

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

API NUMBER: 045 23527

Approval Date: 10/21/2014
Expiration Date: 04/21/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 16N Rge: 24W County: ELLIS
SPOT LOCATION: NE NE NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 250 1575

Lease Name: CROSS 5-16-24 Well No: 1H Well will be 250 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

RONALD CROSS
P.O. BOX 242
ARNETT OK 73832

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

| Name | Depth | Name | Depth |
|------------|-------|------|-------|
| 1 MARMATON | 9779 | 6 | |
| 2 | | 7 | |
| 3 | | 8 | |
| 4 | | 9 | |
| 5 | | 10 | |

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201404284
201404287

Special Orders:

Total Depth: 14000 Ground Elevation: 2054 **Surface Casing: 430** Depth to base of Treatable Water-Bearing FM: 380

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: 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: OGALLALA

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-28417
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: OGALLALA

HORIZONTAL HOLE 1

Sec 05 Twp 16N Rge 24W County ROGER MILLS

Spot Location of End Point: W2 SW SE SE

Feet From: SOUTH 1/4 Section Line: 330

Feet From: EAST 1/4 Section Line: 1200

Depth of Deviation: 9225

Radius of Turn: 344

Direction: 178

Total Length: 4235

Measured Total Depth: 14000

True Vertical Depth: 9779

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

| Additional Surface Owner | Address | City, State, Zip |
|--------------------------|--------------|------------------|
| JIMMIE & RHONDA WAYLAND | P.O. BOX 193 | ARNETT, OK 73832 |

Notes:

Category

Description

MEMO

10/20/2014 - G76 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201404284

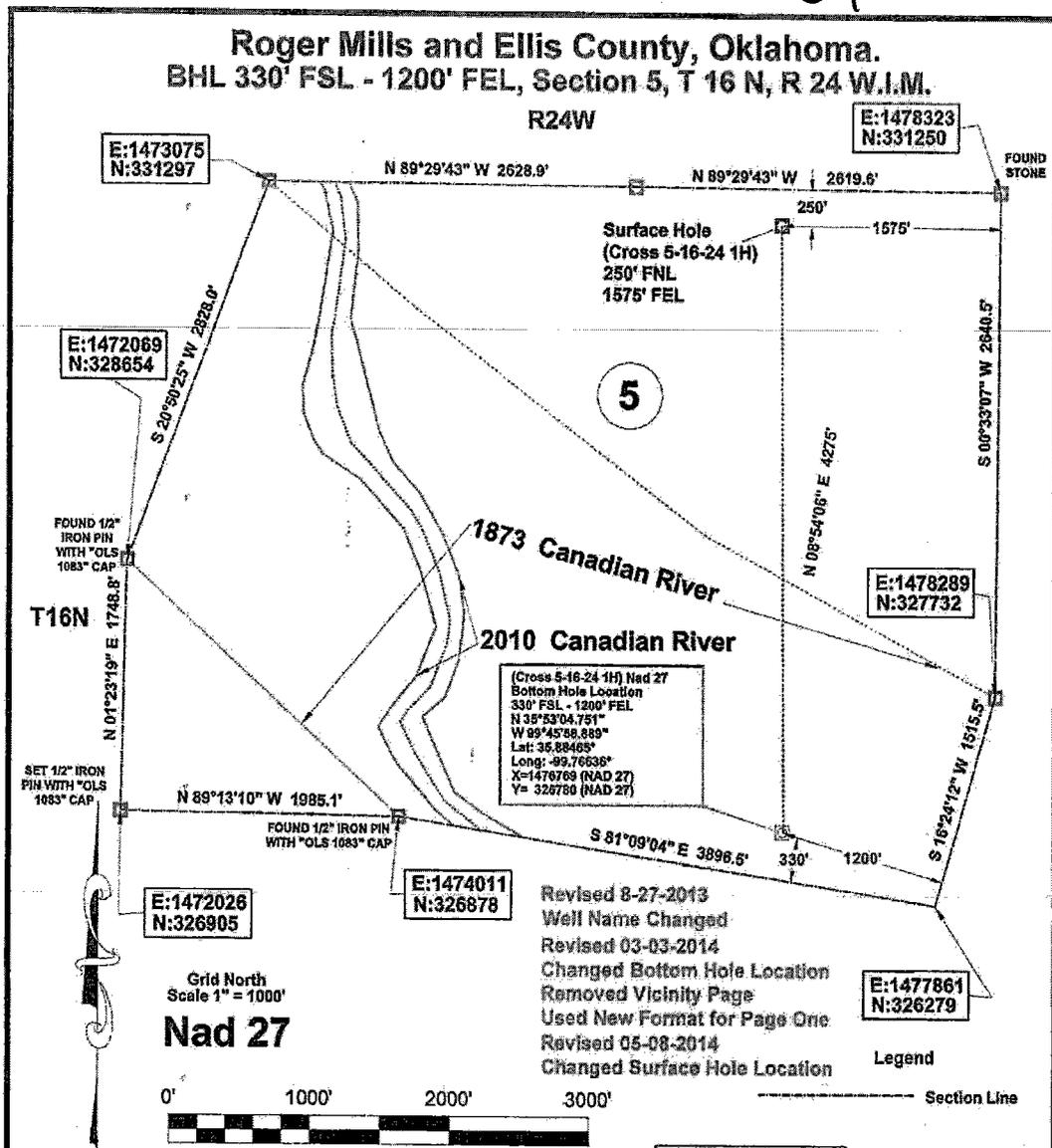
10/20/2014 - G91 - (I.O.) 5-16N-24W
X 201404287 MRMN
X OTHER
SHL NCT 250 FNL, NCT 1575 FEL
1ST PERF NCT 300 FNL, NCT 1000 FEL
LAST PERF NCT 300 FSL, NCT 1000 FEL
NO OP. NAMED
REC. 10-7-2014 (JOHNSON)

PENDING CD - 201404287

10/20/2014 - G91 - (640)(HOR) 5-16N-24W
EST MRMN
POE TO BHL NCT 660' FB
(SUPERCEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS)
REC. 10-7-2014 (JOHNSON)

045-23527

Roger Mills and Ellis County, Oklahoma.
 BHL 330' FSL - 1200' FEL, Section 5, T 16 N, R 24 W.I.M.



BOTTOM HOLE INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.
 CORNER COORDINATES ARE TAKEN FROM POINTS SURVEYED IN THE FIELD.

ELEVATION:
 2054' Gr. at stake

OPERATOR: Apache Corporation **WELL NO.:** 1H
LEASE NAME: Cross 5-16-24

BEST ACCESSIBILITY TO LOCATION: From the West or South
DISTANCE & DIRECTION
FROM HWY JCT OR TOWN: Beginning at the intersection of CR E0770 and HWY 283, Oklahoma, North .1 mi, West on lease rd 1.9 mi. to location stake.

48 HOURS BEFORE YOU DIG...
 CALL ONE
 1-800-322-8943

OKLAHOMA ONE-CALL SYSTEM

Buried utilities are not necessarily shown. It is the contractor's responsibility to locate and preserve all utility services.

Contractor is responsible for contacting all utility companies prior to construction.

REVISION: 05-08-2014 **DATE OF DRAWING:** 05-08-2014
INVOICE #: 18193 **DATE STAKED:** 05-07-2014

STAKED SURFACE HOLE We do hereby certify that this survey was done in accordance to records, maps and other information as provided to us by the client herein named and that great care was taken in the actual staking of this well and the determination of any obstacles thereupon. However, the accuracy of this survey is not guaranteed and if there appears to be any discrepancy, please notify us immediately.

DATUM: Nad 27
N: 35°53'46.816"
W: 99°48'00.104"
LAT: 35.89628°
LONG: -99.76670°
STATE PLANE
COORDINATES: (US FEET)
ZONE: OK North
X: 1476746
Y: 331014

ROGER D. JIVIDEN
 L.S. 1083
 05-08-14

Survey is valid only if print has original seal and signature of surveyor present

| | | | | | |
|---|--|---------------------------|--|--------------------------|------------------------|
| <p>JIVIDEN LAND SURVEY CO., INC. 1210 19TH STREET / P.O. BOX 943 WOODWARD, OKLAHOMA 73802 Phone 880-258-7174 - Fax 580-258-5424</p> | <p>Survey For: Apache Corporation 6120 South Yale Avenue, Ste. 1500 Tulsa, Oklahoma 74138 ATTN: JEFF CLARK</p> | JOB 274-14 | DATE OF PLAT 05-08-2014 | SCALE 1"=1000' | SHEET 1 OF 3 |
| | | DRAWN BY J.C.B. | OKLA. CA #2064, EXP. 06/30/2015 KANSAS CA #143, EXP. 12/31/2014 | | |