API NUMBER: 119 24325 A

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

Approval Date: 01/21/2015
Expiration Date: 07/21/2015

Horizontal Hole Oil & Gas

Amend reason: UPDATE TO MSC

## AMEND PERMIT TO DRILL

OT LOCATIO		. 300	County: PAY	SOUTH FROM	WEST 1670			
Lease Name	: BUCKNER 24-19N-1W		Well No:	1WH		Well will be 13	3 feet from nearest un	it or lease boundar
Operator Name:	AMERICAN ENERG	SY-WOODFORD LI	.c	Telephone:	4056085540; 405418	88 OT	C/OCC Number:	23358 0
	CAN ENERGY-WOO	ODFORD LLC			GEORGE	W. BUCKNER		
PO BOX	X 18756			1319 S. VASSAR ROAD				
OKLAH	OMA CITY,	OK 7	3154-0756				<b>-</b>	•
					ORLAND	0	OK 7307:	3
ormation(	s) (Permit Valid fo	or Listed Forma	ations Only):  Depth		ORLANDO	0	OK 73073	3
ormation(	, ,	or Listed Forma	• •			O		3
1 2	Name	or Listed Forma	Depth		<b>Name</b> 6 7	O		3
1 2 3	Name	or Listed Forma	Depth		<b>Name</b> 6 7	O		3
1 2	Name	or Listed Forma	Depth		<b>Name</b> 6 7	O		3
1 2 3 4 5	Name WOODFORD	or Listed Forma	Depth	Orders:	Name 6 7 8 9			3
2 3 4	Name WOODFORD	or Listed Forma	<b>Depth</b> 4948	Orders:	Name 6 7 8 9	Increas	Depth	3

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

D. One time land application -- (REQUIRES PERMIT)

H. CLOSED SYSTEM=STEEL PITS (REQUIRED - LAKE CARL BLACKWELL)

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? 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: WELLINGTON

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.

PERMIT NO: 14-29319

## **HORIZONTAL HOLE 1**

Sec 24 Twp 19N Rge 1W County **PAYNE** Spot Location of End Point: NE NW NW NW Feet From: NORTH 1/4 Section Line: 165 WEST Feet From: 1/4 Section Line: 470

Depth of Deviation: 4200 Radius of Turn: 748 Direction: 300

Total Length: 5125

Measured Total Depth: 10500

True Vertical Depth: 4948

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

Notes:

Category Description

PENDING CD - 201409204 1/21/2015 - G76 - (E.O.) W2 24-19N-1W

X628303 WDFD

COMPL. INT. NCT 165 FSL, NCT 165 FNL, NCT 330 FWL

AMERICAN ENERGY - WOODFORD, LLC

REC. 1/20/2015 (DECKER)

SPACING - 628303 1/21/2015 - G76 - (320)(HOR) W2 24-19N-1W SU W2

EST WDFD, OTHERS

POE TO BHL (OTHERS) NCT 660 FB POE TO BHL (WDFD, OTHER) NCT 330 FB

## API-119-24325

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA 6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293. PAYNE . County, Oklahoma 133'FSL-1670'FWL 24\_\_\_Township 19N Range \_ <u>1W</u>...I.M. Section X 2217227 Y 407047 ·*2659'* -2649' NAD-83 X 2185628 Y 407074 // NAD-27 11 X 2219885 Y 407043 X 222253 Y 407051 2222535 WERIDIAN BOTTOM HOLE 165'FNL-470'FWL NAD-83 NAD-83 165 FNL-4/0" F NAD-27 36"06"55.8" N 97"15"46.7" W 36.115508' N 97.262962' W X: 2217698 Y: 406881 NAD-83 2188286 407070 X 2190936 Y 407078 NDIAN NAD-83 36'06'56.0" N 97'15'47.8" W 36.115554' N 97.263279' W X: 2186099 Y: 406907 GRID AD-27 2222555 NAD-27 X 222200 Y 404415 OK NORTH US FEET NAD--83 Scale: NAD-27 X 2190956 Y 404442 1000 X 2217250 Y 404390 NAD-83 X 218565 Y 404417 TIGN-RIE PAT LANDING POINT 165'FSL-470'FWL NAD-27 36°06'06.7" N 97'15'46.7" W 36.101863' N 97.262961' W DRILL DISTANC 1200, 4967, 2509 2643 PROPOSED X: 2217736 Y: 401914 NAD-83 36'06'06.9" N 97'15'47.8" W 36.101909' N 97.263278' W X: 2186137 SURFACE HOLE NAD-83 36'06'06.5" N 97'15'33.2" W 36.101813' N BUCKNER 24-19N-1W 2MH NAD-27 NA0-27 97.259216" W X: 2187337 Y: 401914 BUCKNER X 2219922 Y 401760 NAD-83 X 2222582 Y 401784 24-SWD -- 19N -- 1W NAD-83 X 2190983 Y 401811 NAD-27 X 2188323 Y 401787 L1 985 X 2217267 Y 401747 1670' 133' NAD-83 2655 2660 X 2185668 Y 401774 BOTTOM HOLE, LANDING POINT, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY Operator: AMERICAN ENERGY - WOODFORD, LLC **ELEVATION:** Lease Name: BUCKNER 24-19N-1W 1WH 1000' Gr. at Stake Well No .: \_ Topography & Vegetation Loc. fell in scattered trees Reference Stakes or Alternate Location Good Drill Site? \_ Yes None Stakes Set . Best Accessibility to Location From West off county road Distance & Direction From the junction of St. Hwy 51 & I-35, go  $\pm$  4.5 miles East on St. Hwy 51, then from Hwy Jct or Town ± 0.8 mile South to the Southwest Corner of Section 24, T19N-R1W W.S. ESSIONAL POFESSIONAL PROFESSIONAL Date of Drawing: Dec. 30, 2014 DATUM: NAD-27 Invoice # 238214 Date Staked: Nov. 26, 2014 NMB LAT: 36'06'06.4"N LONG: 97'15'32.0"W **CERTIFICATE:** is information vid with a GPS foot Horiz./Vert. LAT: 36.101767° N SENSED. Thomas L. Howell SURVE LONG: 97.258899° W \_\_\_an Oklahoma Licensed Land THOMAS L Surveyor and an authorized agent of Topographic Land HOWELL STATE PLANE Surveyors of Oklahoma, do hereby certify to the COORDINATES (US FEET): 1433 information shown herein. This ered ±1 fo OKLAHONA MINING ZONE: OK NORTH 2218936 Thome L. Low o at the state of th

Oklahoma Reg. No. \_\_

401888