

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

API NUMBER: 017 25529

Approval Date: 09/20/2019

Expiration Date: 03/20/2021

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 12N Rge: 8W

County: CANADIAN

SPOT LOCATION: ☐ NW ☐ NE ☐ NW ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 285 718

Lease Name: SUMMER MOON 8-12N-8W

Well No: 17WH

Well will be 285 feet from nearest unit or lease boundary.

Operator Name: PALOMA OPERATING CO INC

Telephone: 7136508509

OTC/OCC Number: 23932 0

PALOMA OPERATING CO INC  
1100 LOUISIANA ST STE 5100  
HOUSTON, TX 77002-5220

CHARLES LAWRENCE  
3 PEBBLE DR  
ENID OK 73703

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

Name	Depth	Name	Depth
1 WOODFORD	11466	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 663300

Location Exception Orders: 699179

Increased Density Orders: 695951

Pending CD Numbers:

Special Orders:

Total Depth: 16746

Ground Elevation: 1413

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 310

Deep surface casing has been approved

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: 3000 Average: 1500

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: DOG CREEK

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

PERMIT NO: 19-36951

F. Haul to Commercial soil farming facility: Sec. 27 Twn. 17N Rng. 9W Cnty. 73 Order No: 659856

G. Haul to recycling/re-use facility: Sec. 22 Twn. 16N Rng. 9W Cnty. 73 Order No: 647741

H. SEE MEMO

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.

## PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED

Chlorides Max: 90000 Average: 40000

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: DOG CREEK

## HORIZONTAL HOLE 1

Sec 08 Twp 12N Rge 8W County CANADIAN

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 65

Feet From: WEST 1/4 Section Line: 400

Depth of Deviation: 10616

Radius of Turn: 382

Direction: 358

Total Length: 5530

Measured Total Depth: 16746

True Vertical Depth: 11466

End Point Location from Lease,  
Unit, or Property Line: 65

### Notes:

#### Category

#### Description

#### DEEP SURFACE CASING

9/10/2019 - 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

9/10/2019 - 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)

#### INCREASED DENSITY - 695951

9/20/2019 - G56 - 8-12N-8W  
X663300 WDFD  
6 WELLS  
NO OP NAMED  
5/10/2019

#### LOCATION EXCEPTION - 699179

9/20/2019 - G56 - (I.O.) 8-12N-8W  
X663300 WDFD  
X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO EXISTING AND/OR PROPOSED WELL  
COMPL INT NCT 165' FSL, NCT 165' FNL, NCT 330' FWL  
PALOMA OPERATING CO. INC.  
7/15/2019

This permit does not address the right of entry or settlement of surface damages.

017 25529 SUMMER MOON 8-12N-8W 17WH

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.

MEMO

9/10/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -  
OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 663300

9/20/2019 - G56 - (640) 8-12N-8W  
EXT 575475 WDFD

This permit does not address the right of entry or settlement of surface damages.

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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.

017-25529

**TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA**

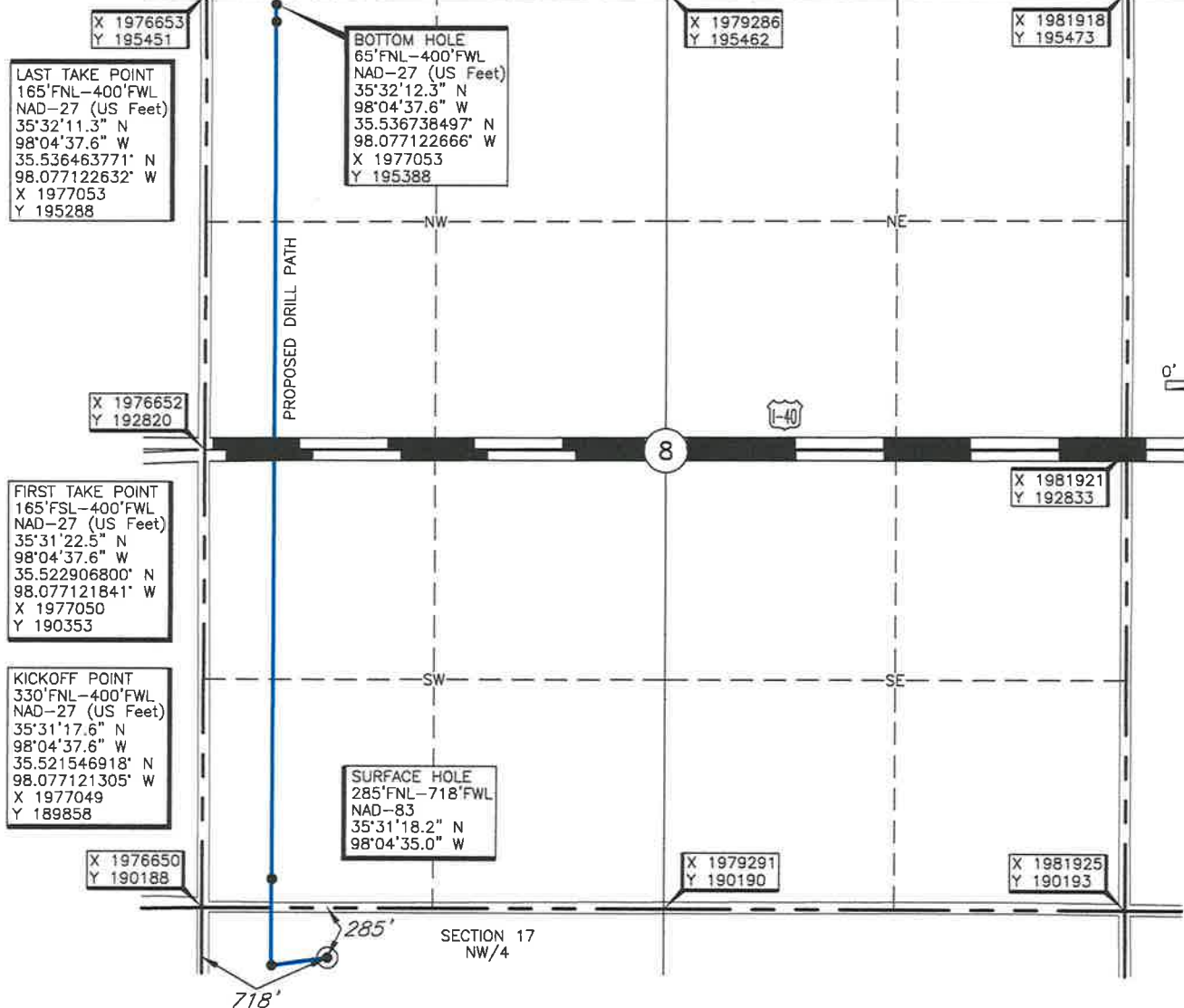
13800 Wireless Way, Okla. City, OK. 73134 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

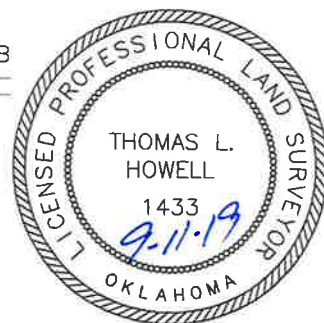
CANADIAN

County, Oklahoma

285'FNL-718'FWL Section 17 Township 12N Range 8W I.M.

Operator: PALOMA OPERATING COMPANY, INC.Lease Name: SUMMER MOON 8-12N-8WWell No.: 17WHTopography & Vegetation Loc. fell on existing pad.Good Drill Site? Yes Reference Stakes or Alternate Location  
Stakes Set NoneBest Accessibility to Location From North off county road.

Distance &amp; Direction

from Hwy Jct or Town From the junction of Heaston Road & I-40, go ±0.5 mile South on Heaston Road, to the Northwest Corner of Section 17, T12N-R8W.Revision ☒ 4Date of Drawing: Sept. 11, 2019Project # 123274A Date Staked: May 20, 2019 AL/NB**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: 35°31'18.0" N  
LONG: 98°04'33.8" W  
LAT: 35.521671617' N  
LONG: 98.076051288' W  
STATE PLANE  
COORDINATES: (US Feet)  
ZONE: OK NORTH  
X: 1977368  
Y: 189903

# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

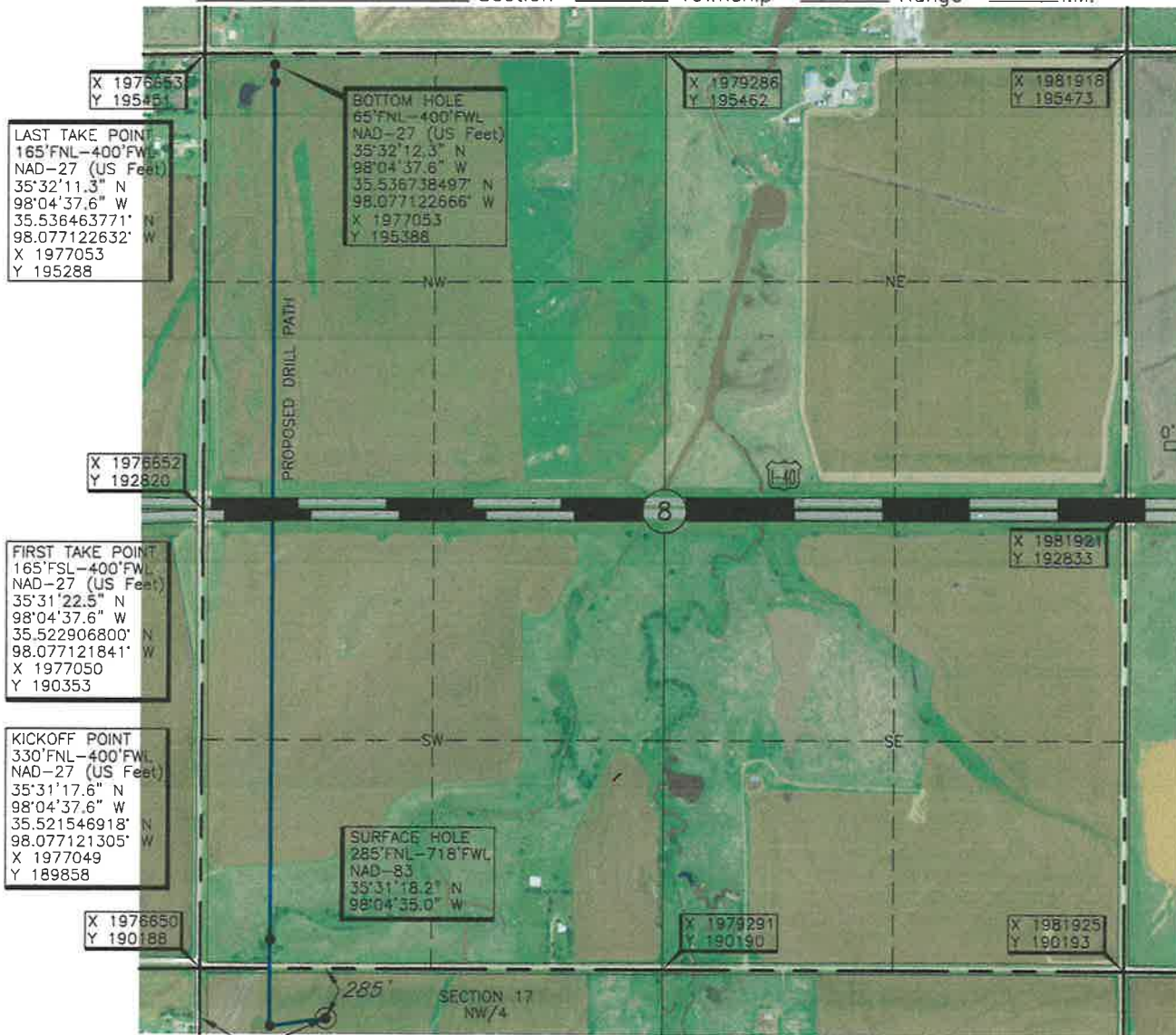
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CANADIAN

County, Oklahoma

285° FNL-718° FWL Section 17 Township 12N Range 8W I.M.



GRID  
NAD-27  
OK NORTH  
US Feet

SCALE:  
1" = 1000'

0' 500' 1000'

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

THE INFORMATION SHOWN HEREIN IS  
FOR CONSTRUCTION PURPOSES ONLY

Operator: PALOMA OPERATING COMPANY, INC.

Lease Name: SUMMER MOON 8-12N-8W

Well No.: 17WH

Topography & Vegetation Loc. fell on existing pad.

## ELEVATION:

1413' Gr. at Existing Pad NGVD29

1413' Gr. at Existing Pad NAVD88

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

Best Accessibility to Location From North off county road.

Distance & Direction  
From Hwy Jct or Town From the junction of Heaston Road & I-40, go ±0.5 mile South on Heaston Road, to the  
Northwest Corner of Section 17, T12N-R8W.

Revision ☒ 4

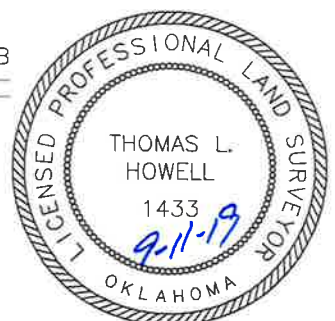
Date of Drawing: Sept. 11, 2019

Project # 123274A Date Staked: May 20, 2019 AL/NB

## 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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STATE PLANE  
COORDINATES: (US Feet)  
ZONE: OK NORTH  
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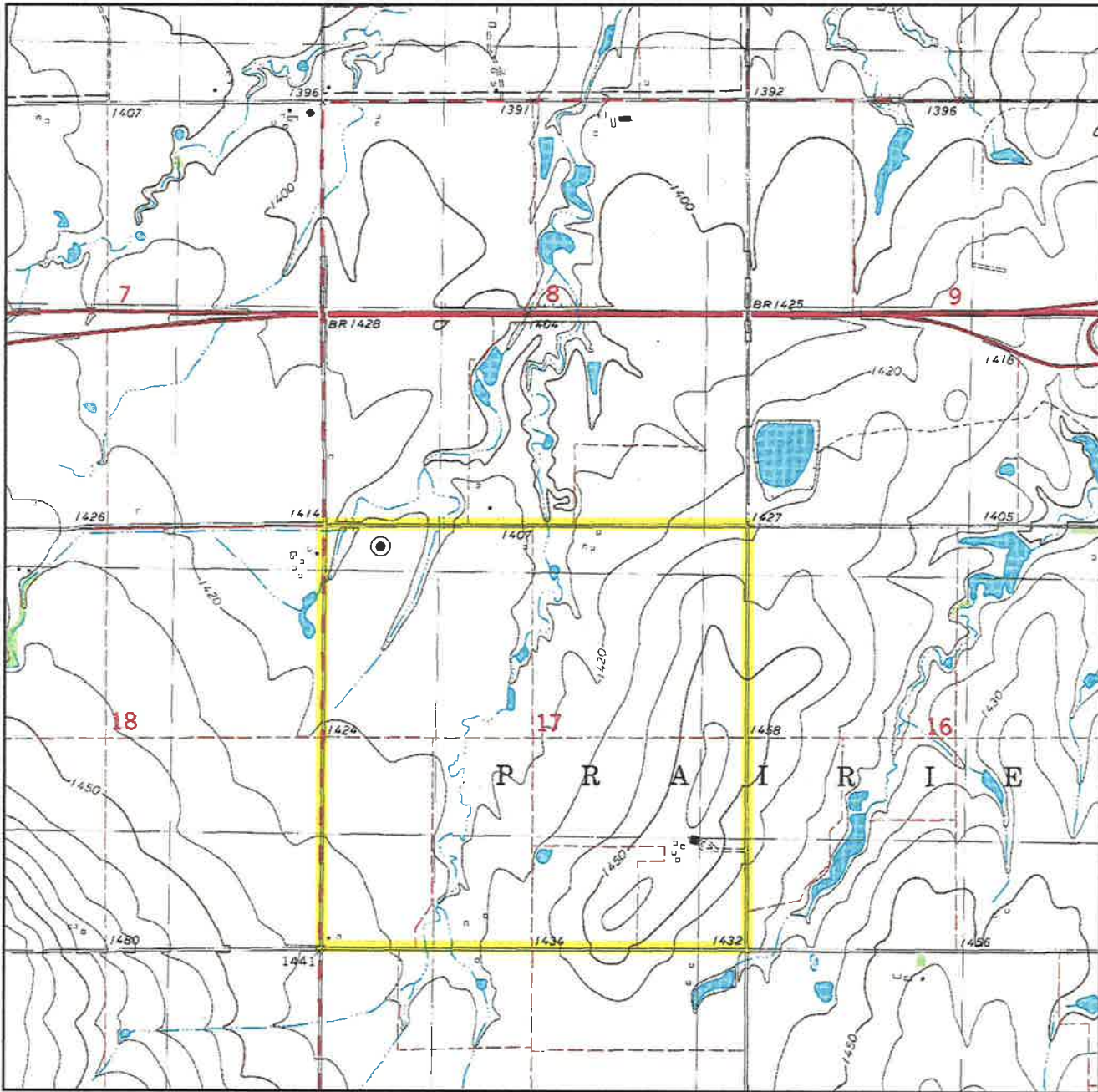
# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry

13800 Wireless Way, Oklahoma City, OK 73134 [www.topographic.com](http://www.topographic.com)

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

## LOCATION & ELEVATION VERIFICATION MAP



Sec. 17 Twp. 12N Rng. 8W I.M.

County CANADIAN State OK

Operator PALOMA OPERATING COMPANY, INC.

Description 285'FNL-718'FWL

Lease SUMMER MOON 8-12N-8W 17WH

Elevation 1413' Gr. at Existing Pad NGVD29  
1413' Gr. at Existing Pad NAVD88

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.



LAND SURVEYORS OF OKLAHOMA

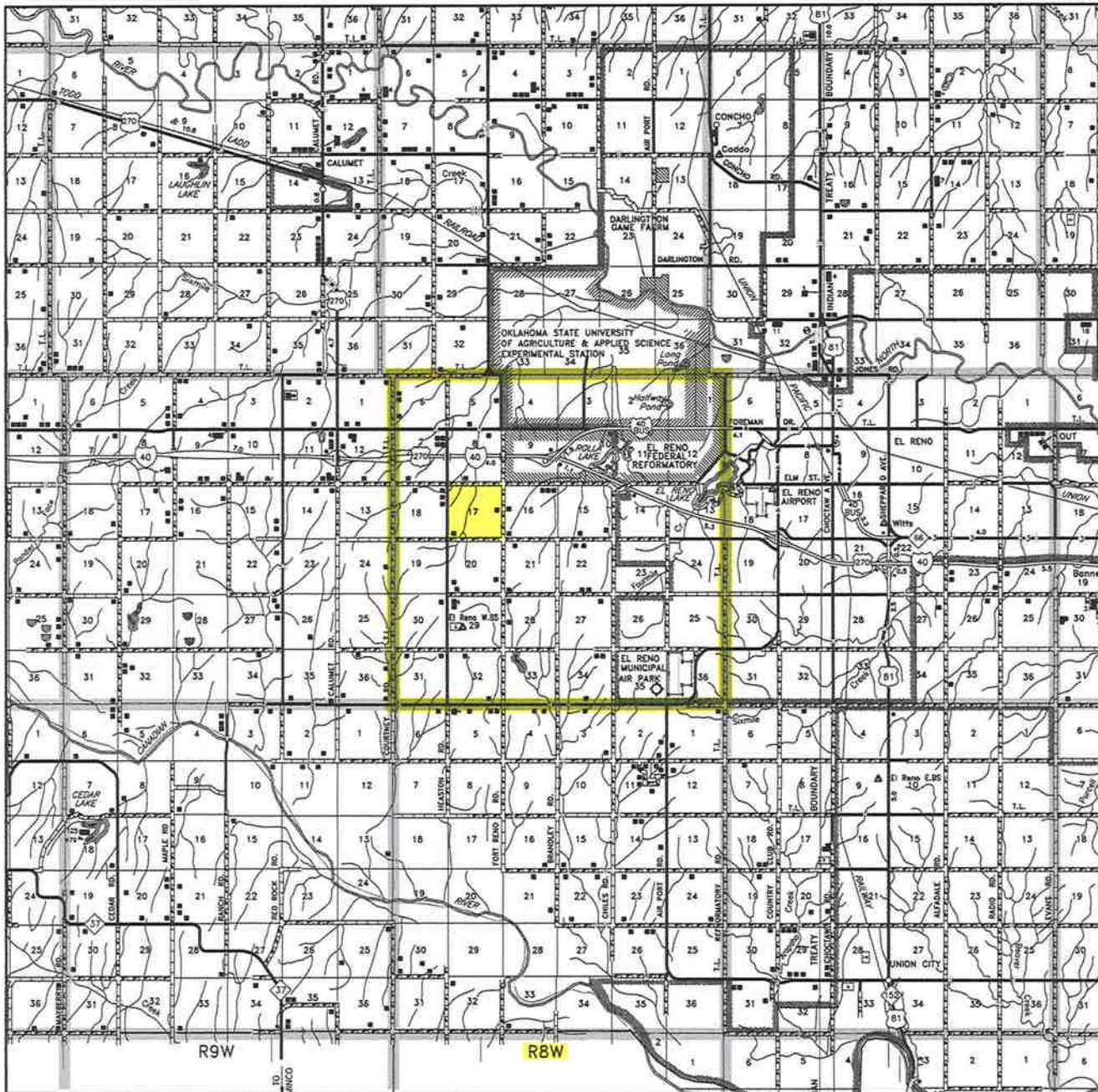
May 20, 2019



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## VICINITY MAP



Scale: 1" = 3 Miles

Sec. 17 Twp. 12N Rng. 8W I.M.

County CANADIAN State OK

Operator PALOMA OPERATING COMPANY, INC.



LAND SURVEYORS OF OKLAHOMA