

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

API NUMBER: 003 23296

Approval Date: 11/15/2017

Expiration Date: 05/15/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 30 Twp: 25N Rge: 11W County: ALFALFA
SPOT LOCATION: ☐ NW ☐ NW ☐ NW ☒ NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 250 2473

Lease Name: MACLEOD Well No: 3-19H Well will be 250 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

JACKIE & SHERRY GREEN
13803 CR. 580
CARMEN OK 73726

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

| Name | Depth | Name | Depth |
|--------------|-------|------|-------|
| 1 MISS'AN LM | 5960 | 6 | |
| 2 | | 7 | |
| 3 | | 8 | |
| 4 | | 9 | |
| 5 | | 10 | |

Spacing Orders: 93336

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201706571
201706572

Special Orders:

Total Depth: 11400 Ground Elevation: 1315 Surface Casing: 1000 Depth to base of Treatable Water-Bearing FM: 300

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: 80000 Average: 8000

E. Haul to Commercial pit facility: Sec. 10 Twn. 26N Rng. 15W Cnty. 151 Order No: 563714

Is depth to top of ground water greater than 10ft below base of pit? Y

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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: CEDAR HILLS

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 19 Twp 25N Rge 11W County ALFALFA

Spot Location of End Point: NE NE NE NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 2600

Depth of Deviation: 5551

Radius of Turn: 573

Direction: 358

Total Length: 4949

Measured Total Depth: 11400

True Vertical Depth: 5985

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category

Description

DEEP SURFACE CASING

11/1/2017 - 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

11/1/2017 - 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; 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

PENDING CD - 201706571

11/15/2017 - G58 - 19-25N-11W
X93336 MPLM
1 WELL
NO OP NAMED
REC 10/24/2017 (MILLER)

PENDING CD - 201706572

11/15/2017 - G58 - (I.O.) 19-25N-11W
X93336 MPLM
COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 2640' FEL
NO OP NAMED
REC 10/24/2017 (MILLER)

SPACING - 93336

11/8/2017 - G58 - (640) 19-25N-11W
EXT 51771/88782 MPLM, OTHER

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003 23296 MACLEOD 3-19H

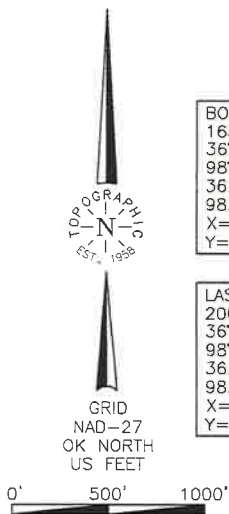
003-23296

ALFALFA

County, Oklahoma

250'FNL - 2805'FWL Section 30 Township 25N Range 11W I.M.

X 1878457
Y 596362



BOTTOM HOLE
165'FNL-2600'FWL
36°38'13.5" N
98°25'24.2" W
36.637075860" N
98.423398670" W
X=1875769
Y=596195

LAST PERF
200'FNL-2600'FWL
36°38'13.1" N
98°25'24.2" W
36.636979721" N
98.423398694" W
X=1875769
Y=596160

X 1873158
Y 593732

X 1878441
Y 593721

PENETRATION POINT & FIRST PERF
165'FSL-2600'FWL
36°37'24.5" N
98°25'24.2" W
36.623481193" N
98.423401789" W
X=1875747
Y=591246

X 1873146
Y 591082

X 1875789
Y 591081

PENETRATION POINT & FIRST PERF

X 1878425
Y 591079

X 1873136
Y 588446

X 1878410
Y 588437

X 1873126
Y 585809

X 1875763
Y 585802

X 1878396
Y 585794

Range Line
T25N-R12W
T25N-R11W

Operator: AEXCO PETROLEUM INC.
Lease Name: MACLEOD
Topography & Vegetation Loc. fell in terraced grass pasture, ±175' South of E-W saltwater line
Good Drill Site? Yes
Best Accessibility to Location From county road North of well location.
Distance & Direction From Hwy Jct or Town From Jct. St. Hwy. 45 E-W & St. Hwy. 8 N-S at Carmen, OK., go ±1.5 mi. North on St. Hwy. 8, then ±1.5 mi. North on county road, then ±1.0 mi. West to the NW Cor. of Sec. 30-T25N-R11W.

ELEVATION:
1315' Gr. at Stoke

[PENETRATION POINT, FIRST PERF, LAST PERF, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED NOT SURVEYED.]

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

Revision ☒ B Date of Drawing: Nov. 15, 2017
Invoice # 282959 Date Staked: Oct. 19, 2017 AC

CERTIFICATE:

I, Lee K. Goss, 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. 1778



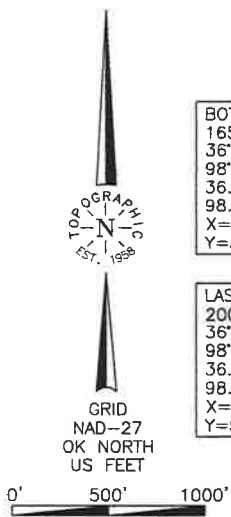
DATUM: NAD-27
LAT: 36°37'20.4" N
LONG: 98°25'21.7" W
LAT: 36.622343459° N
LONG: 98.422702999° W
STATE PLANE
COORDINATES (US FEET):
ZONE: OK NORTH
X: 1875950
Y: 590831

This information was gathered with a GPS receiver with ±1 foot horizontal accuracy.

ALFALFA

County, Oklahoma

250'FNL - 2805'FWL Section 30 Township 25N Range 11W I.M.



BOTTOM HOLE
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X=1875769
Y=596160

X 1873170
Y 596358

X 1875813
Y 596360

X 1878457
Y 596362

LOT 1

LOT 2

X 1873158
Y 593732

LOT 3

LOT 4

X 1873146
Y 591082

X 1875789
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Y=591246

E/2-SW/4

SE

Lot 1

Lot 2

X 1873136
Y 588446

Lot 3

Lot 4

X 1873126
Y 585809

X 1875763
Y 585802

X 1878410
Y 588437

X 1878396
Y 585794

PENETRATION POINT, FIRST PERF, LAST PERF, BOTTOM HOLE AND DRILL
PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

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Distance & Direction From Jct. St. Hwy. 45 E-W & St. Hwy. 8 N-S at Carmen, OK., go ±1.5 mi., North on St. Hwy. 8, then ±1.5 mi. North on county road, then ±1.0 mi. West to the NW Cor. of Sec. 30-T25N-R11W.
Reference Stakes or Alternate Location Stakes Set None
Well No.: 3-19H
ELEVATION: 1315' Gr. at Stake

Range Line-P T25N-R12W
T25N-R11W

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Revision ☒ B

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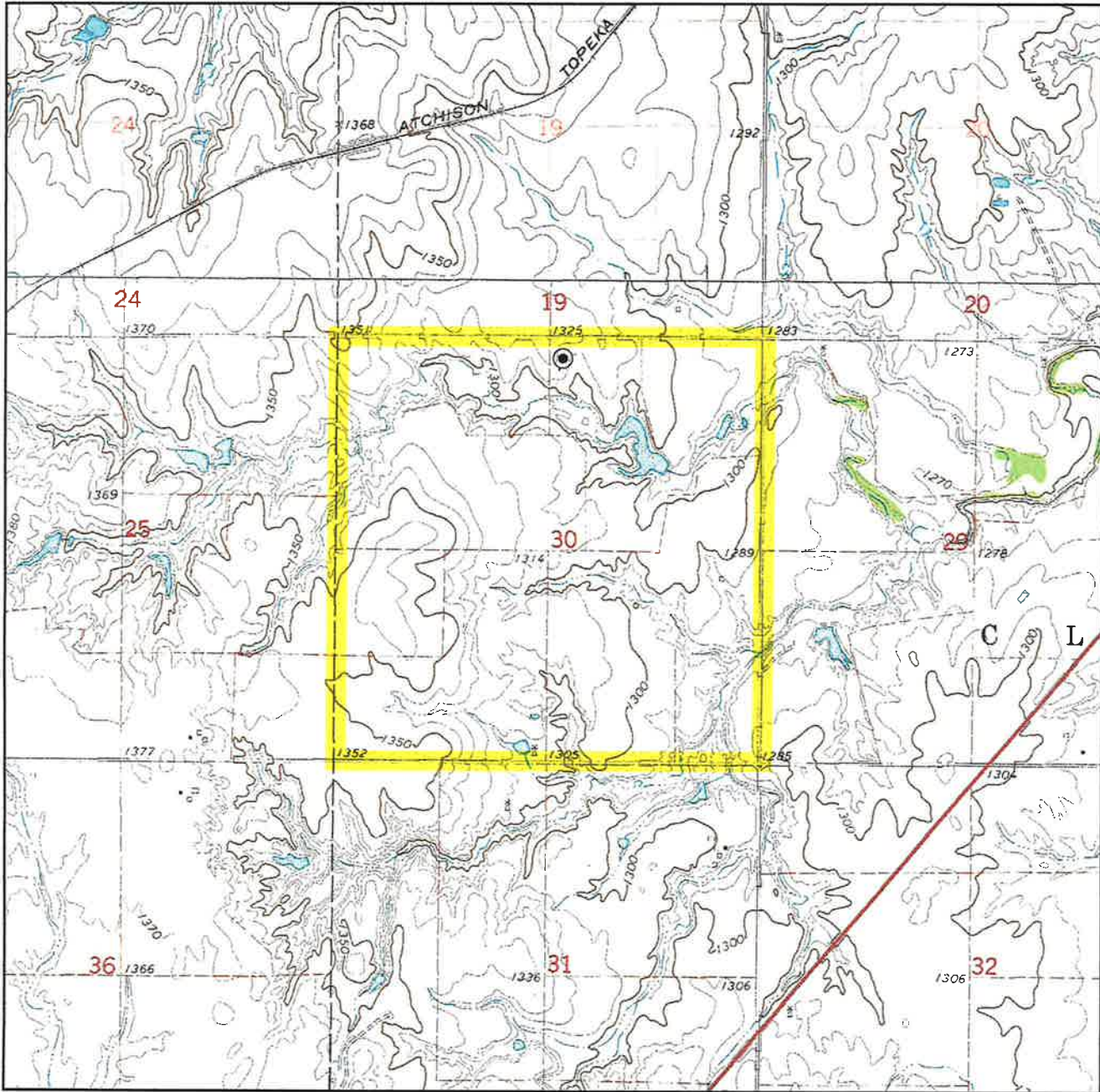
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry

6709 North Classen Blvd. Oklahoma City, OK 73116 www.topographic.com

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

LOCATION & ELEVATION VERIFICATION MAP



Sec. 30 Twp. 25N Rng. 11W I.M.

County ALFALFA State OK

Operator AEXCO PETROLEUM, INC.

Description 250'FNL - 2805'FWL

Lease MACLEOD 3-19H

Elevation 1315' Gr. at Stake

U.S.G.S. Topographic
Quadrangle Map CARMEN, OK

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

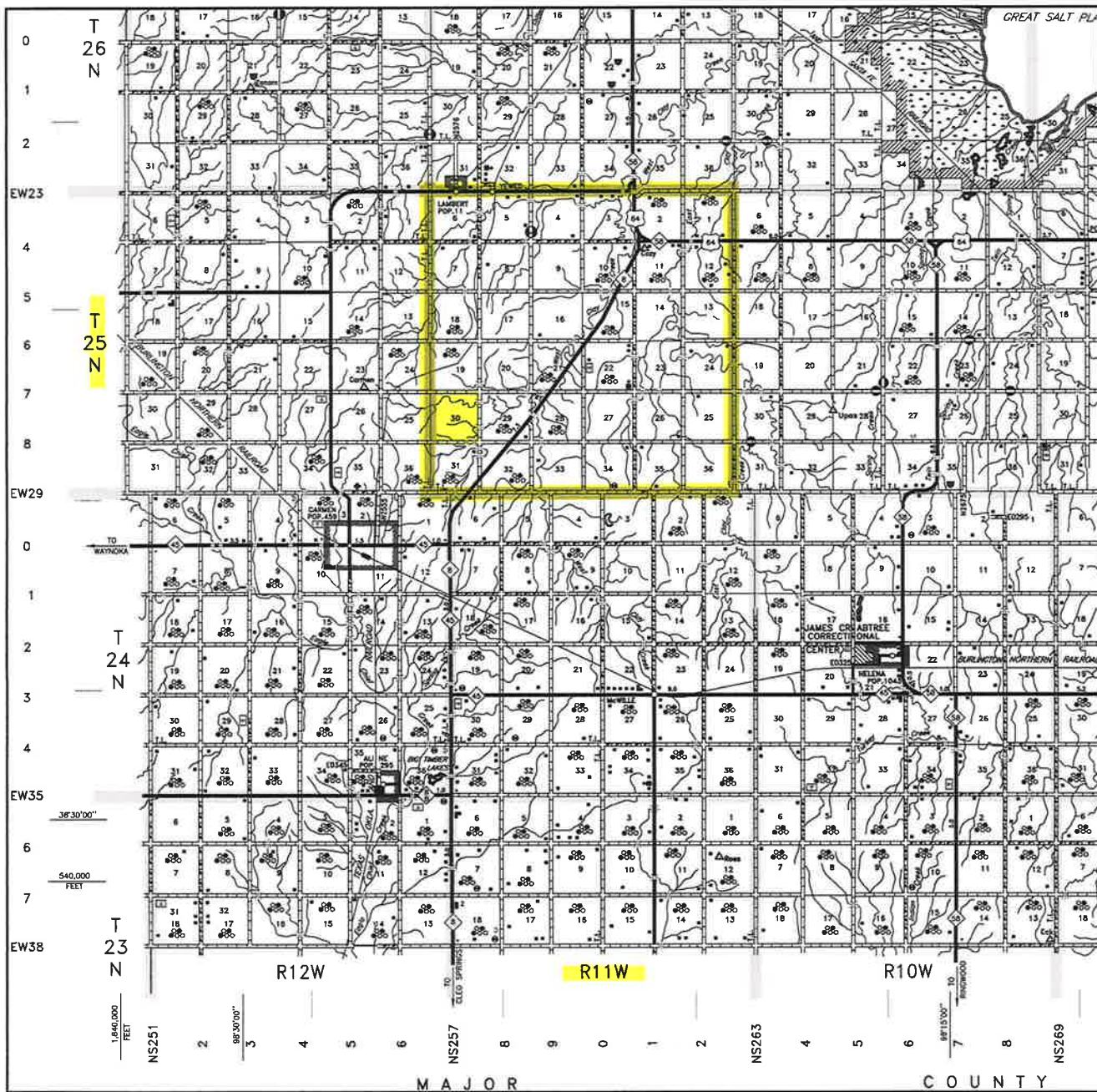
LAND SURVEYORS OF OKLAHOMA

Oct. 19, 2017

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VICINITY MAP



Scale: 1" = 3 Miles

Sec. 30 Twp. 25N Rng. 11W I.M.

County ALFALFA State OK

Operator AEXCO PETROLEUM, INC.



LAND SURVEYORS OF OKLAHOMA