API NUMBER: 017 25253 Α **OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION** P.O. BOX 52000 **OKLAHOMA CITY, OK 73152-2000** (Rule 165:10-3-1)

Approval Date: 07/31/2018 01/31/2019 Expiration Date:

Horizontal Hole Oil & Gas

Amend reason: CHANGE WELL NAME TO CROOKED NOSE 15-12N-08W 2MH

AMEND PERMIT TO DRILL

WELL LOCATION:	Sec: 1	15 Twp:	12N	Rge:	8W	County	: CAN	ADIAN		
SPOT LOCATION:	NW	SW N	W	NW		FEET FROM QUARTER:	FROM	NORTH	FROM	WEST
						SECTION LINES:		715		230
Lease Name: (CROOKED	NOSE 15-	12N-8V	v		We	ell No:	2MH		

Operator

Name:

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

Well will be 230 feet from nearest unit or lease boundary.

PALOMA OPERATING CO INC 1100 LOUISIANA ST STE 5100

HOUSTON. TX 77002-5220 CHARLES W. BRANDLEY AND CHERLYN J. BRANDLEY 7903 SMITH ROAD WEST

EL RENO OK 73036

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

	Name	Depth	Name	Depth
1	MISSISSIPPI	10750 6		
2		7		
3		8		
4		9		
5		10		
Spacing Orders:	143998	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201804441 Special Orders:

Total Depth: 15879 Ground Elevation: 1445 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 320

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

Approved Method for disposal of Drilling Fluids: PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000

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?

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: 18-34430

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?

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. 15 Twp 12N Rge 8W County CANADIAN

Spot Location of End Point: ΝE NW NW NW Feet From: NORTH 1/4 Section Line: 65 WEST Feet From: 1/4 Section Line: 360

Depth of Deviation: 10177 Radius of Turn: 477

Direction: 1

Total Length: 4953

Measured Total Depth: 15879 True Vertical Depth: 10870 End Point Location from Lease. Unit, or Property Line: 65

> **Additional Surface Owner** Address City, State, Zip LAVERNE BRANDLEY 7323 SMITH ROAD WEST EL RINO, OK 73036

Notes:

MEMO

Category Description

DEEP SURFACE CASING 7/16/2018 - 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 7/16/2018 - 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

7/16/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201804441 7/24/2018 - G58 - (I.O.) 15-12N-8W

X143998 MISS

COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 330' FWL

NO. OP. NAMED REC 6/26/2018 (MILLER)

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 25253 CROOKED NOSE 15-12N-8W 2MH

Category Description

SPACING - 143998

7/24/2018 - G58 - (640) 15-12N-8W EXT OTHER EXT 122864/137298 MISS

