

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

API # 4704502333

Farm Name Heartwood Forestland Fund
 Location Elevation 852
 District Unknown
 Latitude 9200 Degree 37 Minutes 42 Seconds 30
 Longitude 8860 East Degree 81 Minutes 47 Seconds 30

Well Number 511766
 QUAD Mallory
 County Logan, WV
 WV

Company EQT Plaza
 Suite 1700
 625 Liberty Avenue
 Pittsburgh, Pa 15222

Longitude 37.68309
 Latitude -81.82219

Agent Cecil Ray
 Inspector Tom Morris
 Permit Issued 1/25/10
 Well Work Commenced 6/18/2010
 Well Work Completed 8/19/2010
 Verbal Plugging _____

<u>Casing & Tubing Size</u>	<u>Used In Drilling</u>	<u>Left in Well</u>	<u>Cement Cubic FT</u>
18	22.00	22.00	
13 3/8	95.00	95.00	
9 5/8	510.00	510.00	259.20
7	2093.00	2,093.00	476.50
4 1/2	7458.00	7,458.00	

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Rotary Rig X Rotary Rig _____
 Total Depth TND: 4079' MD: 7,497.00

Type From
 Fresh Water 133.00
 Salt Water 2,000.00

Type From
 Coal 133.00 ft. - 135.00 ft.

Producing Formation

Gas: Initial Open Flow 761
 Final Open Flow 721
 Static Rock Pressure 720

NOTE: On back of this form put the following
 1) Details of Perforated Intervals, fracturing or stimulating, physical change, etc.
 2) The well log, a systematic detailed geological record of all formations including coal encountered in the well bore

For EQT Production Company
 By Mike Butcher
 Date 9-14-2010

03/01/2013

45-02333

Formation record

Gas Tests

<u>Formation Name</u>	<u>Top</u>	<u>Bottom</u>	<u>Thickness</u>	<u>Depth Gas</u>	<u>Comments</u>
ALT SAND	559.40	1,198.00	638.60	2,475.00	0 N/S
AVENCLIFF SAND	1,268.00	1,328.00	60.00	2,675.00	0 N/S
UPPER MAXTON SAND	1,448.00	1,613.00	165.00	3,050.00	0 TRACE
MIDDLE MAXTON SAND	1,688.00	1,830.00	142.00	3,454.00	0 TRACE
LOWER MAXTON SAND	1,938.00	1,979.00	41.00	3,858.00	0 ODOR
LITTLE LIME	2,022.00	2,078.00	56.00	3,917.00	0 ODOR
HIGH LIME	2,094.00	2,430.00	336.00	4,350.00	0 N/S
WEIR SAND	2,516.00	2,631.00	115.00	4,993.00	0 N/S
WINBURY	2,956.00	2,980.00	24.00	6,096.00	1592 90/10 THUR 4"
WIERA SAND	2,980.00	3,014.00	34.00	6,341.00	712 18/10 THRU 4"
UPPER DEVONIAN	3,015.25				
WYNDON SAND	3,288.00	3,318.00	30.00		
LOWER HURON SHALE	4,054.00	4,516.00	462.00		
WYNDON SILTSTONE	4,066.00	4,138.00	72.00		
WYNDON SHALE	4,516.00	4,670.00	154.00		
WYNDON SHALE	4,670.00	4,902.00	232.00		
WYNDON SHALE	4,902.00				

Questions regarding formations can
be directed to Jonette Speranzo.
Jsperanzo@eqt.com

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Stage	Formation	Frac Type				
1	LOWER HURON SILT	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/12/2010	7296 - 7458		4,309.00	5,885.00	5 Min:	
					10 Min:	
					15 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient			
102,094.00	6,118.00					
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
		1,001,276.00				

Stage	Formation	Frac Type				
2	LOWER HURON SILT	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/12/2010	7011 - 7296		3,283.00	5,417.00	5 Min:	
					10 Min:	
					15 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient			
105,172.00	5,557.00					
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.50	1,001,845.00				

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Stage	Formation	Frac Type				
3	LOWER HURON SILT	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/12/2010	6769 - 7011		3,023.00	4,851.00	5 Min:	
					10 Min:	
					15 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient			
105,178.00	4,955.00					
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.00	1,003,383.00				

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Stage	Formation	Frac Type		
4	LOWER HURON SILT	N ²		
Date	From / To	# of perfs	BD Press	ATP Psi
8/12/2010	6484 - 6769		3,099.00	4,625.00
Avg Rate	Max Press PSI	ISIP	Frac Gradient	
103,213.00	4,712.00			
Sand Proppant	Water-bbl	SCF N2	Acid-Gal	
	5.60	1,001,878.00		

SIP Detail
5 Min:
10 Min:
15 Min:

Stage	Formation	Frac Type		
5	LOWER HURON SILT	N ²		
Date	From / To	# of perfs	BD Press	ATP Psi
8/12/2010	6200 - 6484		3,163.00	4,532.00
Avg Rate	Max Press PSI	ISIP	Frac Gradient	
102,521.00	4,630.00	2,476.00		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal	
	6.00	1,003,788.00		

SIP Detail
5 Min: 1566
10 Min:
15 Min:

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Stage	Formation	Frac Type		
6	LOWER HURON SILT	N ²		
Date	From / To	# of perfs	BD Press	ATP Psi
8/12/2010	5915 - 6200		3,045.00	5,170.00
Avg Rate	Max Press PSI	ISIP	Frac Gradient	
101,694.00	5,346.00			
Sand Proppant	Water-bbl	SCF N2	Acid-Gal	
	5.90	1,001,649.00		

SIP Detail
5 Min:
10 Min:
15 Min:

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Stage	Formation	Frac Type				
7	LOWER HURON SILT	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/12/2010	5674 - 5915		3,185.00	4,709.00	5 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min:	
102,568.00	4,769.00				15 Min:	
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	6.10	1,001,971.00				

Stage	Formation	Frac Type				
8	LOWER HURON SILT	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/12/2010	5388 - 5674		3,365.00	4,769.00	5 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min:	
102,866.00	4,843.00				15 Min:	
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.30	1,001,901.00				

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Stage	Formation	Frac Type				
9	LOWER HURON SILT	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/12/2010	5103 - 5388		3,298.00	4,825.00	5 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min:	
101,956.00	4,872.00				15 Min:	
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	7.50	1,002,720.00				

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Stage	Formation	Frac Type				
10	LOWER HURON SILT	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/12/2010	4817 - 5103		3,303.00	4,252.00	5 Min: 1675	
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min:	
104,273.00	4,316.00	2,130.00			15 Min:	
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.90	1,002,937.00				

Stage	Formation	Frac Type				
11	LOWER HURON SILT	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/12/2010	4576 - 4817		3,122.00	5,085.00	5 Min: 1728	
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min:	
103,548.00	5,178.00				15 Min:	
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.60	1,000,709.00				

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Stage	Formation	Frac Type				
12	LOWER HURON SILT	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/12/2010	4291 - 4576		3,201.00	4,409.00	5 Min: 1164	
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min: 1140	
107,309.00	4,571.00	2,001.00			15 Min: 1128	
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.00	1,001,461.00				

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