

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

API NUMBER: 129 23929

Approval Date: 03/19/2014
Expiration Date: 09/19/2014

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 16N Rge: 22W County: ROGER MILLS
SPOT LOCATION: SW SW SW SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 200 2325

Lease Name: MCCRACKEN 20-16-22 Well No: 1H Well will be 200 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

JR< MCCRACKEN, SO TRUSTEES OF THE JOHN &
TYLENE MCCRACKEN TRUST
19251 E. 810 ROAD
LEEDEY OK 73654

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

Name	Depth	Name	Depth
1 TONKAWA	8421	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 61659 Location Exception Orders: Increased Density Orders: 618387

Pending CD Numbers: 201307438 Special Orders:

Total Depth: 13317 Ground Elevation: 2083 Surface Casing: 650 Depth to base of Treatable Water-Bearing FM: 450

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: 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: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: CLOUD CHIEF

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-26694
H. SEE MEMO

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.

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 BED AQUIFER

Pit Location Formation: CLOUD CHIEF

HORIZONTAL HOLE 1

Sec 20 Twp 16N Rge 22W County ROGER MILLS

Spot Location of End Point: C S2 SW SE

Feet From: SOUTH 1/4 Section Line: 330

Feet From: EAST 1/4 Section Line: 1980

Depth of Deviation: 7872

Radius of Turn: 573

Direction: 178

Total Length: 5115

Measured Total Depth: 13317

True Vertical Depth: 8493

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

Notes:

Category

Description

INCREASED DENSITY - 618387

3/19/2014 - G30 - 20-16N-22W
X61659 TNKW
2 WELLS
APACHE CORPORATION
11/21/13

MEMO

3/19/2014 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - SOUTH CANADIAN RIVER), PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201307438

3/19/2014 - G30 - 20-16N-22W
X61659 TNKW
SHL NCT 200 FSL, NCT 2325 FEL 17-16N-22W
1ST PERF NCT 300 FNL, NCT 1320 FEL 20-16N-22W
LAST PERF NCT 330 FSL, NCT 1320 FEL 20-16N-22W
NO OP. NAMED
REC 11/26/13 (JOHNSON)

SPACING - 61659

3/19/2014 - G30 - (640) 20-16N-22W
EST TNKW

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