API NUMBER: 017 25566

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

Approval Date: 12/03/2019
Expiration Date: 06/03/2021

Horizontal Hole

Multi Unit

Oil & Gas

### PERMIT TO DRILL

OT LOCATION	I: NW NE NE	INVV	ET FROM QUARTER: FROM NO COTION LINES: 288		EST		
Lease Name:	SUMMER MOON 8_5-12N-8\	W		/HX		ell will be 288 feet from neare	est unit or lease boundary
Operator Name:	PALOMA OPERATING C	O INC		Telephone: 71365	508509	OTC/OCC Number:	23932 0
	A OPERATING CO INC UISIANA ST STE 5100 DN,		7002-5220		CHARLES LAV 3 PEBBLE DR ENID	!	73703
					LINID	OK /	3703
Formation(s	, ,	sted Forma	* *				
Formation(s	Name	sted Forma	Depth		Name	Dept	
Formation(s	, ,	sted Forma	* *	6			
Formation(s	Name	sted Forma	Depth	7			
Formation(s	Name	sted Forma	Depth	7 8			
Formation(s	Name	sted Forma	Depth	7			

Total Depth: 21759 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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-37099
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 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: NE NE NE NW
Feet From: NORTH 1/4 Section Line: 65
Feet From: EAST 1/4 Section Line: 2631

Depth of Deviation: 10778
Radius of Turn: 478

Direction: 3

Total Length: 10230

Measured Total Depth: 21759

True Vertical Depth: 11470

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

Notes:

Category Description

BHL 12/2/2019 - GB1 - 65' FNL, 2649' FWL OF NE NE NE NW 5-12N-8W; CHANGED BHL TO FIT ITD

SYSTEM; WILL NOT TAKE A NUMBER >2640'

DEEP SURFACE CASING 11/18/2019 - 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 11/18/2019 - 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 - 695950 (201901695) 12/2/2019 - GB1 - 5-12N-8W

X677774 WDFD 6 WELLS NO OP. NAMED 5/10/2019 INCREASED DENSITY - 695951 (201901697) 12/2/2019 - GB1 - 8-12N-8W

X663300 WDFD 6 WELLS NO OP. NAMED 5/10/2019

**LOCATION EXCEPTION - 699177** 

12/2/2019 - GB1 - (I.O.) 8 & 5-12N-8W (201901713)X663300 WDFD 8-12N-8W

X677774 WDFD 5-12N-8W

X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO PROPOSED WELLS

COMPL. INT. (8-12N-8W) NCT 165' FSL, NCT 0' FNL, NCT 990' FWL COMPL. INT. (5-12N-8W) NCT 0' FSL, NCT 165' FNL, NCT 900' FWL\*\*\*

PALOMA OPERATING CO. INC

7/15/2019

\*\*\* S/B 990' FWL; WILL BE CORRECTED PER ATTORNEY FOR OPR AT FINAL HEARING

11/18/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 **MEMO** 

- OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

**SPACING - 663300** 12/2/2019 - GB1 - (640) 8-12N-8W

EXT 575475 WDFD

12/2/2019 - GB1 - (640) 5-12N-8W **SPACING - 677774** 

EXT 663300 WDFD

SPACING - 700284 (201901712) 12/2/2019 - GB1 - (I.O.) 8 & 5-12N-8W

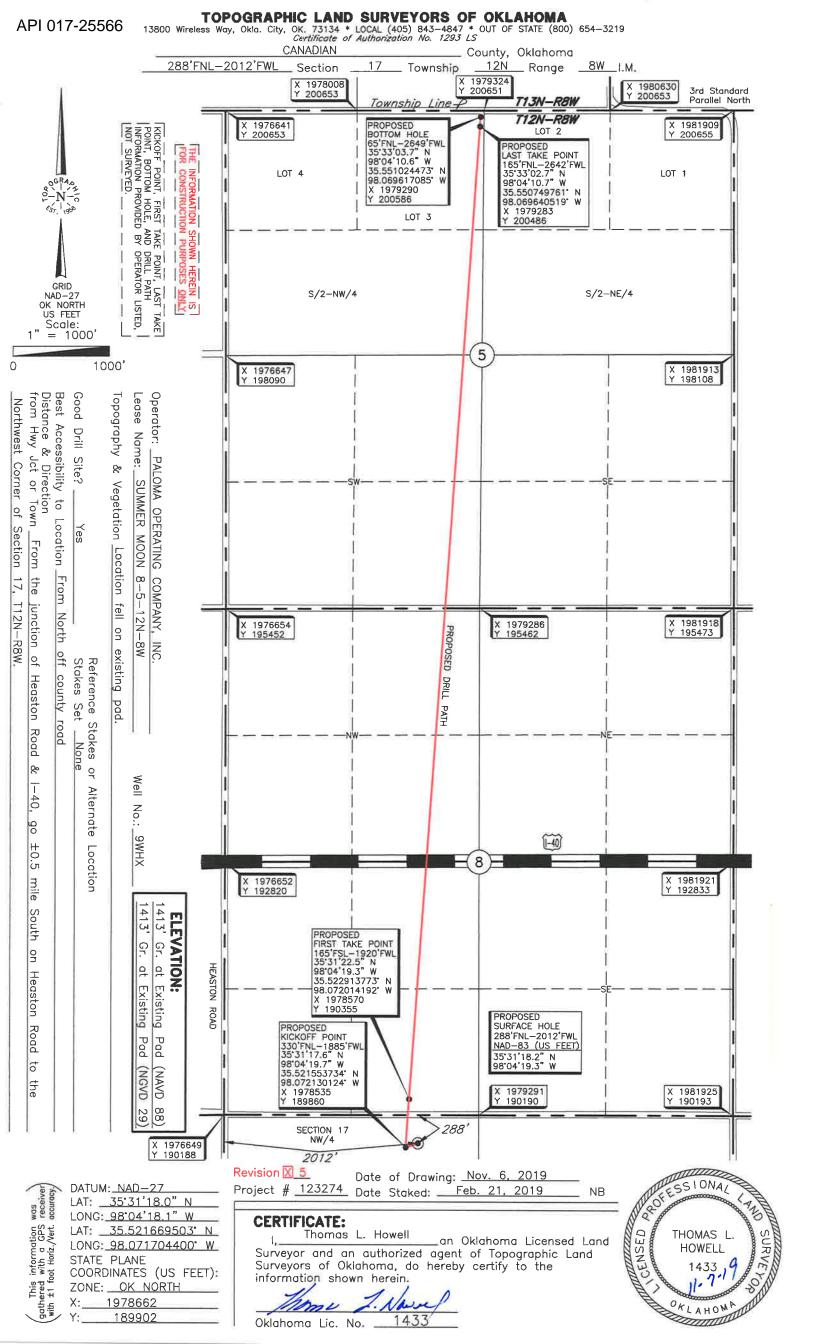
EST MULTIUNIT HORIZONTAL WELL

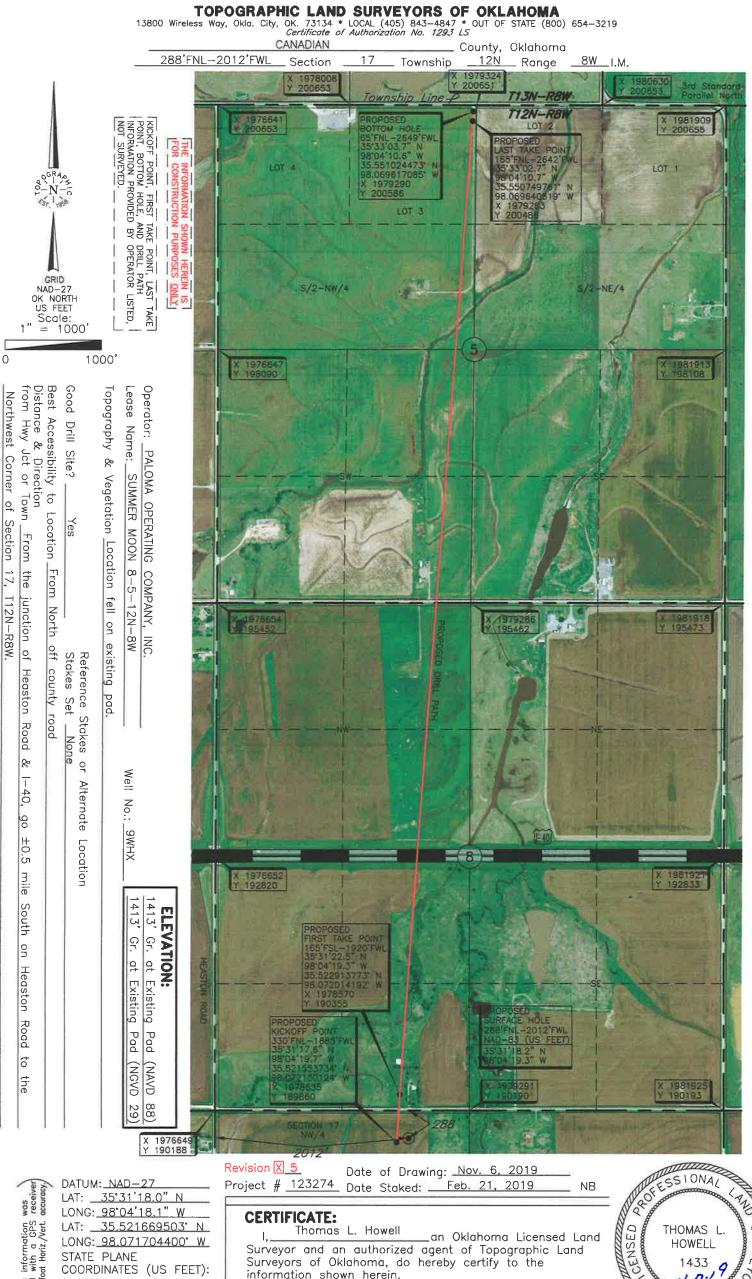
X663300 WDFD 8-12N-8W X677774 WDFD 5-12N-8W

50% 8-12N-8W 50% 5-12N-8W

PALOMA PARTNERS IV, LLC

8/5/2019





ZONE: OK NORTH 1978662 189902

Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein.

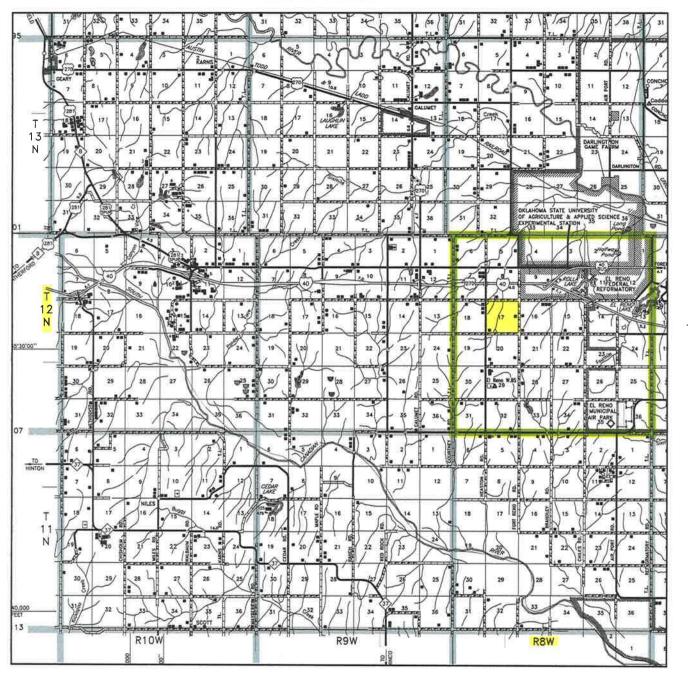
num Oklahoma Lic. No. \_



# 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

OGRADA

557 1958

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

County CANADIAN State OK

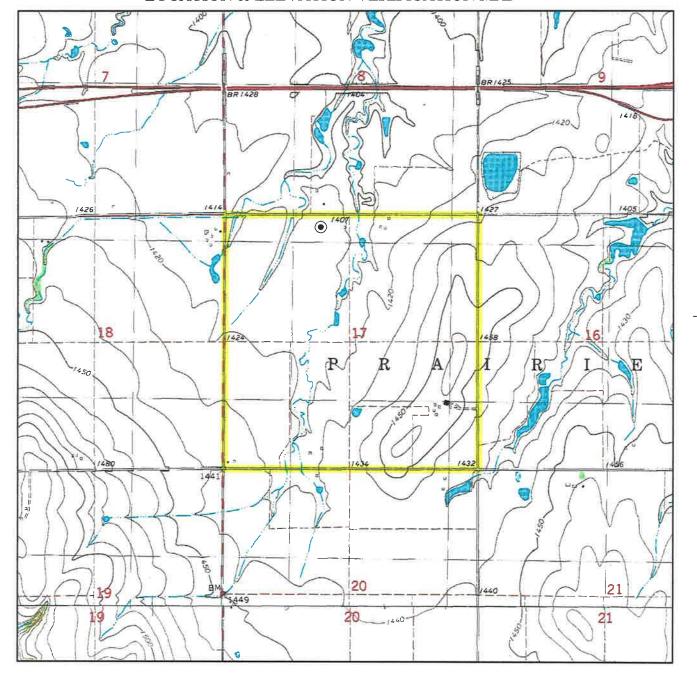
Operator PALOMA OPERATING COMPANY, INC.



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

County CANADIAN State OK

State State

Operator PALOMA OPERATING COMPANY, INC.

Description 288'FNL-2012'FWL

Lease SUMMER MOON 8-5-12N-8W 9WHX

1414' Gr. at Existing Pad (NAVD 88) Elevation 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