

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

4704502334

45-02334

Well Name Heartwood Forest Land Fund
 Location Elevation 852
 District Unknown
 Latitude 39° 20' 00" Degree 37 Minutes 42 Seconds 30
 Longitude 88° 00' 00" East Degree 81 Minutes 47 Seconds 30

Well Number 511764
 QUAD Mallory
 County Logan, WV
 WV

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

Longitude 37.68309
 Latitude -81.82226

Agent Cecil Ray
 Inspector Tom Morris
 Permit Issued 1/25/2010

Casing & Tubing Size	Used In Drilling	Left in Well	Cement Cubic FT
18 5/8	22.00	22.00	
13 3/8	102.00	102.00	
9 5/8	512.00	512.00	289.10
7	2079.00	2,079.00	474.20
4 1/2	7744.00	7,744.00	

Well Work Commenced 6/11/2010
 Well Work Completed 8/18/2010

Arboreal Plugging

Rotary Rig Rotary Rig

Total Depth TVD: 4428' MD: 7,858.00

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Type From
 Fresh Water 250.00

Type	From	To	ft.
Coal	5.00 ft. -	15.00	ft.
Coal	83.00 ft. -	85.00	ft.
Coal	131.00 ft. -	133.00	ft.

Producing Formation

Gas: Initial Open Flow 2543

Final Open Flow 4385

Static Rock Pressure 455

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

45-02334

Formation record

Gas Tests

<u>Formation Name</u>	<u>Top</u>	<u>Bottom</u>	<u>Thickness</u>	<u>Depth Gas</u>	<u>Comments</u>
OVER BURN	0.00	5.00	5.00	2,489.00	0 Trace
COALBED METHANE	5.00	15.00	10.00	2,676.00	0 Trace
OVER BURN	15.00	83.00	68.00	3,057.00	0 Trace
COALBED METHANE	83.00	85.00	2.00	3,802.00	0 Trace
OVER BURN	85.00	131.00	46.00	4,850.00	0 Trace
COALBED METHANE	131.00	133.00	2.00	6,119.00	2909 44/10ths thru 7"
SAND STONE	133.00	270.00	137.00	7,858.00	2543 22/10ths thru 4 1/2
SANDY SHALE	270.00	504.00	234.00		
SALT SAND	504.00	1,198.00	694.00		
SAVENCLIFF SAND	1,268.00	1,328.00	60.00		
UPPER MAXTON SAND	1,448.00	1,613.00	165.00		
MIDDLE MAXTON SAND	1,688.00	1,830.00	142.00		
LOWER MAXTON SAND	1,938.00	1,979.00	41.00		
LITTLE LIME	2,022.00	2,078.00	56.00		
BIG LIME	2,094.00	2,430.00	336.00		
WEIR SAND	2,516.00	2,631.00	115.00		
SUNBURY	2,956.00	2,980.00	24.00		
BEREA SAND	2,980.00	3,014.00	34.00		
UPPER DEVONIAN	3,015.25				
GORDON SAND	3,288.00	3,318.00	30.00		
LOWER HURON SHALE	4,054.00	4,516.00	462.00		
HURON SILTSTONE	4,066.00	4,138.00	72.00		
JAVA SHALE	4,516.00	4,670.00	154.00		
ANGOLA SHALE	4,670.00	4,902.00	232.00		
RHINESTREET SHALE	4,902.00				

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Questions regarding Formations
Can be directed to Jonette Speranzo
Jsperanzo@eqt.com
or
412-395-3941

03/01/2013

45-02334

Well	Completion	Attachment	Well	Treatment	Summary
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Stage	Formation	Frac Type				
1	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	7575 - 7734		4,215.00	6,361.00	5 Min:	
					10 Min:	
					15 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient			
95,709.00	6,412.00					
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
		1,000,532.00				

Stage	Formation	Frac Type				
2	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	7335 - 7575		4,097.00	6,008.00	5 Min:	
					10 Min:	
					15 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient			
96,776.00	6,323.00					
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.70	1,002,142.00				

Stage	Formation	Frac Type				
3	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	7050 - 7335		3,877.00	6,068.00	5 Min:	
					10 Min:	
					15 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient			
85,271.00	6,460.00					
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	8.20	1,001,686.00				

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Well ID: 45-02334 Completion: Attachment: Well: Treatment: Summary

45-02334

Stage	Formation	Frac Type	
4	LOWER HURON	N ²	
Date	From / To	# of perfs	BD Press
8/11/2010	6810 - 7050		4,037.00
Avg Rate	Max Press PSI	ISIP	Frac Gradient
90,856.00	6,390.00		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal
	5.60	1,003,181.00	

SIP Detail
5 Min:
10 Min:
15 Min:

Stage	Formation	Frac Type	
5	LOWER HURON	N ²	
Date	From / To	# of perfs	BD Press
8/11/2010	6569 - 6810		3,845.00
Avg Rate	Max Press PSI	ISIP	Frac Gradient
82,452.00	6,435.00	4,164.00	1.1
Sand Proppant	Water-bbl	SCF N2	Acid-Gal
	11.90	1,001,662.00	

SIP Detail
5 Min: 2757
10 Min:
15 Min:

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Stage	Formation	Frac Type	
6	LOWER HURON	N ²	
Date	From / To	# of perfs	BD Press
8/11/2010	6285 - 6569		4,191.00
Avg Rate	Max Press PSI	ISIP	Frac Gradient
75,545.00	6,397.00		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal
	5.60	1,001,394.00	

SIP Detail
5 Min:
10 Min:
15 Min:

Well: W-55 Completion: Attachment: Well: Treatment: Summary

45-02334

Stage	Formation	Frac Type				
7	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	6045 - 6285		4,428.00	5,814.00	5 Min:	
					10 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min:	
98,560.00	5,961.00					
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.40	1,002,418.00				

Stage	Formation	Frac Type				
8	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	5805 - 6045		3,803.00	6,268.00	5 Min:	
					10 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min:	
90,245.00	6,405.00					
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.50	1,002,000.00				

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Stage	Formation	Frac Type				
9	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	5519 - 5805		4,224.00	5,994.00	5 Min: 2531	
					10 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min:	
98,505.00	6,225.00	3,650.00	0.964			
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	7.20	1,001,782.00				

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03/01/2013

45-02334

Stage	Formation	Frac Type		Summary		
10	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	5279 - 5519		3,873.00	5,796.00	5 Min: 2491	
Avg Rate	Max Press PSI	ISIP	Frac Gradient	10 Min:		
102,199.00	5,909.00	3,359.00	0.887	15 Min:		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	6.00	1,002,184.00				

Stage	Formation	Frac Type		Summary		
11	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	4995 - 5279		4,030.00	5,477.00	5 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient	10 Min:		
105,922.00	5,717.00			15 Min:		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.80	1,001,412.00				

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Stage	Formation	Frac Type		Summary		
12	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	4754 - 4995		3,970.00	5,118.00	5 Min:	
Avg Rate	Max Press PSI	ISIP	Frac Gradient	10 Min:		
104,810.00	5,177.00			15 Min:		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.50	1,001,609.00				

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Stage	Formation	Frac Type				Summary
13	LOWER HURON	N ²				
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail	
8/11/2010	4514 - 4754		3,677.00	5,473.00	5 Min: 2325	
					10 Min: 2126	
					15 Min: 2026	
Avg Rate	Max Press PSI	ISIP	Frac Gradient			
104,356.00	5,667.00	3,310.00				
Sand Proppant	Water-bbl	SCF N2	Acid-Gal			
	5.70	1,001,730.00				

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