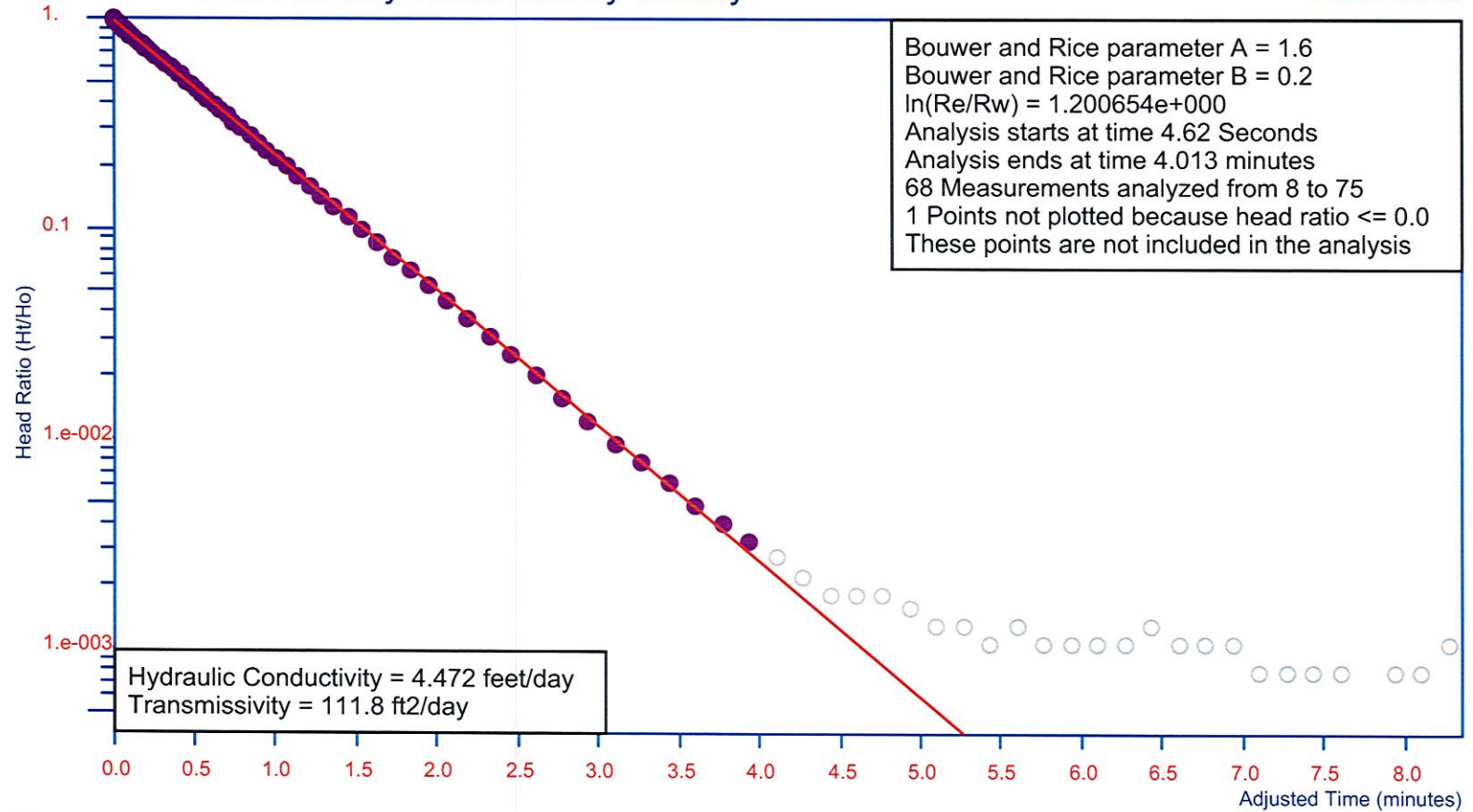


### C-139 Basin Study 4/13/10

South of West Boundary Road Hendry County

### Bouwer and Rice Graph

HES-27S



Project Number: 38617509 for SFWMD  
Analysis by Starpoint Software

Ho is 7.668 feet at 4.62 Seconds

## Bouwer and Rice Automatic Parameter Estimation

### C-139 Basin Study

Site Name: South of West Boundary Road  
 Location: Hendry County  
 Test Date: 4/13/10  
 Client: SFWMD  
 Project Number: 38617509  
 Import File: F:\HendryCountyWells\Slugs\April2010\HES-27S-Pump.txt

Well Label: HES-27S  
 Aquifer Thickness: 25. feet  
 Screen Length: 2. feet  
 Casing Radius: 1. Inches  
 Effective Radius: 6. Inches  
 Bouwer and Rice Parameter A: 1.6  
 Bouwer and Rice Parameter B: 0.2  
 Radius of Influence of Test: 1.661 feet

Trial	Adjusted Time (minutes)	Head (feet)	Head Ratio	Hyd. Con. (feet/day)	Flow to Well (Gallons/Minute)
8	0.	7.668	0.893	--	
9	1.1e-002	7.537	0.8777	4.702	1.927
10	2.2e-002	7.412	0.8632	4.633	1.867
11	3.3e-002	7.29	0.849	4.598	1.823
12	4.4e-002	7.169	0.8349	4.59	1.789
13	5.5e-002	7.049	0.8209	4.594	1.761
14	6.6e-002	6.932	0.8073	4.589	1.73
15	7.7e-002	6.817	0.7939	4.586	1.7
16	8.8e-002	6.702	0.7805	4.593	1.674
17	9.9e-002	6.594	0.7679	4.575	1.64
18	0.11	6.481	0.7547	4.589	1.617
19	0.121	6.373	0.7422	4.589	1.59
20	0.132	6.267	0.7298	4.588	1.563
21	0.143	6.163	0.7177	4.586	1.537
22	0.154	6.055	0.7051	4.603	1.515
23	0.1657	5.951	0.693	4.592	1.486
24	0.1782	5.847	0.6809	4.567	1.452
25	0.1913	5.736	0.668	4.555	1.421
26	0.2053	5.622	0.6547	4.538	1.387
27	0.2202	5.502	0.6407	4.525	1.354
28	0.2358	5.378	0.6263	4.516	1.32
29	0.2525	5.25	0.6114	4.503	1.285
30	0.2702	5.115	0.5957	4.498	1.251
31	0.2888	4.98	0.5799	4.486	1.215
32	0.3087	4.841	0.5638	4.472	1.177
33	0.3297	4.693	0.5465	4.47	1.141
34	0.3518	4.545	0.5293	4.463	1.103
35	0.3753	4.392	0.5115	4.457	1.064
36	0.4002	4.238	0.4935	4.447	1.025
37	0.4265	4.158	0.4842	4.307	0.9738
38	0.4545	3.893	0.4534	4.477	0.9476
39	0.4842	3.718	0.433	4.487	0.9071
40	0.5155	3.545	0.4128	4.492	0.8659
41	0.5487	3.369	0.3923	4.499	0.8241
42	0.5838	3.192	0.3717	4.506	0.782
43	0.6212	3.012	0.3508	4.515	0.7394

South of West Boundary Road

44	0.6607	2.838	0.3305	4.516	0.6968
45	0.7025	2.665	0.3104	4.516	0.6543
46	0.7468	2.49	0.29	4.521	0.612
47	0.7938	2.32	0.2702	4.521	0.5702
48	0.8437	2.15	0.2504	4.524	0.5288
49	0.8963	1.988	0.2315	4.521	0.4886
50	0.9522	1.825	0.2125	4.525	0.449
51	1.011	1.67	0.1945	4.524	0.4108
52	1.074	1.517	0.1767	4.529	0.3735
53	1.14	1.375	0.1601	4.524	0.3382
54	1.211	1.238	0.1442	4.521	0.3043
55	1.285	1.105	0.1287	4.524	0.2718
56	1.364	0.977	0.1138	4.533	0.2408
57	1.448	0.862	0.1004	4.531	0.2124
58	1.536	0.754	8.781e-002	4.532	0.1858
59	1.63	0.656	7.639e-002	4.527	0.1615
60	1.73	0.563	6.556e-002	4.532	0.1387
61	1.835	0.486	5.66e-002	4.513	0.1192
62	1.946	0.408	4.751e-002	4.524	0.1004
63	2.065	0.344	4.006e-002	4.513	8.441e-002
64	2.19	0.284	3.307e-002	4.518	6.976e-002
65	2.322	0.233	2.713e-002	4.516	5.721e-002
66	2.463	0.191	2.224e-002	4.501	4.674e-002
67	2.611	0.152	1.77e-002	4.507	3.724e-002
68	2.769	0.118	1.374e-002	4.525	2.903e-002
69	2.936	9.2e-002	1.071e-002	4.522	2.262e-002
70	3.102	7.2e-002	8.385e-003	4.517	1.768e-002
71	3.269	5.9e-002	6.871e-003	4.469	1.434e-002
72	3.436	4.8e-002	5.59e-003	4.433	1.157e-002
73	3.602	3.7e-002	4.309e-003	4.444	8.941e-003
74	3.769	3.e-002	3.494e-003	4.415	7.201e-003
75	3.936	2.5e-002	2.911e-003	4.367	5.936e-003

Arithmetic Means:

Hydraulic Conductivity 4.522 feet/day  
 Transmissivity 113.1 ft<sup>2</sup>/day

Geometric Means:

Hydraulic Conductivity 4.522 feet/day  
 Transmissivity 113. ft<sup>2</sup>/day

Sensitivity Analysis:

Hydraulic Conductivity 4.507 feet/day  
 Transmissivity 112.7 ft<sup>2</sup>/day

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	<b>High K Estimator Spreadsheet</b>				<b>Test Well Specs - "d" not used in confined case</b>																		
2	<b>English Units</b>																						
3																							
4	<b>General Test Data</b>																						
5	<b>Site Location:</b>																						
6	<b>Date:</b>																						
7	<b>Time:</b>																						
8	<b>Test Designation:</b>																						
9	<b>Static Level:</b>																						
10	<b>Initial Water Level</b>																						
11	<b>Change (H<sub>0</sub>):</b>																						
12	<b>Start Time for Test:</b>																						
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
2	<b>Depth to Bottom of Screen (from toc):</b>				80 ft																		
3	<b>Screen Length (b):</b>				2 ft																		
4	<b>Depth to Static Water Level (from toc):</b>				2.42 ft																		
5	<b>Top of Screen to Water Table (d):</b>				76.2 ft																		
6	<b>Radius of Well Screen (r<sub>w</sub>):</b>				0.083 ft																		
7	<b>Nominal Radius of Well Casing (r<sub>nc</sub>):</b>				0.500 ft																		
8	<b>Radius of Transducer Cable (r<sub>tc</sub>):</b>				0.009 ft																		
9	<b>Effective Casing Radius (r<sub>c</sub> = (r<sub>nc</sub><sup>2</sup>-r<sub>tc</sub><sup>2</sup>)<sup>0.5</sup>):</b>				0.500 ft																		
10	<b>Modified Screen Radius (r<sub>w</sub><sup>*</sup>):</b>				0.055 ft																		
11	<b>Aspect Ratio (b/r<sub>w</sub><sup>*</sup>):</b>				36.563																		
12	<b>Formation Thickness (B):</b>				150 ft																		
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