

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

API NUMBER: 119 24192 B

Approval Date: 03/05/2014
Expiration Date: 09/05/2014

Horizontal Hole Oil & Gas

Amend reason: REMOVE MISSISSIPPIAN FROM INTENT

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 29 Twp: 18N Rge: 4E

County: PAYNE

SPOT LOCATION: SW SE SE SW

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 280 560

Lease Name: HILL 29-20 18N 4E

Well No: 2WH

Well will be 280 feet from nearest unit or lease boundary.

Operator Name: AMERICAN ENERGY-WOODFORD LLC

Telephone: 4054188001; 4054188

OTC/OCC Number: 23358 0

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

GAIL D. HILL REVOCABLE TRUST
7909 W 9H ST
RIPLEY OK 74062

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

Name	Depth	Name	Depth
1 WOODFORD	4130	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201400541
201400587
201400589
201400588

Special Orders:

Total Depth: 14350

Ground Elevation: 915

Surface Casing: 240

Depth to base of Treatable Water-Bearing FM: 190

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? Y

Within 1 mile of municipal water well? N

Wellhead Protection Area? Y

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

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-26222
H. CLOSED SYSTEM=STEEL PITS (REQUIRED - CIMARRON RIVER)

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 20 Twp 18N Rge 4E County PAYNE

Spot Location of End Point: N2 N2 N2 NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 1320

Depth of Deviation: 2700

Radius of Turn: 1500

Direction: 180

Total Length: 9400

Measured Total Depth: 14350

True Vertical Depth: 4200

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

Notes:

Category	Description
PENDING CD - 201400541	3/4/2014 - G30 - (640 HOR) 20 & 29-18N-4E VAC 565417 MISS (NW4 20) VAC 578674 MISS (SE4 20) EXT 617455 MSSP, WDFD, OTHER POE TO BHL (MSSP) NLT 660' FB POE TO BHL (WDFD) NLT 330' FB REC 2/16/14 (JOHNSON)
PENDING CD - 201400587	3/4/2014 - G30 - 20 & 29-18N-4E X201400541 MSSP, WDFD EST MULTI UNIT FOR HORIZONTAL WELL PER OCC 165:5-7-62 20-18N-4E (50%) 29-18N-4E (50%) NO OP. NAMED REC 2/16/14 (JOHNSON)
PENDING CD - 201400588	3/4/2014 - G30 - 20-18N-4E X201400541 MSSP, WDFD COMP. INT. NCT 0 FSL, NCT 165 FNL, NCT 660 FWL NO OP. NAMED REC 2/19/14 (JOHNSON)
PENDING CD - 201400589	3/4/2014 - G30 - 29-18N-4E X201400541 MSSP, WDFD SHL NCT 280 FSL, NCT 2080 FWL COMP. INT. NCT 0 FNL, NCT 165 FSL, NCT 660 FEL NO OP. NAMED REC 2/19/14 (JOHNSON)
WELLHEAD PROTECTION AREA	2/26/2014 - G71 - RIPLEY PWA - 1 WPA, NE/4 29-T18N-R4E