API NUMBER: 129 23958

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: 05/27/2014

Expiration Date: 11/27/2014

250 feet from nearest unit or lease boundary.

6778 0

## PERMIT TO DRILL

WELL LOCATION	: Sec: 19 Twp: 16N	Rge: 22V	W Count	y: ROG	ER MILLS			
SPOT LOCATION	NW NE NW	NW	FEET FROM QUARTER:	FROM	NORTH	FROM	WEST	
			SECTION LINES:		250		790	
Lease Name:	CURRIER		w	ell No:	2-18H			
Operator Name:	APACHE CORPORATIO	N			Teleph	none:	9184914900; 918	4914

APACHE CORPORATION
6120 S YALE AVE STE 1500
TULSA, OK 74136-4224

UNITED STATES DEPARTMENT OF THE INTERIOR
7906 EAST 33RD STREET, SUITE 101
BUREAU OF LAND MANAGEMENT/OK FIELD OFFICE
TULSA OK 74145-

OTC/OCC Number:

Well will be

Formation(s) (Permit Valid for Listed Formations Only): Name Depth Name Depth TONKAWA 8272 1 6 2 7 3 8 4 9 10 579421 Spacing Orders: Location Exception Orders: 624652 Increased Density Orders:

Pending CD Numbers: 201402663 Special Orders:

Total Depth: 13500 Ground Elevation: 1958 Surface Casing: 510 Depth to base of Treatable Water-Bearing FM: 460

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-27180
Chlorides Max: 8000 Average: 5000 H. SEE MEMO

Is depth to top of ground water greater than 10ft below base of pit? Yithin 1 mile of municipal water well? N

William Filling of marilospal water well.

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

## 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 18 Twp 16N Rge 22W County ROGER MILLS

Spot Location of End Point: NW NW NE NW
Feet From: NORTH 1/4 Section Line: 300
Feet From: WEST 1/4 Section Line: 1412

Depth of Deviation: 8600 Radius of Turn: 573

Direction: 20

Total Length: 4836

Measured Total Depth: 13500

True Vertical Depth: 8272

End Point Location from Lease,
Unit, or Property Line: 300

Notes:

Category Description

LOCATION EXCEPTION - 610809 5/27/2014 - G72 - 18-16N-22W (I.O.)

X 597421 TNKW;

SHL NCT 200 FSL NCT 200 FWL;

COMP INT. NCT 300 FSL NCT 300 FNL NCT 560 FWL;

APACHE CORPORATION:

4/25/2013

LOCATION EXCEPTION - 624652 5/27/2014 - G72 - 18-16N-22W

EXT 610809 FROM 4/25/2014 TO 4/25/2015;

MEMO 5/20/2014 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - CANADIAN RIVER),

PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201402663 5/27/2014 - G72 - 18-16N-22W

X 579421 TNKW;

1 WELL;

NO OPER NAMED;

REC 5/6/2014 (MCKEOWN)

SPACING - 572053 5/23/2014 - G72 - (640 HOR) 18-16N-22W

EST TNKW;

EXIST CONCURRENTLY WITH PRODUCING NON-HORIZONTAL DRILLING AND SPACING UNITS, SUPERSEDE EXISTING NON-DEVELOPED NON-HORIZONTAL DRILLING AND SPACING UNITS.