

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

API NUMBER: 017 25512 B

Horizontal Hole Oil & Gas

Approval Date: 08/28/2019

Expiration Date: 02/28/2021

Amend reason: MOVE SHL

AMEND PERMIT TO DRILL

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

County: CANADIAN

SPOT LOCATION: ☐ NW ☐ NE ☐ NE ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 288 1992

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

Well No: 11MH

Well will be 288 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 MISSISSIPPI	10968	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 137303

Location Exception Orders: 699172

Increased Density Orders: 696868

Pending CD Numbers:

Special Orders:

Total Depth: 16122

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

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 SHALE

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 19-36877

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

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

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: 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 SHALE

HORIZONTAL HOLE 1

Sec 08 Twp 12N Rge 8W County CANADIAN

Spot Location of End Point: NE NE NW NW

Feet From: NORTH 1/4 Section Line: 65

Feet From: WEST 1/4 Section Line: 1160

Depth of Deviation: 9990

Radius of Turn: 382

Direction: 353

Total Length: 5532

Measured Total Depth: 16122

True Vertical Depth: 11113

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

Notes:

Category

Description

DEEP SURFACE CASING

8/6/2019 - 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

8/6/2019 - 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; 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

INCREASED DENSITY - 696868

8/22/2019 - GC0 - 8-12N-8W
X137303 MISS
3 WELLS
NO OP. NAMED
5/30/2019

LOCATION EXCEPTION - 699172

8/22/2019 - GC0 - (I.O.) 8-12N-8W
X137303 MISS
X165:10-3-28(C)(2)(B) MISS MAY BE CLOSER THAN 600' FROM EXISTING AND/OR PROPOSED WELLS
COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 660' FWL
PALOMA OPERATING CO. INC.
7/15/2019

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

017 25512 SUMMER MOON 8-12N-8W 11MH

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

8/6/2019 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 1 - WBM & CUTTINGS TO ORDER # 659856, 27-T17N-R9W, KINGFISHER CO; PIT 2 - OBM TO VENDOR, OBM CUTTINGS TO ORDER # 647741, 22-T16N-R9W, KINGFISHER CO

SPACING - 137303

8/21/2019 - GC0 - (640) 8-12N-8W
EXT OTHER
EXT 122864/134373 MISS, OTHERS

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA13800 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

288'FNL-1992'FWL Section 17 Township 12N Range 8W I.M.

PROPOSED
BOTTOM HOLE
65'FNL-1160'FWL
35°32'12.3" N
98°04'28.4" W
35.536748908" N
98.074568397" W
X 1977813
Y 195391

PROPOSED
LAST TAKE POINT
165'FNL-1160'FWL
35°32'11.3" N
98°04'28.4" W
35.536474181" N
98.074568372" W
X 1977813
Y 195291

PROPOSED
FIRST TAKE POINT
165'FNL-1160'FWL
35°31'22.5" N
98°04'28.4" W
35.522910314" N
98.074568016" W
X 1977810
Y 190354

PROPOSED
KICKOFF POINT
330'FNL-1160'FWL (SEC.17)
35°31'17.6" N
98°04'28.4" W
35.521550432" N
98.074567526" W
X 1977809
Y 189859

PROPOSED
SURFACE HOLE
288'FNL-1992'FWL
NAD-83 (US FEET)
35°31'18.2" N
98°04'19.6" W

X 1976654
Y 195452X 1979266
Y 195462X 1981918
Y 195473X 1976652
Y 192820X 1981921
Y 192833X 1976649
Y 190188X 1979291
Y 190190X 1981925
Y 190193

HEASTON ROAD

PROPOSED DRILL PATH

SECTION 17
NW/4

1992'

288'

649'

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

ELEVATION:

1413' Gr. at Existing Pad (NAVD 88)

1413' Gr. at Existing Pad (NGVD 29)

Operator: PALOMA OPERATING COMPANY, INC.

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

Well No.: 11MH

Topography & Vegetation Location fell on existing pad.

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 ☒ 6

Date of Drawing: Nov. 6, 2019

Project # 123274C

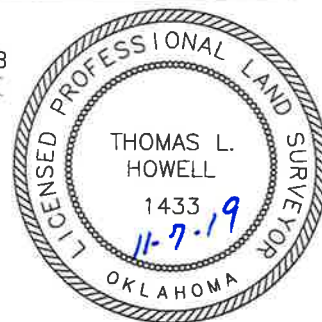
Date Staked: Feb. 21, 2019

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°04'18.4" W

LAT: 35.521669641° N

LONG: 98.071771982° W

STATE PLANE

COORDINATES (US FEET):

ZONE: OK NORTH

X: 1978641

Y: 189902

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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County, Oklahoma

288'FNL-1992'FWL Section 17 Township 12N Range 8W I.M.



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X 1978654 Y 195452
X 1979286 Y 195452
X 1981918 Y 195473
X 1978652 Y 192820
X 1981924 Y 192833
X 1978649 Y 190186
X 1979291 Y 190190
X 1981925 Y 190193



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

0 1000'

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

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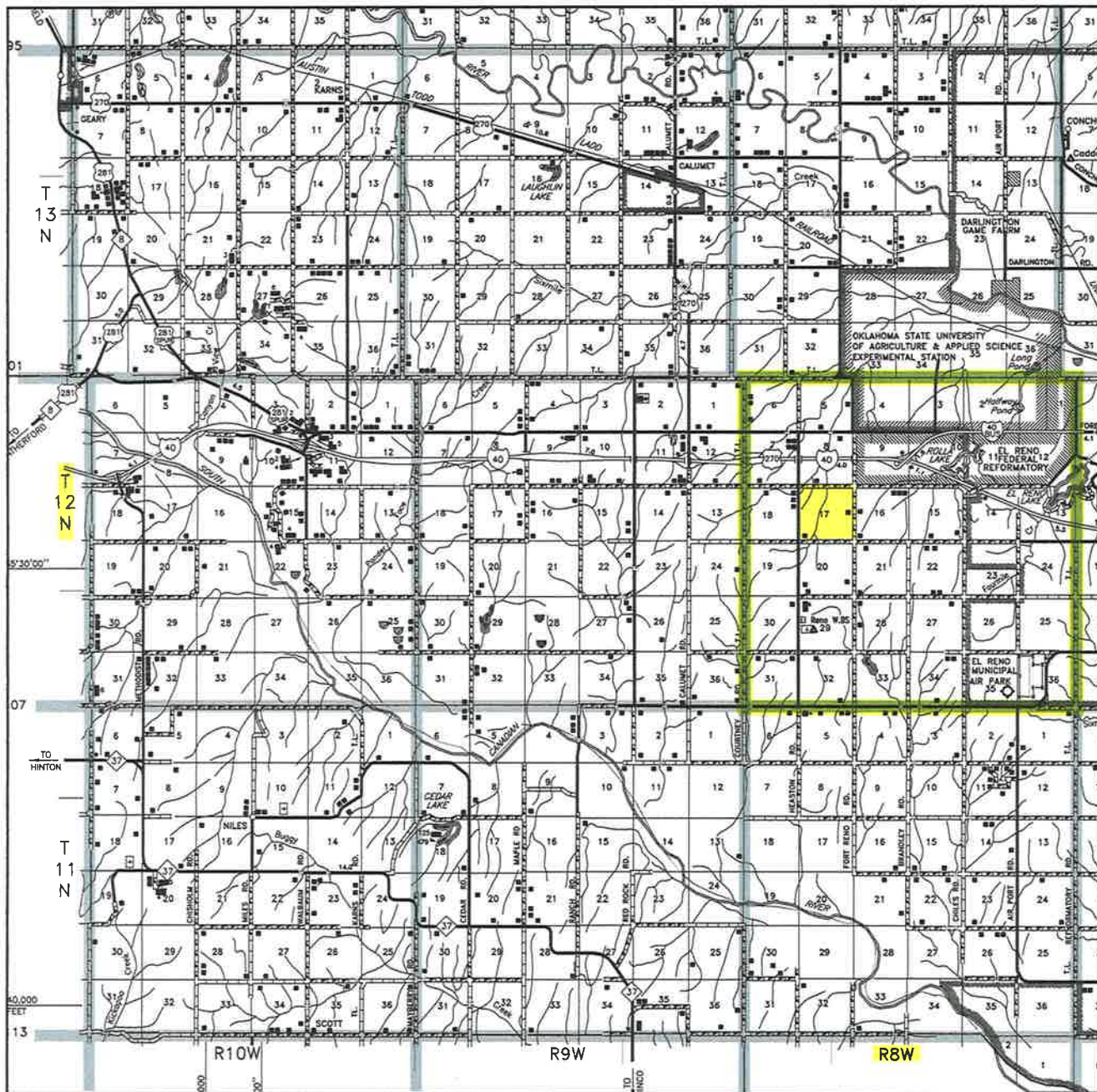
DATUM: NAD-27
LAT: 35°31'18.0" N
LONG: 98°04'18.4" W
LAT: 35.521669641° N
LONG: 98.071771982° W
STATE PLANE
COORDINATES (US FEET):
ZONE: OK NORTH
X: 1978641
Y: 189902



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.

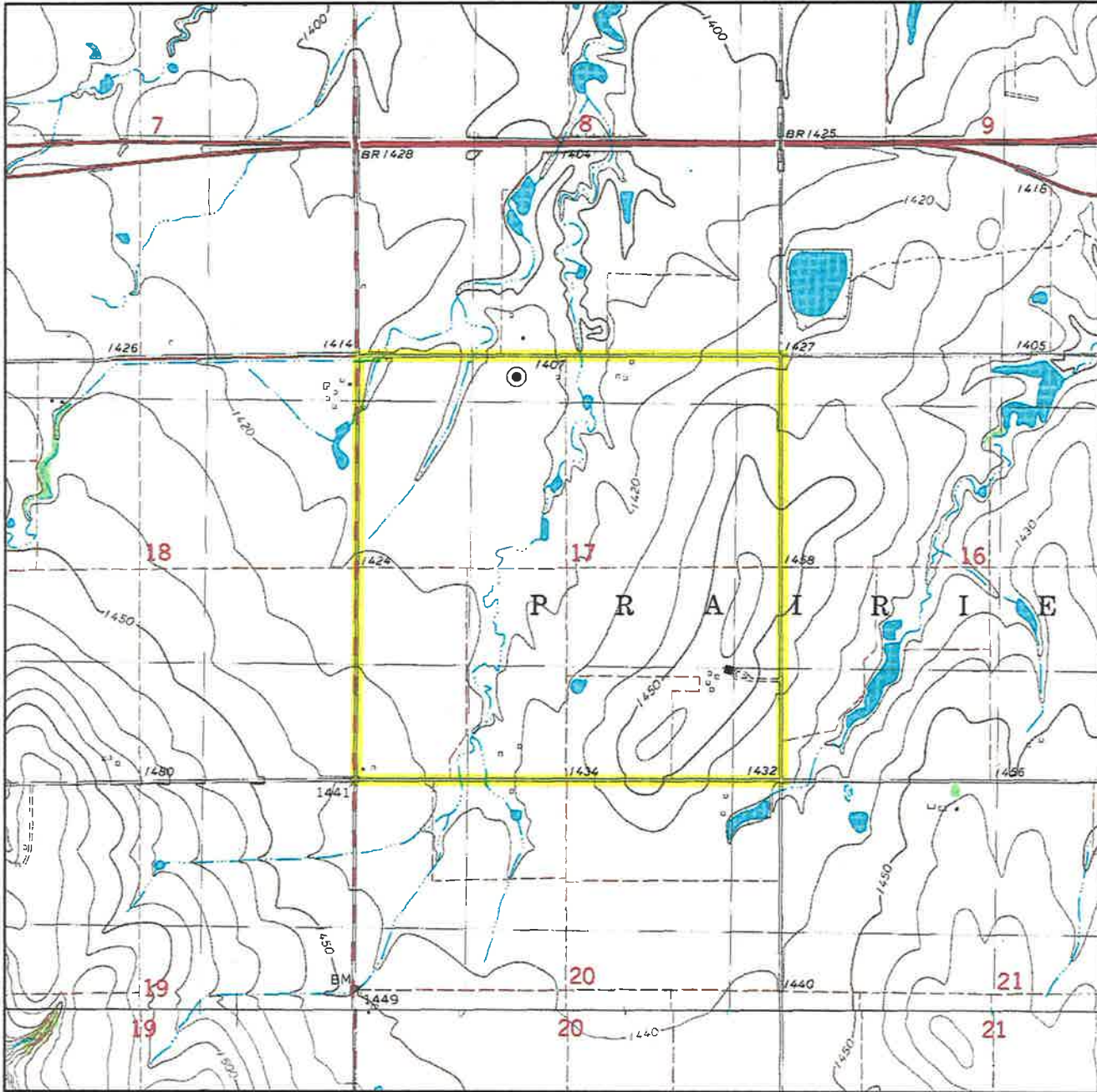


LAND SURVEYORS OF OKLAHOMA

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LOCATION & ELEVATION VERIFICATION MAP



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

County CANADIAN State OK

Operator PALOMA OPERATING COMPANY, INC.

Description 288'FNL-1992'FWL

Lease SUMMER MOON 8-12N-8W 11MH

Elevation 1413' Gr. at Existing Pad (NAVD 88)
1413' Gr. at Existing Pad (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.



LAND SURVEYORS OF OKLAHOMA

Nov. 5, 2019