API NUMBER: 129 24003

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: 09/17/2014 Expiration Date: 03/17/2015

PERMIT TO DRILL

WELL LOCATION:	Sec:	34	Twp:	16N	Rge:	24W	County:	ROGER MILLS

SPOT LOCATION: SE SE SW SE FEET FROM QUARTER: FROM SOUTH FROM EAST SECTION LINES: 289 1445

Lease Name: AVRIETT Well No: 34-16-24 4H Well will be 289 feet from nearest unit or lease boundary.

 Operator Name:
 APACHE CORPORATION
 Telephone:
 9184914900; 9184914
 OTC/OCC Number:
 6778
 0

APACHE CORPORATION 6120 S YALE AVE STE 1500

TULSA. OK 74136-4224

GILES CUMMINGS AVRIETT 3602 WOODVIEW ROAD

WOODWARD OK 73801

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

	Name	Depth	Name	Depth
1	TONKAWA	8586	6	
2			7	
3			8	
4			9	
5			10	
Spacing Orders:	607526	Location Exception Orders: 6295	531	Increased Density Orders:

Pending CD Numbers: 201404290 Special Orders:

Total Depth: 13500 Ground Elevation: 2302 Surface Casing: 780 Depth to base of Treatable Water-Bearing FM: 580

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

PIT 1 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: WATER BASED Chlorides Max: 8000 Average: 5000

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: 1B

Liner required for Category: 1B
Pit Location is BED AQUIFER
Pit Location Formation: OGALLALA

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-28249

H. SEE MEMO

PIT 2 INFORMATION

Type of Pit System: ON SITE

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: 3

Liner required for Category: 3
Pit Location is BED AQUIFER
Pit Location Formation: OGALLALA

## **HORIZONTAL HOLE 1**

Sec 34 Twp 16N Rge 24W County ROGER MILLS

Spot Location of End Point: C N2 NW NE
Feet From: NORTH 1/4 Section Line: 330
Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 8086
Radius of Turn: 573
Direction: 354
Total Length: 4514

Measured Total Depth: 13500

True Vertical Depth: 8659

End Point Location from Lease,
Unit, or Property Line: 330

Notes:

Category Description

LOCATION EXCEPTION - 629531 9/17/2014 - G91 - (I.O.) 34-16N-24W

X 607526 TNKW

SHL NCT 289 FSL, NCT 1445 FEL

COMP INT. NCT 300 FSL, NCT 300 FNL, NCT 1320 FEL

APACHE CORPORATION

8-21-2014

MEMO 9/17/2014 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201404290 9/17/2014 - G91 - 34-16N-24W

X 607526 TNKW 2 WELLS NO OP. NAMED

REC. 7-15-2014 (JOHNSON)

SPACING - 607526 9/17/2014 - G91 - (640)(HOR) 34-16N-24W

VAC 203364 TNKW

**EST TNKW** 

POE BHL NCT 660' FB