API NUMBER: 017 25519

Oil & Gas

Horizontal Hole

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

Approval Date: 09/04/2019
Expiration Date: 03/04/2021

PERMIT TO DRILL

WELL LOCATION: Sec: 11 Twp: 12N Rge: 7W County: CANADIA	WELL LOCATION:	Sec:	11	Twp:	12N	Rge:	7W	County:	CANADIA
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SPOT LOCATION: NW SE SW FEET FROM QUARTER: FROM SOUTH FROM WEST SECTION LINES: 605 1565

Lease Name: PAMUNKEY 14-12N-7W Well No: 5MH Well will be 605 feet from nearest unit or lease boundary.

Operator PALOMA OPERATING CO INC Telephone: 7136508509 OTC/OCC Number: 23932 0

PALOMA OPERATING CO INC 1100 LOUISIANA ST STE 5100

HOUSTON. TX 77002-5220

HENRY DEL GIRARD 3027 EAST ELM ST

EL RENO OK 73036

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

	Name	Depth	Name	Depti	1
1	MISSISSIPPIAN	8924	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	141057	Location Exception Orders:		Increased Density Orders:	701139

Pending CD Numbers: 201903344 Special Orders:

Total Depth: 14484 Ground Elevation: 1324 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 340

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

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36873
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

#### 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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

### HORIZONTAL HOLE 1

Sec 14 Twp 12N Rge 7W County CANADIAN

Spot Location of End Point: SW SW SE SW
Feet From: SOUTH 1/4 Section Line: 65
Feet From: WEST 1/4 Section Line: 1395

Depth of Deviation: 9073
Radius of Turn: 478
Direction: 181

Total Length: 4660

Measured Total Depth: 14484

True Vertical Depth: 9475

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 - 701139 9/3/2019 - GB6 - 14-12N-7W

X141057 MSSP 4 WELLS NO OP. NAMED 8/21/2019

MEMO 8/6/2019 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 1 -

WBM & CUTTINGS TO ORDER #659856, 27-17N-9W, KINGFISHER CO; PIT 2 - OBM TO VENDOR,

OBM CUTTINGS TO ORDER # 647741, 22-16N-9W, KINGFISHER CO

Category Description

PENDING CD - 201903344 9/3/2019 - GB6 - (I.O.) 14-12N-7W

X141057 MSSP

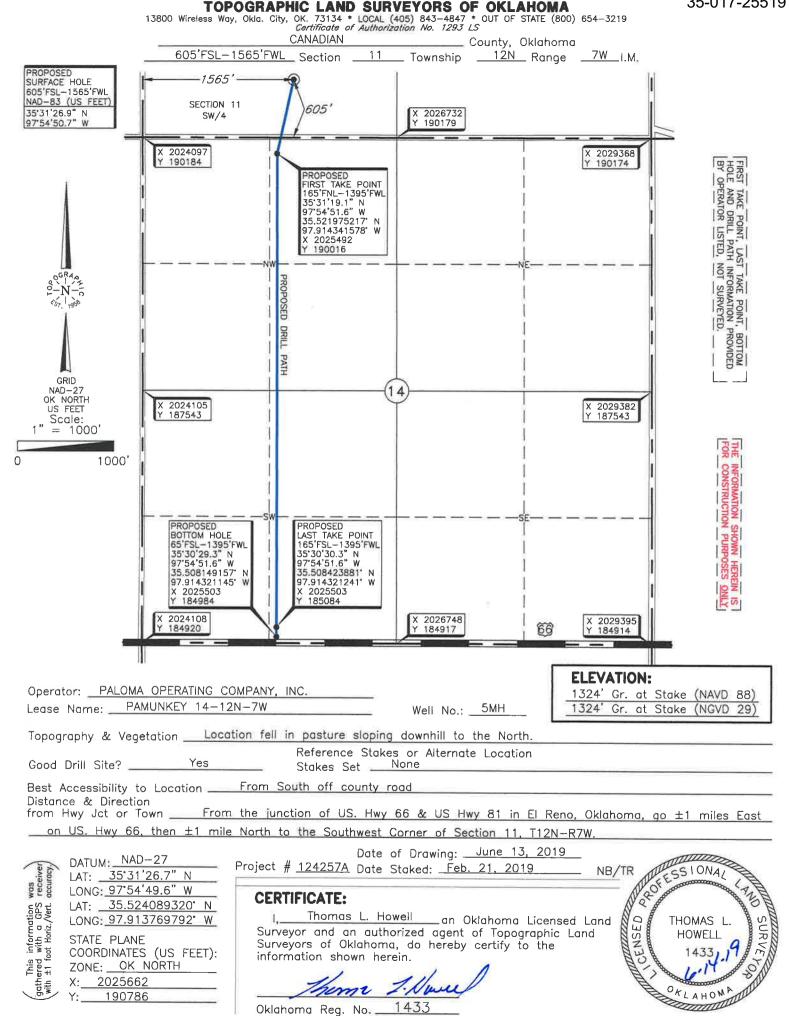
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 650' FWL

NO OP. NAMED

REC 7/15/2019 (MOORE)

SPACING - 141507 9/3/2019 - GB6 - (640) 14-12N-7W

EXT 124533 MSSP EXT OTHERS EST OTHER



CANADIAN County, Oklahoma 605'FSL-1565'FWL Section \_ <u>12N</u> Range 11 7W\_I.M. Township PROPOSED SURFACE HOLE 605'FSL-1565'FWL NAD-83 (US FEET) ESTION 11 35'31'26.9" N 97'54'50.7" W FIRST HOLE BY OF RST TAKE POINT, LAST TO OLE AND DRILL PATH IN OPERATOR LISTED, NO ST TAKE POINT, E GRID NAD-27 OK NORTH US FEET Scale: 1" = 1000' 1000 35.508423881° 97.914321241° X 2025503 025748 **ELEVATION:** Operator: PALOMA OPERATING COMPANY, INC. 1324' Gr. at Stake (NAVD 88) Lease Name: PAMUNKEY 14-12N-7W Well No.: \_\_5MH 1324' Gr. at Stake (NGVD 29) Topography & Vegetation \_\_\_\_Location fell in pasture sloping downhill to the North. Reference Stakes or Alternate Location Yes None Good Drill Site? \_\_\_\_\_ Stakes Set \_ From South off county road Best Accessibility to Location \_\_\_ Distance & Direction from Hwy Jct or Town \_ From the junction of US. Hwy 66 & US Hwy 81 in El Reno, Oklahoma, go ±1 miles East on US. Hwy 66, then ±1 mile North to the Southwest Corner of Section 11, T12N-R7W. Date of Drawing: June 13, 2019 WAGE ESSIONAL DATUM: NAD-27 Project # <u>124257A</u> Date Staked: <u>Feb. 21, 2019</u> NB/TR LAT: <u>35°31'2</u>6.7" N LONG: 97'54'49.6" W **CERTIFICATE:** LAT: <u>35.524089320° N</u> LONG: 97.913769792' W Thomas L. Howell ENSED \_an Oklahoma Licensed Land THOMAS L Surveyor and an authorized agent of Topographic Land HOWELL STATE PLANE Surveyors of Oklahoma, do hereby certify to the COORDINATES (US FEET): information shown herein. ZONE: OK NORTH X: 2025662

Oklahoma Reg. No. <u>143</u>3

190786

OKLAHOMP

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

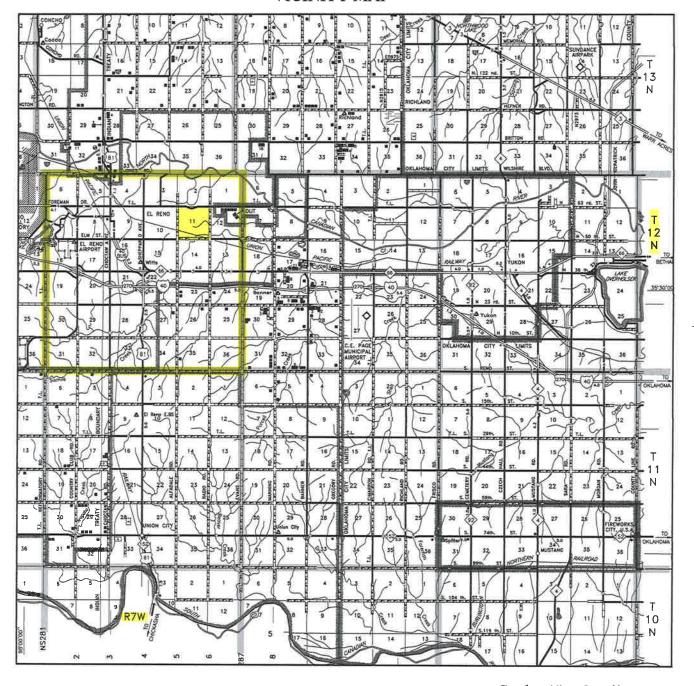
13800 Wireless Way, Okla. City, OK. 73134 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

# 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. 11 Twp. 12N Rng. 7W I.M.

County CANADIAN State OK

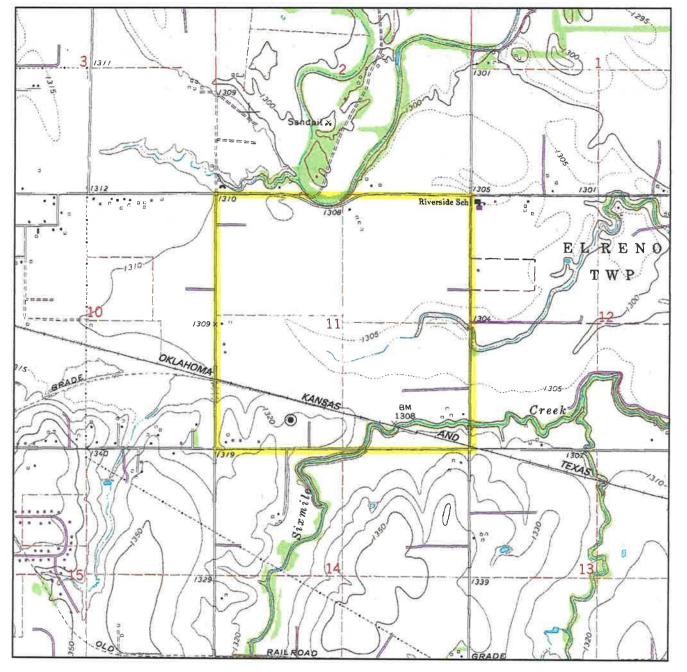
Operator PALOMA OPERATING COMPANY, INC.



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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. 11 Twp. 12N Rng. 7W I.M.

County CANADIAN State OK

Operator PALOMA OPERATING COMPANY, INC.

Description 605'FSL-1565'FWL

Lease PAMUNKEY 14-12N-7W 5MH

1324' Gr. at Stake (NAVD 88)

Elevation 1324' 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.



LAND SURVEYORS OF OKLAHOMA