

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

API 47-017-06330 County DODDRIDGE District WEST UNION  
Quad OXFORD 7.5' Pad Name OXF156 Field/Pool Name \_\_\_\_\_  
Farm name HEASTER, CHARLES P., ET AL Well Number 513141  
Operator (as registered with the OOG) EQT Production Company  
Address 625 Liberty Ave. EQT Plaza, Suite 1700 City Pittsburgh State PA Zip 15222

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4342152.0 Easting 518346.3  
Landing Point of Curve Northing 4342522.9 Easting 518714.6  
Bottom Hole Northing 4344589.4 Easting 517716.5

Elevation (ft) 1202 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)  
SBM 12.6ppg - powdered hydrocarbon resin, calcium carbonate, ground almond hulls, barium sulfate, calcium chloride, lecithin liquid, organophilic clay, polyaminated fatty acid, calcium hydroxide, polyimide surfactant, modified fatty acid, dimer/trimer fatty acid, ground walnut hulls, refined base oil.

Date permit issued 11/20/2013 Date drilling commenced 5/7/2014 Date drilling ceased 8/6/2014  
Date completion activities began 12/8/2016 Date completion activities ceased 12/27/2016  
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 169,216,320,386,462,600,1084 Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 1456 Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 1272,1312 Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

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

API 47-017 - 06330 Farm name HEASTER, CHARLES P., ET AL Well number 513141

| 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                 | 24"       | 20"         | 40'     | New         | 94lb/ft     | N/A             | Y  |
| Surface                   | 17-1/2"   | 13-3/8"     | 1,168'  | New         | 54.5lb/ft   | N/A             | Y  |
| Coal                      |           |             |         |             |             |                 |  |
| Intermediate 1            | 12-3/8"   | 9-5/8"      | 5,281'  | New         | 40lb/ft     | N/A             | Y  |
| Intermediate 2            |           |             |         |             |             |                 |  |
| Intermediate 3            |           |             |         |             |             |                 |  |
| Production                | 8-1/2"    | 5-1/2"      | 15,678' | New         | 20lb/ft     | N/A             | N  |
| 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      | Class A                  | 38              | 15.6            | 1.18                         | 44.84                     | 0               | 8         |
| Surface        | Class A                  | 930             | 15.6            | 1.18                         | 970                       | 0               | 8         |
| Coal           |                          |                 |                 |                              |                           |                 |           |
| Intermediate 1 | Class A 5050 P&S Class A | 380/310/1115    | 14.2/15.6/15.6  | 1.28/1.18/1.18               | 2168                      | 0               | 8         |
| Intermediate 2 |                          |                 |                 |                              |                           |                 |           |
| Intermediate 3 |                          |                 |                 |                              |                           |                 |           |
| Production     | Class A/Class H          | 425/1040        | 14.2/15.2       | 1.26/1.97                    | 2584                      | 5,500'          | 72        |
| Tubing         |                          |                 |                 |                              |                           |                 |           |

Drillers TD (ft) 15,694' Loggers TD (ft) \_\_\_\_\_  
 Deepest formation penetrated Mazoni Plug back to (ft) \_\_\_\_\_  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) 5,519'

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 Conductor: N/A  
 Surface Bowspring centralizer on shoe track and every 300' to surface  
 Intermediate-Bowspring centralizer on shoe track and every 500' to surface  
 Production- Composite bodied centralizers on every joint from Shoe track up to 4,421'

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 \_\_\_\_\_





| Formation Name   | Final Top MD (ftGL) (ft) | Final Top TVD (ft) | Final Btm MD (ftGL) (ft) | Final Btm TVD (ft) |
|------------------|--------------------------|--------------------|--------------------------|--------------------|
| FRESH WATER ZONE | 1                        | 1                  | 1,084.00                 | 1,084.00           |
| SAND/SHALE       | 1,084.00                 | 1,084.00           | 1,272.00                 | 1,272.00           |
| COAL             | 1,272.00                 | 1,272.00           | 1,277.00                 | 1,277.00           |
| SAND/SHALE       | 1,277.00                 | 1,277.00           | 1,312.00                 | 1,312.00           |
| COAL             | 1,312.00                 | 1,312.00           | 1,318.00                 | 1,318.00           |
| SAND/SHALE       | 1,318.00                 | 1,318.00           | 1,513.00                 | 1,512.90           |
| MAXTON           | 1,513.00                 | 1,512.90           | 1,865.00                 | 1,864.90           |
| BIG LIME         | 1,865.00                 | 1,864.90           | 1,923.00                 | 1,922.90           |
| KEENER           | 1,923.00                 | 1,922.90           | 2,163.00                 | 2,162.90           |
| WEIR             | 2,163.00                 | 2,162.90           | 2,358.00                 | 2,357.90           |
| BEREA            | 2,358.00                 | 2,357.90           | 2,367.00                 | 2,366.90           |
| GANTZ            | 2,367.00                 | 2,366.90           | 2,442.00                 | 2,441.90           |
| 50F              | 2,442.00                 | 2,441.90           | 2,563.00                 | 2,562.90           |
| 30F              | 2,563.00                 | 2,562.90           | 2,612.00                 | 2,611.90           |
| GORDON           | 2,612.00                 | 2,611.90           | 2,710.00                 | 2,709.90           |
| 4TH              | 2,710.00                 | 2,709.90           | 2,918.00                 | 2,917.90           |
| BAYARD           | 2,918.00                 | 2,917.90           | 3,207.00                 | 3,206.90           |
| WARREN           | 3,207.00                 | 3,206.90           | 3,293.00                 | 3,292.90           |
| SPEECHLEY        | 3,293.00                 | 3,292.90           | 3,796.00                 | 3,795.80           |
| BALLTOWN A       | 3,796.00                 | 3,795.80           | 4,023.00                 | 4,022.80           |
| BALLTOWN B       | 4,023.00                 | 4,022.80           | 4,183.00                 | 4,182.80           |
| BRADFORD         | 4,183.00                 | 4,182.80           | 4,424.00                 | 4,423.80           |
| RILEY            | 4,424.00                 | 4,423.80           | 4,871.00                 | 4,870.80           |
| BENSON           | 4,871.00                 | 4,870.80           | 5,122.00                 | 5,121.80           |
| ALEXANDER        | 5,122.00                 | 5,121.80           | 7,032.00                 | 6,390.20           |
| MIDDLESEX        | 7,032.00                 | 6,390.20           | 7,218.00                 | 6,451.80           |
| GENESEE          | 7,218.00                 | 6,451.80           | 7,395.00                 | 6,518.70           |
| GENESEO          | 7,395.00                 | 6,518.70           | 7,537.00                 | 6,561.20           |
| TULLY            | 7,537.00                 | 6,561.20           | 7,652.00                 | 6,586.70           |
| HAMILTON         | 7,652.00                 | 6,586.70           | 7,730.00                 | 6,602.80           |
| MARCELLUS        | 7,730.00                 | 6,602.80           | 15,694.00                | 6,682.10           |

**513141 - 47-017-06330-0000- Perforations**

| <b>Stage Number</b> | <b>Perforation Date</b> | <b>Top Perf Depth (ftKB)</b> | <b>Bottom Perf Depth (ftKB)</b> | <b>Number of Shots</b> | <b>Formation</b> |
|---------------------|-------------------------|------------------------------|---------------------------------|------------------------|------------------|
| Initiation Sleeve   | 1/26/2015               | 15,653.00                    | 15,678.00                       | 10                     | MARCELLUS        |
| 1                   | 12/9/2016               | 15,474.00                    | 15,636.00                       | 24                     | MARCELLUS        |
| 2                   | 12/10/2016              | 15,334.00                    | 15,176.00                       | 40                     | MARCELLUS        |
| 3                   | 12/10/2016              | 15,134.00                    | 14,976.00                       | 40                     | MARCELLUS        |
| 4                   | 12/11/2016              | 14,934.00                    | 14,776.00                       | 40                     | MARCELLUS        |
| 5                   | 12/11/2016              | 14,734.00                    | 14,576.00                       | 40                     | MARCELLUS        |
| 6                   | 12/11/2016              | 14,534.00                    | 14,376.00                       | 40                     | MARCELLUS        |
| 7                   | 12/12/2016              | 14,334.00                    | 14,176.00                       | 40                     | MARCELLUS        |
| 8                   | 12/12/2016              | 14,134.00                    | 13,978.00                       | 40                     | MARCELLUS        |
| 9                   | 12/12/2016              | 13,934.00                    | 13,776.00                       | 40                     | MARCELLUS        |
| 10                  | 12/13/2016              | 13,734.00                    | 13,576.00                       | 40                     | MARCELLUS        |
| 11                  | 12/13/2016              | 13,531.00                    | 13,476.00                       | 40                     | MARCELLUS        |
| 12                  | 12/13/2016              | 13,334.00                    | 13,176.00                       | 40                     | MARCELLUS        |
| 13                  | 12/14/2016              | 13,134.00                    | 12,976.00                       | 40                     | MARCELLUS        |
| 14                  | 12/14/2016              | 12,934.00                    | 12,776.00                       | 40                     | MARCELLUS        |
| 15                  | 12/21/2016              | 12,574.00                    | 12,736.00                       | 40                     | MARCELLUS        |
| 16                  | 12/21/2016              | 12,374.00                    | 12,536.00                       | 40                     | MARCELLUS        |
| 17                  | 12/21/2016              | 12,134.00                    | 12,336.00                       | 48                     | MARCELLUS        |
| 18                  | 12/21/2016              | 11,852.00                    | 12,014.00                       | 40                     | MARCELLUS        |
| 19                  | 12/22/2016              | 11,652.00                    | 11,814.00                       | 40                     | MARCELLUS        |
| 20                  | 12/22/2016              | 11,452.00                    | 11,614.00                       | 40                     | MARCELLUS        |
| 21                  | 12/23/2016              | 11,252.00                    | 11,414.00                       | 40                     | MARCELLUS        |
| 22                  | 12/23/2016              | 11,052.00                    | 11,214.00                       | 40                     | MARCELLUS        |
| 23                  | 12/23/2016              | 10,851.00                    | 11,014.00                       | 40                     | MARCELLUS        |
| 24                  | 12/23/2016              | 10,652.00                    | 10,814.00                       | 40                     | MARCELLUS        |
| 25                  | 12/23/2016              | 10,452.00                    | 10,614.00                       | 40                     | MARCELLUS        |
| 26                  | 12/24/2016              | 10,252.00                    | 10,414.00                       | 40                     | MARCELLUS        |
| 27                  | 12/24/2016              | 10,052.00                    | 10,214.00                       | 40                     | MARCELLUS        |
| 28                  | 12/24/2016              | 9,852.00                     | 10,014.00                       | 40                     | MARCELLUS        |
| 29                  | 12/24/2016              | 9,652.00                     | 9,814.00                        | 40                     | MARCELLUS        |
| 30                  | 12/25/2016              | 9,452.00                     | 9,614.00                        | 40                     | MARCELLUS        |
| 31                  | 12/25/2016              | 9,252.00                     | 9,414.00                        | 40                     | MARCELLUS        |
| 32                  | 12/25/2016              | 9,052.00                     | 9,214.00                        | 40                     | MARCELLUS        |
| 33                  | 12/26/2016              | 8,852.00                     | 9,010.00                        | 40                     | MARCELLUS        |
| 34                  | 12/26/2016              | 8,652.00                     | 8,814.00                        | 40                     | MARCELLUS        |
| 35                  | 12/26/2016              | 8,452.00                     | 8,614.00                        | 40                     | MARCELLUS        |
| 36                  | 12/26/2016              | 8,252.00                     | 8,414.00                        | 40                     | MARCELLUS        |
| 37                  | 12/26/2016              | 8,052.00                     | 8,214.00                        | 40                     | MARCELLUS        |
| 38                  | 12/27/2016              | 7,852.00                     | 8,014.00                        | 40                     | MARCELLUS        |

**513141 - 47-017-06330-0000- Stimulated Stages**

| Stage Number      | Stimulation 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) |
|-------------------|------------------|---------------------|------------------------------|------------------------------|------------|--------------------------|------------------------|----------------------------------|
| Initiation Sleeve | 12/8/2016        | N/A                 | N/A                          | N/A                          | N/A        | N/A                      | N/A                    | 0                                |
| 1                 | 12/10/2016       | 84                  | 9,095.00                     | 9,267.00                     | 3,476.00   | 448,860                  | 12,309.00              | 0                                |
| 2                 | 12/10/2016       | 87                  | 9,118.00                     | 9,360.00                     | 3,572.00   | 449,560                  | 9,533.00               | 0                                |
| 3                 | 12/11/2016       | 96                  | 8,989.00                     | 9,226.00                     | 3,563.00   | 449,940                  | 9,073.00               | 0                                |
| 4                 | 12/11/2016       | 98                  | 9,084.00                     | 9,337.00                     | 4,422.00   | 450,230                  | 9,213.00               | 0                                |
| 5                 | 12/11/2016       | 100                 | 9,001.00                     | 9,240.00                     | 4,242.00   | 448,860                  | 8,623.00               | 0                                |
| 6                 | 12/11/2016       | 101                 | 8,667.00                     | 8,883.00                     | 4,916.00   | 448,610                  | 9,095.00               | 0                                |
| 7                 | 12/12/2016       | 100                 | 8,890.00                     | 9,022.00                     | 3,934.00   | 447,120                  | 8,858.00               | 0                                |
| 8                 | 12/12/2016       | 101                 | 8,513.00                     | 8,930.00                     | 4,411.00   | 448,850                  | 9,016.00               | 0                                |
| 9                 | 12/12/2016       | 100                 | 8,710.00                     | 9,038.00                     | 4,021.00   | 447,610                  | 8,539.00               | 0                                |
| 10                | 12/13/2016       | 101                 | 8,594.00                     | 8,979.00                     | 4,758.00   | 448,000                  | 9,150.00               | 0                                |
| 11                | 12/13/2016       | 97                  | 8,805.00                     | 9,375.00                     | 4,973.00   | 448,190                  | 8,558.00               | 0                                |
| 12                | 12/13/2016       | 100                 | 8,469.00                     | 8,745.00                     | 4,265.00   | 449,760                  | 9,024.00               | 0                                |
| 13                | 12/14/2016       | 98                  | 8,640.00                     | 8,948.00                     | 3,883.00   | 449,890                  | 8,321.00               | 0                                |
| 14                | 12/14/2016       | 101                 | 8,381.00                     | 8,819.00                     | 5,036.00   | 449,680                  | 8,811.00               | 0                                |
| 15.01             | 12/21/2016       | N/A                 | N/A                          | 8,266.00                     | 4,034.00   | N/A                      | 1,079.00               | 0                                |
| 15                | 12/21/2016       | 101                 | 8,386.00                     | 9,047.00                     | 4,828.00   | 451,881                  | 9,918.00               | 0                                |
| 16                | 12/21/2016       | 99                  | 8,602.00                     | 9,461.00                     | 5,120.00   | 431,688                  | 8,802.00               | 0                                |
| 17                | 12/21/2016       | 100                 | 8,296.00                     | 9,044.00                     | 4,678.00   | 538,849                  | 10,258.00              | 0                                |
| 18                | 12/22/2016       | 100                 | 8,344.00                     | 8,653.00                     | 4,249.00   | 447,897                  | 8,529.00               | 0                                |
| 19                | 12/22/2016       | 100                 | 8,348.00                     | 9,002.00                     | 5,602.00   | 450,001                  | 8,223.00               | 0                                |
| 20                | 12/22/2016       | 100                 | 8,181.00                     | 8,706.00                     | 5,421.00   | 448,955                  | 8,365.00               | 0                                |
| 21                | 12/23/2016       | 101.00              | 8,347.00                     | 8,711.00                     | 5,072.00   | 449,544                  | 8,197.00               | 0                                |
| 22                | 12/23/2016       | 101.00              | 8,164.00                     | 8,360.00                     | 4,234.00   | 450,342                  | 8,067.00               | 0                                |
| 23                | 12/23/2016       | 101.00              | 8,070.00                     | 8,285.00                     | 3,656.00   | 448,091                  | 7,867.00               | 0                                |
| 24                | 12/23/2016       | 101.00              | 8,108.00                     | 8,552.00                     | 4,891.00   | 447,310                  | 8,055.00               | 0                                |
| 25                | 12/24/2016       | 101.00              | 8,234.00                     | 8,421.00                     | 4,119.00   | 452,483                  | 8,133.00               | 0                                |
| 26                | 12/24/2016       | 101.00              | 8,169.00                     | 8,368.00                     | 4,266.00   | 452,548                  | 8,011.00               | 0                                |
| 27                | 12/24/2016       | 100.00              | 8,245.00                     | 8,656.00                     | 4,891.00   | 453,747                  | 7,941.00               | 0                                |
| 28                | 12/24/2016       | 101                 | 8,155.00                     | 8,353.00                     | 4,172.00   | 452,102                  | 8,138.00               | 0                                |
| 29                | 12/25/2016       | 99                  | 8,644.00                     | 8,909.00                     | 4,166.00   | 453,748                  | 7,967.00               | 0                                |
| 30                | 12/25/2016       | 101                 | 8,341.00                     | 8,962.00                     | 3,937.00   | 448,515                  | 7,987.00               | 0                                |
| 31                | 12/25/2016       | 101                 | 7,835.00                     | 8,027.00                     | 4,224.00   | 447,813                  | 7,881.00               | 0                                |
| 32                | 12/25/2016       | 101.00              | 7,900.00                     | 8,114.00                     | 4,559.00   | 453,088                  | 7,952.00               | 0                                |
| 33                | 12/26/2016       | 101.00              | 8,028.00                     | 8,232.00                     | 4,109.00   | 449,601                  | 7,939.00               | 0                                |
| 34                | 12/26/2016       | 100.00              | 8,066.00                     | 8,426.00                     | 5,107.00   | 452,878                  | 7,828.00               | 0                                |
| 35                | 12/26/2016       | 100.00              | 7,882.00                     | 8,344.00                     | 3,703.00   | 451,909                  | 7,843.00               | 0                                |
| 36                | 12/26/2016       | 101.00              | 7,648.00                     | 7,915.00                     | 4,317.00   | 449,070                  | 7,833.00               | 0                                |
| 37                | 12/27/2016       | 100.00              | 7,468.00                     | 7,797.00                     | 4,778.00   | 447,986                  | 7,873.00               | 0                                |
| 38                | 12/27/2016       | 101.00              | 8,089.00                     | 8,712.00                     | 3,971.00   | 448,884                  | 7,946.00               | 0                                |

## Hydraulic Fracturing Fluid Product Component Information Disclosure

|                                |                    |
|--------------------------------|--------------------|
| Job Start Date:                | 12/8/2016          |
| Job End Date:                  | 12/27/2016         |
| State:                         | West Virginia      |
| County:                        | Doddridge          |
| API Number:                    | 47-017-06330-00-00 |
| Operator Name:                 | EQT Production     |
| Well Name and Number:          | 513141             |
| Latitude:                      | 39.22838400        |
| Longitude:                     | -80.78761600       |
| Datum:                         | NAD83              |
| Federal Well:                  | NO                 |
| Indian Well:                   | NO                 |
| True Vertical Depth:           | 6,603              |
| Total Base Water Volume (gal): | 13,723,710         |
| Total Base Non Water Volume:   | 0                  |



### Hydraulic Fracturing Fluid Composition:

| Trade Name         | Supplier          | Purpose                 | Ingredients | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|--------------------|-------------------|-------------------------|-------------|--|--|--|----------|
| Water              | FTS International | Carrier/Base Fluid      |             |  |  |  |          |
|                    |                   |                         | Water       | 7732-18-5                                | 100.00000  | 86.63660   | None     |
| Other Chemical (s) | Listed Above      | See Trade Name (s) List |             |  |  |  |          |
|                    |                   |                         | Water       | 7732-18-5                                | 50.00000   | 0.03235  |          |



|                         |                   |  |       |              |          |         |      |
|-------------------------|-------------------|--|-------|--------------|----------|---------|------|
| Nu Flo 1000 LT          | FTS International | Diverting Agent                          |       |              |          |         |      |
|                         |                   |  | Water | 7732-18-5    | 50.00000 | 0.03235 | None |
| Hydrochloric Acid (15%) | FTS International | Acidizing                                |       |              |          |         |      |
|                         |                   |  |       | Listed Below |          |         |      |
| CS-500-SI               | FTS International | Scale inhibitor                          |       |              |          |         |      |
|                         |                   |  |       | Listed Below |          |         |      |
| ECM FR NI 200           | ECM Supply        | Friction Reducing Agent                  |       |              |          |         |      |
|                         |                   |  |       | Listed Below |          |         |      |
| MC MX 5-3886            | Multi-Chem Group  | Specialty Brine                          |       |              |          |         |      |
|                         |                   |  |       | Listed Below |          |         |      |
| HVG-1 4.0               | FTS International | Water Gelling Agent                      |       |              |          |         |      |
|                         |                   |  |       | Listed Below |          |         |      |
| CI-150                  | FTS International | Acid corrosion inhibitor                 |       |              |          |         |      |
|                         |                   |  |       | Listed Below |          |         |      |
| Sand (Proppant)         | FTS International | Proppant                                 |       |              |          |         |      |
|                         |                   |  |       | Listed Below |          |         |      |
| MC MX 8-2544            | Multi-Chem Group  | Live Culture - Nitrate Reducing Bacteria |       |              |          |         |      |

|   |                   |             |                                |              |           |          |      |
|---|-------------------|-------------|--------------------------------|--------------|-----------|----------|------|
|   |                   |             |                                | Listed Below |           |          |      |
| APB-1   | FTS International | Gel Breaker |                                |              |           |          |      |
|   |                   |             |                                | Listed Below |           |          |      |
| Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients. |                   |             |                                |              |           |          |      |
|   |                   |             | Silica Substrate               | 14808-60-7   | 100.00000 | 12.98447 | None |
|   |                   |             | Calcium Nitrate.4H2O           | 13477-34-4   | 100.00000 | 0.10607  | None |
|   |                   |             | Hydrochloric Acid              | 7647-01-0    | 15.00000  | 0.02584  | None |
|   |                   |             | Copolymer of Two Propenamide   | 69418-26-4   | 30.00000  | 0.01941  | None |
|   |                   |             | Copolymer of Two Propenamide   | 69418-26-4   | 30.00000  | 0.01941  |      |
|   |                   |             | Petroleum Distillate           | 64742-47-8   | 20.00000  | 0.01294  | None |
|   |                   |             | Petroleum Distillate           | 64742-47-8   | 20.00000  | 0.01294  |      |
|   |                   |             | Sodium chloride                | 7647-14-5    | 100.00000 | 0.00957  |      |
|   |                   |             | Sodium chloride                | 7647-14-5    | 100.00000 | 0.00957  | None |
|   |                   |             | Ethylene glycol                | 107-21-1     | 10.00000  | 0.00241  | None |
|   |                   |             | Polyactide resin               | 9051-89-2    | 98.00000  | 0.00141  |      |
|   |                   |             | Polyactide resin               | 9051-89-2    | 98.00000  | 0.00141  | None |
|   |                   |             | Alcohols, C-12-16, Ethoxylated | 68551-12-2   | 2.00000   | 0.00129  | None |
|   |                   |             | Oleic Acid Diethanolamide      | 93-83-4      | 2.00000   | 0.00129  |      |
|   |                   |             | Oleic Acid Diethanolamide      | 93-83-4      | 2.00000   | 0.00129  | None |
|   |                   |             | Alcohols, C-12-16, Ethoxylated | 68551-12-2   | 2.00000   | 0.00129  |      |
|   |                   |             | Ammonium Chloride ((NH4)Cl)    | 12125-02-9   | 1.00000   | 0.00065  |      |
|   |                   |             | Ammonium Chloride ((NH4)Cl)    | 12125-02-9   | 1.00000   | 0.00065  | None |
|   |                   |             | Sodium nitrate                 | 7631-99-4    | 5.00000   | 0.00048  | None |
|   |                   |             | Sodium nitrate                 | 7631-99-4    | 5.00000   | 0.00048  |      |
|   |                   |             | Petroleum Distillate           | 64742-47-8   | 55.00000  | 0.00026  |      |

|  |  |  |                              |             |          |         |      |
|--|--|--|------------------------------|-------------|----------|---------|------|
|  |  |  | Petroleum Distillate         | 64742-47-8  | 55.00000 | 0.00026 | None |
|  |  |  | Guar Gum                     | 9000-30-0   | 50.00000 | 0.00023 | None |
|  |  |  | Guar Gum                     | 9000-30-0   | 50.00000 | 0.00023 |      |
|  |  |  | Ethylene glycol              | 107-21-1    | 30.00000 | 0.00010 | None |
|  |  |  | Isopropanol                  | 67-63-0     | 30.00000 | 0.00010 | None |
|  |  |  | Organic amine resin salt     | Proprietary | 30.00000 | 0.00010 | None |
|  |  |  | Dimethylformamide            | 68-12-2     | 10.00000 | 0.00003 | None |
|  |  |  | Quaternary ammonium compound | Proprietary | 10.00000 | 0.00003 | None |
|  |  |  | Aromatic aldehyde            | Proprietary | 10.00000 | 0.00003 | None |
|  |  |  | Clay                         | 14808-60-7  | 2.00000  | 0.00001 |      |
|  |  |  | Clay                         | 14808-60-7  | 2.00000  | 0.00001 | None |
|  |  |  | Surfactant                   | 68439-51-0  | 2.00000  | 0.00001 |      |
|  |  |  | Surfactant                   | 68439-51-0  | 2.00000  | 0.00001 | None |
|  |  |  | Ammonium Persulfate          | 7727-54-0   | 95.00000 | 0.00001 |      |
|  |  |  | Ammonium Persulfate          | 7727-54-0   | 95.00000 | 0.00001 | None |

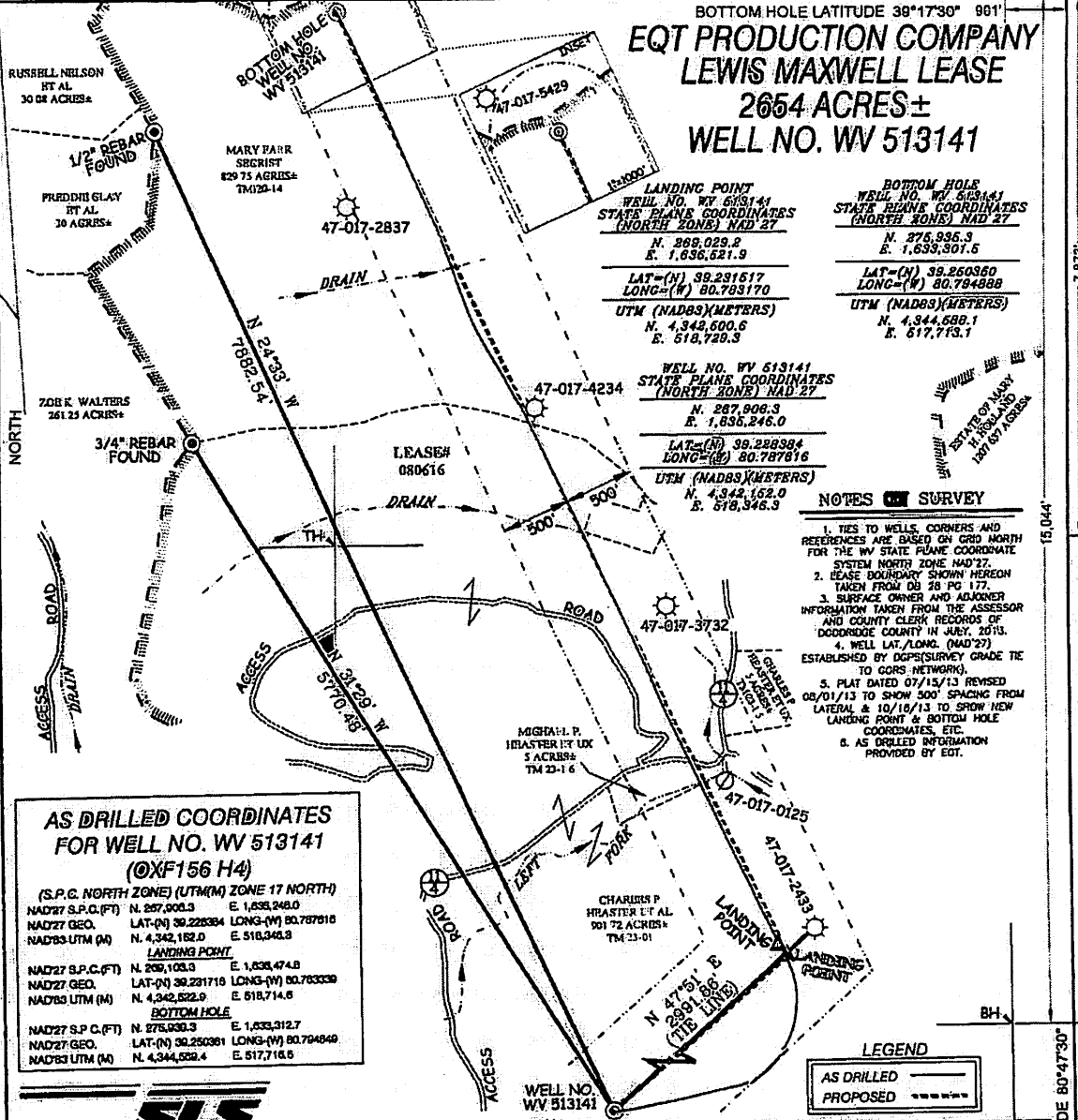
\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

\*\*\* If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided. Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

**EQT PRODUCTION COMPANY  
LEWIS MAXWELL LEASE  
2654 ACRES±  
WELL NO. WV 513141**



**AS DRILLED COORDINATES FOR WELL NO. WV 513141 (OXF156 H4)**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

|                  |                   |                    |
|------------------|-------------------|--------------------|
| NAD83 S.P.C.(FT) | N. 287,908.3      | E. 1,636,246.0     |
| NAD27 GEO.       | LAT-(N) 39.228384 | LONG-(W) 80.787916 |
| NAD83 UTM (M)    | N. 4,342,182.0    | E. 518,346.3       |

**LANDING POINT**

|                  |                   |                    |
|------------------|-------------------|--------------------|
| NAD27 S.P.C.(FT) | N. 289,108.3      | E. 1,636,474.8     |
| NAD27 GEO.       | LAT-(N) 39.228176 | LONG-(W) 80.783339 |
| NAD83 UTM (M)    | N. 4,342,522.9    | E. 518,714.6       |

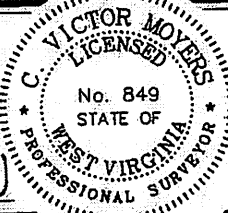
**BOTTOM HOLE**

|                  |                   |                    |
|------------------|-------------------|--------------------|
| NAD27 S.P.C.(FT) | N. 276,936.3      | E. 1,633,312.7     |
| NAD27 GEO.       | LAT-(N) 39.250361 | LONG-(W) 80.794849 |
| NAD83 UTM (M)    | N. 4,344,528.4    | E. 517,716.5       |

**NOTES ON SURVEY**

1. TIES TO WELLS, CORNERS AND REFERENCES ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE, NAD 27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DB 28 PG 177.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIIDGE COUNTY IN JULY, 2013.
4. WELL LAT./LONG. (NAD 27) ESTABLISHED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK).
5. PLAT DATED 07/15/13 REVISED 08/01/13 TO SHOW 500' SPACING FROM LATERAL & 10/16/13 TO SHOW NEW LANDING POINT & BOTTOM HOLE COORDINATES, ETC.
6. AS DRILLED INFORMATION PROVIDED BY EQT.

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.



P.S. *C. Victor Moyers*  
849

(\*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE OCTOBER 16, 20 13  
REVISED DATE 08/13/14, 12/07/16 & 12/27/16  
OPERATORS WELL NO. WV 513141  
API WELL NO. 47-017-06330H  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 6980ASDRILLED513141R2  
PROVEN SOURCE OF ELEVATION DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 1000'

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

WELL TYPE: OIL  GAS  LIQUID WASTE DISPOSAL  INJECTION  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: PAD ELEVATION 1,202' WATERSHED LEFT FORK ARNOLDS CREEK

DISTRICT WEST UNION COUNTY DODDRIIDGE QUADRANGLE OXFORD 7.5'

SURFACE OWNER CHARLES P. HEASTER ET AL. ACREAGE 901.72 ±

ROYALTY OWNER LEWIS MAXWELL HRS ACREAGE 2654 ±

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION MARCELLUS  
ESTIMATED DEPTH 6,647'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY  
ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

COUNTY NAME PERMIT

**Van Horn, Stacy**

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**From:** TrackingUpdates@fedex.com  
**Sent:** Friday, March 24, 2017 9:28 AM  
**To:** Van Horn, Stacy  
**Subject:** FedEx Shipment 778721995318 Delivered

## Your package has been delivered

Tracking # 778721995318

Ship date:  
**Thu, 3/23/2017**  
Carol Hill  
EQT  
Pittsburgh, PA 15222  
US



Delivery date:  
**Fri, 3/24/2017 9:25 am**  
WV DEP Office of Oil and Gas  
601 57th Street  
CHARLESTON, WV 25304  
US



### Shipment Facts

Our records indicate that the following package has been delivered.

|                            |  |
|----------------------------|--|
| Tracking number:           | <b><u>778721995318</u></b>                                   |
| Status:                    | Delivered: 03/24/2017 09:25 AM<br>Signed for By:<br>S.GRALEY |
| Purchase order number:     | 217055.863200  |
| Reference:                 | 513141   |
| Signed for by:             | S.GRALEY   |
| Delivery location:         | CHARLESTON, WV   |
| Delivered to:              | Shipping/Receiving   |
| Service type:              | FedEx Priority Overnight                                     |
| Packaging type:            | FedEx Envelope   |
| Number of pieces:          | 1  |
| Weight:                    | 0.50 lb.   |
| Special handling/Services: | Deliver Weekday  |
| Standard transit:          | 3/24/2017 by 10:30 am  |

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 8:28 AM CDT on 03/24/2017.