

Data Set: Z:\GW Data Steward Working Area\Caloosahatchee River Seepage\Caloosahatchee Well Drawdown Re

Title: Caloosahatchee River Seepage Project

Date: 06/15/16

Time: 14:46:03

### PROJECT INFORMATION

Company: SFWMD

Client: SFWMD

Test Date: 7/22/1999

Test Well: CRS01FS

### AQUIFER DATA

Saturated Thickness: 29. ft

Anisotropy Ratio (Kz/Kr): 0.25

### SLUG TEST WELL DATA

Test Well: CRS01FS

X Location: 0. ft

Y Location: 0. ft

Initial Displacement: 2.802 ft

Static Water Column Height: 25.69 ft

Casing Radius: 0.0833 ft

Well Radius: 0.25 ft

Well Skin Radius: 0.25 ft

Screen Length: 5. ft

Total Well Penetration Depth: 25.69 ft

Corrected Casing Radius (Bouwer-Rice Method): 0.0833 ft

Gravel Pack Porosity: 0.

No. of Observations: 113

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0165	2.389	2.557	0.197
0.033	1.679	2.706	0.19
0.0495	1.166	2.863	0.184
0.066	0.691	3.03	0.18
0.0825	0.489	3.207	0.177
0.099	0.421	3.394	0.171
0.1155	0.402	3.592	0.165
0.132	0.395	3.803	0.161
0.1485	0.391	4.025	0.152
0.165	0.385	4.261	0.149
0.1815	0.379	4.511	0.145
0.198	0.375	4.776	0.141
0.2145	0.372	5.056	0.138
0.231	0.368	5.353	0.131
0.2475	0.365	5.667	0.126
0.264	0.362	6.	0.116

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.2805	0.359	6.353	0.113
0.297	0.356	6.727	0.109
0.3135	0.352	7.123	0.103
0.33	0.35	7.543	0.099
0.3467	0.347	7.987	0.097
0.3643	0.344	8.457	0.092
0.383	0.343	8.956	0.089
0.4028	0.34	9.484	0.086
0.4238	0.337	10.04	0.084
0.446	0.333	10.64	0.08
0.4695	0.329	11.26	0.074
0.4943	0.327	11.93	0.07
0.5207	0.324	12.63	0.069
0.5487	0.321	13.38	0.069
0.5783	0.317	14.17	0.066
0.6097	0.314	15.01	0.058
0.6428	0.314	15.89	0.057
0.678	0.31	16.83	0.054
0.7153	0.304	17.83	0.048
0.7548	0.301	18.83	0.047
0.7967	0.295	19.83	0.044
0.841	0.292	20.83	0.044
0.888	0.288	21.83	0.038
0.9378	0.284	22.83	0.038
0.9905	0.279	23.83	0.04
1.046	0.275	24.83	0.04
1.105	0.271	25.83	0.041
1.168	0.265	26.83	0.04
1.234	0.261	27.83	0.032
1.305	0.253	28.83	0.035
1.379	0.249	29.83	0.034
1.458	0.243	30.83	0.038
1.542	0.238	31.83	0.034
1.631	0.233	32.83	0.03
1.724	0.23	33.83	0.032
1.824	0.223	34.83	0.035
1.929	0.217	35.83	0.034
2.041	0.213	36.83	0.032
2.159	0.209	37.83	0.038
2.284	0.206	38.83	0.035
2.416	0.201		

SOLUTION

Slug Test  
 Aquifer Model: Unconfined  
 Solution Method: Hvorslev  
 Log Factor: 0.271

VISUAL ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	
K	28.06	ft/day
y0	1.816	ft

K = 0.009899 cm/sec  
 T = K\*b = 813.7 ft<sup>2</sup>/day (8.75 sq. cm/sec)

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
K	28.06	3.509	+/- 6.954	7.997	ft/day
y0	1.816	0.1692	+/- 0.3354	10.73	ft

C.I. is approximate 95% confidence interval for parameter  
 t-ratio = estimate/std. error  
 No estimation window

K = 0.009899 cm/sec  
 T = K\*b = 813.7 ft<sup>2</sup>/day (8.75 sq. cm/sec)

Parameter Correlations

	<u>K</u>	<u>y0</u>
K	1.00	0.75
y0	0.75	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 4.793 ft<sup>2</sup>  
 Variance ..... 0.04318 ft<sup>2</sup>  
 Std. Deviation ..... 0.2078 ft  
 Mean ..... 0.1241 ft  
 No. of Residuals .. 113  
 No. of Estimates .. 2

NOTES

Estimated thickness of water table aquifer - 30 feet  
 Estimated thickness of Lower Tamiami Aquifer - 50 feet