

DEC 15 2015

WR-35
Rev. 8/23/13

WV GEOLOGICAL SURVEY
MORGANTOWN, WV

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47 - 033 - 05867 County HARRISON District TEN MILE
Quad WOLF SUMMIT 7.5' Pad Name WILLIAMS, W.F. Field/Pool Name WOLF SUMMIT
Farm name HUFFMAN, BRIAN V. Well Number 232
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,347,054 M Easting 543,316 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4,347,173 M Easting 543,237 M

Elevation (ft) 1168' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 3/9/15 Date drilling commenced 4/1/15 Date drilling ceased 4/9/15
Date completion activities began 4/27/15 Date completion activities ceased 4/29/15
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft None Open mine(s) (Y/N) depths N
Salt water depth(s) ft None Void(s) encountered (Y/N) depths N
Coal depth(s) ft 428'- 435' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

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API 47-033 - 05867

Farm name HUFFMAN, BRIAN V.

Well number 232

| CASING STRINGS | Hole Size | Casing Size | Depth | New or Used | Grade wt/ft | Basket Depth(s) | Did cement circulate (Y/N) * Provide details below* |
|---------------------------|-----------|-------------|---------|-------------|-------------|-----------------|--|
| Conductor | 12 1/4" | 11 5/8" | 30' | Used | LS | | Sand In |
| Surface | 8 3/4" | 7" | 506' | New | LS | 64' | Y |
| Coal | | | | | | | |
| Intermediate 1 | | | | | | | |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 6 1/4" | 4 1/2" | 2895.8' | New | J-55 | | Y |
| Tubing | | | | | | | |
| Packer type and depth set | | | | | | | |

Comment Details Circulated Est. 25 sks to surface on 7" surface cement job. Circulated Est. 20 sks to surface on 4 1/2" cement job.

| CEMENT DATA | Class/Type of Cement | Number of Sacks | Slurry wt (ppg) | Yield (ft ³ /sks) | Volume (ft ³) | Cement Top (MD) | WOC (hrs) |
|----------------|----------------------|-----------------|-----------------|------------------------------|---------------------------|-----------------|-----------|
| Conductor | | | | | | | |
| Surface | Reg Neat | 110 | 15.6 | 1.18 | 130 | Surface | 8 |
| Coal | | | | | | | |
| Intermediate 1 | | | | | | | |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 50:50 Pozmix | 110/150 | 13.2/14.2 | 1.64/1.27 | 180/186 | Surface | 8 |
| Tubing | | | | | | | |

Drillers TD (ft) 2940' Loggers TD (ft) 2938'

Deepest formation penetrated Fifth Sand Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 550'

Check all wireline logs run caliper density deviated/directional induction neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

20 Centralizers every 88 from bottom on 4 1/2", Centralizer placed mid string on 7"

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED

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PRODUCING FORMATION(S)

DEPTHS

Fifth Sand 2756'- 2765' TVD 2792'- 2802' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY Estimated Orifice Pilot

| LITHOLOGY/ FORMATION | TOP DEPTH IN FT NAME TVD | BOTTOM DEPTH IN FT TVD | TOP DEPTH IN FT MD | BOTTOM DEPTH IN FT MD | DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC) |
|-------------------------|--------------------------------|------------------------------|--------------------------|-----------------------------|--|
| Sand/Shale | 0 | 428 | 0 | 428 | |
| Pittsburgh Coal | 428 | 435 | 428 | 435 | |
| Sand/Shale | 435 | 1780 | 435 | 1802 | |
| Big Lime | 1780 | 1858 | 1802 | 1888 | |
| Big Injun | 1858 | 1932 | 1888 | 1960 | |
| Shale | 1932 | 2346 | 1960 | 2380 | |
| Fifty Foot | 2346 | 2382 | 2380 | 2422 | |
| Shale | 2382 | 2440 | 2422 | 2476 | |
| Sand | 2440 | 2608 | 2476 | 2644 | |
| Shale | 2608 | 2756 | 2644 | 2792 | |
| Fifth Sand | 2756 | 2765 | 2792 | 2802 | Drilled directional N 39° W a distance of 356' |
| Shale | 2765 | 2903 | 2802 | 2940 | |
| TD | 2903 | | 2940 | | |

Please insert additional pages as applicable.

Drilling Contractor Decker Drilling

Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International

Address 11000 Performance PL City Youngstown State OH Zip 44502

Cementing Company Universal Services

Address 14 Sewer Plant Rd City Buckhannon State WV Zip 26201


Stimulating Company Producers Service Corp.

Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman

Telephone 304-420-1107

Signature 

Title Operations Manager

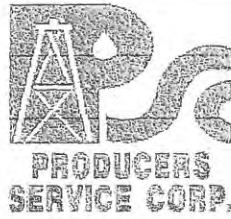
Date 12/11/15

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

Prepared for:

Dustin Hendershot



Prepared by:

Producers Service Corp

Daniel Graham

109 S. Graham St.

Zanesville, OH 43702

740-454-6253

INVOICE #: 18502

WELL NAME: W. F Williams 232

COUNTY/STATE: Harrison/WV

TOWNSHIP/FIELD: Wolf Summit

DATE of SERVICE: 4/29/2015

CUSTOMER PO#:

| Description | Notes | Amount | Units | Unit Cost | Total Cost |
|---|------------------------|--------|-------|-----------|------------|
| FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS | | 1 | EA | | |
| BLENDER CHARGE 0-10 BPM | | 1 | EA | | |
| MILEAGE CHARGE PER UNIT ONE WAY | 2 Units @ 70miles each | 140 | MI | | |
| IC ACID 15% | | 700 | GAL | | |
| PRO HIB II | | 0.5 | GAL | | |
| ACID DELIVERY | | 2 | HR | | |
| PERF BALLS 7/8" 1.3 | | 40 | EA | | |
| PRO CLA LOK (KCL SUBSTITUTE) | | 20 | GAL | | |
| PRO NE-21 | | 10 | GAL | | |
| PRO A GEL | | 250 | LB | | |
| BUFFER I | | 50 | LB | | |
| BUFFER II | | 50 | LB | | |
| BIO CLEAR 750 | | 1 | LB | | |
| AP BREAKER | | 22 | LB | | |
| BXL-A | | 15 | GAL | | |
| BXL-10C | | 15 | GAL | | |
| FLOW METER 2INCH | | 1 | EA | | |
| MANUAL PERFBALL INJECTOR | | 1 | EA | | |
| DATA VAN | | 1 | STAGE | | |
| SAND 20/40 OTTAWA | | 150 | CWT | | |
| SAND DELIVERY / TON MILES | | 525 | TMILE | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Customer Approval: _____

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