOOVER	1573	6	MISSISSIPPI	3683
2	TONKAWA	2173	7	WILCOX	4023
3	LAYTON	2743	8		
4	OSWEGO	3283	9		
5	SKINNER	3450	10		

Spacing Orders: 629922

Location Exception Orders:

Increased Density Orders: 656167

Pending CD Numbers:

Special Orders:

Total Depth: 4200

Ground Elevation: 974

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

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 BED AQUIFER

Pit Location Formation: WELLINGTON

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 17-32665

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

DIRECTIONAL HOLE 1

Sec 32 Twp 26N Rge 2E County KAY

Spot Location of End Point: nn C SE NE

Feet From: NORTH 1/4 Section Line: 1980

Feet From: EAST 1/4 Section Line: 660

Measured Total Depth: 4200

True Vertical Depth: 4120

End Point Location from Lease,

Unit, or Property Line: 660

Notes:

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
HYDRAULIC FRACTURING	5/30/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE
INCREASED DENSITY - 656167	6/15/2017 - G75 - N2 32-26N-2E X629922 MISS 1 WELL AEXCO PETRO., INC. 9-19-2016
SPACING - 629922	6/15/2017 - G75 - (320) N2 32-26N-2E LD NE4 NCT 660' FB VAC 118139 MSSCT NE4 VAC 120566 MSSP (LESS MSSCT) EST HOVR, TNKW, LYT, OSWG, SKNR, MISS, WLCX

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.

071 24878 OTTO 2-32

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

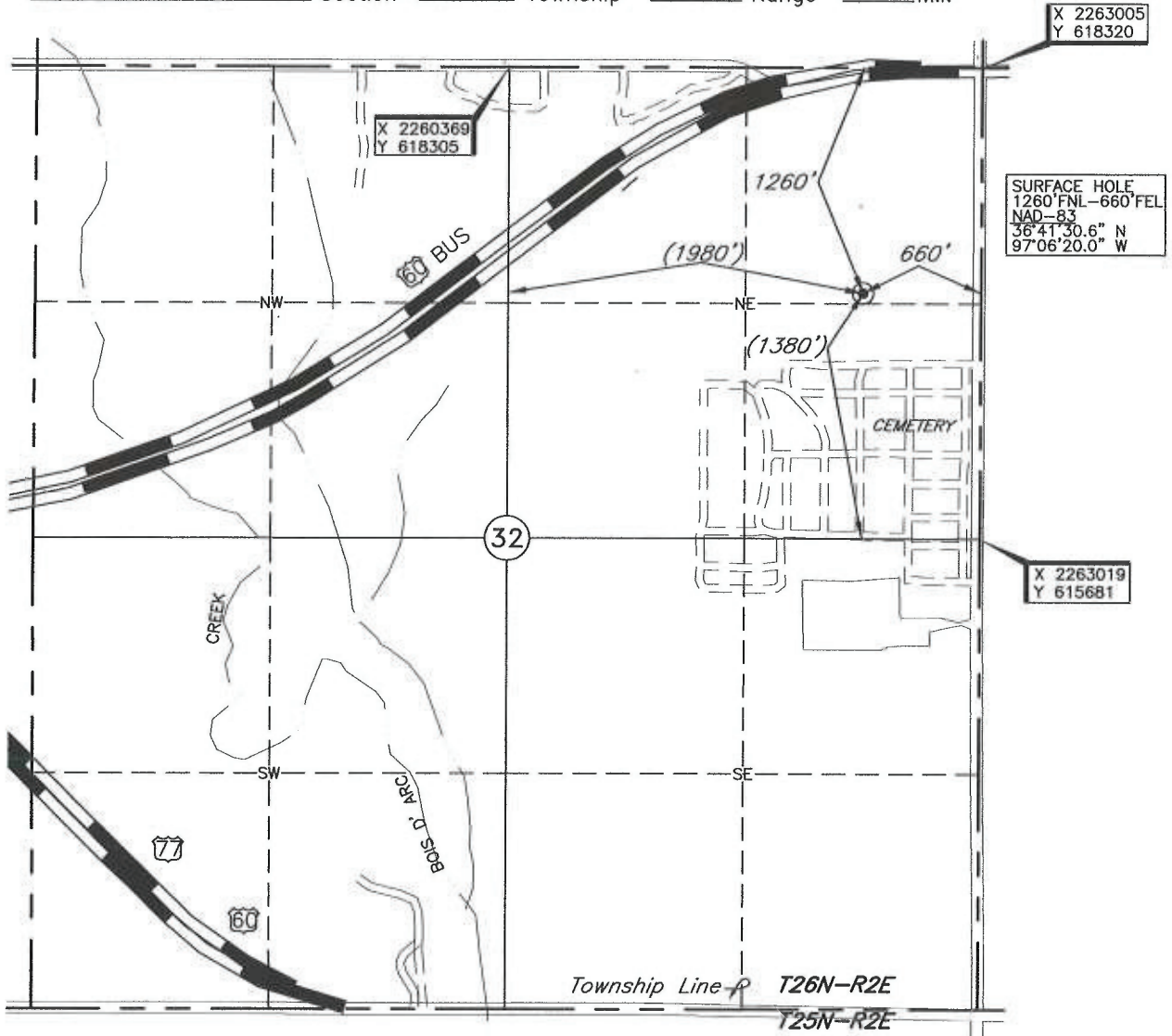
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293. LS

KAY

County, Oklahoma

API 071-24878

1260'FNL - 660'FEL Section 32 Township 26N Range 2E 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 on the ground.

NOTE:
The information shown herein is for construction purposes ONLY.

Operator: AEXCO PETROLEUM, INC.

Lease Name: OTTO

Well No.: 2-32

ELEVATION:

974' Gr. at Stake

Topography & Vegetation Loc. fell in sloping pasture, ±135' North of fence

Good Drill Site? Yes

Reference Stakes or Alternate Location
Stakes Set None

Best Accessibility to Location From North off US Hwy. BUS 60

Distance & Direction

from Hwy Jct or Town From Jct. St. Hwy. 156 South & US Hwy. BUS 60, go ±2.0 mi. East on US Hwy. BUS 60 to the NE Cor. of Sec. 32-T26N-R2E

Date of Drawing: Apr. 21, 2016

Invoice # 259618 Date Staked: Apr. 20, 2016

AC

CERTIFICATE:

I, Thomas L. Howell a 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.

DATUM: NAD-27
LAT: 36°41'30.5"N
LONG: 97°06'18.8"W
LAT: 36.691800922° N
LONG: 97.105233626° W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 2262351
Y: 617056