API NUMBER: 119 24289

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: 10/15/2014
Expiration Date: 04/15/2015

PERMIT TO DRILL

WELL LOCATION: Sec: 31 Twp: 19N Rge: 3E County: PAYNE

SPOT LOCATION: NW NE NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 200 1939

Lease Name: FRANK 31-19N-3E Well No: 1MH Well will be 200 feet from nearest unit or lease boundary.

Operator AMERICAN ENERGY-WOODFORD LLC Telephone: 4056085574; 4054188 OTC/OCC Number: 23358 0

AMERICAN ENERGY-WOODFORD LLC

PO BOX 18756

OKLAHOMA CITY, OK 73154-0756

FRANK W. & SANDRA J. ADAMS

2805 E 32ND ST

STILLWATER OK 74074

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

Name Depth Name Depth MISSISSIPPIAN 1 4228 6 2 7 3 8 4 9 10 608471 Spacing Orders: Location Exception Orders: 629916 Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 10500 Ground Elevation: 862 **Surface Casing: 450** Depth to base of Treatable Water-Bearing FM: 200

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

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-28379

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

HORIZONTAL HOLE 1

Sec 31 Twp 19N Rge 3E County **PAYNE** Spot Location of End Point: SW SE SW SE Feet From: SOUTH 1/4 Section Line: 165 Feet From: EAST 1/4 Section Line: 1900

Depth of Deviation: 3728 Radius of Turn: 1223

Direction: 179
Total Length: 4850

Measured Total Depth: 10500

True Vertical Depth: 4951

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category Description

LOCATION EXCEPTION - 629916 10/15/2014 - G91 - (I.O.) 31-19N-3E

X 608471 MSSP, OTHERS

X OTHERS

COMPL. INT. NCT 165 FSL, NCT 165 FNL, NCT 1320 FWL

AMERICAN ENERGY-WOODFORD, LLC. 9-2-2014

SPACING - 608471 10/15/2014 - G91 - (640)(HOR) 31-19N-3E

VAC 205997 MSSLM, OTHER EXT 605008 MSSP, OTHERS POE TO BHL NCT 660' FB

(SUPERCEDE EXISTING NON-DEVELOPED NON-HORIZONTAL DRILLING AND SPACING UNITS;

COEXIST PRODUCING NON-HORIZONTAL DRILLING AND SPACING UNITS)