API NUMBER: 017 25250

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: 07/30/2018
Expiration Date: 01/30/2019

PERMIT TO DRILL

							SECTION LINES:		605		230
SPOT LOCATION:	NW	sw	N'	W	NW		FEET FROM QUARTER:	FROM	NORTH	FROM	WEST
WELL LOCATION:	Sec:	22	Twp:	12N	Rge:	8W	County	: CAN	ADIAN		

Lease Name: CROOKED NOSE 15-12N-8W Well No: 1WH Well will be 230 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

CHARLES W. BRANDLEY AND CHERLYN J, BRANDLEY 7903 SMITH ROAD WEST

EL RINO OK 73036

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

	Name	Depth	Nam	ne	Depth
1	WOODFORD	11195	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	201804438	Location Exception Orders:	201804439		Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 16089 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

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: 5000 Average: 3000

Is depth to top of ground water greater than 10ft below base of pit? $\quad Y$

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: 18-34429

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 NE NW NW Feet From: NORTH 1/4 Section Line: 65 WEST Feet From: 1/4 Section Line: 1060

Depth of Deviation: 10289 Radius of Turn: 477

Direction: 10

Total Length: 5051

Measured Total Depth: 16089 True Vertical Depth: 12000 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

Description Category

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 - 201804438 7/17/2018 - G58 - (640) 15-12N-8W

EXT 592308 WDFD REC 6/26/2018 (MILLER) Category

Description

7/17/2018 - G58 - (I.O.) 15-12N-8W X201804438 WDFD PENDING CD - 201804439

COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 330' FWL NO OP. NAMED

REC 6/26/2018 (MILLER)

