

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

API NUMBER: 017 25328

Approval Date: 11/20/2018

Expiration Date: 05/20/2020

Horizontal Hole
Multi Unit

Oil & Gas

PERMIT TO DRILL

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

County: CANADIAN

SPOT LOCATION: ☐ SW ☐ NW ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 351 1173

Lease Name: SUMMER MOON 8-5-12N-8W

Well No: 5WHX

Well will be 351 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

DOROTHY GOURLEY
1101 MYRTLE DRIVE
EDMOND OK 73034

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

Name	Depth	Name	Depth
1 WOODFORD	11291	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 677774
663300

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201808284
201808285
201808292
201808293

Special Orders:

Total Depth: 21626

Ground Elevation: 1421

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 300

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: 18-35698

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 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.

PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED

Chlorides Max: 300000 Average: 200000

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 05 Twp 12N Rge 8W County CANADIAN

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 65

Feet From: EAST 1/4 Section Line: 550

Depth of Deviation: 10859

Radius of Turn: 340

Direction: 10

Total Length: 10232

Measured Total Depth: 21626

True Vertical Depth: 11337

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

Notes:

Category

Description

DEEP SURFACE CASING

11/17/2018 - 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

11/17/2018 - 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

MEMO

11/17/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201808284

11/20/2018 - G58 - (I.O.) 5 & 8-12N-8W
EST MULTIUNIT HORIZONTAL WELL
X677774 WDFD 5-12N-8W
X663300 WDFD 8-12N-8W
50% 5-12N-8W
50% 8-12N-8W
NO OP. NAMED
REC 11/5/2018 (M. NORRIS)

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.

017 25328 SUMMER MOON 8-5-12N-8W
5WHX

Category	Description
PENDING CD - 201808285	11/20/2018 - G58 - (I.O.) 5 & 8-12N-8W X677774 WDFD 5-12N-8W X663300 WDFD 8-12N-8W X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO SUMMER MOON 8 5-12N-8W 6WHX WELL COMPL. INT. 8-12N-8W NCT 165' FSL, NCT 0' FNL, NCT 450' FEL COMPL. INT. 5-12N-8W NCT 0' FSL, NCT 165' FNL, NCT 450' FEL NO OP. NAMED REC 11/5/2018 (M. NORRIS)
PENDING CD - 201808292	11/20/2018 - G58 - 5-12N-8W X677774 WDFD 3 WELLS NO OP. NAMED REC 11/5/2018 (M. NORRIS)
PENDING CD - 201808293	11/20/2018 - G58 - 8-12N-8W X663300 WDFD 3 WELLS NO OP. NAMED REC 11/5/2018 (M. NORRIS)
SPACING - 663300	11/20/2018 - G58 - (640) 8-12N-8W EXT 575475 WDFD
SPACING - 677774	11/20/2018 - G58 - (640) 5-12N-8W EXT 663300 WDFD

CANADIAN

County, Oklahoma

351'FNL-1173'FEL Section 17 Township 12N Range 8W I.M.

X 1980630
Y 200653

X 1981909
Y 200655

3rd Standard Parallel North Township Line ρ T13N-R8W

X 1976641
Y 200653

X 1978008
Y 200653

X 1979324
Y 200651

PROPOSED
BOTTOM HOLE
65'FNL-550'FEL
35°33'03.7" N
98°03'45.6" W
35.551036488° N
98.062663757° W
X: 1981359
Y: 200589

PROPOSED
LAST TAKE POINT
165'FNL-550'FEL
35°33'02.7" N
98°03'45.6" W
35.550761765° N
98.062662965° W
X: 1981359
Y: 200489

LOT 4

LOT 3

LOT 2

LOT 1

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

S/2-NW/4

S/2-NE/4

5

X 1976647
Y 198090

X 1981913
Y 198108

SW

SE

PROPOSED DRILL PATH

X 1976654
Y 195452

X 1979286
Y 195462

X 1981918
Y 195473

NW

NE

8

X 1976652
Y 192811

X 1981921
Y 192833

HEASTON ROAD

SW

SE

PROPOSED
FIRST TAKE POINT
165'FSL-550'FEL
35°31'22.5" N
98°03'45.3" W
35.522926126° N
98.062589207° W
X: 1981374
Y: 190357

X 1976649
Y 190188

X 1979291
Y 190190

PROPOSED
SURFACE HOLE
351'FNL-1173'FEL
NAD-83 (US FEET)
35°31'17.6" N
98°03'54.0" W

X 1981925
Y 190193



GRID
NAD-27
OK NORTH
US FEET
Scale:
1" = 1000'

0 1000'

Good Drill Site? Yes Reference Stakes or Alternate Location
Best Accessibility to Location From North off county road
Distance & Direction From the junction of Heaston Road & I-40, go ±0.5 mile South on Heaston Road, then
from Hwy Jct or Town ±1 mile East to the Northeast Corner of Section 17, T12N-R8W.

Operator: PALOMA OPERATING COMPANY, INC.
Lease Name: SUMMER MOON 8-5-12N-8W
Topography & Vegetation Location fell in plowed field

Well No.: 5WHX

ELEVATION:
1421' Gr. at Stake (NAVD 88)
1420' Gr. at Stake (NGVD 29)

THE INFORMATION SHOWN HEREIN IS
FOR CONSTRUCTION PURPOSES ONLY

Date of Drawing: Oct. 11, 2018

Invoice # 303889

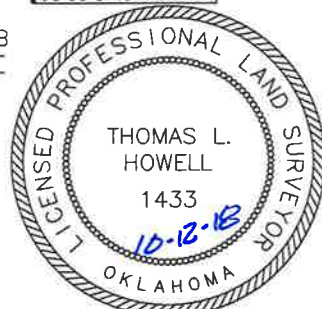
Date Staked: Oct. 11, 2018

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



Information was
gathered with a GPS receiver
with a foot Horiz./Vert. accuracy
within 1 ft ± 1 ft ± 1 ft

DATUM: NAD-27
LAT: 35°31'17.4" N
LONG: 98°03'52.9" W
LAT: 35.521504622° N
LONG: 98.064681615° W
STATE PLANE
COORDINATES (US FEET):
ZONE: OK NORTH
X: 1980751
Y: 189840

CANADIAN

County, Oklahoma

351'FNL-1173'FEL Section 17 Township 12N Range 8W I.M.

X 1980630
Y 200653

X 1981909
Y 200655

3rd Standard Parallel North Township Line of T13N-R8W

X 197664
Y 200653

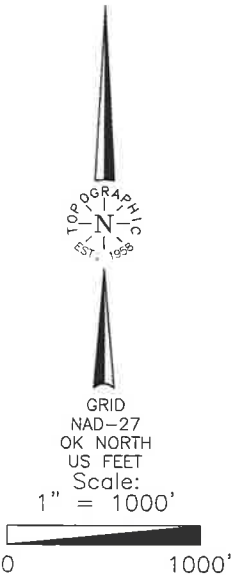
X 1978008
Y 200653

X 1979324
Y 200651

PROPOSED
BOTTOM HOLE
65'FNL-550'FEL
35°33'03.7" N
98°03'45.6" W
39.551036488' N
98.062663757' W
X: 1981359
Y: 200589

PROPOSED
LAST TAKE POINT
165'FNL-550'FEL
35°33'02.7" N
98°03'45.6" W
35.550761765' N
98.062662965' W
X: 1981359
Y: 200489

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



X 1976647
Y 198090

X 1981913
Y 198108

X 1976654
Y 195452

X 1979286
Y 195462

X 1981918
Y 195473

X 1976652
Y 192811

X 1981921
Y 192833

X 1976649
Y 190188

X 1979291
Y 190190

PROPOSED
FIRST TAKE POINT
165'FNL-550'FEL
35°31'22.5" N
98°03'45.3" W
35.522926126' N
98.062589207' W
X: 1981374
Y: 190357

PROPOSED
SURFACE HOLE
351'FNL-1173'FEL
NAD-83 (US FEET)
35°31'17.6" N
98°03'54.0" W

X 1981925
Y 190193

Operator: PALOMA OPERATING COMPANY, INC.
Lease Name: SUMMER MOON 8-5-12N-8W

Well No.: SWHX

Topography & Vegetation Location fell in plowed field

Good Drill Site? Yes

Reference Stakes or Alternate Location
Stakes Set None

Best Accessibility to Location From North off county road
Distance & Direction From the junction of Heaston Road & I-40, go ±0.5 mile South on Heaston Road, then
±1 mile East to the Northeast Corner of Section 17, T12N-R8W.

ELEVATION:

1421' Gr. at Stake (NAVD 88)
1420' Gr. at Stake (NGVD 29)

THE INFORMATION SHOWN HEREIN IS
FOR CONSTRUCTION PURPOSES ONLY

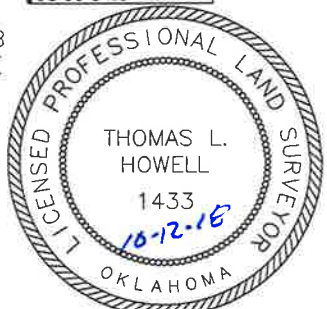
DATUM: NAD-27
LAT: 35°31'17.4" N
LONG: 98°03'52.9" W
LAT: 35.521504622° N
LONG: 98.064681615° W
STATE PLANE
COORDINATES (US FEET):
ZONE: OK NORTH
X: 1980751
Y: 189840

Invoice # 303889 Date of Drawing: Oct. 11, 2018
Date Staked: Oct. 11, 2018 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

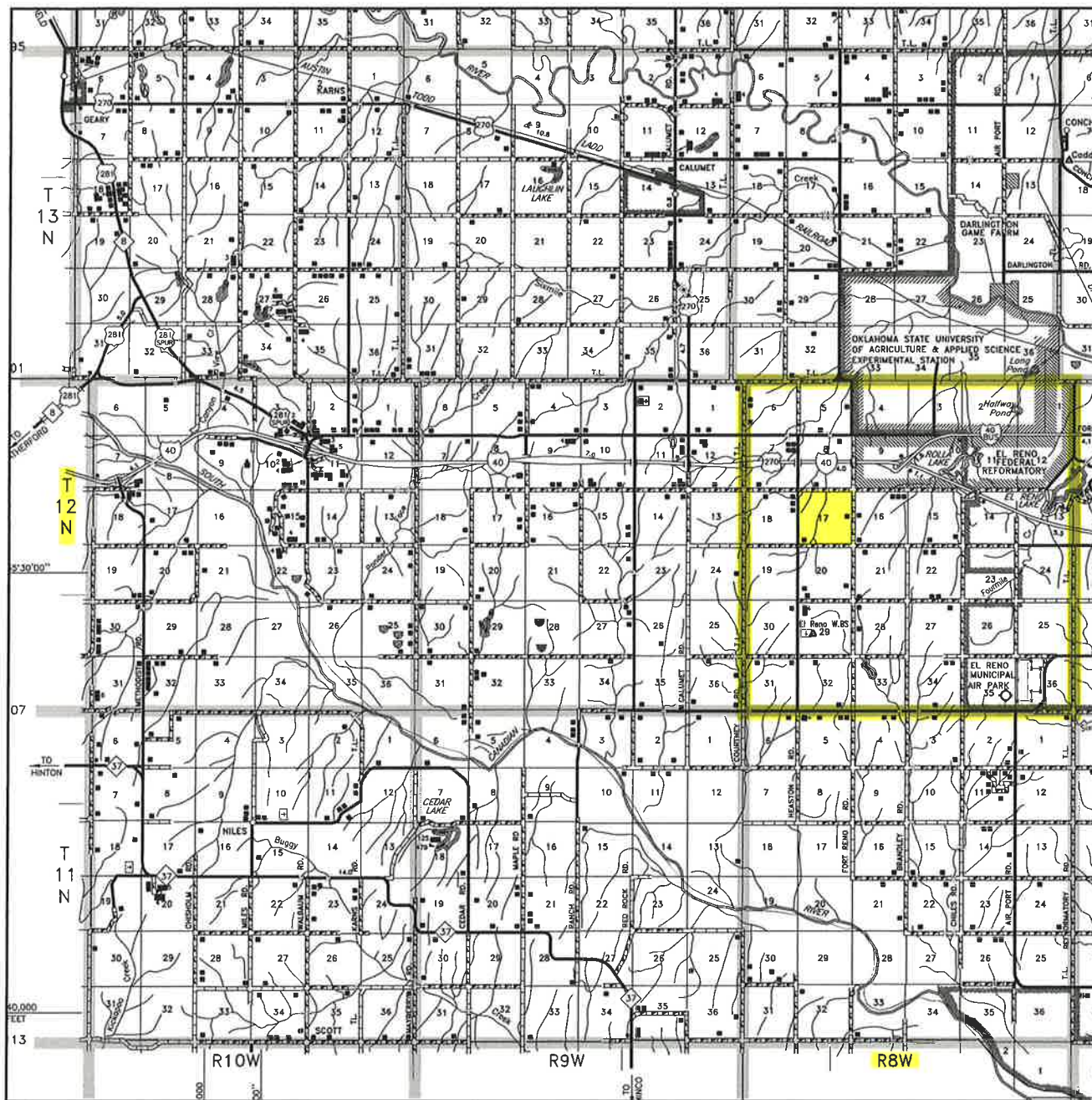


Information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy.

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

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

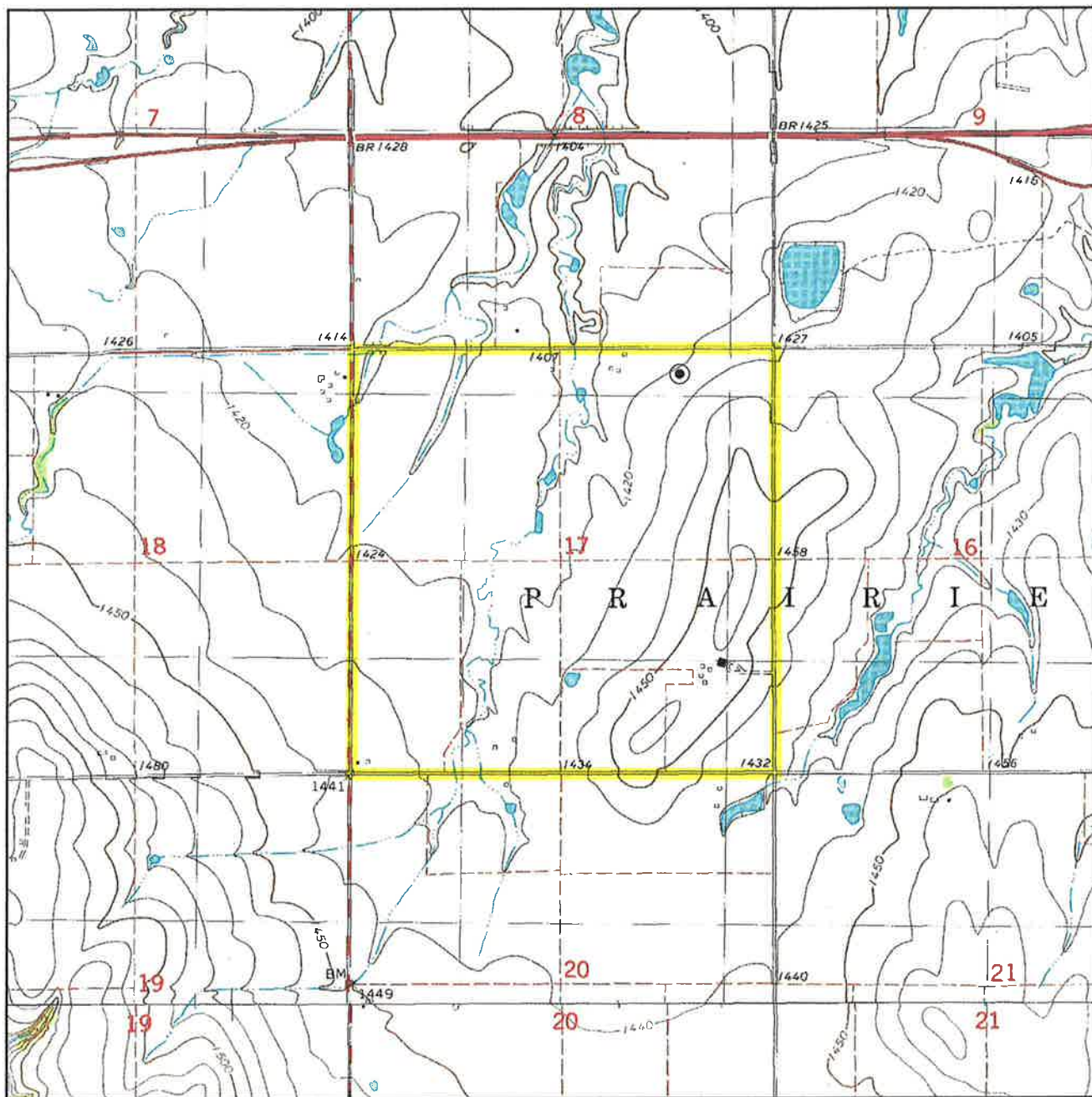
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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

County CANADIAN State OK

Operator PALOMA OPERATING COMPANY, INC.

Description 351'FNL-1173'FEL

Lease SUMMER MOON 8-5-12N-8W 5WHX

Elevation 1421' Gr. at Stake (NAVD 88)
1420' Gr. at Stake (NGVD 29)

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. 11, 2018