API NUMBER: 083 24223

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: 11/19/2013
Expiration Date: 05/19/2014

PERMIT TO DRILL

WELL LOCATION: Sec: 07 Twp: 16N Rge: 4W County: LOGAN

SPOT LOCATION: SW SW SW SE FEET FROM QUARTER: FROM SOUTH FROM EAST SECTION LINES: 206 2464

Lease Name: MURRAY Well No: 2-7-18H Well will be 206 feet from nearest unit or lease boundary.

Operator STEPHENS PRODUCTION CO Telephone: 4797834191 OTC/OCC Number: 23030 0

STEPHENS PRODUCTION CO

623 GARRISON AVE

FORT SMITH, AR 72902-2407

MILDRED FIGHTMASTER

PO BOX 498

CRESCENT OK 73028

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

Name Depth Name Depth MISSISSIPPIAN 1 6395 6 2 WOODFORD 6780 7 3 HUNTON 6860 8 4 9 10 616234 Spacing Orders: Location Exception Orders: 616917 Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 12200 Ground Elevation: 960 **Surface Casing: 550** Depth to base of Treatable Water-Bearing FM: 260

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?  $\quad \mbox{Y}$ 

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 13-24828

H. CLOSED SYSTEM=STEEL PITS REQUIRED - CIMARRON RIVER

## **HORIZONTAL HOLE 1**

Sec 18 Twp 16N Rge 4W County LOGAN

Spot Location of End Point: SW SE SW SE
Feet From: SOUTH 1/4 Section Line: 50
Feet From: EAST 1/4 Section Line: 1935

Depth of Deviation: 6300
Radius of Turn: 700
Direction: 175
Total Length: 4750

Measured Total Depth: 12200
True Vertical Depth: 7005
End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category Description

DEEP SURFACE CASING 11/18/2013 - G71 - APPROVED CONTINGENT ON NOTIFYING OCC FIELD STAFF IMMEDIATELY

OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY

CONDUCTOR OR SURFACE CASING

LOCATION EXCEPTION - 616917 11/19/2013 - G30 - (I.O.) E2 18-16N-4W

X616234 MSSP, WDFD, HNTN

COMP. INT. NCT 150 FNL, NCT 150 FSL, NCT 660 FWL

STEPHENS PRODUCTION COMPANY

10/11/13

SPACING - 616234 11/19/2013 - G30 - (320 HOR) E2 18-16N-4W

EST MSSP, WDFD EXT 598075 HNTN

POE TO BHL (MSSP, HNTN) NCT 660' FB POE TO BHL (WDFD) NCT 330' FB

(COEXIST WITH SP. 59564 MISS & SP. 164264 HNTN, ZACHGO 18-1, SE4 NE4, API 083-21578;

SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS)