

**MOUNTAIRE FARMS OF DELAWARE**  
**Summary of Double Ring Infiltrometer Test Data**

Test No.	Date Tested	Spray Field ID	Lat.	Long.	Test Depth (in. bls)	Total Time (min.)	Final Rate (in./hr)	Limiting Rate* (in./hr)	Best Fit Final Rate** (in./hr)
DR-1	9/17/2019	CB-3A	38.5895756	-75.2536904	27	218.99	3.17	2.79	3.1
DR-2	9/17/2019		38.5907793	-75.2549038	31	223.67	1.19	0.86	1.11
DR-3	9/18/2019		38.5916730	-75.2568333	64	190.42	5.72	5.72	5.88
DR-4	9/18/2019	CB-3	38.5915565	-75.2620067	38	203.58			
DR-5	9/18/2019		38.5927307	-75.2619642	52	1360	0.02	0.02	0.02
DR-6	9/18/2019		38.5947066	-75.2625443	41	210.89	5.93	5.85	6
DR-7	9/19/2019	CB-3B	38.5962357	-75.2665537	62	237.18	2.15	2.14	2.14
DR-8	9/19/2019		38.5981618	-75.2664053	60	207.72	8.83	8.57	8.59
DR-9	9/19/2019		38.5990647	-75.2665860	42	202.01	5.95	5.78	5.71
DR-10	9/19/2019	CB-3DW	38.5997935	-75.2752935	45	213.7	1.66	1.57	1.56
DR-11	10/3/2019	WHBJ-7	38.6186945	-75.2612756	38	222.24	0.96	0.77	0.92
DR-12	10/3/2019		38.6188003	-75.2644486	37	238.53	0.14	0.11	0.12
DR-13	10/3/2019		38.6168174	-75.2643071	28	201.95	0.28	0.28	0.27
DR-14	10/3/2019		38.6173604	-75.2679661	60	216.46	2.43	1.34	1.38
DR-15	10/4/2019		38.6157094	-75.2680121	47	192	3.52	2.9	3.58
DR-16	10/4/2019		38.6130687	-75.2691611	50	440.63	0.002	0.002	0.02
DR-17	10/4/2019		38.6143805	-75.2656042	40	231.17	0.58	0.52	0.55
DR-18	10/4/2019		38.6126104	-75.2624307	34	214.01	0.51	0.44	0.52
DR-19	10/10/2019		38.6145041	-75.2601570	12	1510	0.02	0.01	0.01
DR-20	10/10/2019	WHBJ-4	38.6084051	-75.2639856	45	198.31	31.91	27.66	32.35
DR-21	10/10/2019		38.6105702	-75.2648627	36	209.72	0.33	0.3	0.31
DR-22	10/10/2019		38.6112406	-75.2679703	24	220.19	0.63	0.54	0.57
DR-23	10/11/2019	WHBJ-3	38.6104424	-75.2694549	24	1480	0.003	0.001	0.001
DR-24	10/11/2019		38.6070789	-75.2673001	10	190.38	1.78	1.47	1.22
DR-25	10/11/2019		38.6076359	-75.2701107	40	206.89	0.55	0.51	0.55
DR-26	10/11/2019	WHBJ-3	38.6105671	-75.2721791	40	232.51	0.14	0.11	0.16
DR-27			38.6099041	-75.2751306					
DR-28	10/16/2019		38.6080299	-75.2752404	58	247.61	0.0007	0.0007	na
DR-29	10/16/2019	WHBJ-6	38.611.898	-75.2582230	40	199.08	18.68	14.93	16.95
DR-30	10/16/2019		38.6108791	-75.2586976	36	212.09	0.86	0.34	0.67
DR-31	10/16/2019		38.6082000	-75.2571960	11	199.44	9.29	9.03	9.58
DR-32	10/17/2019	WHBJ-5	38.6056410	-75.2622920	50	198.99	18.38	14.24	17.63
DR-33	10/17/2019		38.6068820	-75.2588210	26	201.87	0.36	0.36	0.38
DR-34	10/17/2019		38.6040511	-75.2632903	58	275.05	0.18	0.15	0.19
DR-35	10/17/2019	CB-3DE	38.5998290	-75.2729650	30	230.36	0.04	0.03	0.03
DR-36	10/18/2019		38.5975828	-75.2721295	44	195.82	29.01	26.97	28.95
DR-37	10/18/2019		CB-3C	38.5956660	-75.2697730	47	193.47	9.92	9.92
DR-38	10/18/2019	38.5928980		-75.2677390	54	210.13	0.59	0.54	0.67
DR-39	10/18/2019	38.5942130		-75.2666450	48	197.3	0.28	0.21	0.27
DR-40	10/23/2019	WHBJ-1	38.6053937	-75.2700085	60	239.39	0.22	0.22	0.2
DR-41	10/23/2019		38.6053070	-75.2725291	58	1483	0.02	0.01	0.01
DR-42	10/23/2019		38.6034138	-75.2736128	20	209.97	0.24	0.23	0.19
DR-43	10/23/2019	WHBJ-2	38.6060922	-75.2762824	56	1255	0.05	0.04	0.05
DR-44	10/24/2019		38.6043474	-75.2783096	13	265.33	0.19	0.19	0.19
DR-45	10/24/2019		38.6033271	-75.2775836	22	202.79	3.62	3.43	3.38
DR-46	10/24/2019		38.6046884	-75.2798960	34	200.33	9.83	9.45	9.72
DR-47	10/24/2019		38.6058190	-75.2792803	17	234.85	0.32	0.26	0.33

# All rates are corrected to the viscosity of water at 60°F

\*Lowest measured rate over last 30 to 60 minutes of test.

\*\* Based on empirical equation determined from log-log plot of data

As per EPA 1981, Design Percolation Rate does not exceed 4% - 10% of Limiting Infiltration Rate

Not reporting due to abnormal test results. (See data plot for DR-4)  
 Test pit for soil profiling purposes only

**MOUNTAIRE FARMS OF DELAWARE**  
**Summary of Double Ring Infiltrometer Test Data**

Test No.	Date Tested	Spray Field ID	Lat.	Long.	Test Depth (in. bls)	Total Time (min.)	Final Rate (in./hr)	Limiting Rate* (in./hr)	Best Fit Final Rate** (in./hr)	Maximum Design Percolation Rate*** (in./wk)
DR-1	9/17/2019	CB-3A	38.5895756	-75.2536904	27	218.99	3.17	2.79	3.1	18.75
DR-2	9/17/2019		38.5907793	-75.2549038	31	223.67	1.19	0.86	1.11	5.78
DR-3	9/18/2019		38.591673	-75.2568333	64	190.42	5.72	5.72	5.88	38.44
DR-4	9/18/2019	CB-3	38.5915565	-75.2620067	38	203.58				0.00
DR-5	9/18/2019		38.5927307	-75.2619642	52	1360	0.02	0.02	0.02	0.13
DR-6	9/18/2019		38.5947066	-75.2625443	41	210.89	5.93	5.85	6	39.31
DR-7	9/19/2019	CB-3B	38.5962357	-75.2665537	62	237.18	2.15	2.14	2.14	14.38
DR-8	9/19/2019		38.5981618	-75.2664053	60	207.72	8.83	8.57	8.59	57.59
DR-9	9/19/2019		38.5990647	-75.266586	42	202.01	5.95	5.78	5.71	38.84
DR-10	9/19/2019	CB-3DW	38.5997935	-75.2752935	45	213.7	1.66	1.57	1.56	10.55
DR-11	10/3/2019	WHBJ-7	38.6186945	-75.2612756	38	222.24	0.96	0.77	0.92	5.17
DR-12	10/3/2019		38.6188003	-75.2644486	37	238.53	0.14	0.11	0.12	0.74
DR-13	10/3/2019		38.6168174	-75.2643071	28	201.95	0.28	0.28	0.27	1.88
DR-14	10/3/2019		38.6173604	-75.2679661	60	216.46	2.43	1.34	1.38	9.00
DR-15	10/4/2019		38.6157094	-75.2680121	47	192	3.52	2.9	3.58	19.49
DR-16	10/4/2019		38.6130687	-75.2691611	50	440.63	0.002	0.002	0.02	0.01
DR-17	10/4/2019		38.6143805	-75.2656042	40	231.17	0.58	0.52	0.55	3.49
DR-18	10/4/2019		38.6126104	-75.2624307	34	214.01	0.51	0.44	0.52	2.96
DR-19	10/10/2019		38.6145041	-75.2601570	12	1510	0.02	0.01	0.01	0.07
DR-20	10/10/2019		WHBJ-4	38.6084051	-75.2639856	45	198.31	31.91	27.66	32.35
DR-21	10/10/2019	38.6105702		-75.2648627	36	209.72	0.33	0.3	0.31	2.02
DR-22	10/10/2019	38.6112406		-75.2679703	24	220.19	0.63	0.54	0.57	3.63
DR-23	10/11/2019	WHBJ-3	38.61044238	-75.2694549	24	24	1480	0.003	0.001	0.02
DR-24	10/11/2019		38.6070789	-75.2673001	10	190.38	1.78	1.47	1.22	9.88
DR-25	10/11/2019		38.6076359	-75.2701107	40	206.89	0.55	0.51	0.55	3.43
DR-26	10/11/2019		38.6105671	-75.2721791	40	232.51	0.14	0.11	0.16	0.74
DR-27	10/11/2019		38.6099041	-75.2751306						0.00
DR-28	10/16/2019	WHBJ-6	38.6080299	-75.2752404	58	247.61	0.0007	0.0007	na	0.01
DR-29	10/16/2019		38.611.898	-75.2582230	40	199.08	18.68	14.93	16.95	100.33
DR-30	10/16/2019		38.6108791	-75.2586976	36	212.09	0.86	0.34	0.67	2.28
DR-31	10/16/2019		38.6082000	-75.2571960	11	199.44	9.29	9.03	9.58	60.68
DR-32	10/17/2019	WHBJ-5	38.6056410	-75.2622920	50	198.99	18.38	14.24	17.63	95.69
DR-33	10/17/2019		38.6068820	-75.2588210	26	201.87	0.36	0.36	0.38	2.42
DR-34	10/17/2019	CB-3DE	38.6040511	-75.2632903	58	275.05	0.18	0.15	0.19	1.01
DR-35	10/17/2019		38.5998290	-75.2729650	30	230.36	0.04	0.03	0.03	0.20
DR-36	10/18/2019		38.5975828	-75.2721295	44	195.82	29.01	26.97	28.95	181.24
DR-37	10/18/2019	CB-3C	38.5956660	-75.2697730	47	193.47	9.92	9.92	10.8	66.66
DR-38	10/18/2019		38.5928980	-75.2677390	54	210.13	0.59	0.54	0.67	3.63
DR-39	10/18/2019		38.5942130	-75.2666450	48	197.3	0.28	0.21	0.27	1.41
DR-40	10/23/2019		38.6053937	-75.2700085	60	239.39	0.22	0.22	0.2	1.48
DR-41	10/23/2019	WHBJ-1	38.6053070	-75.2725291	58	1483	0.02	0.01	0.01	0.07
DR-42	10/23/2019		38.6034138	-75.2736128	20	209.97	0.24	0.23	0.19	1.55
DR-43	10/23/2019		38.6060922	-75.2762824	56	1255	0.05	0.04	0.05	0.27
DR-44	10/24/2019	WHBJ-2	38.6043474	-75.2783096	13	265.33	0.19	0.19	0.19	1.28
DR-45	10/24/2019		38.6033271	-75.2775836	22	202.79	3.62	3.43	3.38	23.05
DR-46	10/24/2019		38.6046884	-75.2798960	34	200.33	9.83	9.45	9.72	63.50
DR-47	10/24/2019		38.6058190	-75.2792803	17	234.85	0.32	0.26	0.33	1.75

# All rates are corrected to the viscosity of water at 60°F

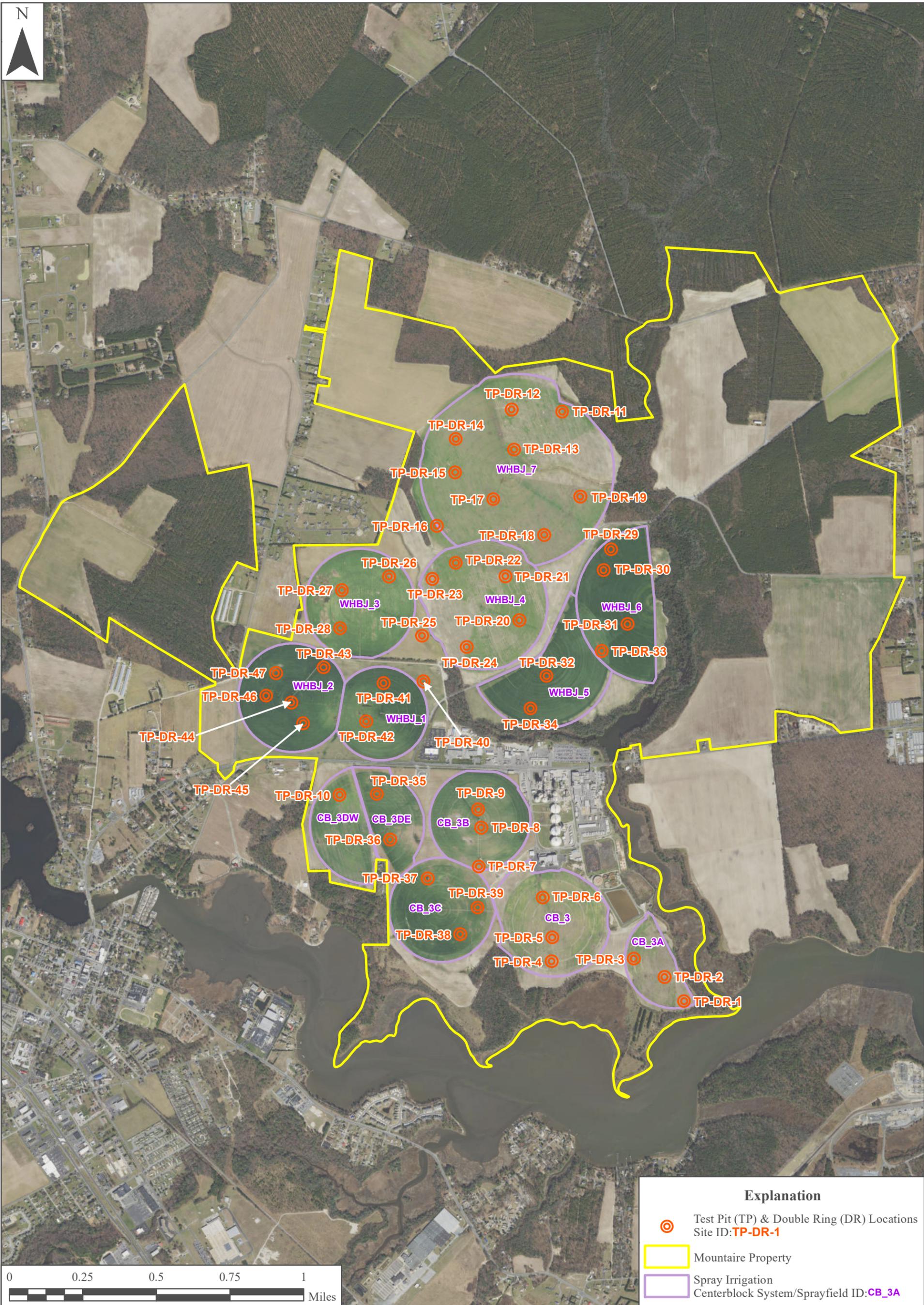
\*Lowest measured rate over last 30 to 60 minutes of test.

\*\* Based on empirical equation determined from log-log plot of data.

\*\*\* Based on assumption that long term rate is equal to 4% of limiting rate *Modified from EPA (1981/2006).*

Not reporting due to abnormal test results. (See data plot for DR-4)

Test pit for soil profiling purposes only

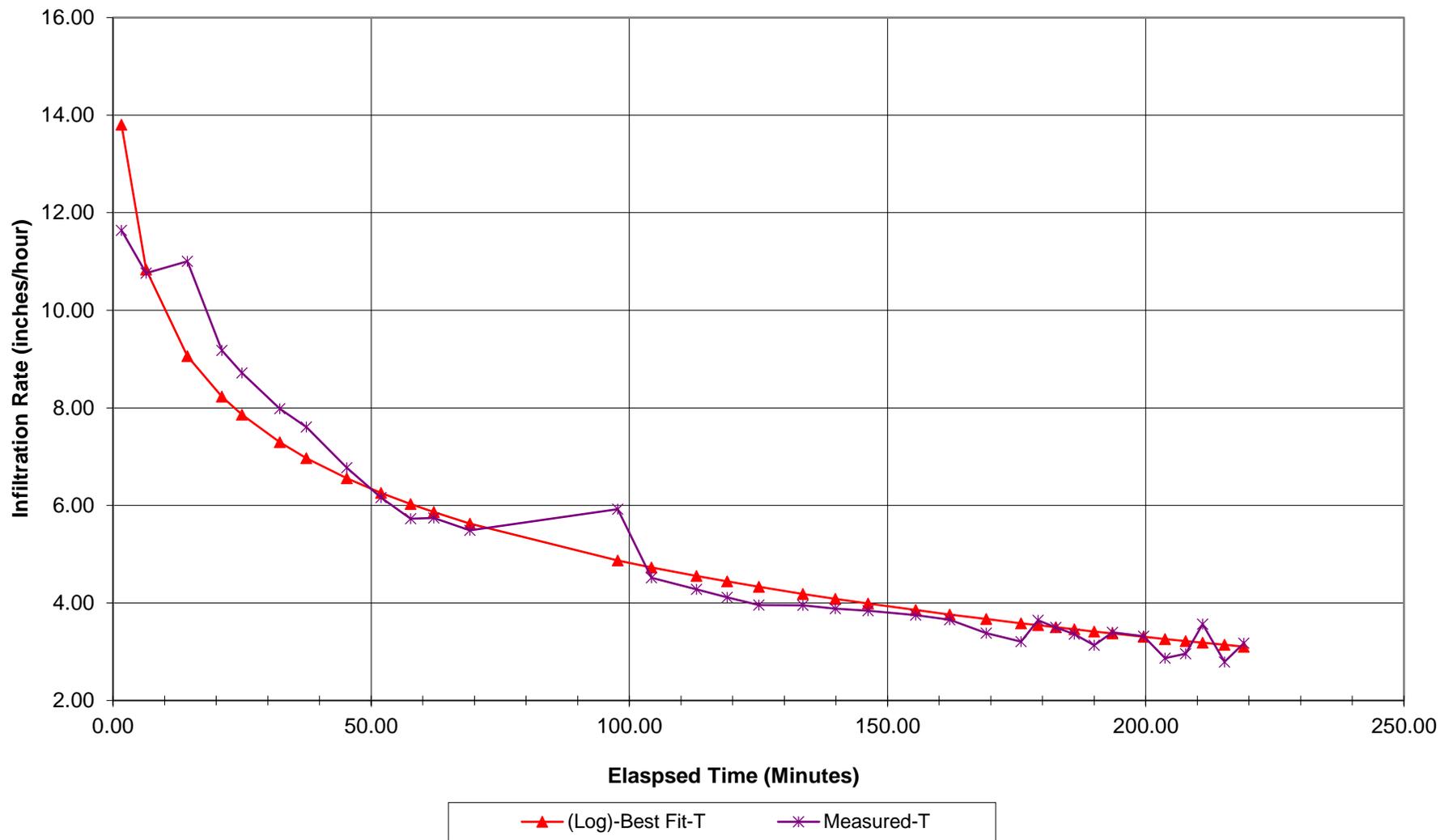


Explanation	
	Test Pit (TP) & Double Ring (DR) Locations Site ID: <b>TP-DR-1</b>
	Mountaire Property
	Spray Irrigation Centerblock System/Sprayfield ID: <b>CB_3A</b>



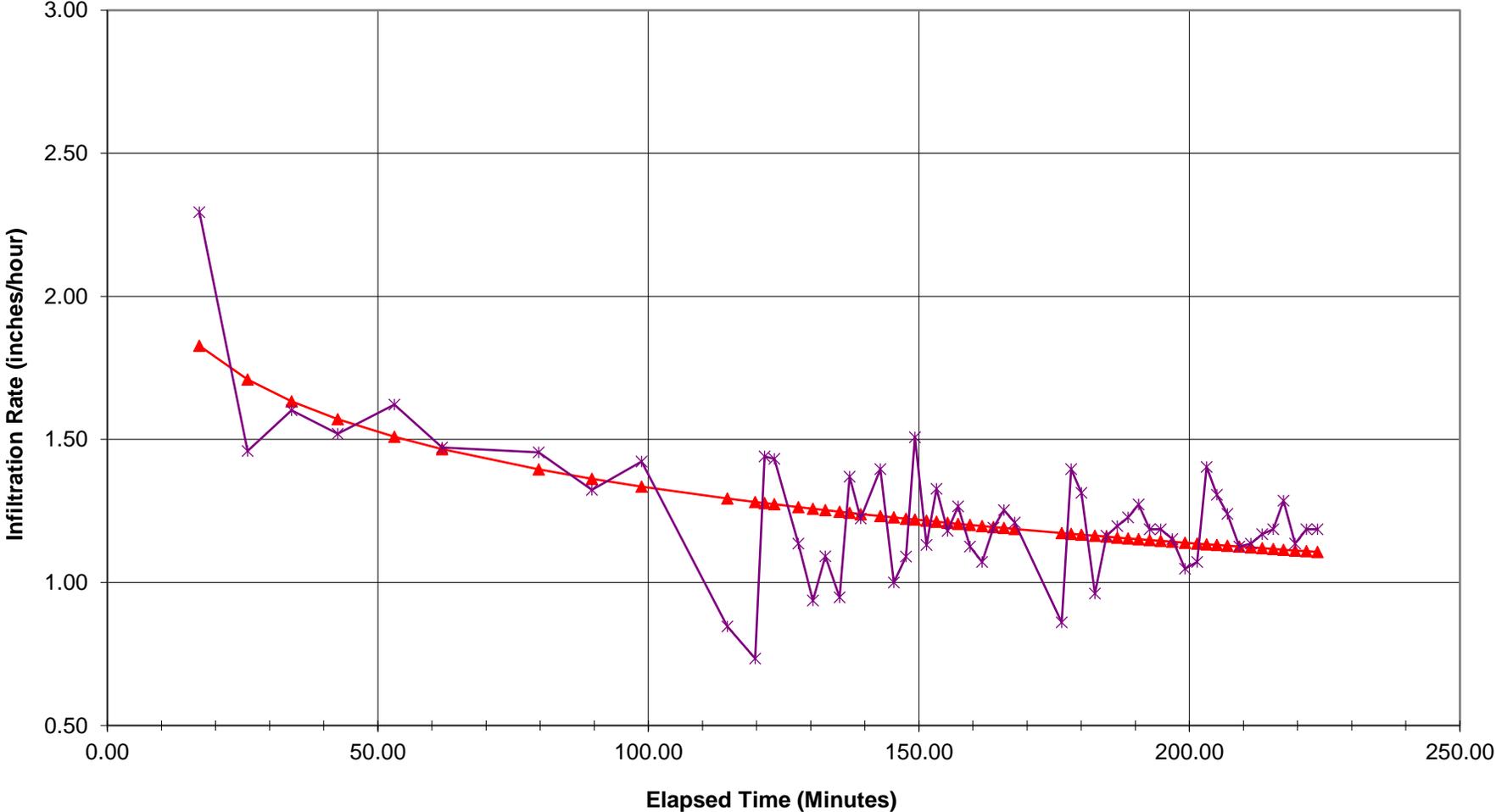
<b>A</b> Figure	Test Pit and Double Ring Testing Locations Millsboro, Delaware			<b>Earth Data</b> INCORPORATED • Water Resources • Geospatial Services • Solutions for Tomorrow. Today.		
	Date: 10/30/2019	Project Number: 4940D	Drawn By: Shawn Stable	Rev. #	Date	Description
	Scale: As Shown	Original Print Size: 11"x17"	Source: Earth Data Inc., Bad Elf GNSS	1	10/17/2019	Adding TP-DR 19-31
				2	10/30/2019	Adding TP-DR 32-47

**Mountaire Farms of Delaware  
Infiltration Rate DR-1**



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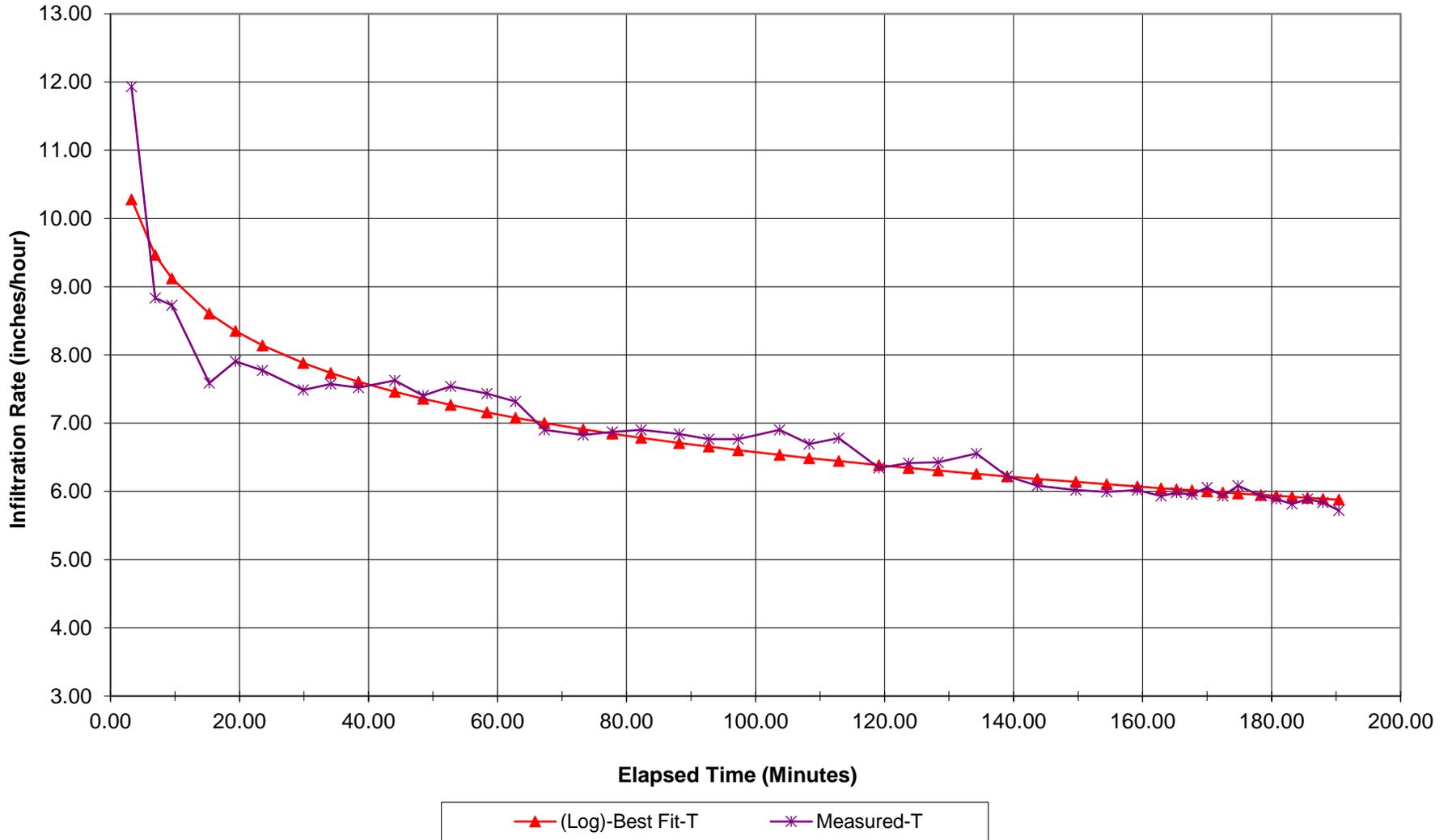
**Mountaire Farms of Delaware  
Infiltration Rate DR-2**



—▲ (Log)-Best Fit-T      —\* Measured-T

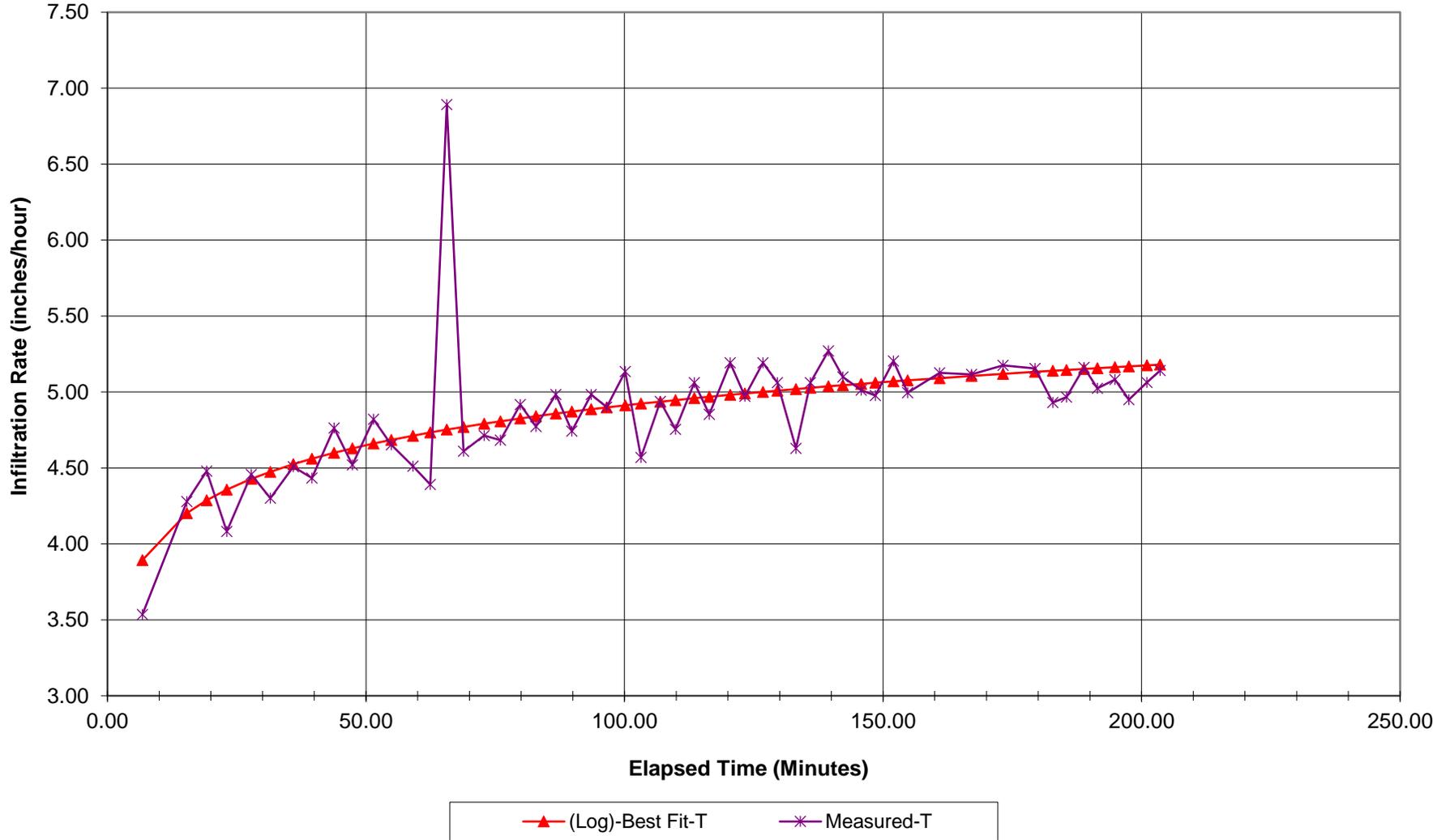
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**Mountaire Farms of Delaware  
Infiltration Rate DR-3**



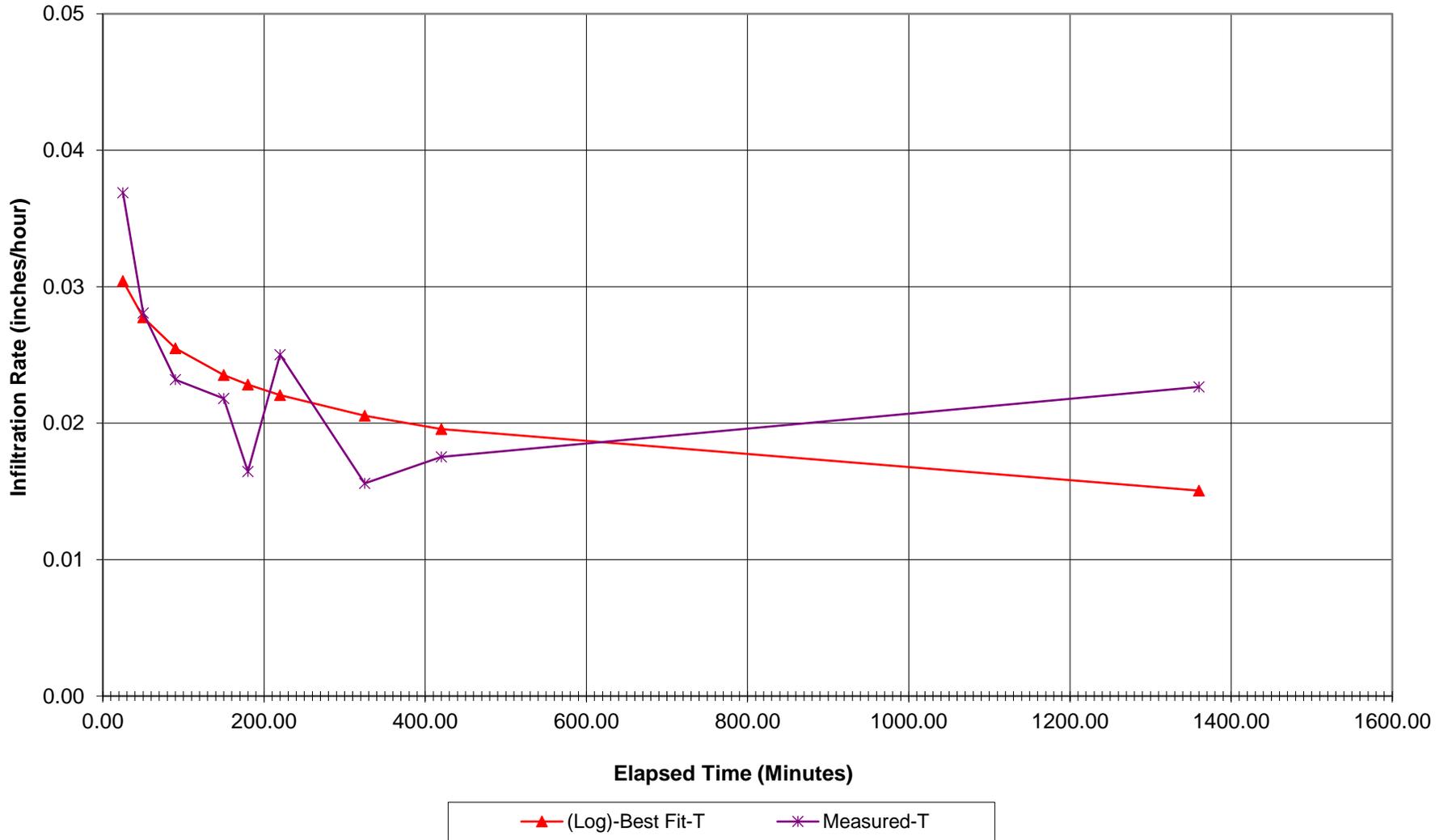
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-4**



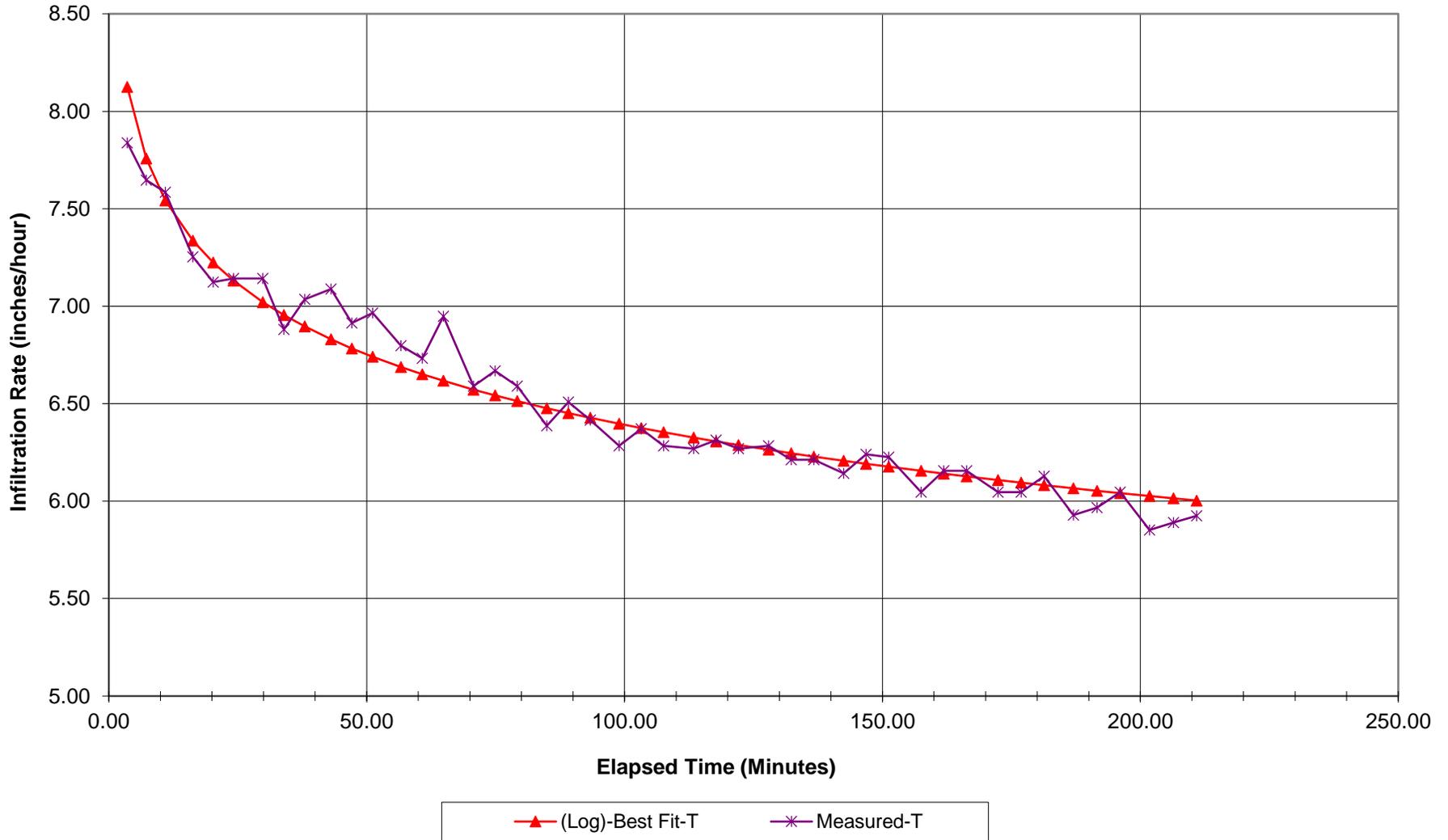
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**Mountaire Farms of Delaware  
Infiltration Rate DR-5**



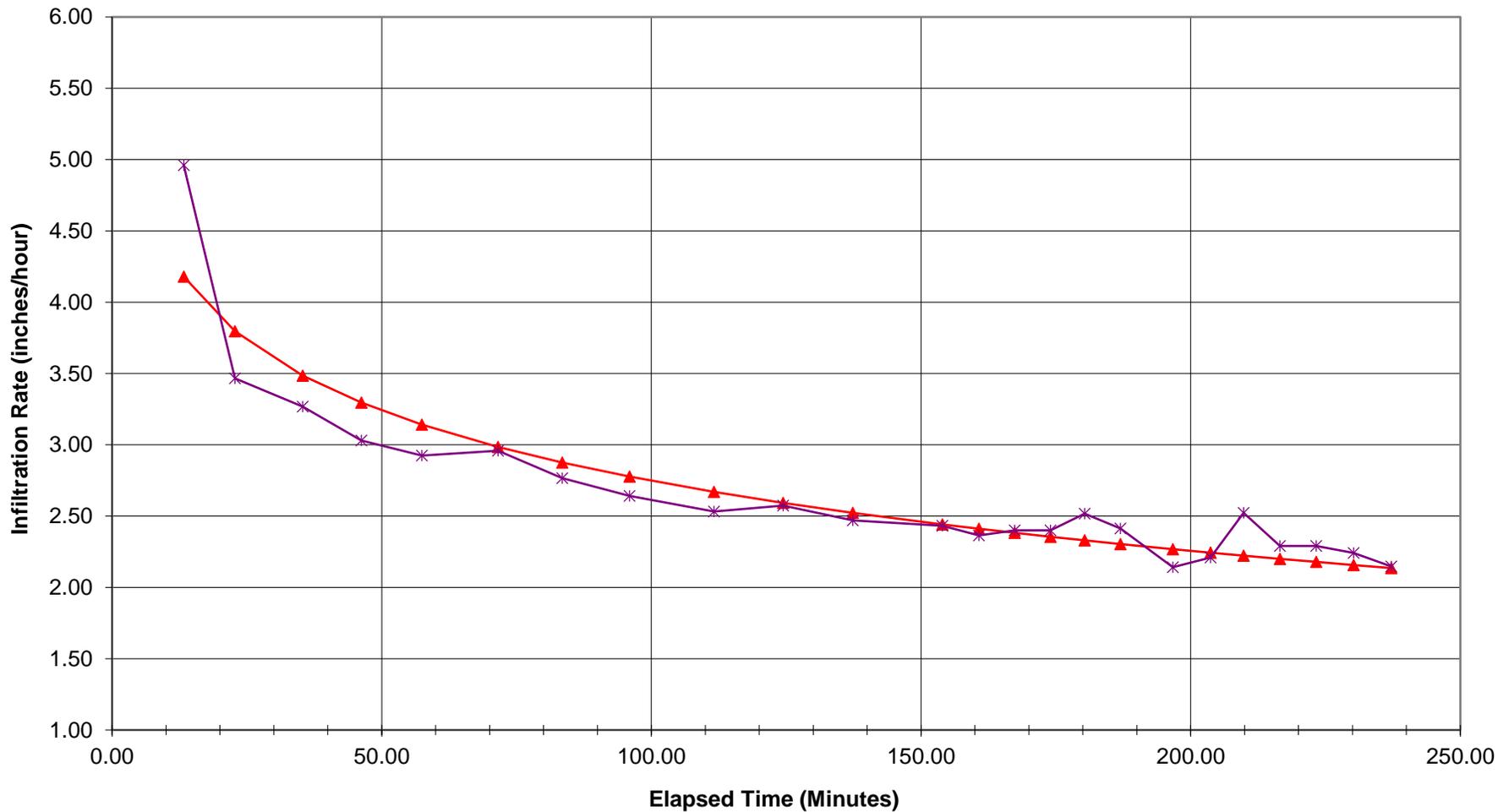
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### Mountaire Farms of Delaware Infiltration Rate DR-6



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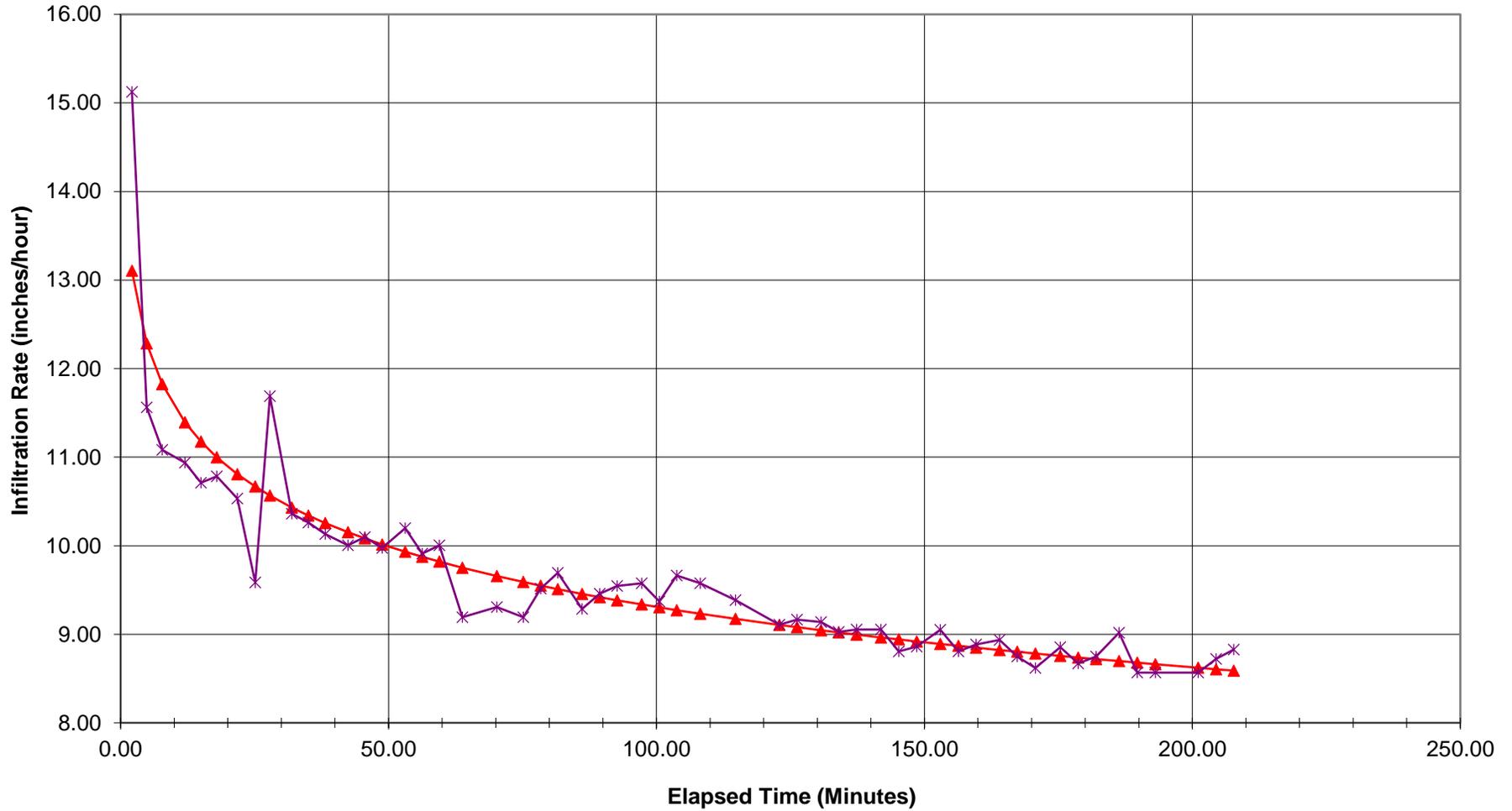
### Mountaire Farms of Delaware Infiltration Rate DR-7



(Log)-Best Fit-T      Measured-T

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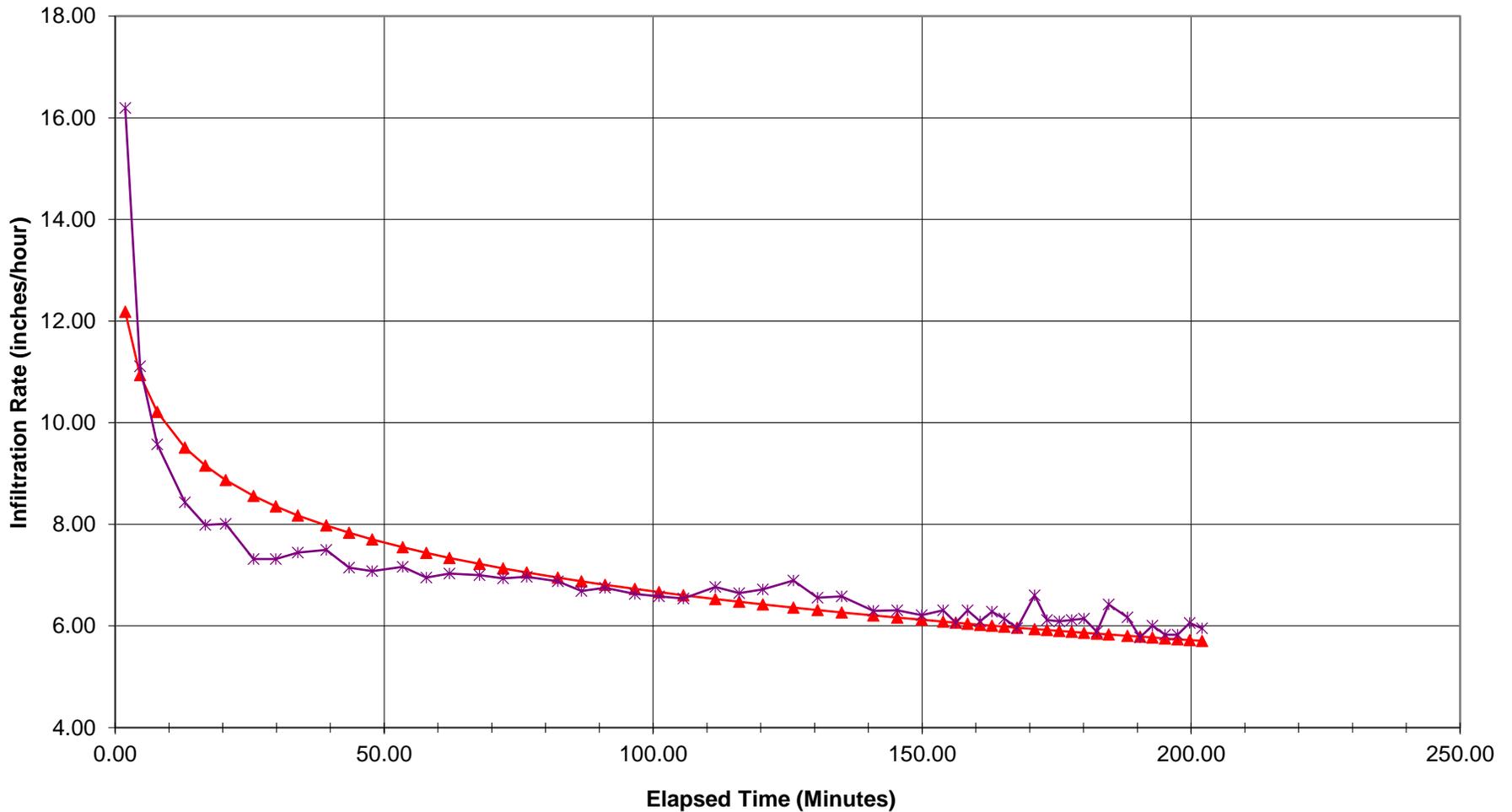
**Mountaire Farms of Delaware  
Infiltration Rate DR-8**



—▲ (Log)-Best Fit-T      —\* Measured-T

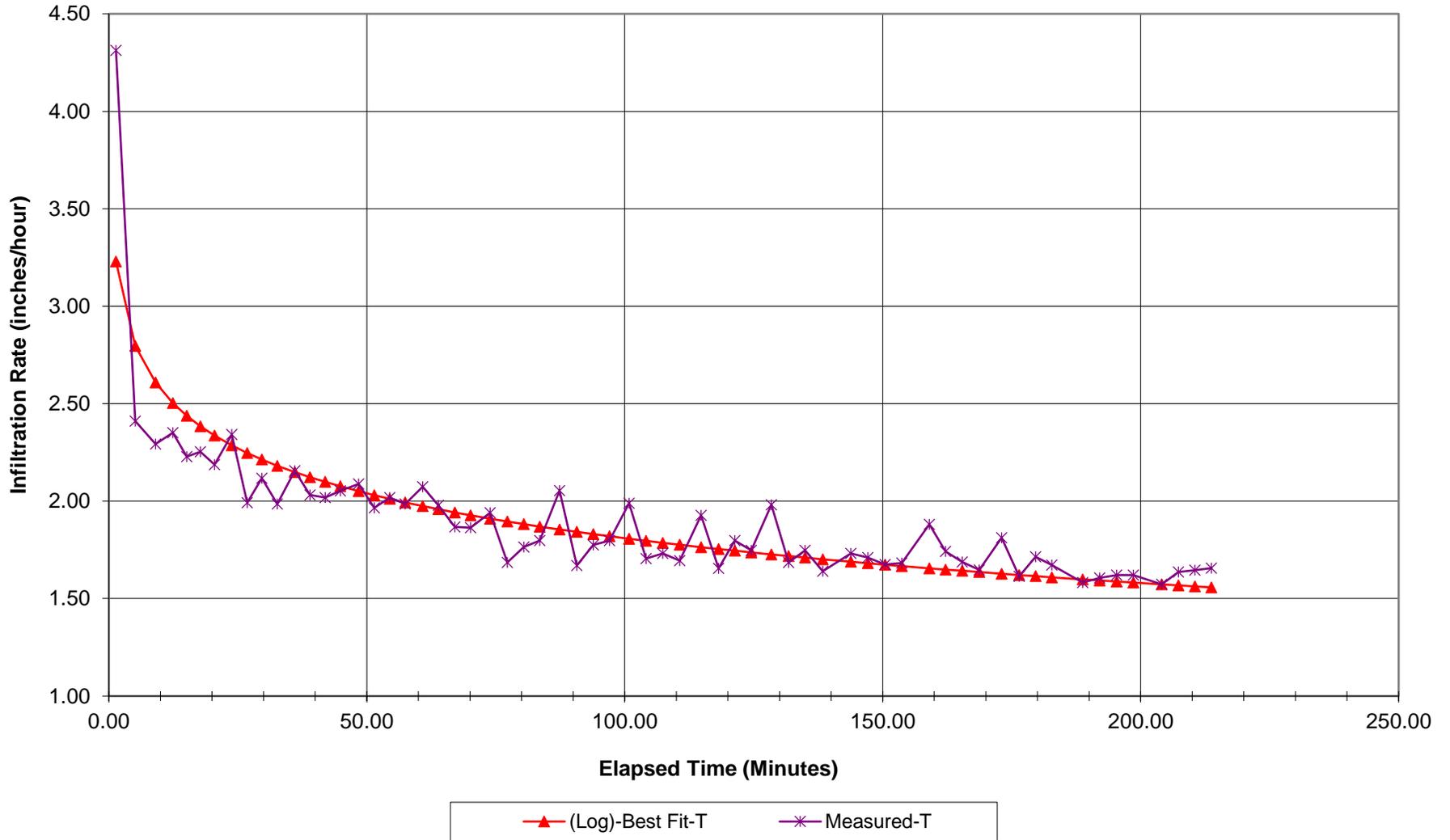
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**Mountaire Farms of Delaware  
Infiltration Rate DR-9**



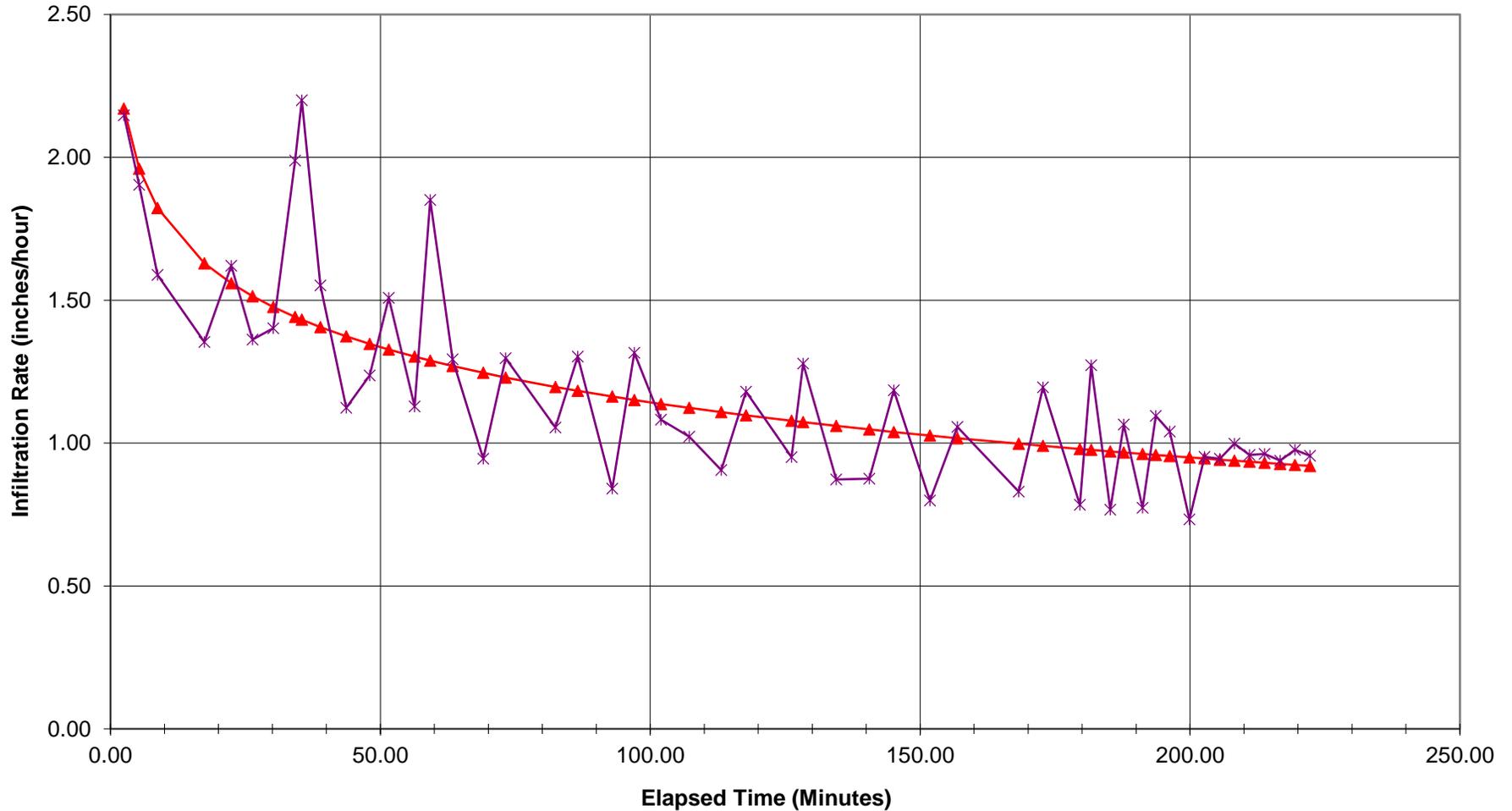
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**Mountaire Farms of Delaware  
Infiltration Rate DR-10**



**EARTH DATA INCORPORATED**

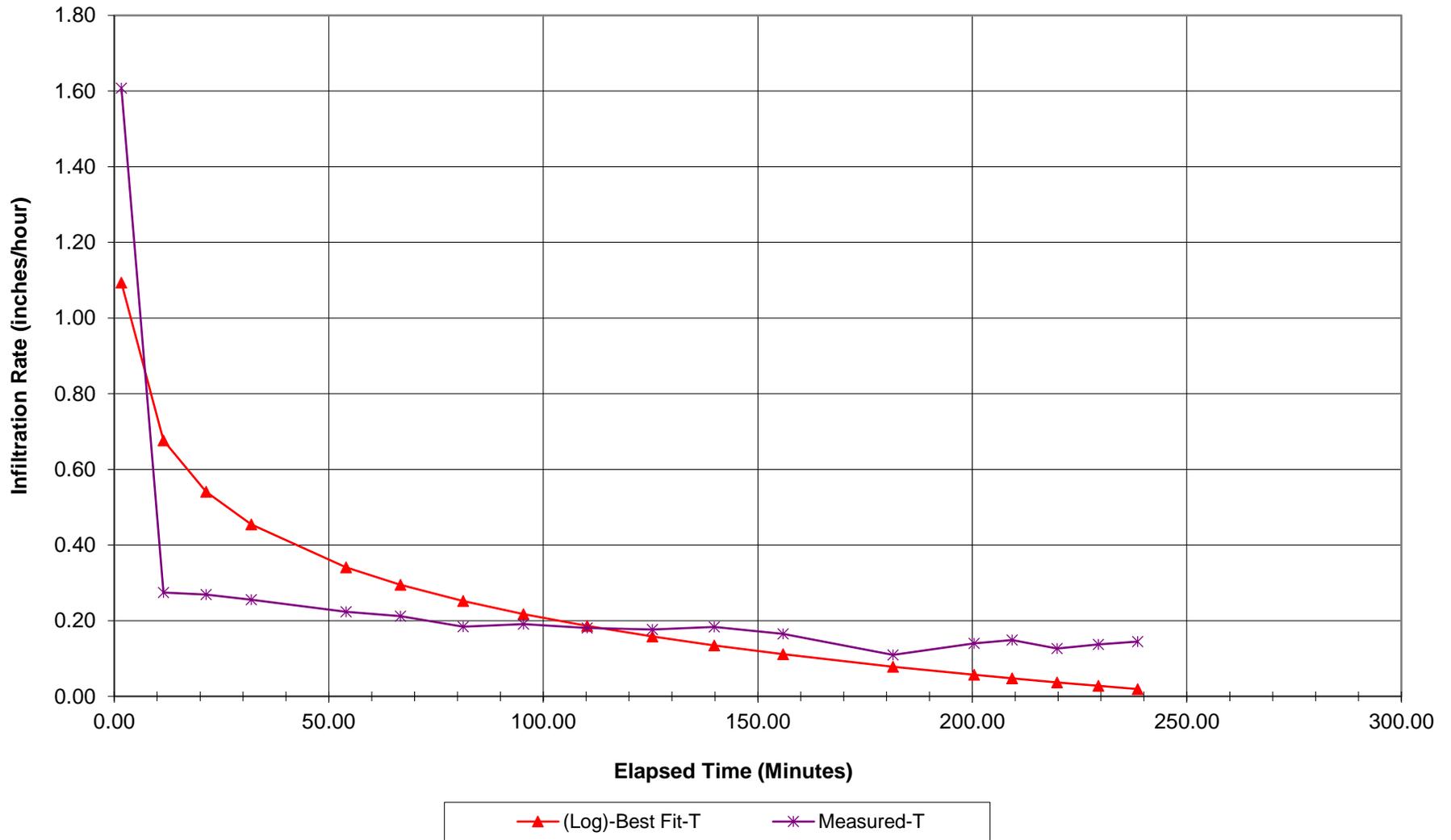
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—▲ (Log)-Best Fit-T      —\* Measured-T

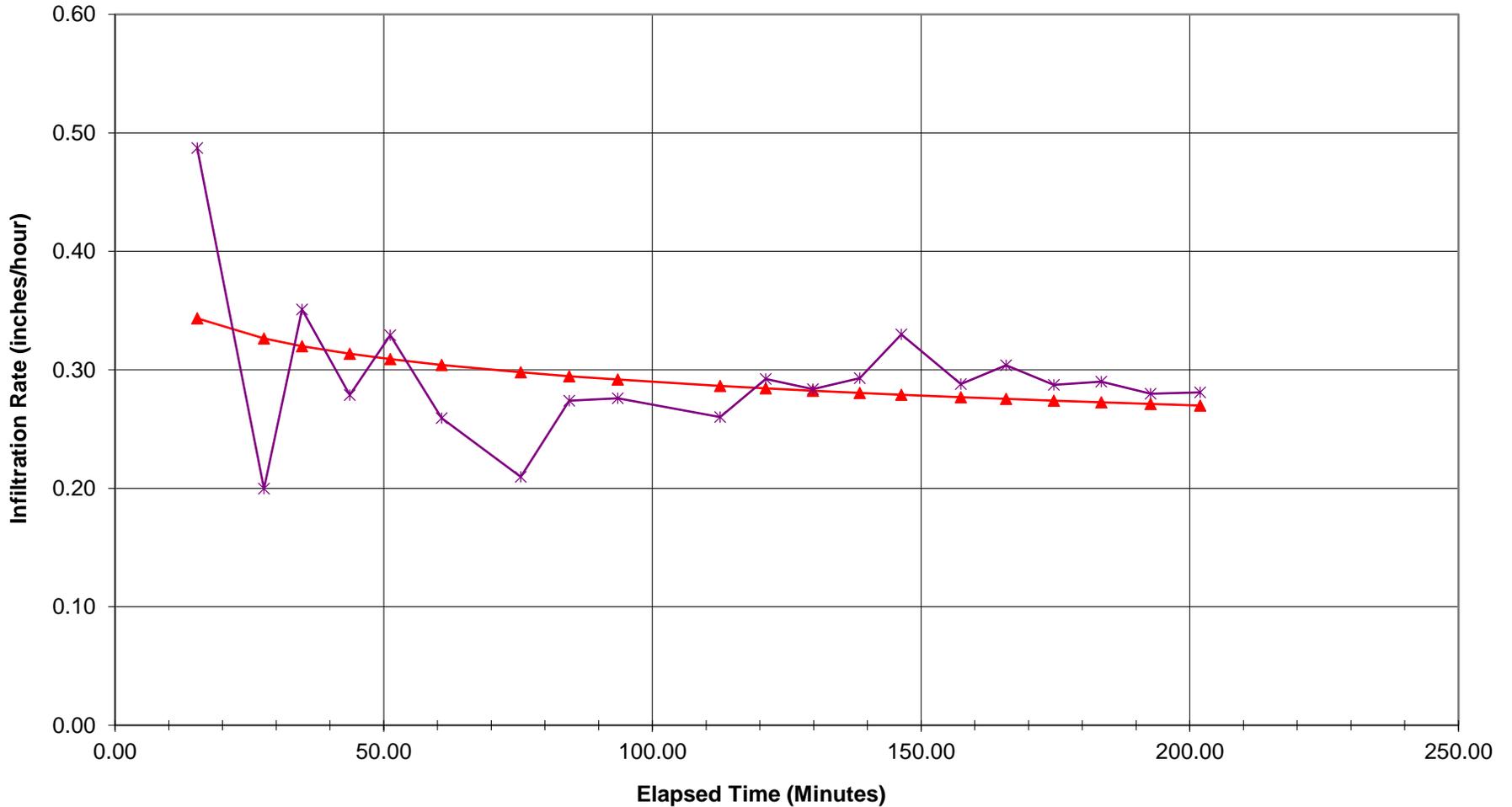
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**Mountaire Farms of Delaware  
Infiltration Rate DR-12**



**EARTH DATA INCORPORATED**

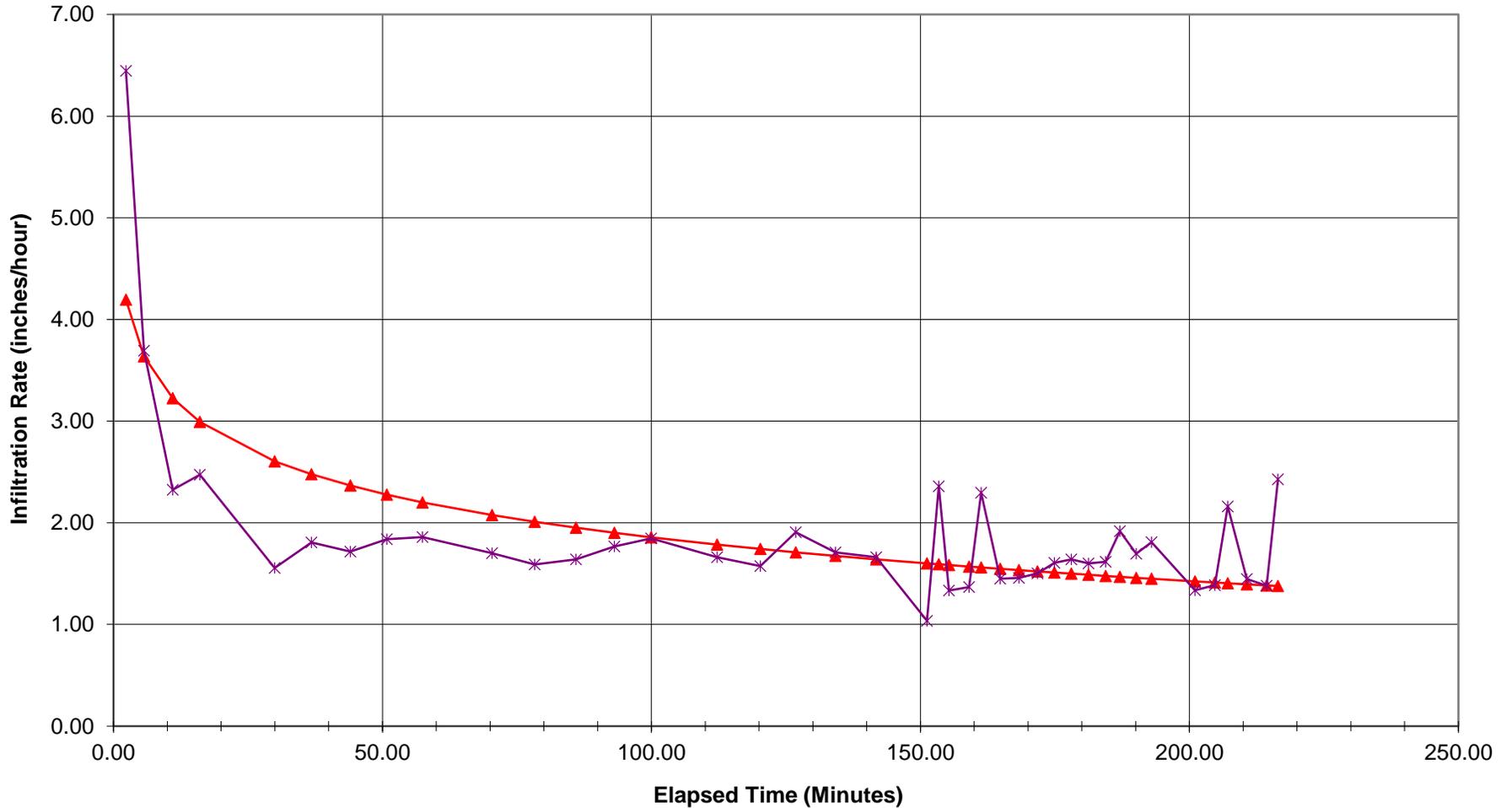
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(Log)-Best Fit-T      Measured-T

**EARTH DATA INCORPORATED**

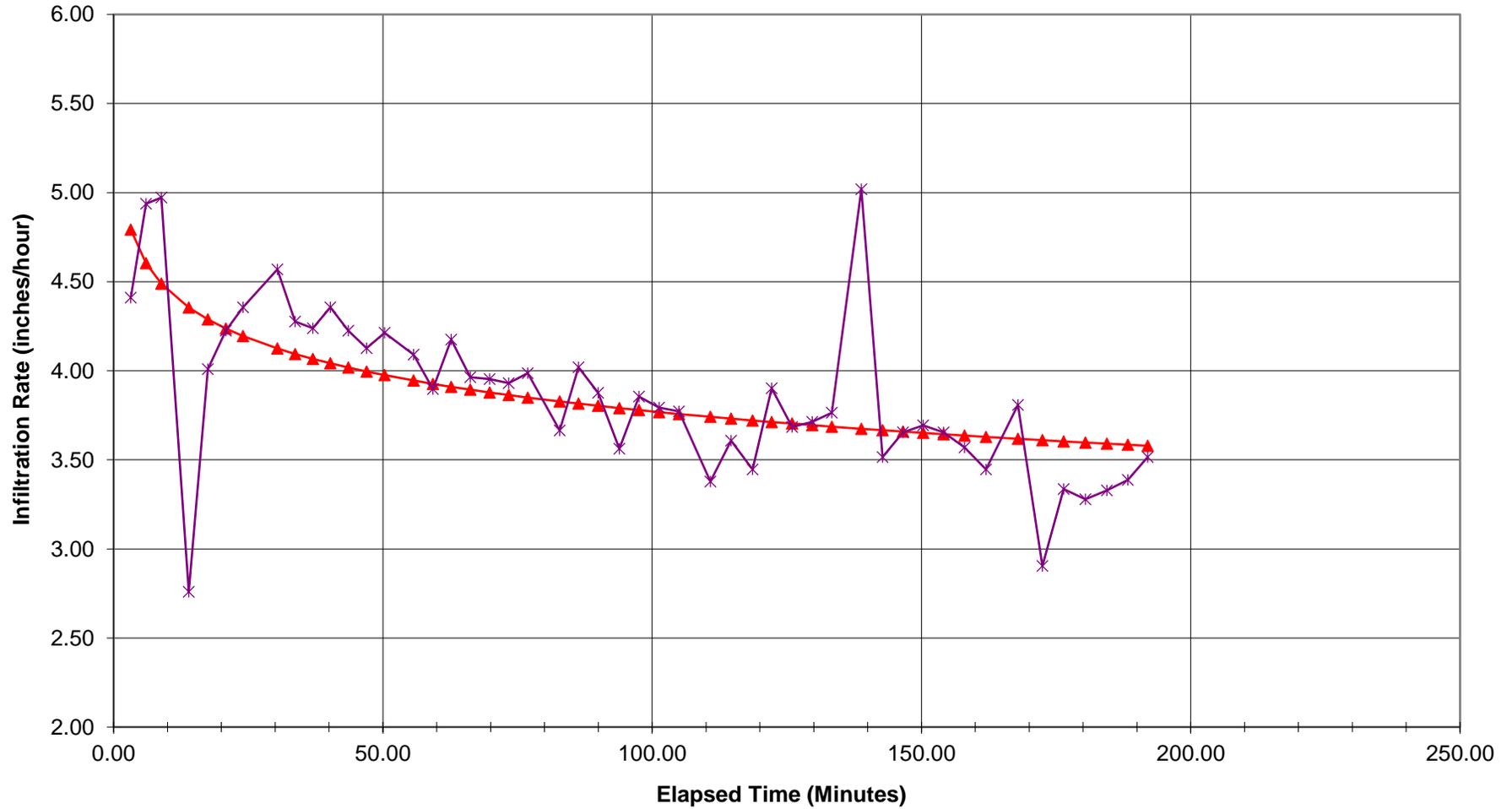
**Mountaire Farms of Delaware  
Infiltration Rate DR-14**



(Log)-Best Fit-T      Measured-T

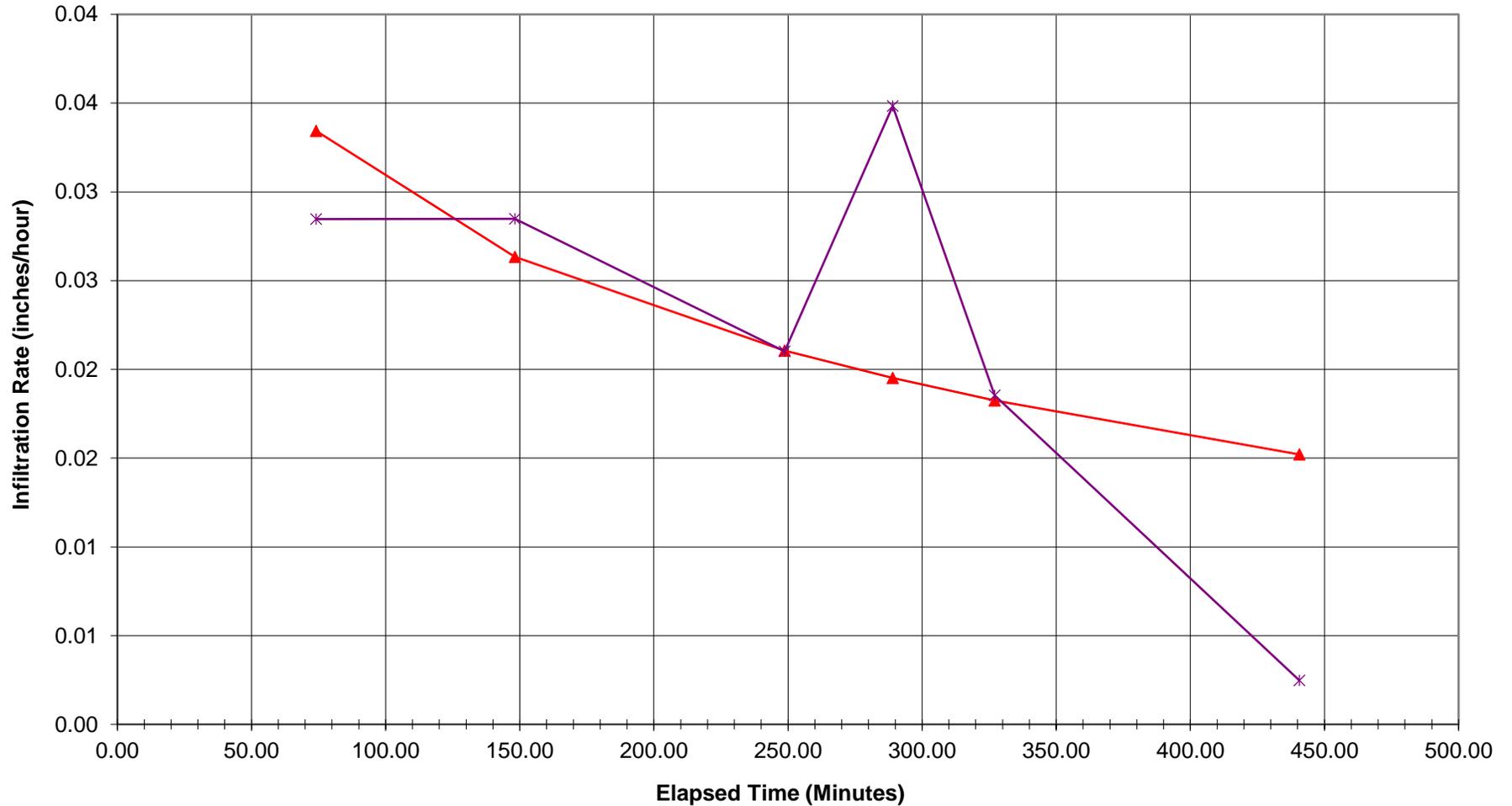
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### Mountaire Farms of Delaware Infiltration Rate DR-15



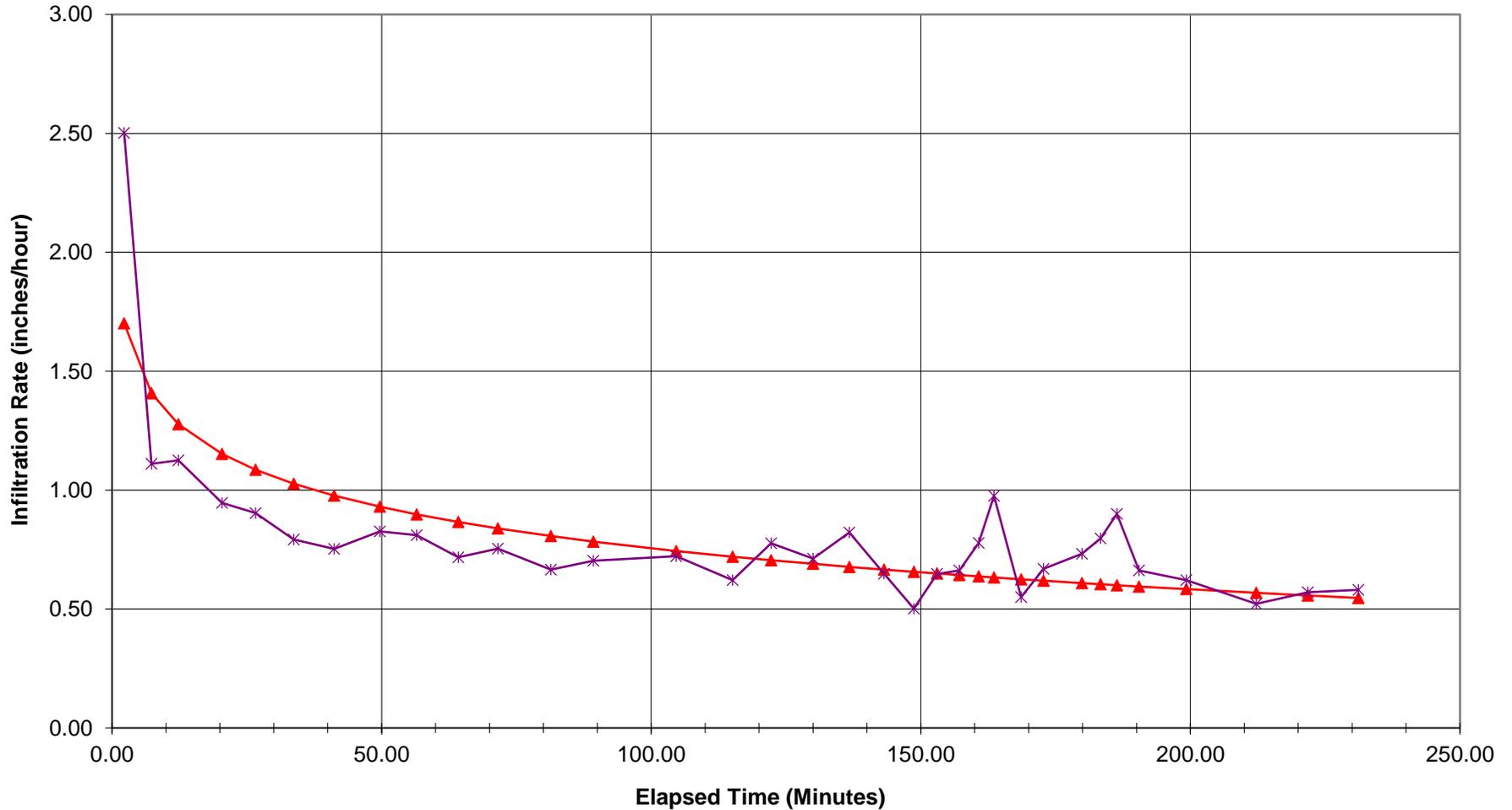
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### Mountaire Farms of Delaware Infiltration Rate DR-16



**EARTH DATA INCORPORATED**

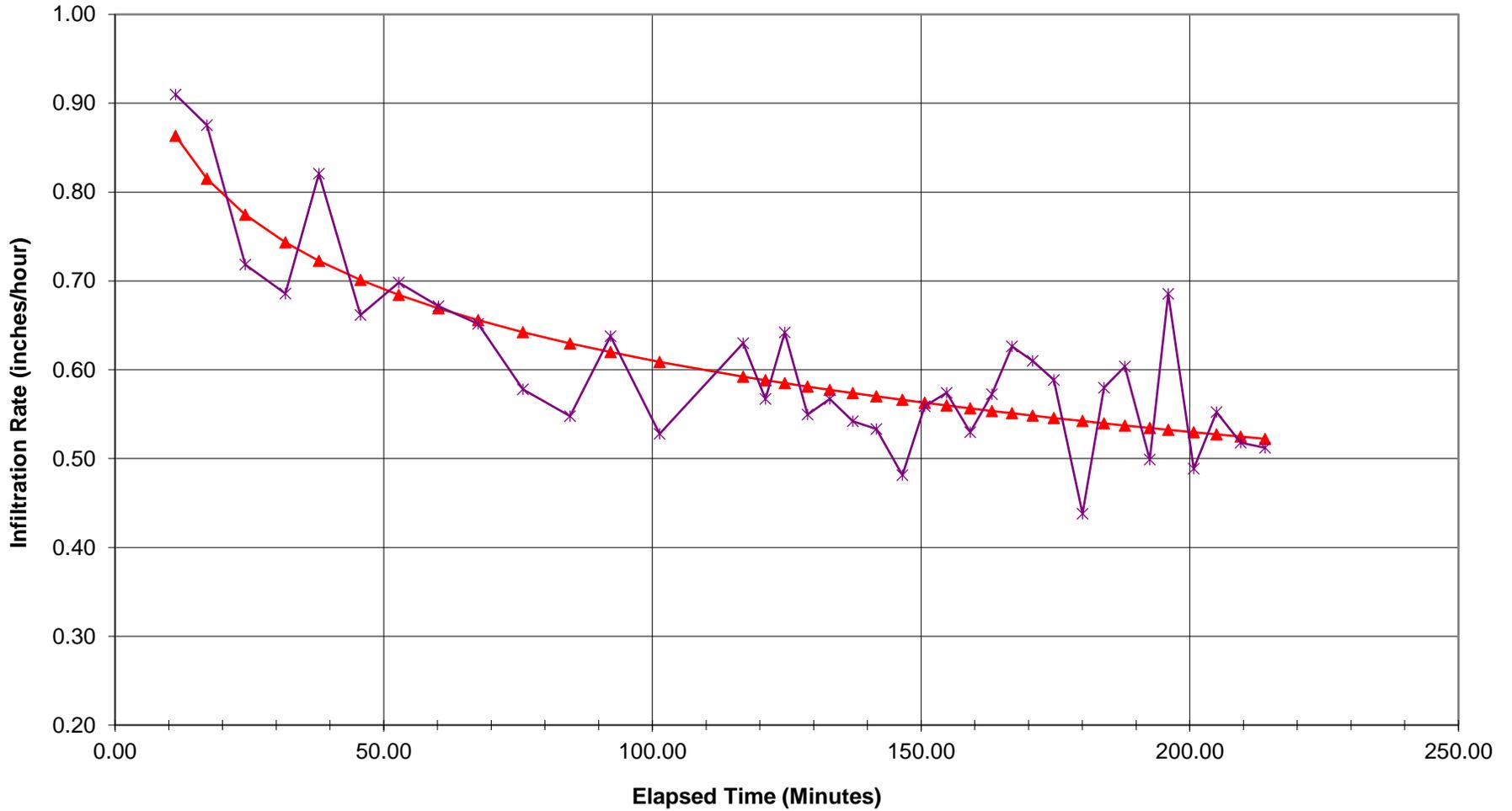
**Mountaire Farms of Delaware  
Infiltration Rate DR-17**



—▲— (Log)-Best Fit-T      —\*— Measured-T

**EARTH DATA INCORPORATED**

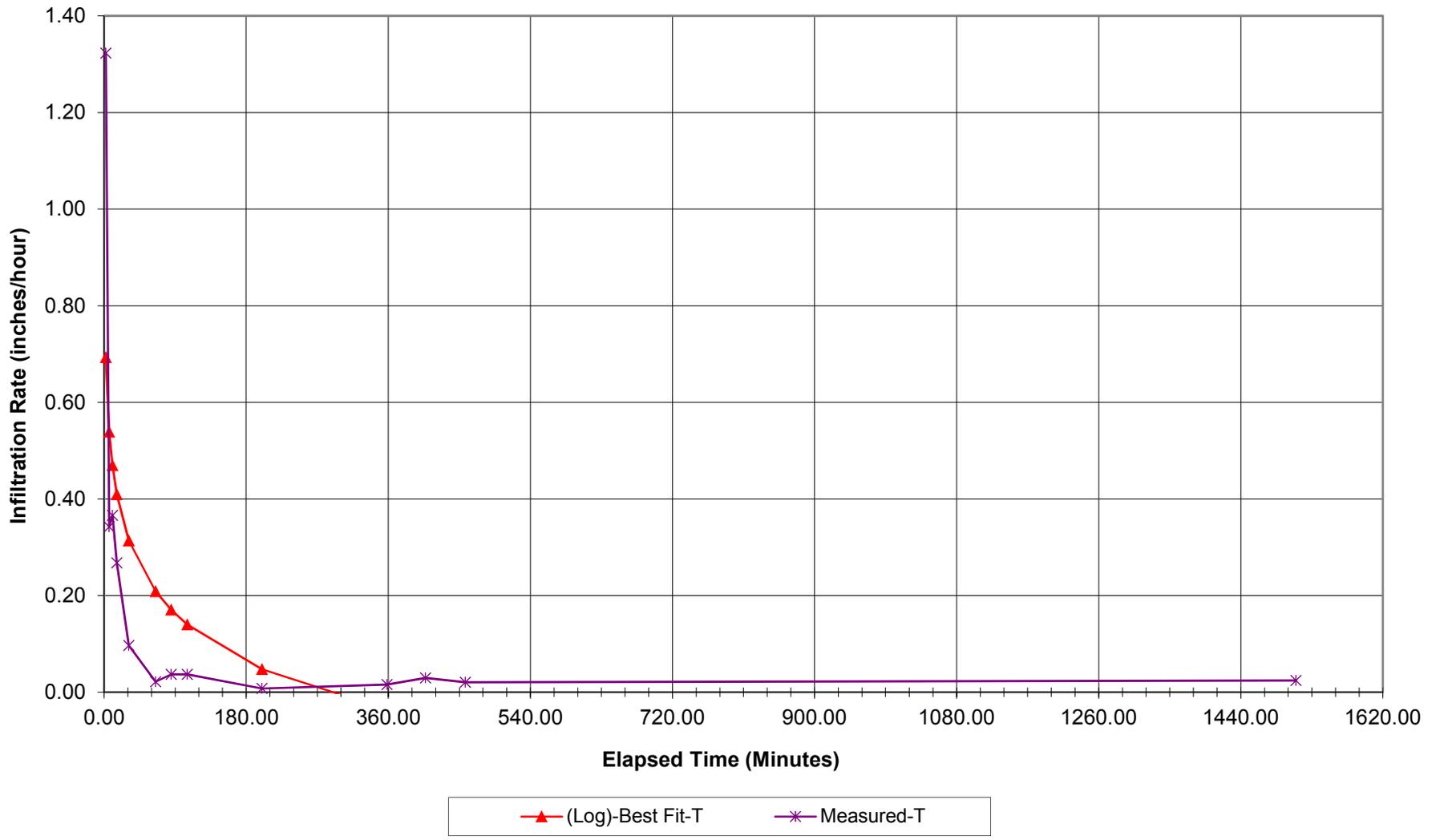
**Mountaire Farms of Delaware  
Infiltration Rate DR-18**



(Log)-Best Fit-T      Measured-T

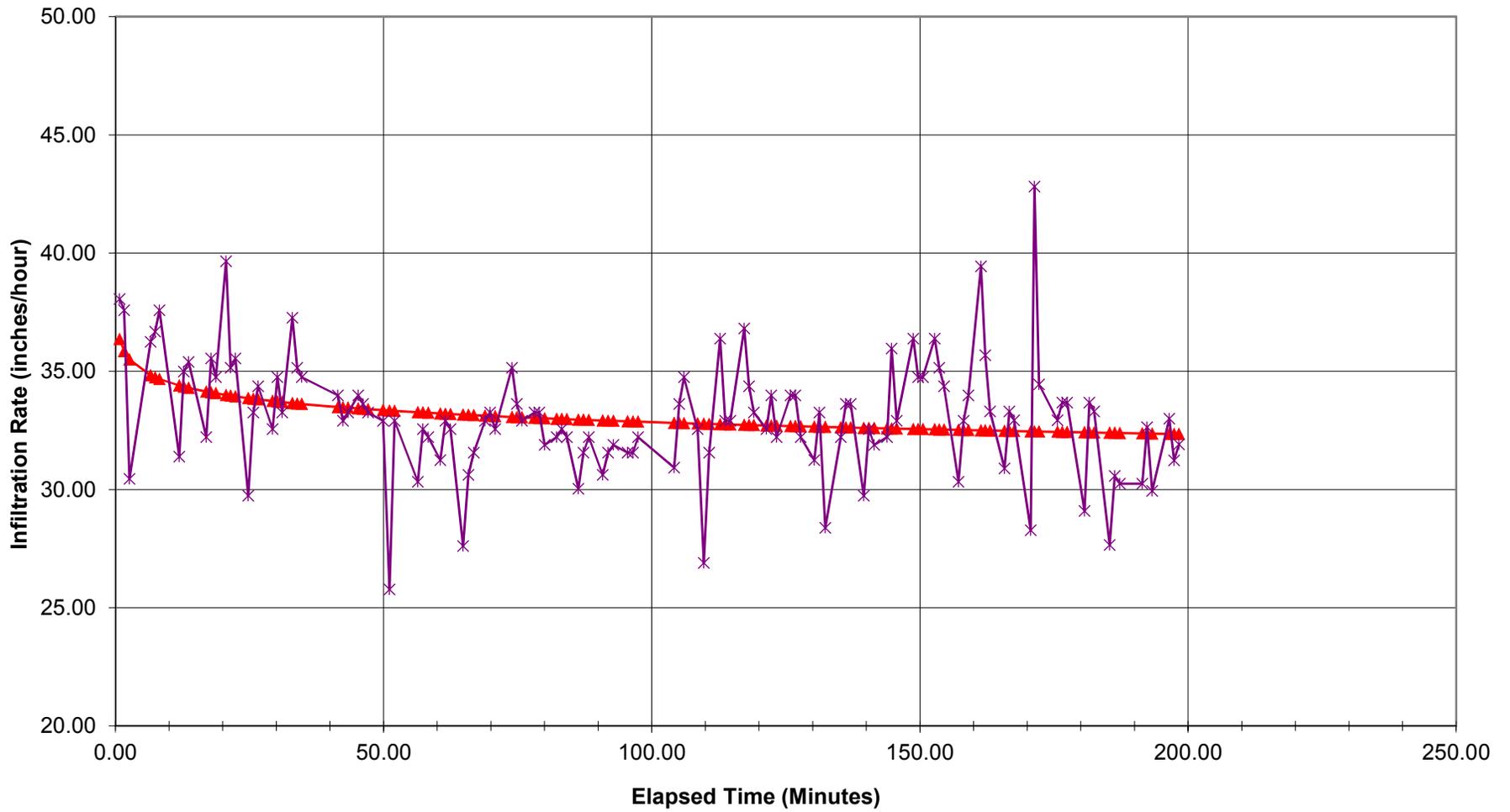
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### Mountaire Farms of Delaware Infiltration Rate DR-19



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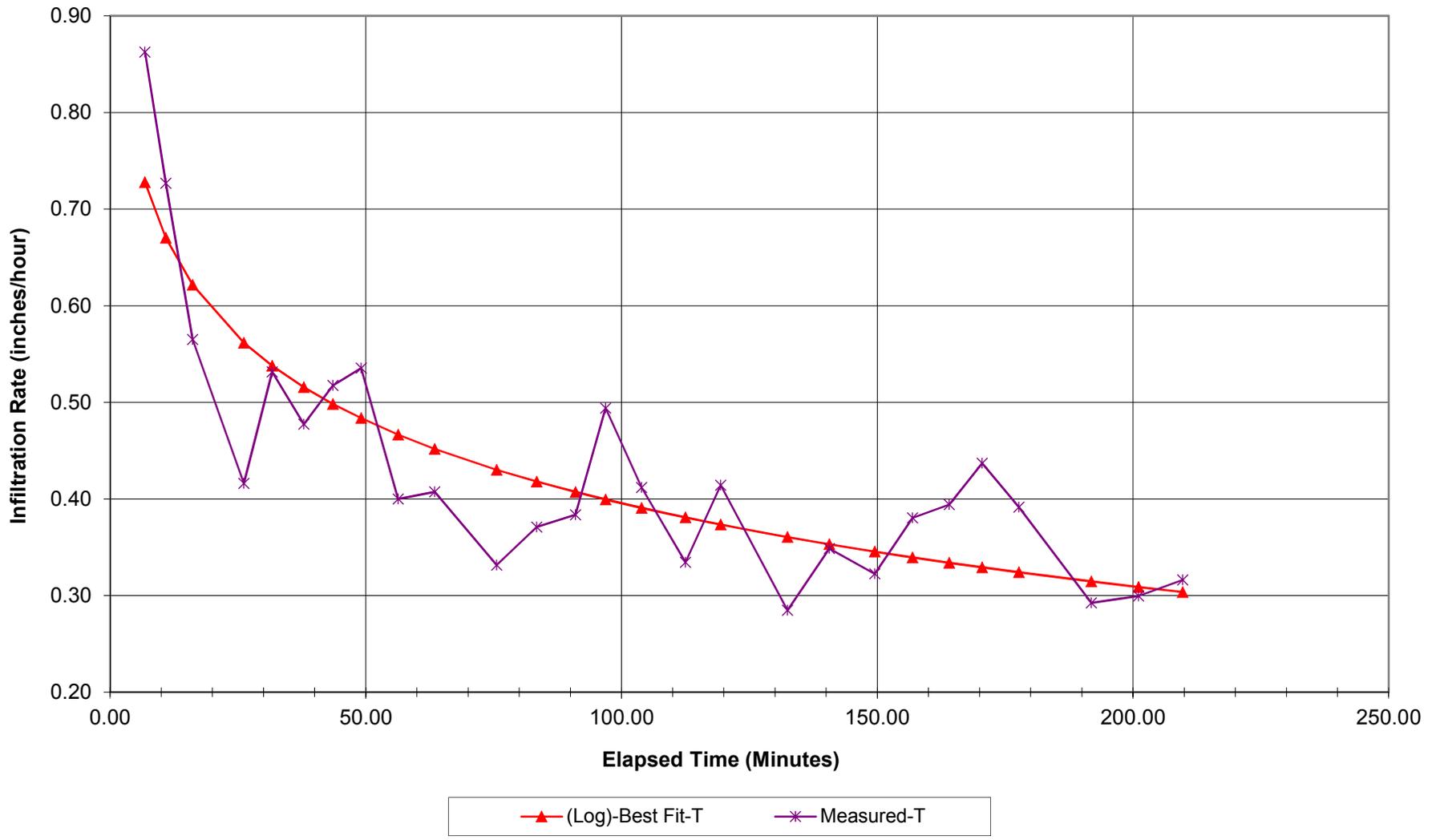
### Mountaire Farms of Delaware Infiltration Rate DR-20



—▲— (Log)-Best Fit-T      —\*— Measured-T

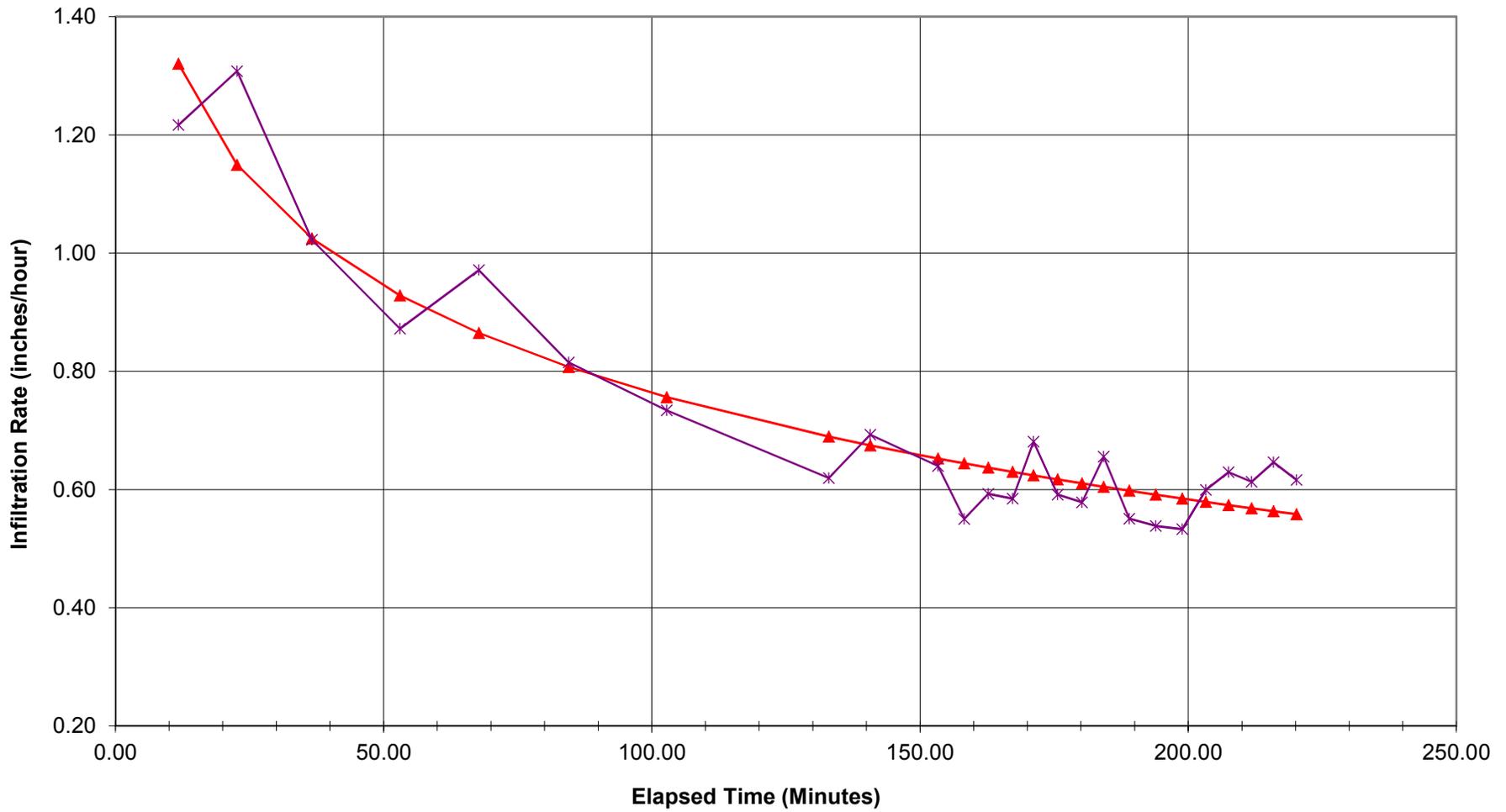
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### Mountaire Farms of Delaware Infiltration Rate DR-21



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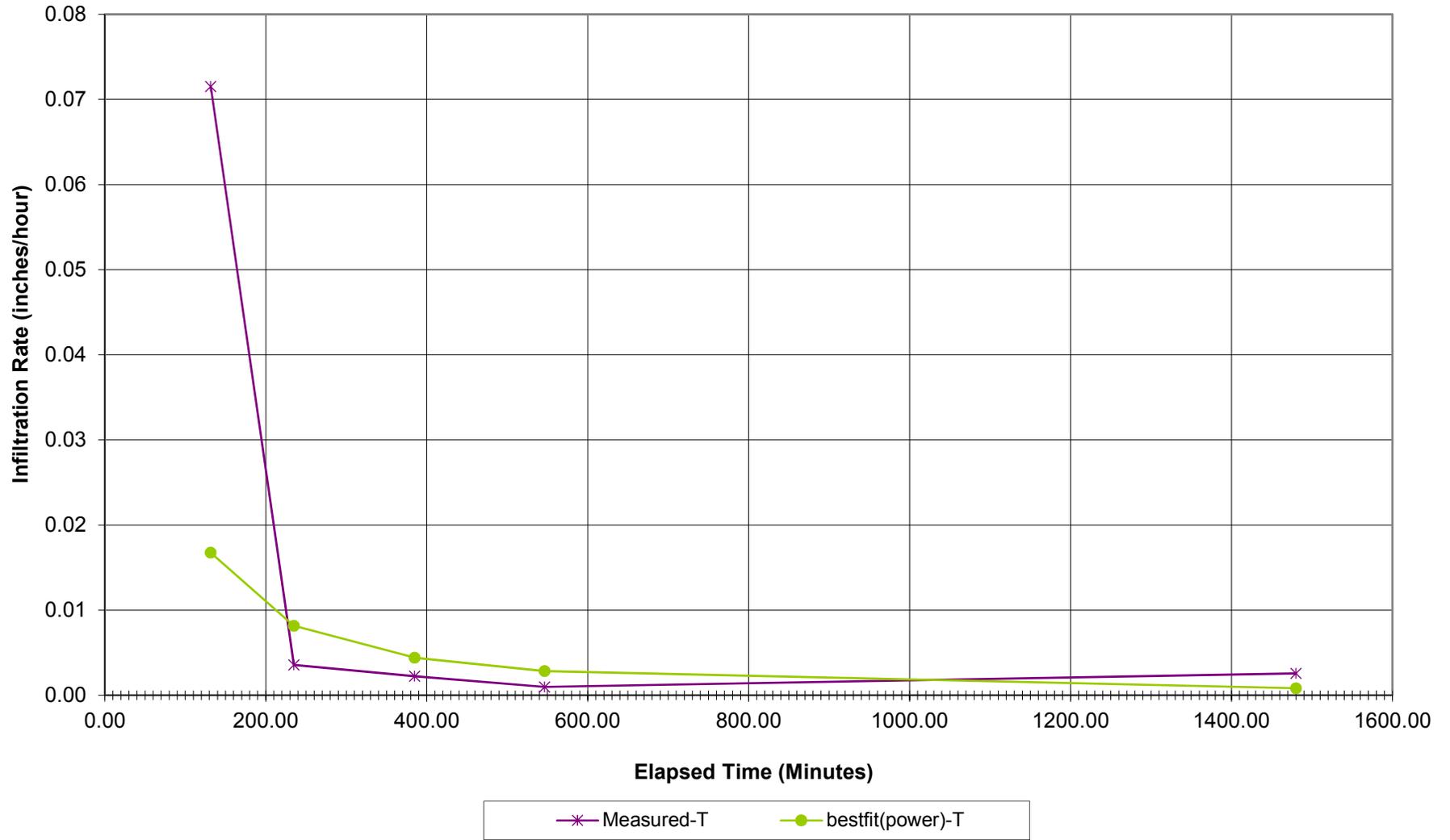
### Mountaire Farms of Delaware Infiltration Rate DR-22



(Log)-Best Fit-T      Measured-T

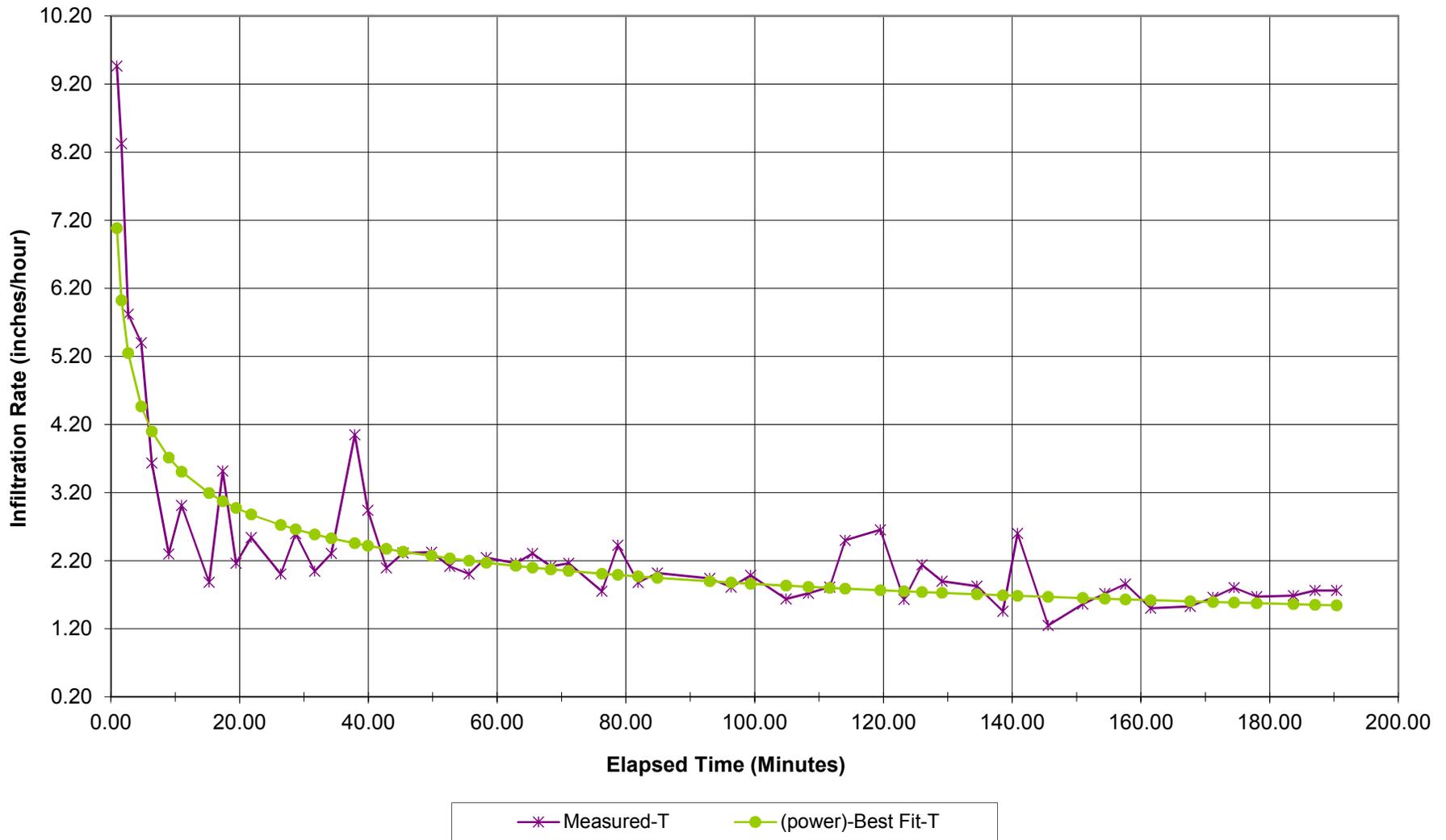
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**Mountaire Farms of Delaware  
Infiltration Rate DR-23**



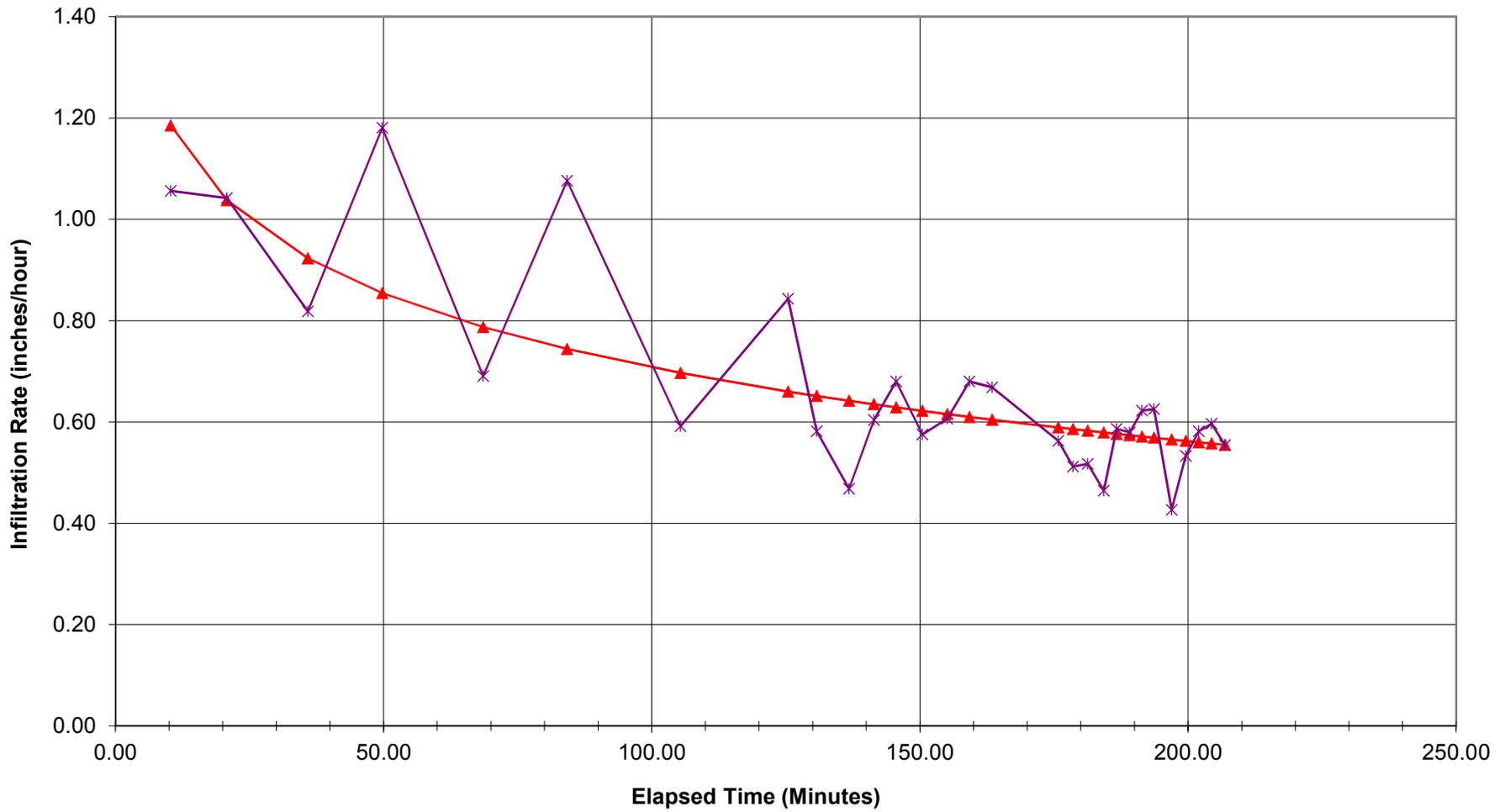
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### Mountaire Farms of Delaware Infiltration Rate DR-24



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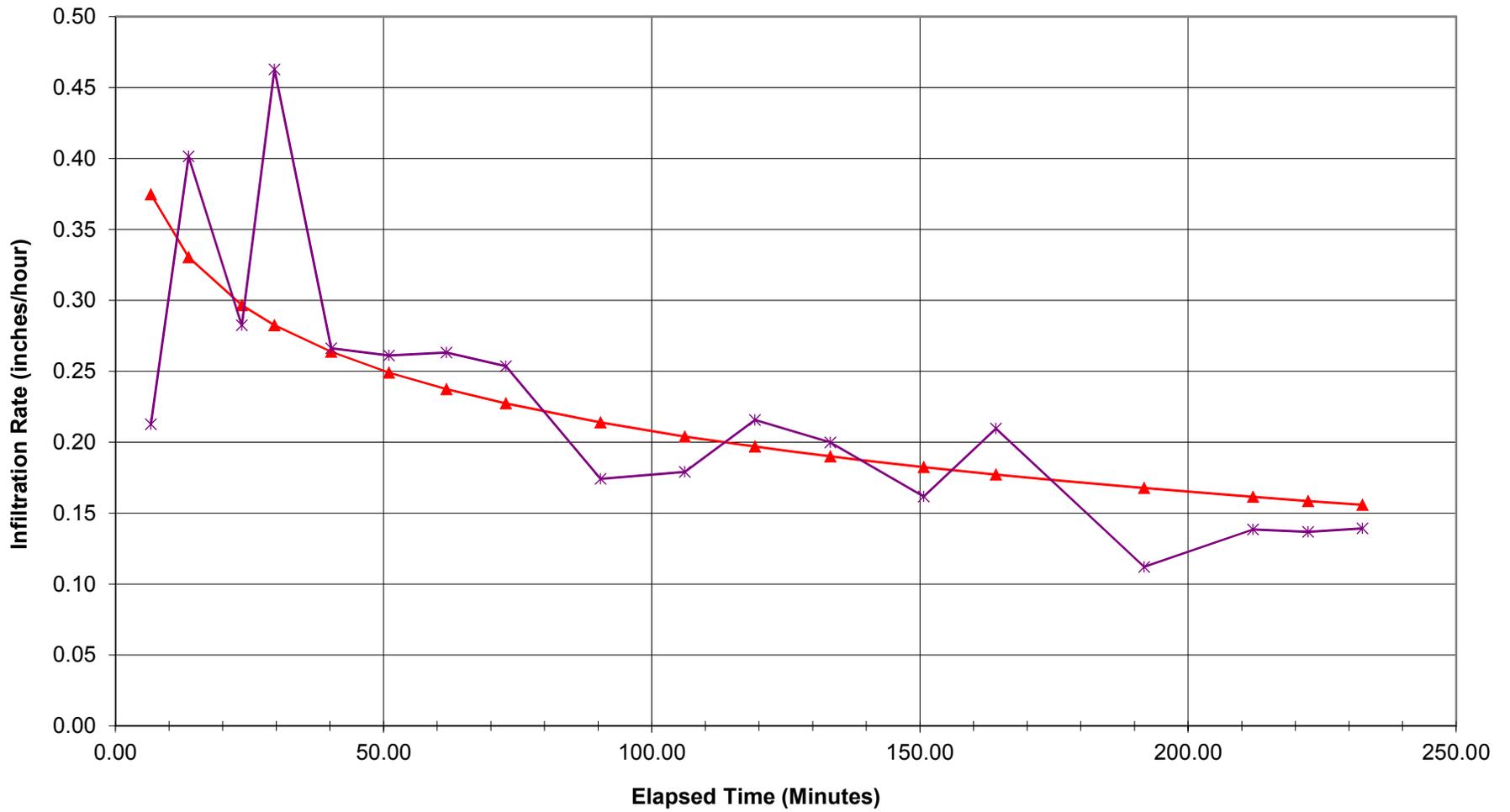
### Mountaire Farms of Delaware Infiltration Rate DR-25



(Log)-Best Fit-T      Measured-T

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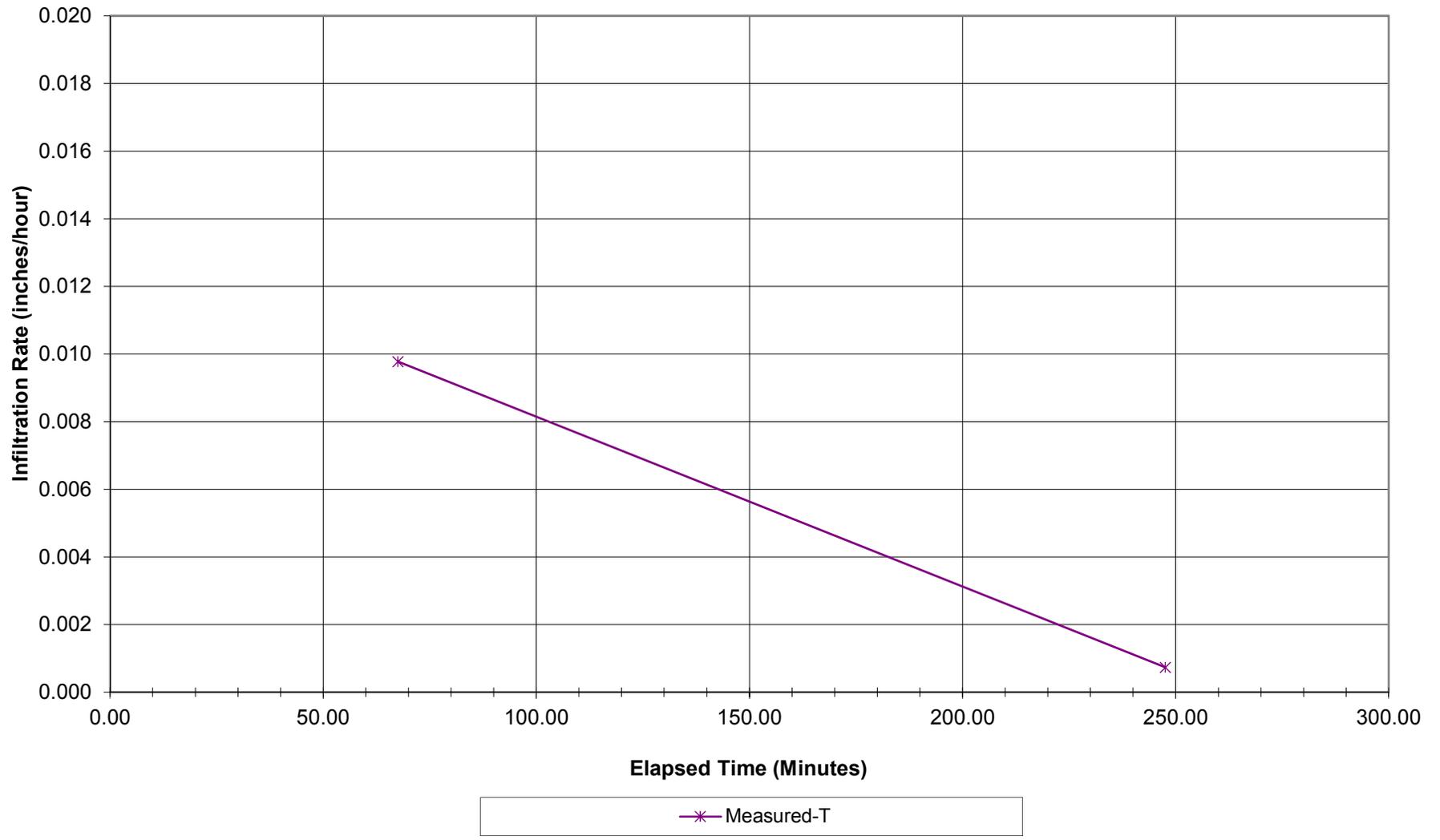
**Mountaire Farms of Delaware  
Infiltration Rate DR-26**



—▲— (Log)-Best Fit-T      —\*— Measured-T

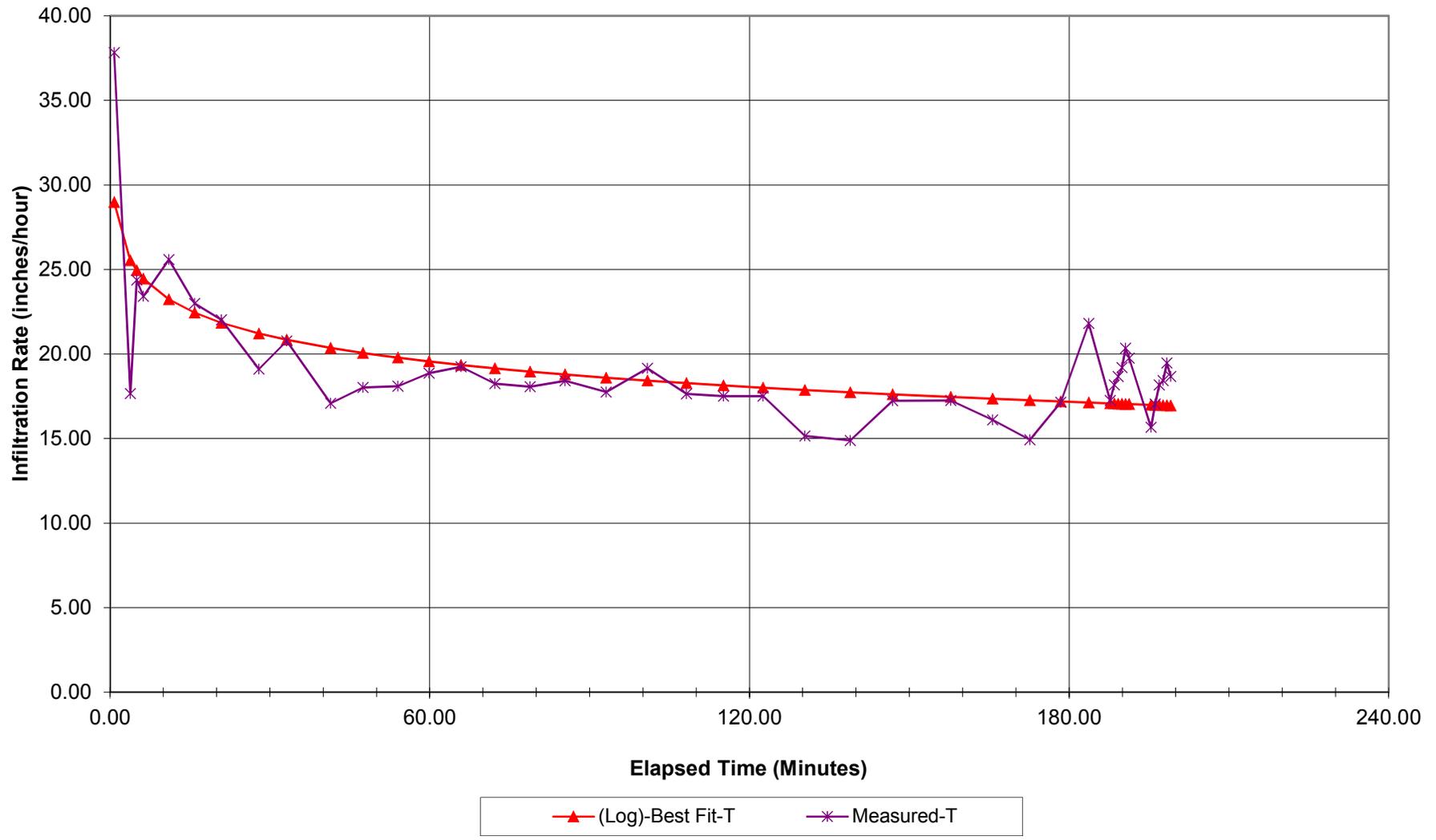
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-28**



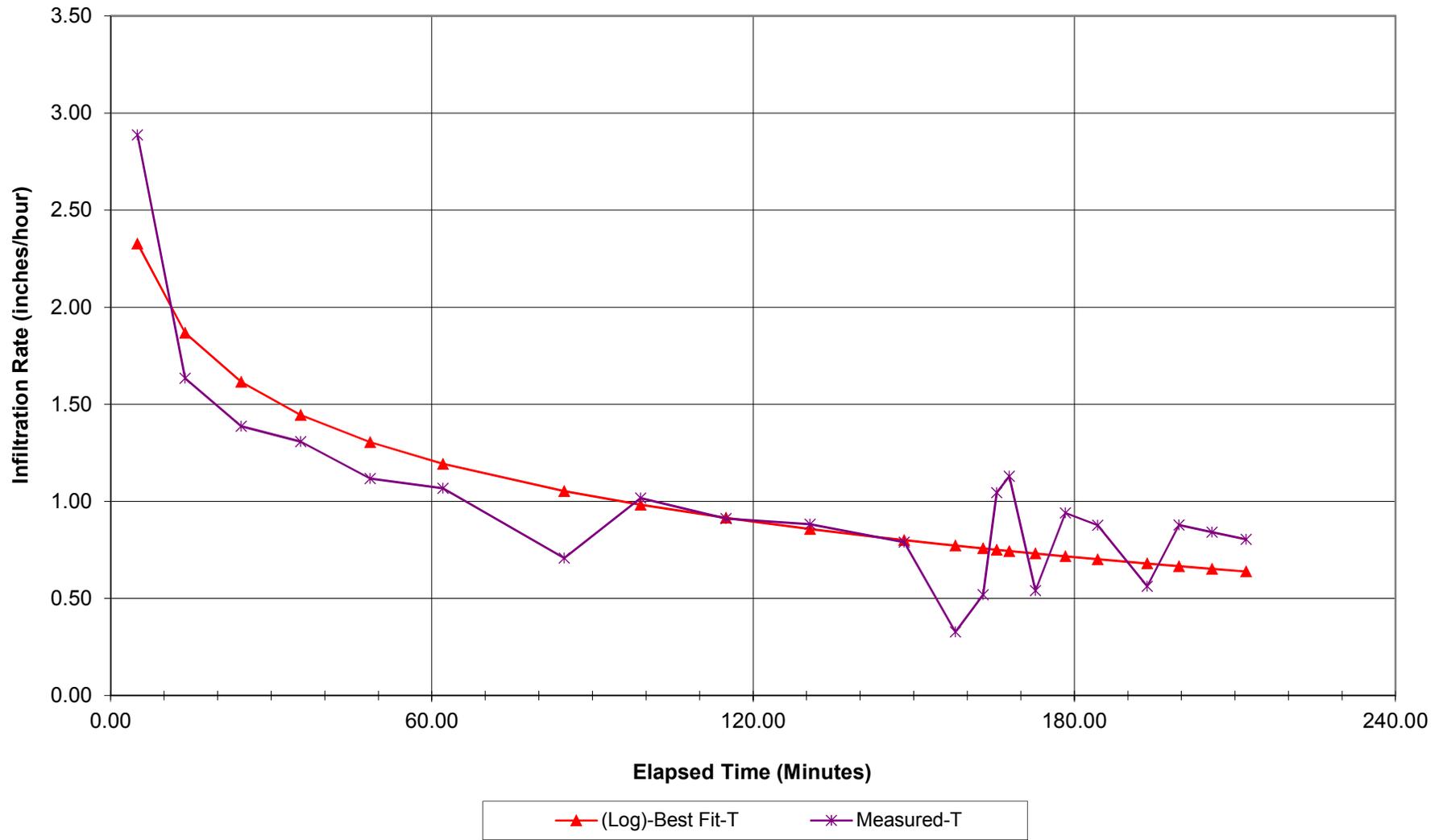
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-29**



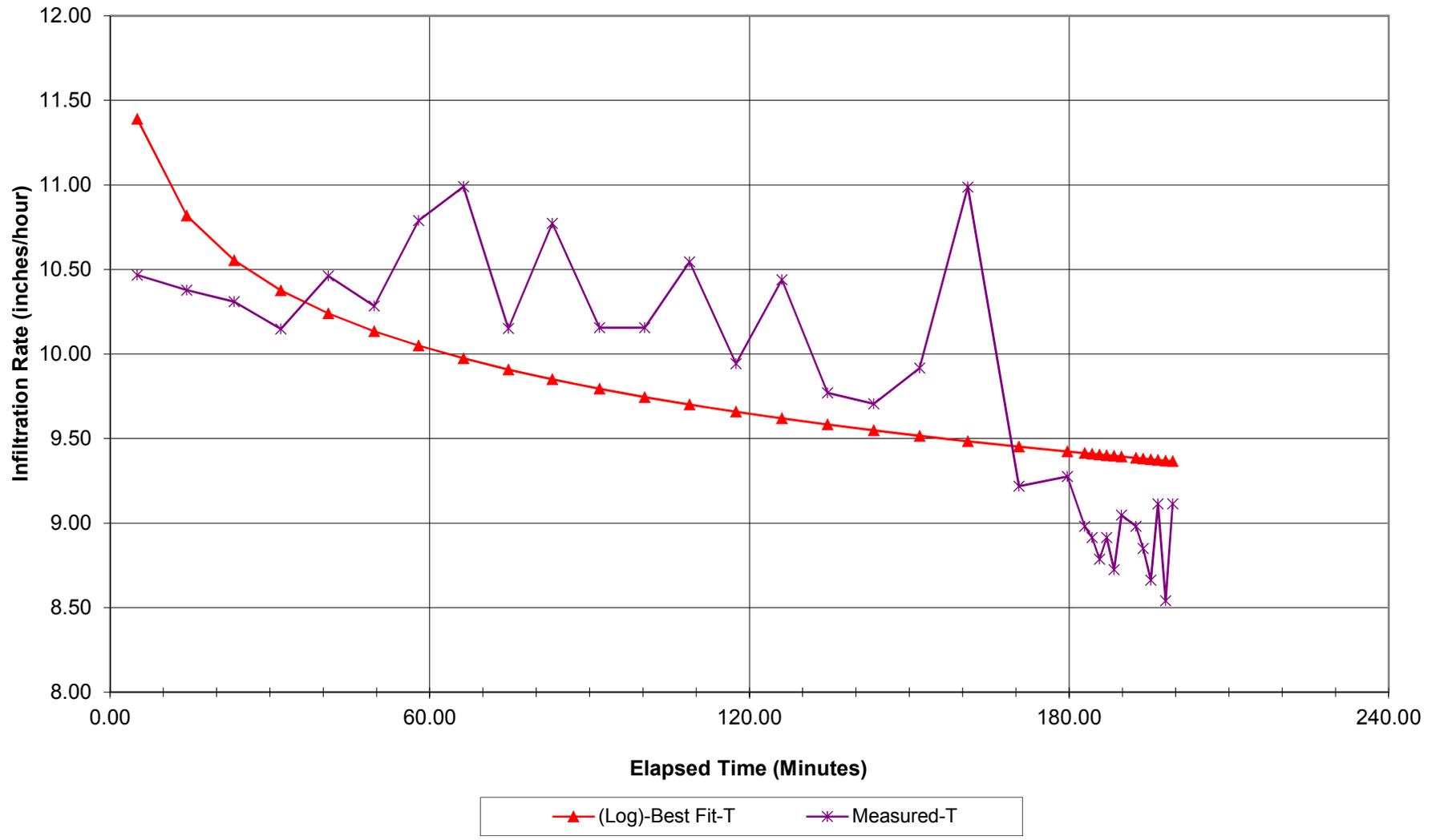
**EARTH DATA INCORPORATED**

### Mountaire Farms of Delaware Infiltration Rate DR-30



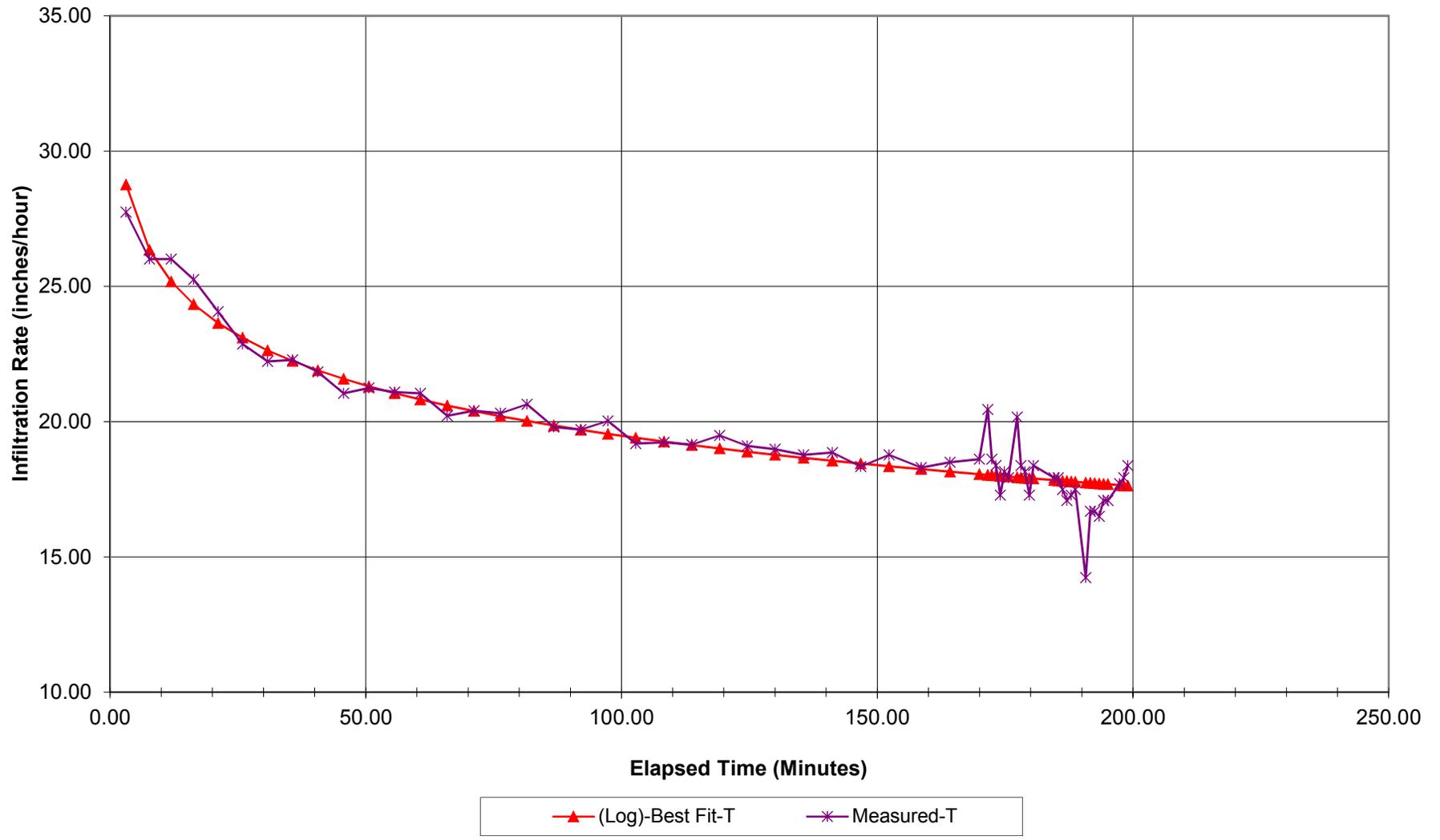
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-31**



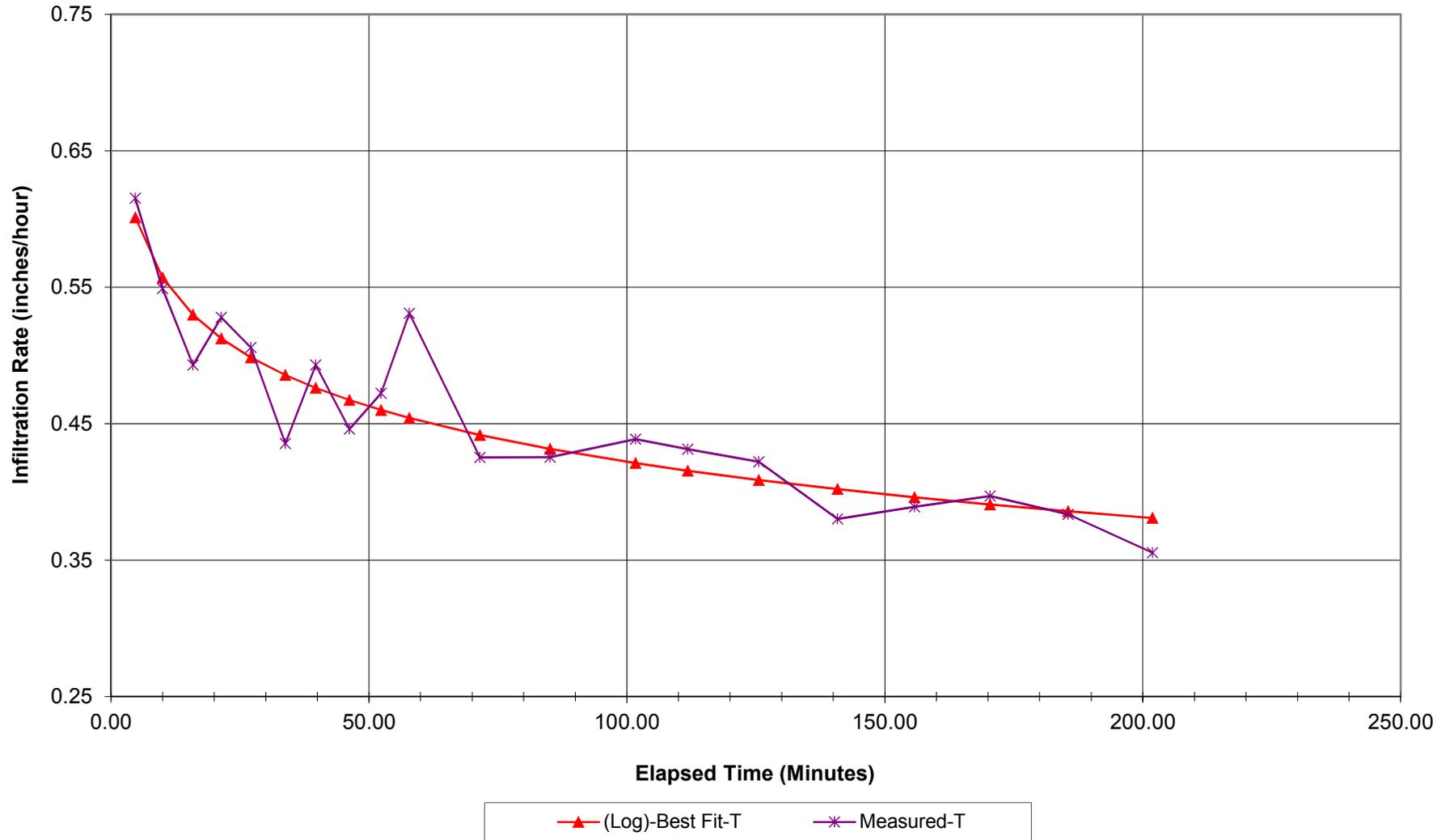
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-32**



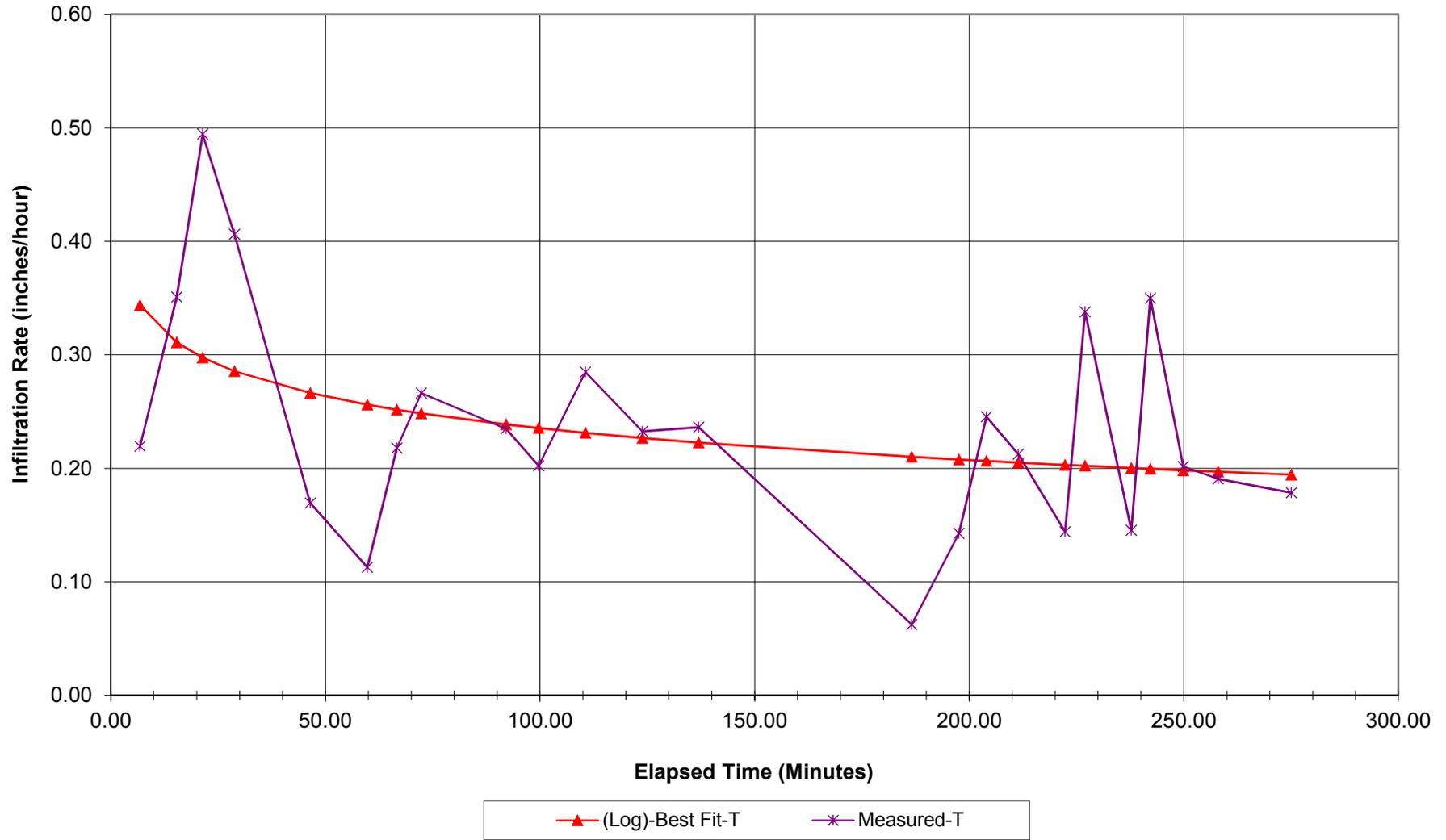
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-33**



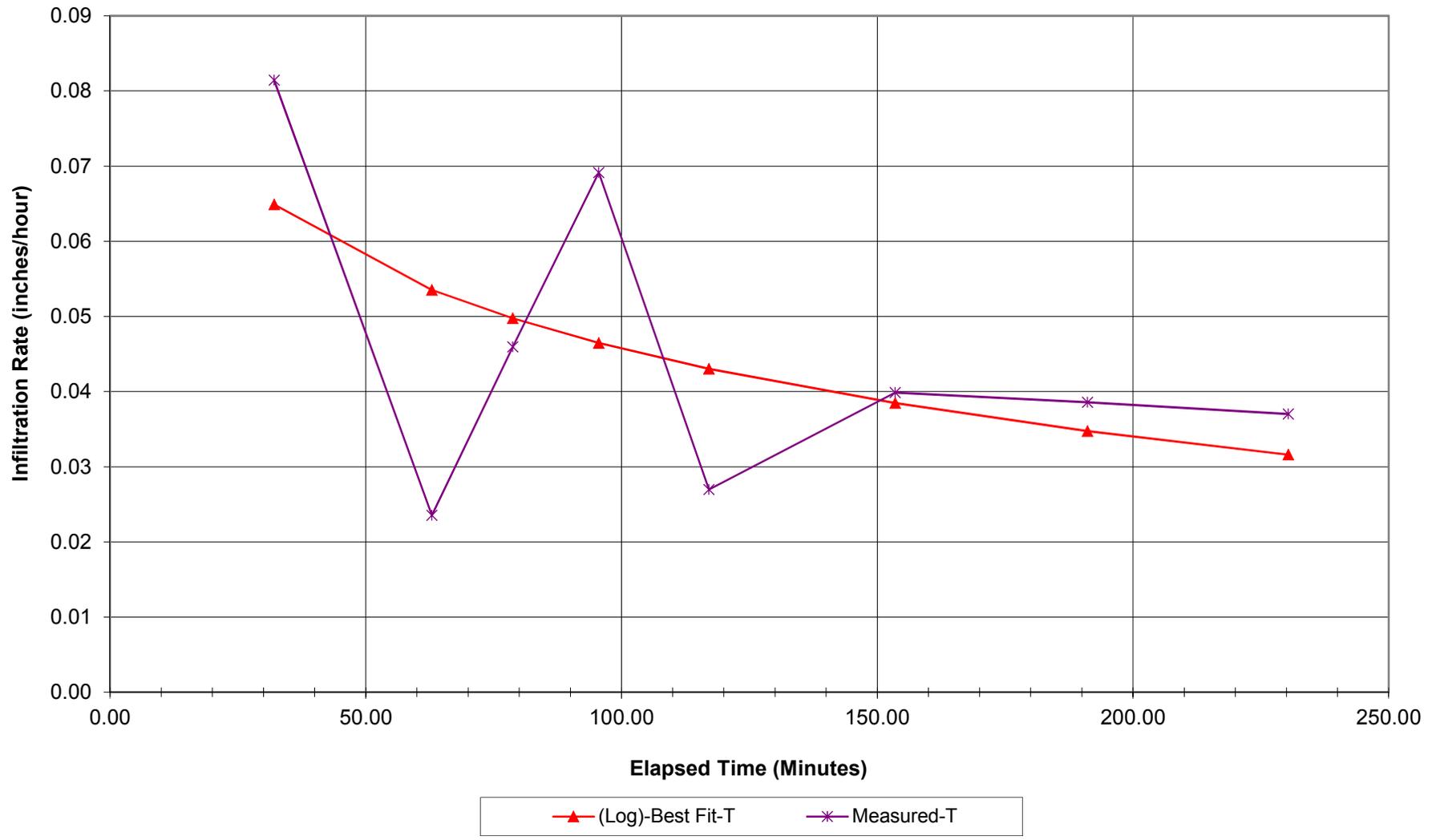
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-34**



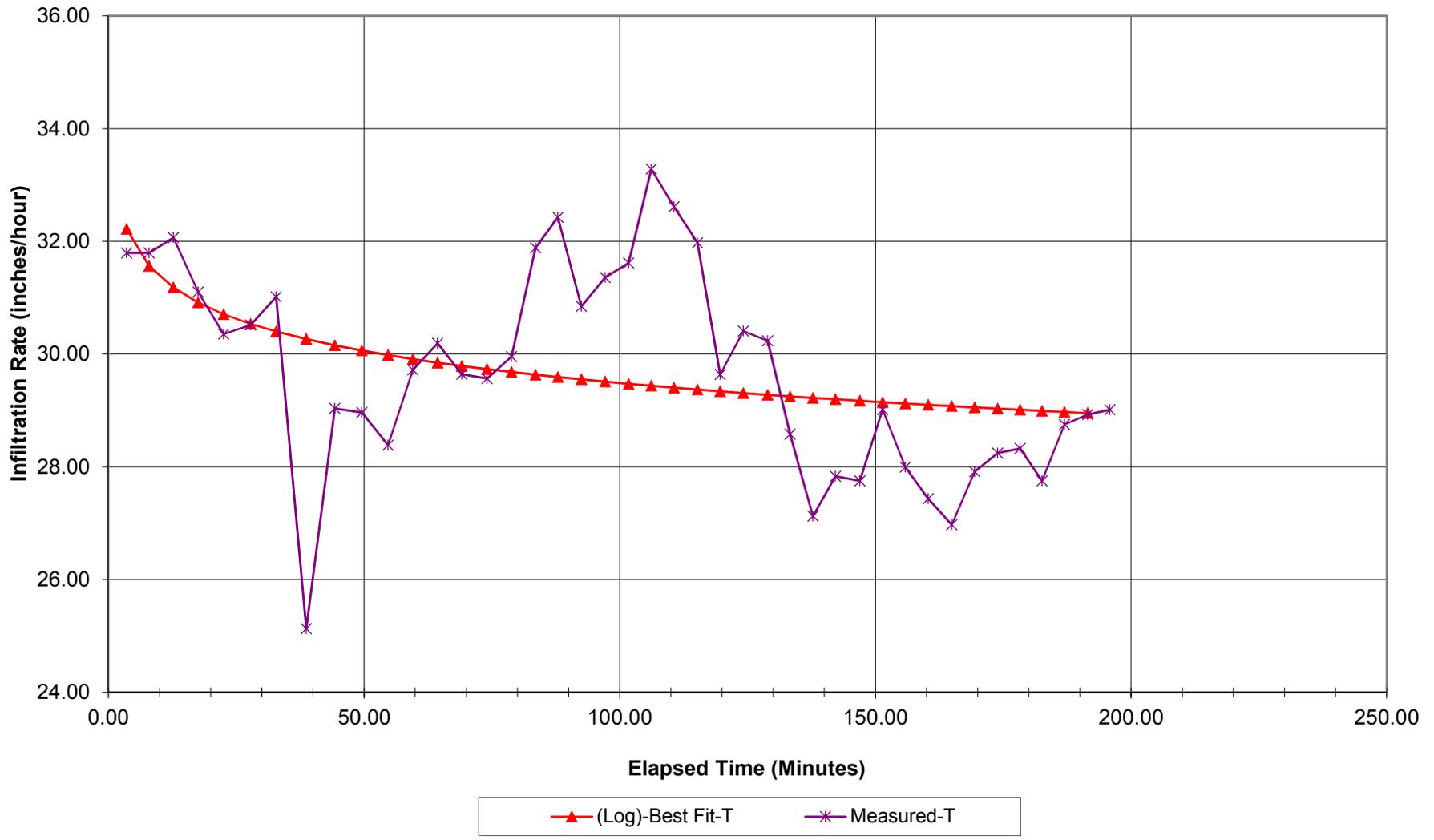
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**Mountaire Farms of Delaware  
Infiltration Rate DR-35**



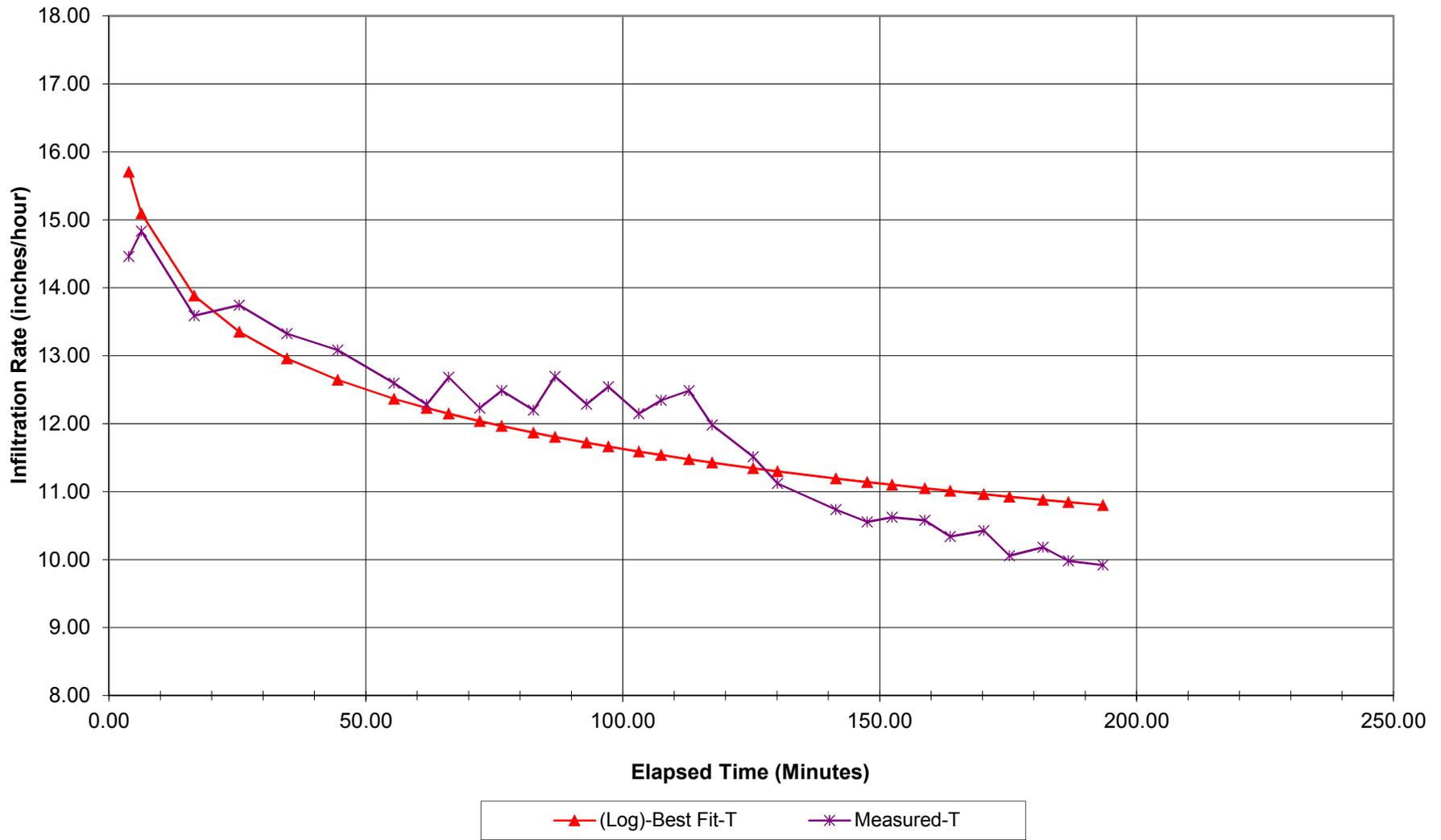
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-36**



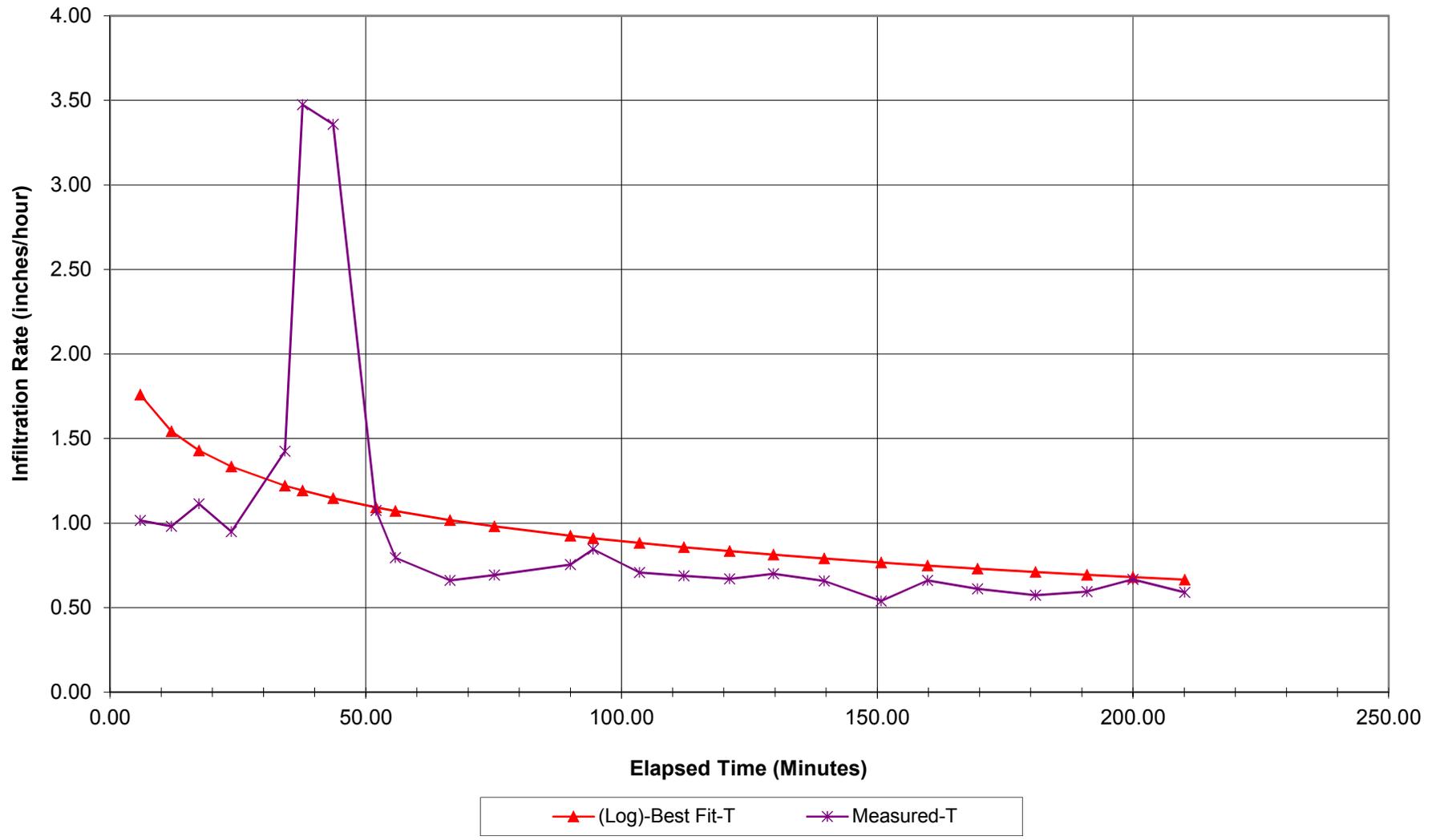
**EARTH DATA INCORPORATED**

### Mountaire Farms of Delaware Infiltration Rate DR-37



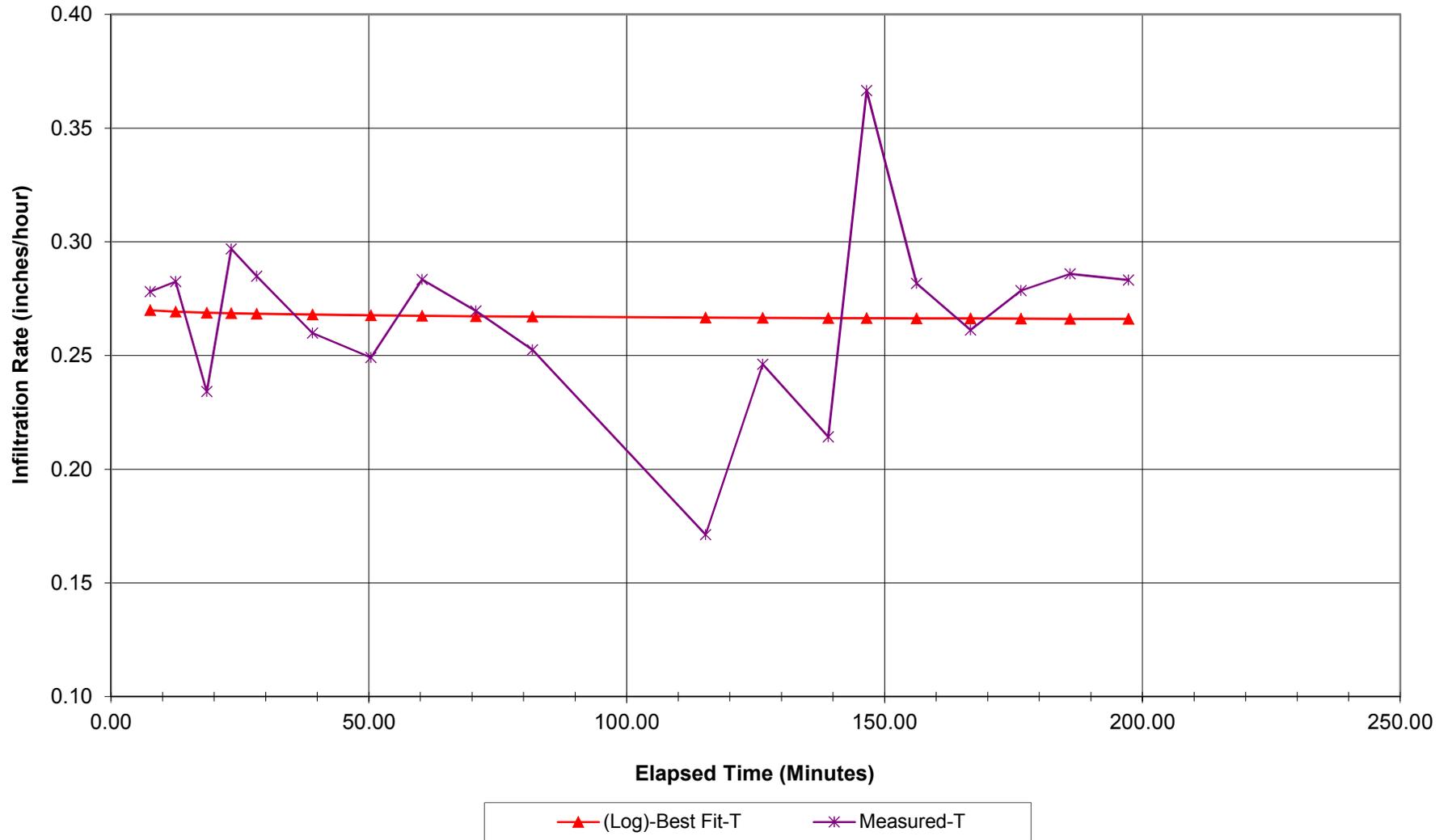
**EARTH DATA INCORPORATED**

### Mountaire Farms of Delaware Infiltration Rate DR-38



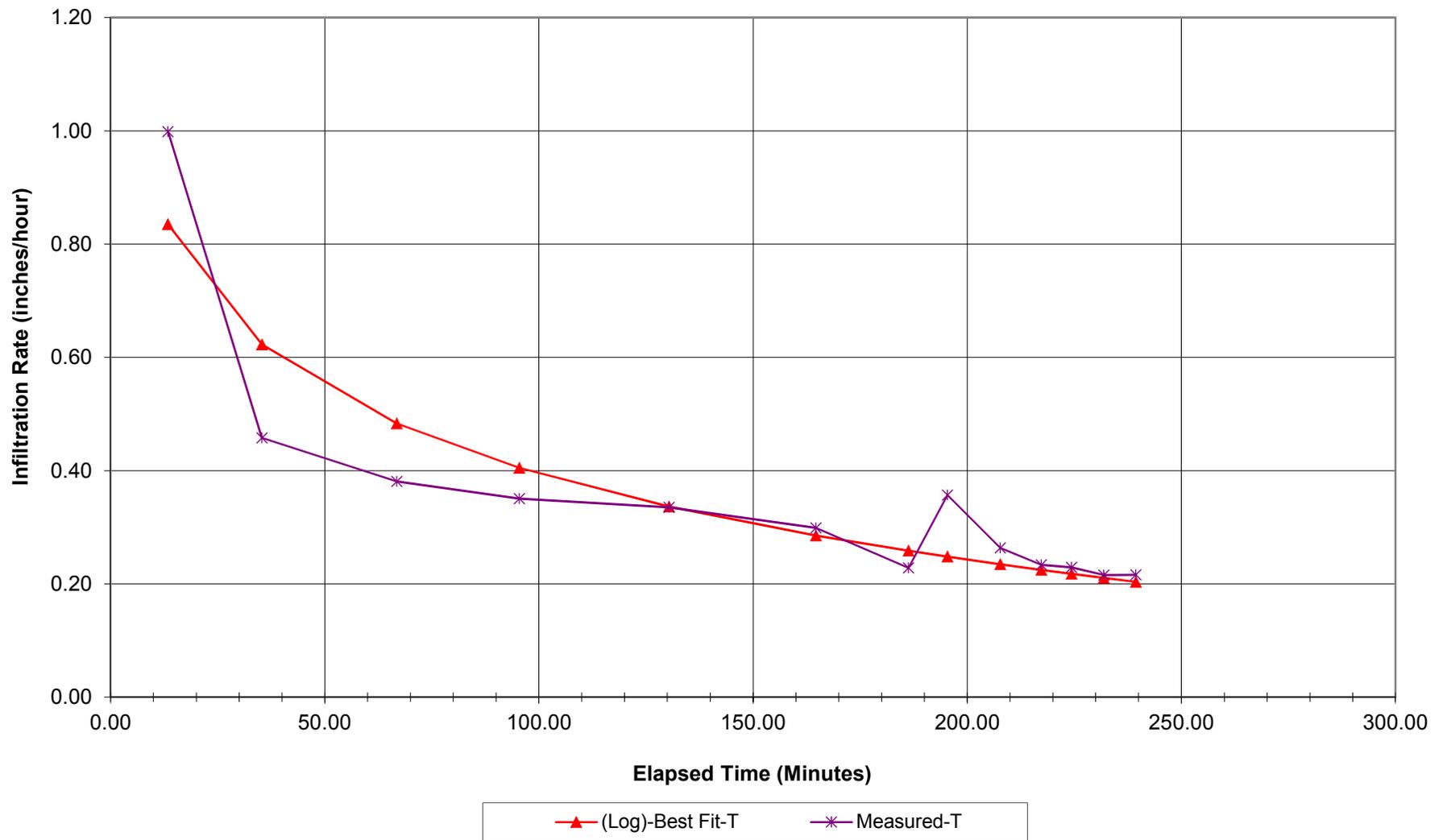
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-39**



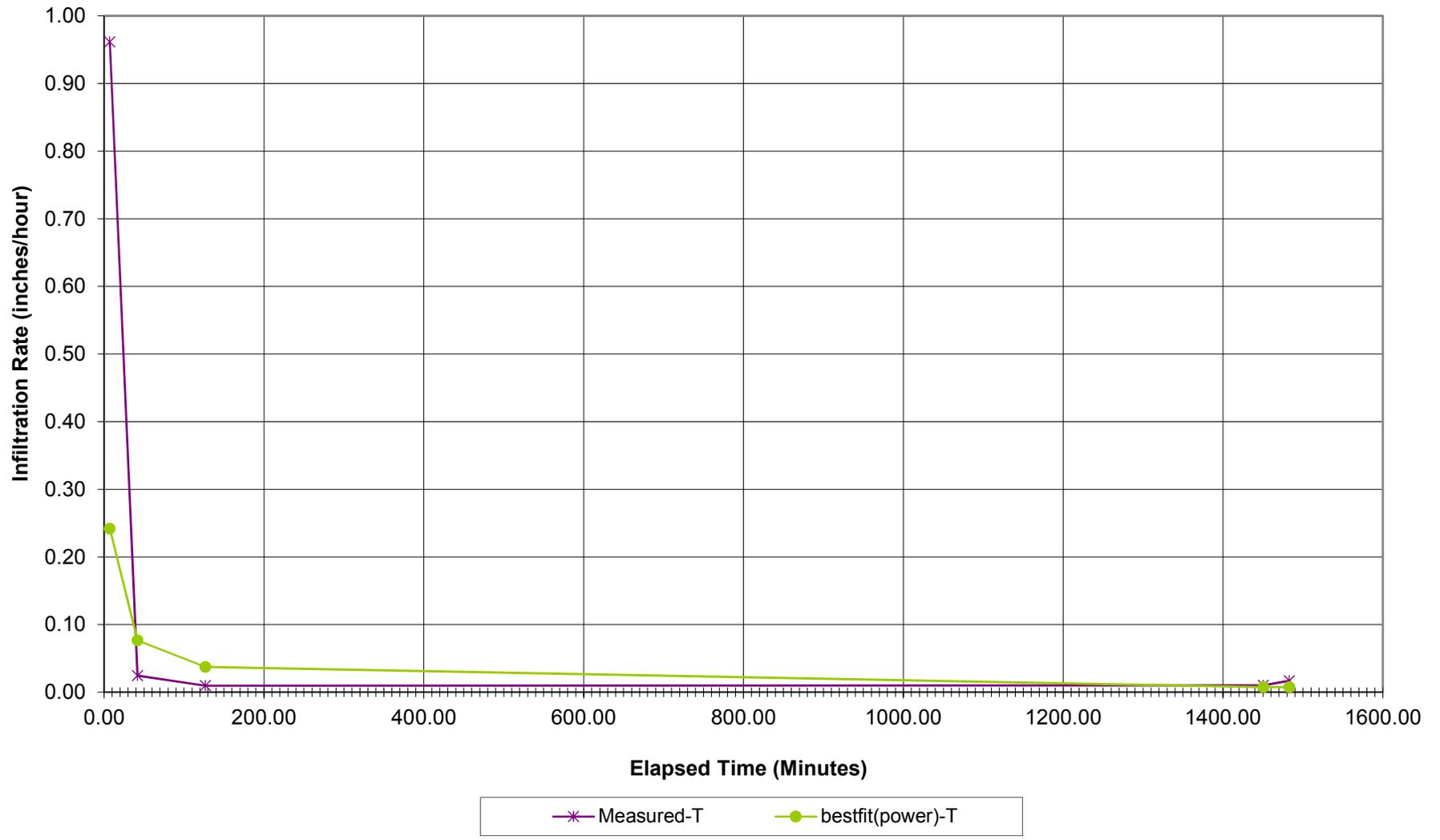
**EARTH DATA INCORPORATED**

### Mountaire Farms of Delaware Infiltration Rate DR-40



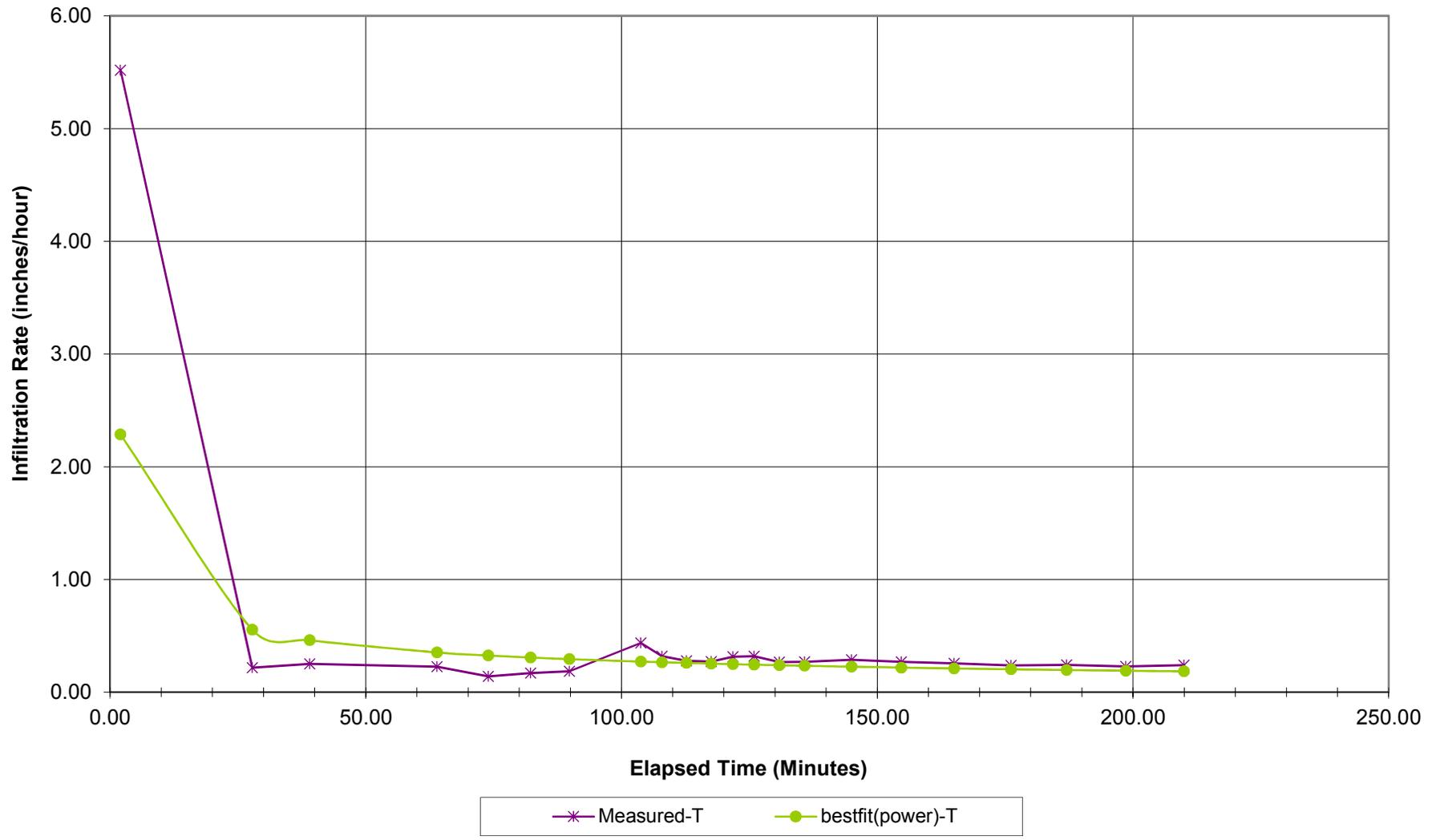
**EARTH DATA INCORPORATED**

### Mountaire Farms of Delaware Infiltration Rate DR-41



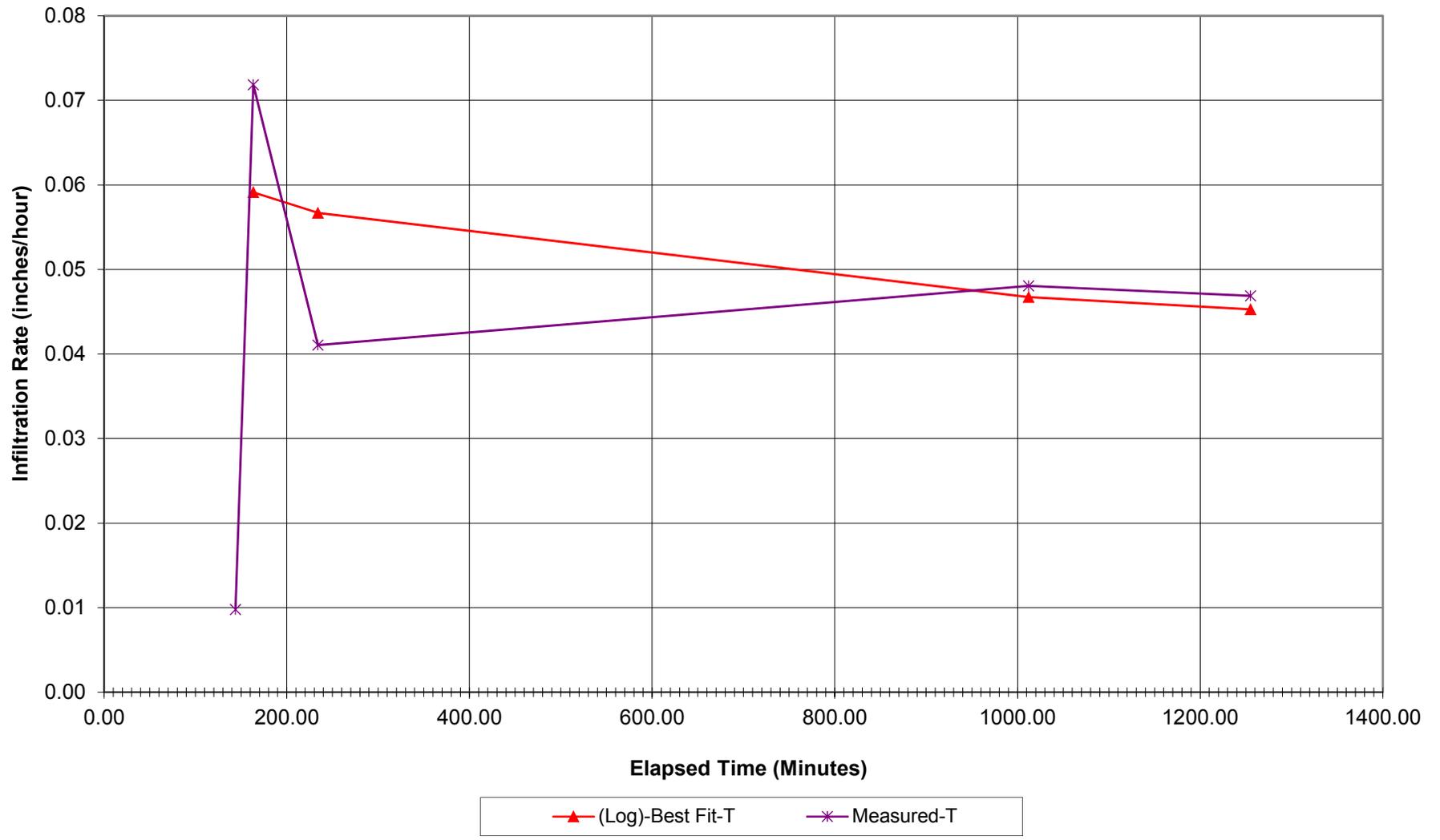
**EARTH DATA INCORPORATED**

### Mountaire Farms of Delaware Infiltration Rate DR-42



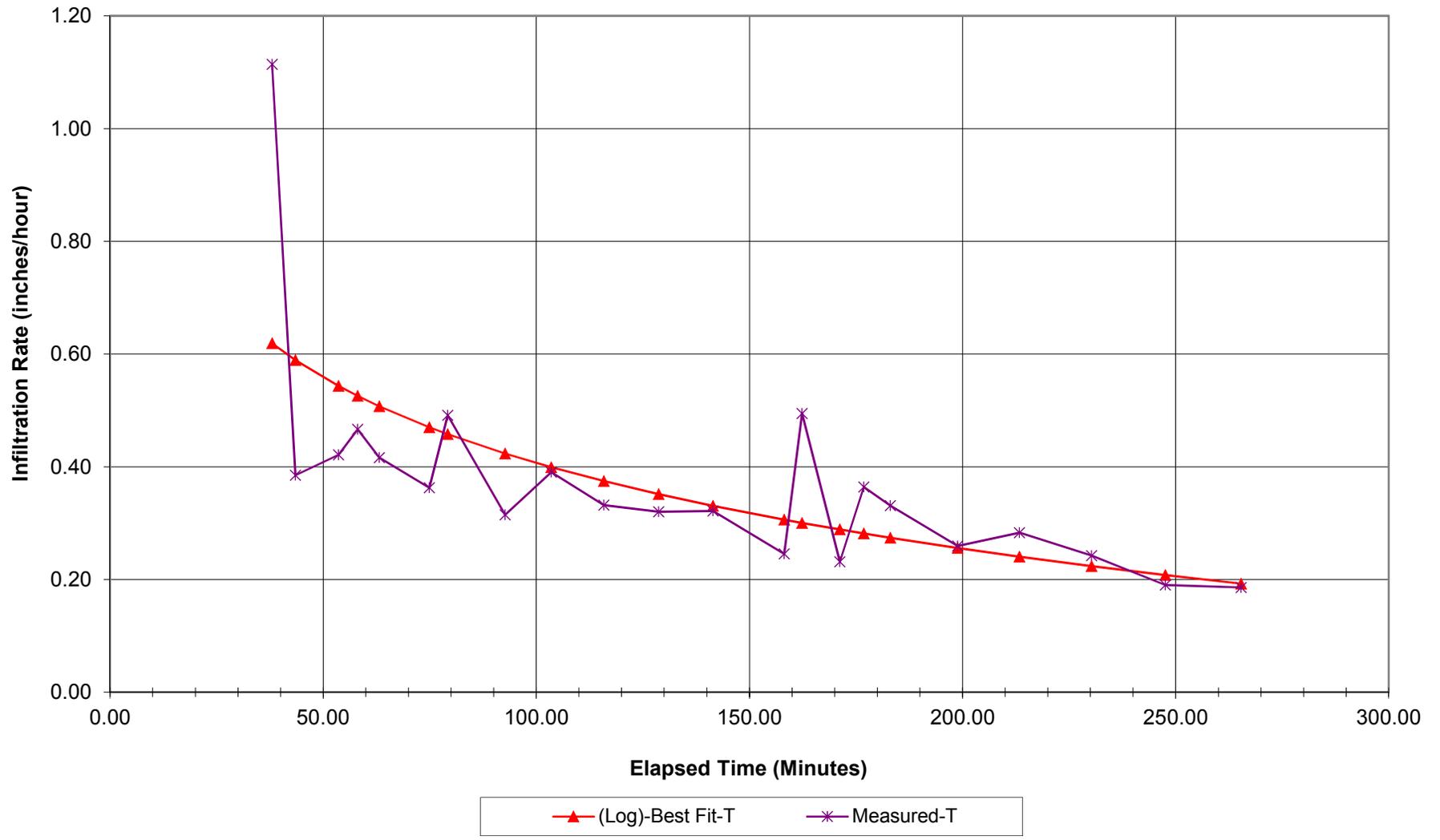
**EARTH DATA INCORPORATED**

### Mountaire Farms of Delaware Infiltration Rate DR-43



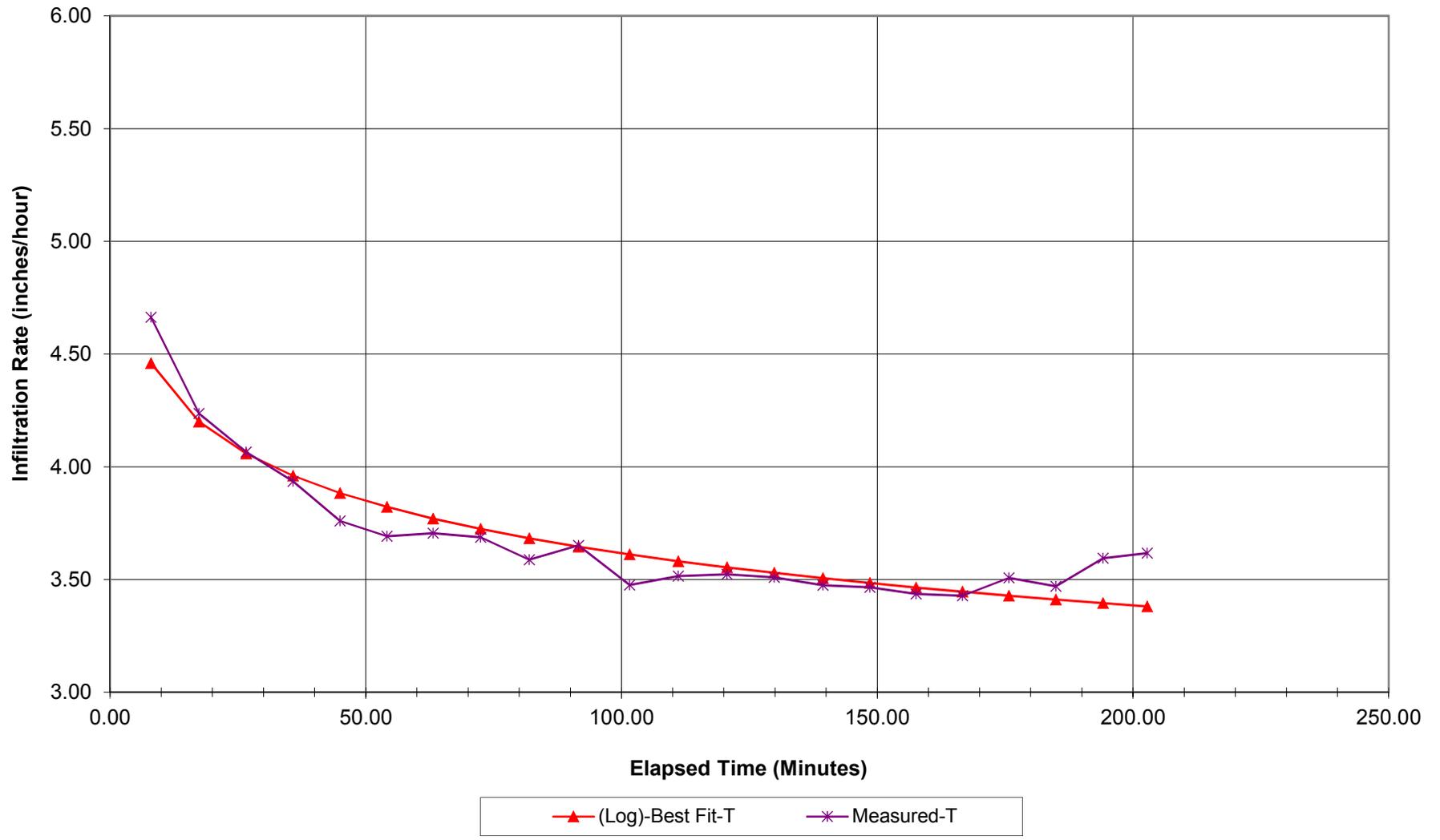
**EARTH DATA INCORPORATED**

**Mountaire Farms of Delaware  
Infiltration Rate DR-44**



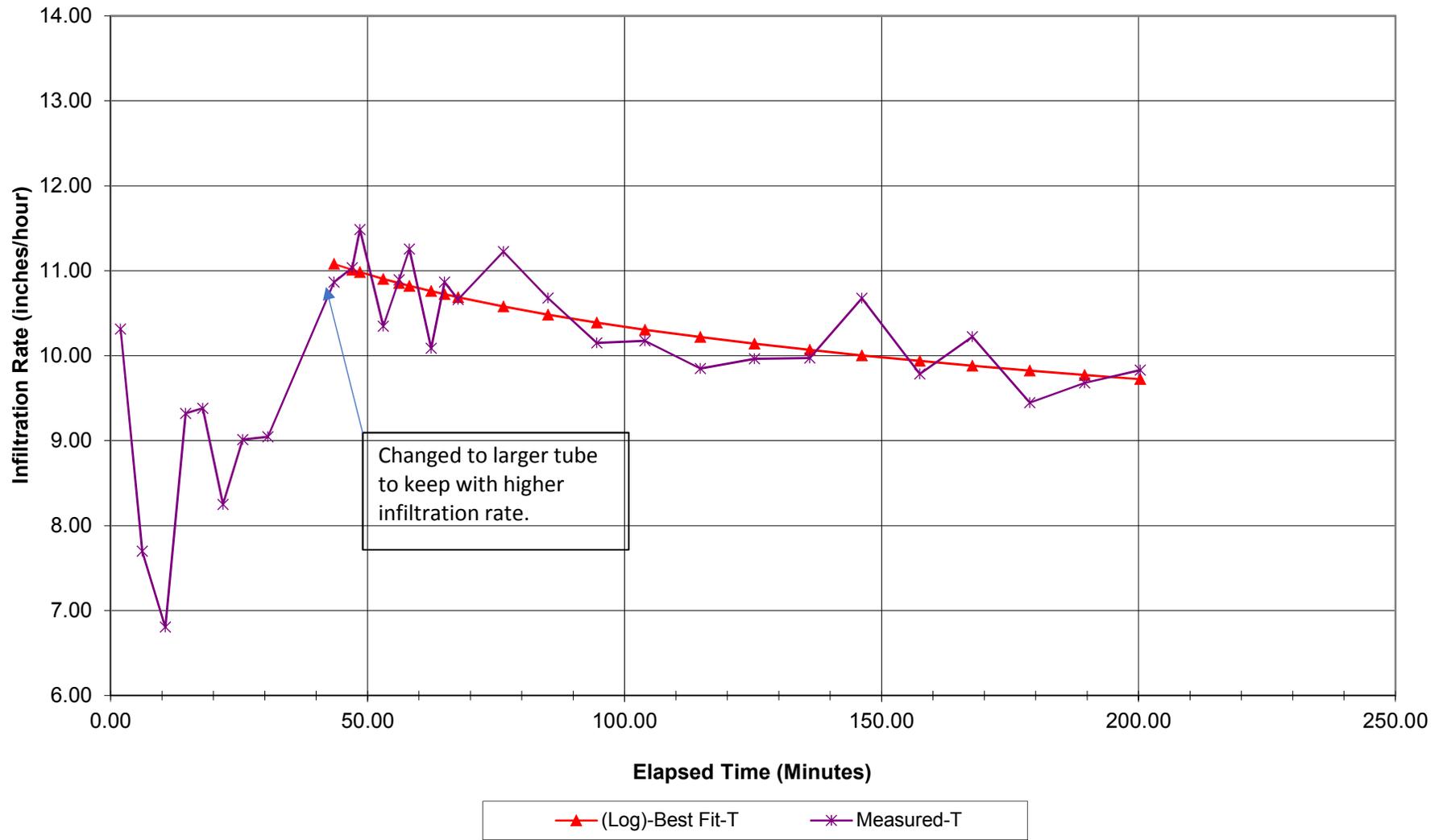
**EARTH DATA INCORPORATED**

### Mountaire Farms of Delaware Infiltration Rate DR-45



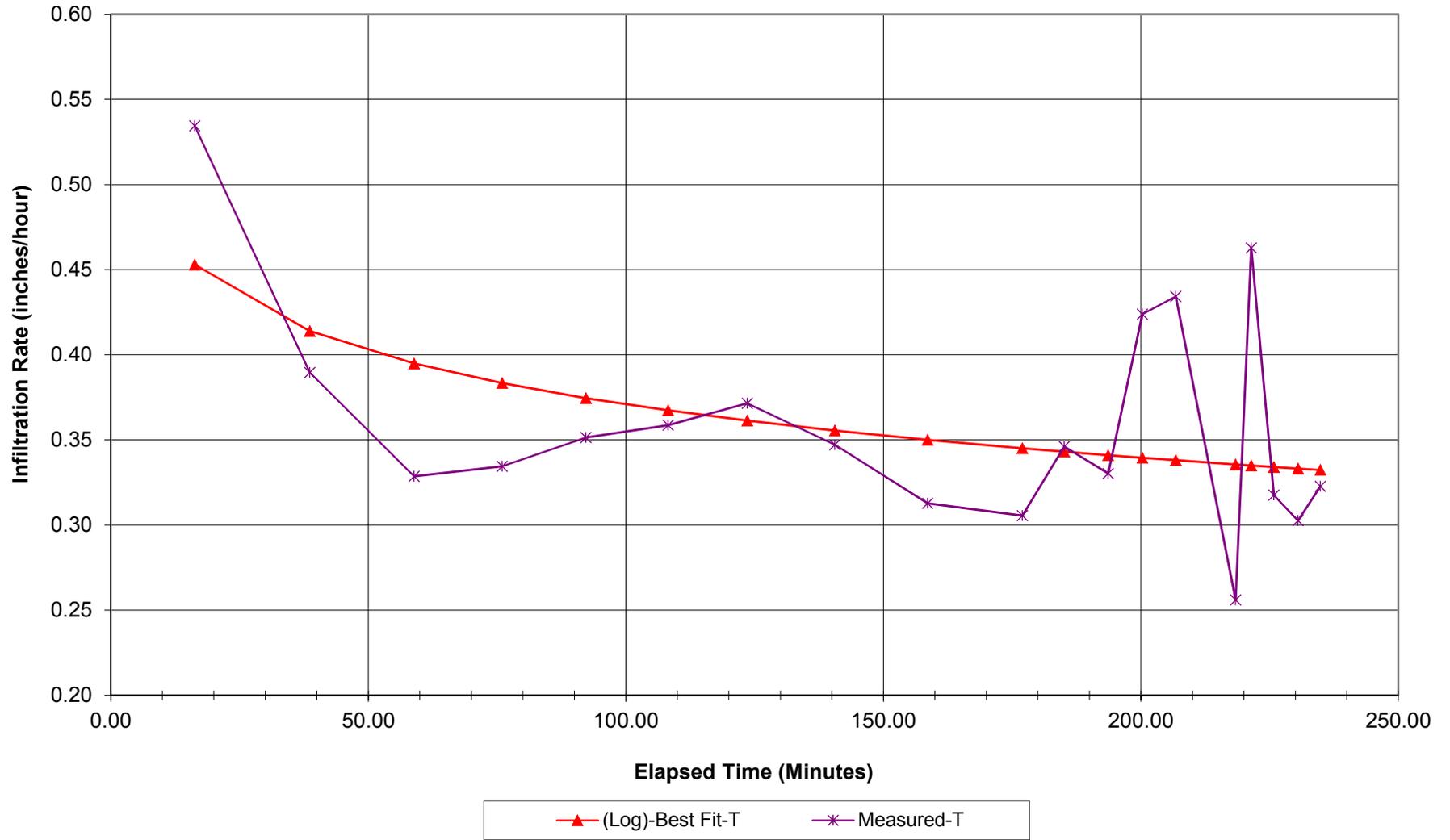
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### Mountaire Farms of Delaware Infiltration Rate DR-46



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**Mountaire Farms of Delaware  
Infiltration Rate DR-47**



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## Mountaire Farms of Delaware

<b>ONSITE WASTEWATER DISPOSAL SOIL AND SITE EVALUATION DATA</b>						WO: 4940D		
						DATE: 9/11/19		
PROJECT: Mountaire Farms Double Ring Infiltrometer Testing								
LOCATION: Mountaire Farms, Millsboro DE				COUNTY: Sussex				
SOIL SURVEY MAP UNIT:						SPRAY FIELD ID: CB-3A		
FIELD CLASSIFICATION:* Arenic Typic Hapludalt						Evaluator: Bruce B. Bagley		
PARENT MATERIAL: Eolian Sands/Coastal Plain Sediments						License No: D2464		
LANDSCAPE POSITION:				SLOPE%		LAT : 38.5895756		
DEPTH TO LIMITING ZONE: 27" (in. bls)				ELEV.		LON: 75.2536904		
HORIZON	DEPTH  (in)	USDA  TEXTURE	MATRIX  COLOR	REDOXIMORPHIC FEATURES				REMARKS  (%RF, Struct, Consist, Biopores, Seepage, Misc.)
				AMOUNT	SIZE	TYPE	LOCATION	
<b>HOLE NO. TP-1</b>								
A <sub>p</sub>	0	16.0	SL-	10YR 4/3				2 MGR
B <sub>T1</sub>	16.0	26.0	SL-	10YR 5/6				2 MSBK
B <sub>T2</sub>	26.0	34.0	SL	10YR 6/6				5% gravel, 1 MSBK
B <sub>T3</sub>	34.0	42.0	GrSL	7.5YR 5/6				3-5% gravel, 2 MSBK
B <sub>C1</sub>	42.0	58.0	LS	7.5YR 5/8				1 MSBK
B <sub>C2</sub>	58.0	70.0	LS	7.5YR 6/6				1 MSBK
C <sub>1</sub>	70.0	87.0	LFS	2.5YR 6/4				Massive, Friable
C <sub>2</sub>	87.0	87+	LS	2.5Y 7/2				SGR, Loose
<b>COMMENTS</b>								
* Additional data may change field classification.						BY: Jeff Chipman		



























































































