

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

API 47 - \_\_\_\_\_ - \_\_\_\_\_ County \_\_\_\_\_ District \_\_\_\_\_  
Quad \_\_\_\_\_ Pad Name \_\_\_\_\_ Field/Pool Name \_\_\_\_\_  
Farm name \_\_\_\_\_ Well Number \_\_\_\_\_  
Operator (as registered with the OOG) \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing \_\_\_\_\_ Easting \_\_\_\_\_

Elevation (ft) \_\_\_\_\_ 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)  
\_\_\_\_\_  
\_\_\_\_\_

Date permit issued \_\_\_\_\_ Date drilling commenced \_\_\_\_\_ Date drilling ceased \_\_\_\_\_  
Date completion activities began \_\_\_\_\_ Date completion activities ceased \_\_\_\_\_  
Verbal plugging (Y/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 \_\_\_\_\_ Open mine(s) (Y/N) depths \_\_\_\_\_  
Salt water depth(s) ft \_\_\_\_\_ Void(s) encountered (Y/N) depths \_\_\_\_\_  
Coal depth(s) ft \_\_\_\_\_ Cavern(s) encountered (Y/N) depths \_\_\_\_\_  
Is coal being mined in area (Y/N) \_\_\_\_\_

Reviewed by:  
\_\_\_\_\_

API 47- \_\_\_\_\_ - \_\_\_\_\_ Farm name \_\_\_\_\_ Well number \_\_\_\_\_

| CASING STRINGS            | Hole Size | Casing Size | Depth | New or Used | Grade wt/ft | Basket Depth(s) | Did cement circulate (Y/ N)<br>* Provide details below* |
|---------------------------|-----------|-------------|-------|-------------|-------------|-----------------|---|
| Conductor                 |           |             |       |             |             |                 |   |
| Surface                   |           |             |       |             |             |                 |   |
| Coal                      |           |             |       |             |             |                 |   |
| Intermediate 1            |           |             |       |             |             |                 |   |
| Intermediate 2            |           |             |       |             |             |                 |   |
| Intermediate 3            |           |             |       |             |             |                 |   |
| Production                |           |             |       |             |             |                 |   |
| Tubing                    |           |             |       |             |             |                 |   |
| Packer type and depth set |           |             |       |             |             |                 |   |

Comment Details \_\_\_\_\_  
\_\_\_\_\_

| CEMENT DATA    | Class/Type of Cement | Number of Sacks | Slurry wt (ppg) | Yield (ft <sup>3</sup> /sks) | Volume (ft <sup>3</sup> ) | Cement Top (MD) | WOC (hrs) |
|----------------|----------------------|-----------------|-----------------|------------------------------|---------------------------|-----------------|-----------|
| Conductor      |                      |                 |                 |                              |                           |                 |           |
| Surface        |                      |                 |                 |                              |                           |                 |           |
| Coal           |                      |                 |                 |                              |                           |                 |           |
| Intermediate 1 |                      |                 |                 |                              |                           |                 |           |
| Intermediate 2 |                      |                 |                 |                              |                           |                 |           |
| Intermediate 3 |                      |                 |                 |                              |                           |                 |           |
| Production     |                      |                 |                 |                              |                           |                 |           |
| Tubing         |                      |                 |                 |                              |                           |                 |           |

Drillers TD (ft) \_\_\_\_\_ Loggers TD (ft) \_\_\_\_\_  
 Deepest formation penetrated \_\_\_\_\_ Plug back to (ft) \_\_\_\_\_  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) \_\_\_\_\_

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 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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 \_\_\_\_\_

API 47- \_\_\_\_\_ - \_\_\_\_\_ Farm name \_\_\_\_\_ Well number \_\_\_\_\_

**PERFORATION RECORD**

| Stage No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formation(s) |
|-----------|------------------|------------------------|----------------------|------------------------|--------------|
|           |                  |                        |                      |                        |              |
|           |                  |                        |                      |                        |              |
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|           |                  |                        |                      |                        |              |

Please insert additional pages as applicable.

**STIMULATION INFORMATION PER STAGE**

Complete a separate record for each stimulation stage.

| Stage No. | Stimulations Date | Ave Pump Rate (BPM) | Ave Treatment Pressure (PSI) | Max Breakdown Pressure (PSI) | ISIP (PSI) | Amount of Proppant (lbs) | Amount of Water (bbls) | Amount of Nitrogen/other (units) |
|-----------|-------------------|---------------------|------------------------------|------------------------------|------------|--------------------------|------------------------|----------------------------------|
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
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|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |

Please insert additional pages as applicable.

API 47- \_\_\_\_\_ - \_\_\_\_\_ Farm name \_\_\_\_\_ Well number \_\_\_\_\_

PRODUCING FORMATION(S)

DEPTHS

|       |           |          |
|-------|-----------|----------|
| _____ | _____ TVD | _____ 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/<br>FORMATION | TOP                     | BOTTOM             | TOP               | BOTTOM            | DESCRIBE ROCK TYPE AND RECORD QUANTITY AND<br>TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC) |
|-------------------------|-------------------------|--------------------|-------------------|-------------------|--|
|                         | DEPTH IN FT<br>NAME TVD | DEPTH IN FT<br>TVD | DEPTH IN FT<br>MD | DEPTH IN FT<br>MD |  |
|                         | 0                       |                    | 0                 |                   |  |
|                         |                         |                    |                   |                   |  |
|                         |                         |                    |                   |                   |  |
|                         |                         |                    |                   |                   |  |
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|                         |                         |                    |                   |                   |  |
|                         |                         |                    |                   |                   |  |
|                         |                         |                    |                   |                   |  |

Please insert additional pages as applicable.

Drilling Contractor \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Logging Company \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Cementing Company \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Stimulating Company \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Please insert additional pages as applicable.

Completed by \_\_\_\_\_ Telephone \_\_\_\_\_  
 Signature \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

**LATERAL WELLBORE****Maximum TVD of wellbore:** 6413 ft TVD @ 12116 ft MD

| Formation/Lithology | Top Depth,<br>MD (ft) | Top Depth, TVD<br>(ft) | Bottom Depth,<br>MD (ft) | Bottom Depth,<br>TVD (ft) |
|---------------------|-----------------------|------------------------|--------------------------|---------------------------|
| SLTSTNE/SS          | 0                     | 0                      | 330                      | 330                       |
| SLTSTNE             | 330                   | 330                    | 450                      | 450                       |
| SLTSTNE/SS          | 450                   | 450                    | 630                      | 630                       |
| SLTSTNE/LS          | 630                   | 630                    | 660                      | 660                       |
| SLTSTNE/SS          | 660                   | 660                    | 720                      | 720                       |
| SLTSTNE/LS          | 720                   | 720                    | 760                      | 760                       |
| PITTSBURGH COAL     | 760                   | 760                    | 764                      | 764                       |
| SLTSTNE/LS          | 764                   | 764                    | 810                      | 810                       |
| SHALE/SLTSTNE       | 810                   | 810                    | 900                      | 900                       |
| SS/SHALE            | 900                   | 900                    | 920                      | 920                       |
| SHALE               | 920                   | 920                    | 1050                     | 1050                      |
| SS/SHALE            | 1050                  | 1050                   | 1110                     | 1110                      |
| SHALE/SLTSTNE       | 1110                  | 1110                   | 1200                     | 1200                      |
| SHALE/SS            | 1200                  | 1200                   | 1290                     | 1290                      |
| SHALE               | 1290                  | 1290                   | 1350                     | 1350                      |
| SHALE/SS            | 1350                  | 1350                   | 1410                     | 1410                      |
| SS/SHALE            | 1410                  | 1410                   | 1680                     | 1680                      |
| SHALE               | 1680                  | 1680                   | 1740                     | 1740                      |
| SHALE/SS            | 1740                  | 1740                   | 1828                     | 1828                      |
| BIG INJUN           | 1828                  | 1828                   | 2000                     | 2000                      |
| SHALE               | 2000                  | 2000                   | 6231                     | 6231                      |
| GENESEO             | 6230                  | 6181                   | 6250                     | 6195                      |
| TULLY               | 6250                  | 6195                   | 6309                     | 6235                      |
| HAMILTON            | 6309                  | 6235                   | 6506                     | 6325                      |
| MARCELLUS           | 6506                  | 6325                   | 12736                    | 6407                      |
| TD                  | 12736                 | 6407                   |                          | 0                         |



