

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: 15:33:51

PROJECT INFORMATION

Company: SFWMD
 Client: SFWMD
 Test Date: 8/11/1999
 Test Well: CRS06FM

AQUIFER DATA

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

SLUG TEST WELL DATA

Test Well: CSR06FM

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

Initial Displacement: 8.952 ft
 Static Water Column Height: 54.35 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: 54.35 ft
 Corrected Casing Radius (Bouwer-Rice Method): 0.0833 ft
 Gravel Pack Porosity: 0.

No. of Observations: 90

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0163	8.8	1.302	0.304
0.0327	7.656	1.376	0.28
0.049	6.599	1.455	0.257
0.0653	5.745	1.539	0.235
0.0817	5.068	1.627	0.216
0.098	4.517	1.721	0.192
0.1143	4.063	1.82	0.174
0.1307	3.68	1.926	0.157
0.147	3.359	2.037	0.144
0.1633	3.081	2.155	0.128
0.1797	2.845	2.281	0.115
0.196	2.638	2.413	0.105
0.2123	2.458	2.554	0.098
0.2287	2.302	2.702	0.092
0.245	2.159	2.86	0.086
0.2613	2.032	3.027	0.078

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.2777	1.921	3.204	0.07
0.294	1.819	3.391	0.065
0.3103	1.725	3.589	0.057
0.3267	1.643	3.799	0.053
0.3433	1.559	4.022	0.047
0.361	1.488	4.258	0.044
0.3797	1.416	4.508	0.042
0.3995	1.348	4.772	0.03
0.4205	1.282	5.053	0.029
0.4427	1.218	5.349	0.03
0.4662	1.156	5.664	0.029
0.491	1.094	5.997	0.027
0.5173	1.036	6.35	0.026
0.5453	0.979	6.724	0.023
0.575	0.924	7.12	0.024
0.6063	0.893	7.539	0.021
0.6395	0.814	7.984	0.021
0.6747	0.763	8.454	0.02
0.712	0.714	8.953	0.018
0.7515	0.665	9.481	0.017
0.7933	0.621	10.04	0.017
0.8377	0.579	10.63	0.017
0.8847	0.54	11.26	0.016
0.9345	0.499	11.92	0.011
0.9872	0.463	12.63	0.014
1.043	0.427	13.37	0.01
1.102	0.397	14.16	0.014
1.165	0.369	15.	0.004
1.231	0.335	15.89	0.005

SOLUTION

Slug Test

Aquifer Model: Confined

Solution Method: Butler-Zhan

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
Kr	16.88	ft/day
Ss	0.0005963	ft ⁻¹
Kz/Kr	0.25	
Le	348.4	ft

K = 0.005953 cm/sec

T = K*b = 843.8 ft²/day (9.073 sq. cm/sec)AUTOMATIC ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
Kr	16.88	0.239	+/- 0.4752	70.61	ft/day
Ss	0.0005963	4.031E-5	+/- 8.013E-5	14.79	ft ⁻¹
Kz/Kr	0.25	not estimated			
Le	348.4	9.563	+/- 19.01	36.43	ft

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

t-ratio = estimate/std. error

No estimation window

K = 0.005953 cm/sec

T = K*b = 843.8 ft²/day (9.073 sq. cm/sec)

Parameter Correlations

	Kr	Ss	Le
Kr	1.00	-0.93	-0.38
Ss	-0.93	1.00	0.35
Le	-0.38	0.35	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.322 ft²
 Variance 0.003701 ft²
 Std. Deviation 0.06083 ft
 Mean 0.01145 ft
 No. of Residuals .. 90
 No. of Estimates .. 3

NOTES

Estimated thickness of Water Table Aquifer 30 feet

Estimated thickness of Lower Tamiami Aquifer 50 feet (leaky confined)