

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

API NUMBER: 119 24286 A

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

Horizontal Hole Oil & Gas

Amend reason: CORRECT THE SURFACE OWNER

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 33 Twp: 19N Rge: 3E County: PAYNE  
SPOT LOCATION:  NE  NW  NE  NE FEET FROM QUARTER: FROM NORTH FROM EAST  
SECTION LINES: 245 795

Lease Name: FRIEDEMANN WEST 28-21-19N-3E Well No: 1WH Well will be 245 feet from nearest unit or lease boundary.

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

AMERICAN ENERGY-WOODFORD LLC  
PO BOX 18756  
OKLAHOMA CITY, OK 73154-0756

ADOLPH & FLORENCE FRIEDEMANN, CO-TTEES.  
ADOLPH & FLORENCE FRIEDEMANN TR.  
ROUTE 4, BOX 9  
STILLWATER OK 74074

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

Name	Depth	Name	Depth
1 WOODFORD	4140	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 616533 Location Exception Orders: 632016 Increased Density Orders:  
619448  
632015

Pending CD Numbers: 201407214 Special Orders:

Total Depth: 15000 Ground Elevation: 869 Surface Casing: 590 Depth to base of Treatable Water-Bearing FM: 340

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

PIT 1 INFORMATION

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? 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: OSCAR

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-28311

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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.

HORIZONTAL HOLE 1

Sec 21 Twp 19N Rge 3E County PAYNE

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 450

Depth of Deviation: 3600

Radius of Turn: 891

Direction: 1

Total Length: 10000

Measured Total Depth: 15000

True Vertical Depth: 4491

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

Notes:

Category

Description

LOCATION EXCEPTION - 632016

10/22/2014 - G91 - (E.O.) 21 & 28-19N-3E  
SHL 245 FNL, 545 FEL \*\* 33-19N-3E  
X 616533 WDFD 28-19N-3E  
X 619448 WDFD 21-19N-3E  
COMPL. INT. (28-19N-3E) NCT 165 FSL, NCT 0 FNL, NCT 330 FEL  
COMPL. INT. (21-19N-3E) NCT 0 FSL, NCT 165 FNL, NCT 330 FEL  
AMERICAN ENERGY - WODDFORD, LLC.  
10-20-2014 (N. STUCK)

\*\* SHL TO BE CORRECTED IN FINAL ORDER PER OPERATOR\*\*

PENDING CD - 201407214

10/9/2014 - G91 - 21 & 28-19N-3E  
X 616533 WDFD 28-19N-3E  
X 619448 WDFD 21-19N-3E  
1 WELL  
NO OP. NAMED  
HEARING 10-21-2014 (N. STUCK)

SPACING - 616533

10/9/2014 - G91 - (640)(HOR) 28-19N-3E  
VAC 271050 WDFD, OTHERS  
VAC 362551/369480 WDFD, OTHERS (N2 SE4 SE4, SW4 SE4 SE4)  
VAC 362551 WDFD, OTHERS (N2 SE4, SW4 SE4, SE4 SE4 SE4, SW4)  
EXT 603961 WDFD, OTHERS  
POE TO BHL NCT 330' FB

SPACING - 619448

10/9/2014 - G91 - (640)(HOR) 21-19N-3E  
VAC 268329 WDFD, OTHERS  
EXT 612294 WDFD, OTHERS  
POE TO BHL NCT 330' FB

SPACING - 632015

10/22/2014 - G91 - (E.O.)(640) 21 & 28-19N-3E  
EST MULTIUNIT HORIZONTAL WELL  
X 616533 WDFD 28-19N-3E  
X 619448 WDFD 21-19N-3E  
(MSSP, MSRH ASSOCIATED COMMON SOURCES OF SUPPLY TO WDFD)  
50% 21-19N-3E  
50% 28-19N-3E  
AMERICAN ENERGY - WOODFORD, LLC.  
10-20-2014 (N. STUCK)

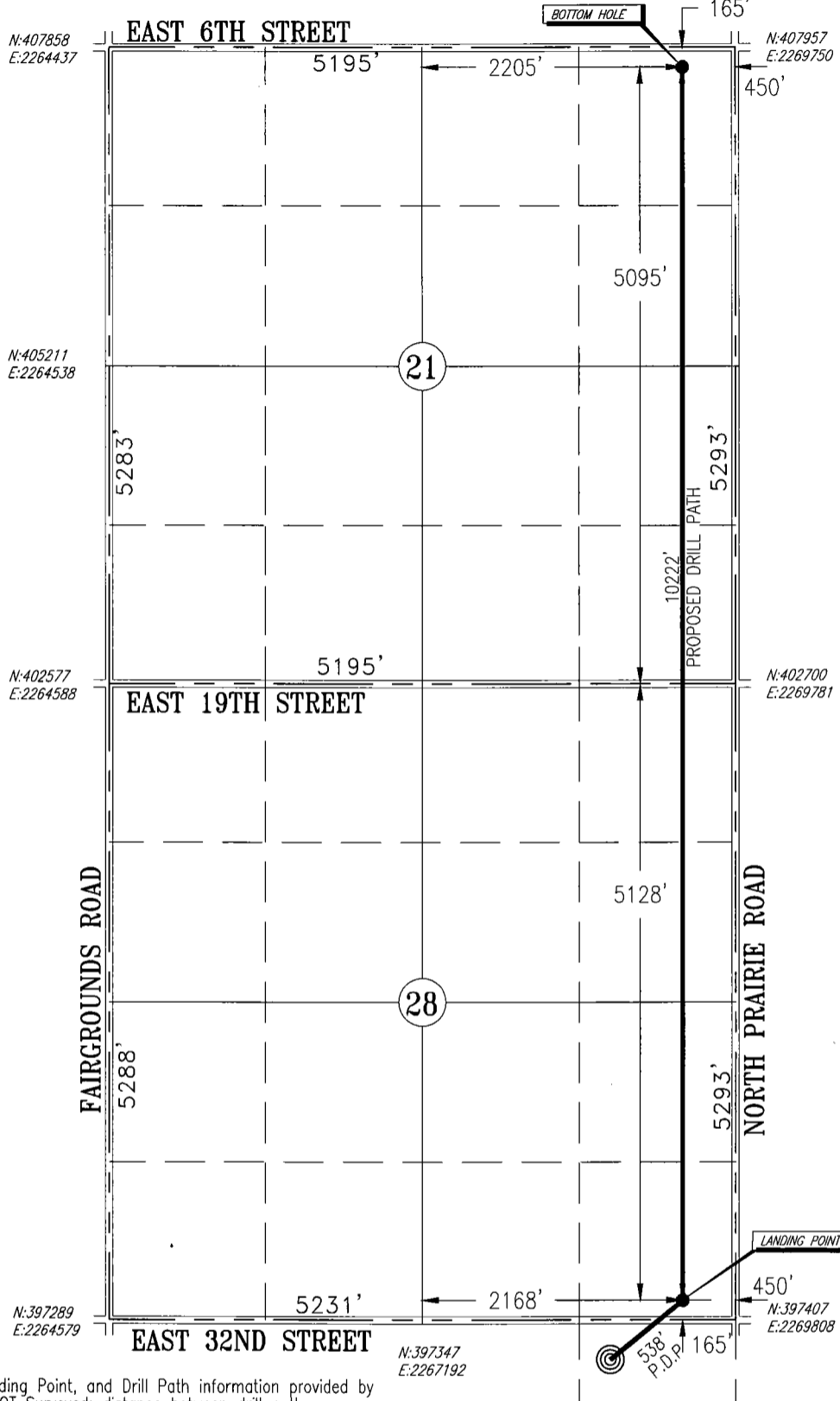
# PROPOSED WELL LOCATION

119-24286

PAYNE County, Oklahoma

245' FNL, 795' FEL NE/4 Section 33, Township 19N, Range 3E I.M.

Scale:  
1" = 1000'



**SURFACE HOLE**  
245'FNL-795'FEL  
NAD-83 (US Feet)  
36°05'12"N  
96°58'58"W  
N:397147  
E:2269015

**LANDING POINT**  
165'FSL-450'FEL  
NAD-83 (US Feet)  
36°05'16"N  
96°58'54"W  
N:397562  
E:2269358

**BOTTOM HOLE**  
165'FNL-450'FEL  
NAD-83 (US Feet)  
36°06'57"N  
96°58'54"W  
N:407784  
E:2269301

Bottom Hole, Landing Point, and Drill Path information provided by operator listed, NOT Surveyed; distance between drill paths are calculated.

Operator: AMERICAN ENERGY-WOODFORD, LLC  
 Lease Name: FRIEDEMANN 28-21-19N-3E Well No.: 1WH  
 Topography & Vegetation: LOCATION FELL IN PASTURE LAND  
 Good Drill Site: YES  
 Best Accessibility to Location: FROM NORTH  
 Distance and Direction from Hwy Junction or Town: FROM THE INTERSECTION OF 32ND STEET AND NORTH PRAIRIE ROAD WEST  
0.10 MILES TO WELL PAD

**ELEVATION:**  
869' GR. AT STAKE

Keystone Engineering and Land Surveying, Inc. CA #5877 Exp. 6/30/15 P.O. Box 436 Stillwater, OK. 74076 Ph. (405) 743-3355



**CERTIFICATE:** W14-186  
 REVISED: 9-23-14  
 I, Carey E. Harris, an Oklahoma Professional Land Surveyor and an authorized agent of Keystone Engineering and Land Surveying, Inc., does hereby certify that on April 07, 2014, the above described well location was surveyed on the ground as shown herein.  
*[Signature]* 23 Sep 14  
 Carey E. Harris, Oklahoma Professional Land Surveyor No. 1719

( THE FOLLOWING INFORMATION WAS GATHERED USING A GPS RECEIVER. ACCURACY ±3 FOOT. )  
 GPS DATUM: NAD-83  
 LATITUDE: 36°05'12" N  
 LONGITUDE: 96°58'58" W  
 STATE PLANE COORDINATES  
 ZONE: OK NORTH  
 X: 2269015  
 Y: 397147