

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: 14:48:01

PROJECT INFORMATION

Company: SFWMD
 Client: SFWMD
 Test Date: 8/12/1999
 Test Well: CRS01NM

AQUIFER DATA

Saturated Thickness: 50. ft
 Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: CRS01NM

X Location: 0. ft
 Y Location: 0. ft

Initial Displacement: 5.699 ft
 Static Water Column Height: 56.5 ft
 Casing Radius: 0.083 ft
 Well Radius: 0.25 ft
 Well Skin Radius: 0.25 ft
 Screen Length: 5. ft
 Total Well Penetration Depth: 56.5 ft
 Corrected Casing Radius (Bouwer-Rice Method): 0.083 ft
 Gravel Pack Porosity: 0.

No. of Observations: 99

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0163	5.506	1.721	0.614
0.0327	4.806	1.82	0.596
0.049	4.217	1.926	0.575
0.0653	3.752	2.037	0.554
0.0817	3.374	2.155	0.536
0.098	3.064	2.281	0.517
0.1143	2.81	2.413	0.5
0.1307	2.597	2.554	0.484
0.147	2.417	2.702	0.465
0.1633	2.262	2.86	0.446
0.1797	2.131	3.027	0.426
0.196	2.017	3.204	0.409
0.2123	1.918	3.391	0.394
0.2287	1.831	3.589	0.381
0.245	1.753	3.799	0.367
0.2613	1.684	4.022	0.355

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.2777	1.625	4.258	0.338
0.294	1.569	4.508	0.321
0.3103	1.519	4.772	0.302
0.3267	1.475	5.053	0.286
0.3433	1.43	5.349	0.275
0.361	1.391	5.664	0.264
0.3797	1.355	5.997	0.254
0.3995	1.319	6.35	0.246
0.4205	1.283	6.724	0.24
0.4427	1.251	7.12	0.228
0.4662	1.218	7.539	0.205
0.491	1.186	7.984	0.201
0.5173	1.157	8.454	0.187
0.5453	1.129	8.953	0.171
0.575	1.098	9.481	0.169
0.6063	1.084	10.04	0.164
0.6395	1.042	10.63	0.152
0.6747	1.016	11.26	0.153
0.712	0.987	11.92	0.149
0.7515	0.958	12.63	0.142
0.7933	0.931	13.37	0.136
0.8377	0.904	14.16	0.123
0.8847	0.876	15.	0.123
0.9345	0.855	15.89	0.12
0.9872	0.83	16.83	0.113
1.043	0.807	17.82	0.101
1.102	0.784	18.82	0.093
1.165	0.759	19.82	0.091
1.231	0.738	20.82	0.1
1.302	0.717	21.82	0.106
1.376	0.697	22.82	0.107
1.455	0.676	23.82	0.123
1.539	0.654	24.82	0.091
1.627	0.634		

SOLUTION

Slug Test

Aquifer Model: Confined

Solution Method: Butler-Zhan

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
Kr	6.305	ft/day
Ss	0.002	ft ⁻¹
Kz/Kr	0.25	
Le	403.1	ft

K = 0.002224 cm/sec

T = K*b = 315.3 ft²/day (3.39 sq. cm/sec)

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	<u>Std. Error</u>	<u>Approx. C.I.</u>	<u>t-Ratio</u>	
Kr	6.305	0.4805	+/- 0.9539	13.12	ft/day
Ss	0.002	0.0004737	+/- 0.0009402	4.222	ft ⁻¹
Kz/Kr	0.25	not estimated			
Le	403.1	54.21	+/- 107.6	7.436	ft

C.I. is approximate 95% confidence interval for parameter

t-ratio = estimate/std. error

No estimation window

K = 0.002224 cm/sec

T = K*b = 315.3 ft²/day (3.39 sq. cm/sec)

Parameter Correlations

	<u>Kr</u>	<u>Ss</u>	<u>Le</u>
Kr	1.00	-0.93	-0.17
Ss	-0.93	1.00	0.11
Le	-0.17	0.11	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 4.133 ft²
 Variance 0.04305 ft²
 Std. Deviation 0.2075 ft
 Mean 0.105 ft
 No. of Residuals .. 99
 No. of Estimates .. 3

NOTES

Estimated water table aquifer thickness - 30 feet

Estimated Lower Tamiami aquifer thickness - 50 feet