

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: 15:12:15

PROJECT INFORMATION

Company: SFWMD
 Client: SFWMD
 Test Date: 7/23/1999
 Test Well: CRS03NM

AQUIFER DATA

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

SLUG TEST WELL DATA

Test Well: CRS03NM

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

Initial Displacement: 9.155 ft
 Static Water Column Height: 54.92 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: 54.92 ft
 Corrected Casing Radius (Bouwer-Rice Method): 0.0833 ft
 Gravel Pack Porosity: 0.

No. of Observations: 100

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0165	8.587	1.724	0.075
0.033	8.012	1.824	0.073
0.0495	7.184	1.929	0.069
0.066	6.496	2.041	0.067
0.0825	5.837	2.159	0.062
0.099	5.101	2.284	0.059
0.1155	4.45	2.416	0.056
0.132	3.989	2.557	0.054
0.1485	3.581	2.706	0.05
0.165	3.218	2.863	0.049
0.1815	2.893	3.03	0.046
0.198	2.603	3.207	0.044
0.2145	2.349	3.394	0.041
0.231	2.115	3.592	0.04
0.2475	1.912	3.803	0.04
0.264	1.726	4.025	0.037

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.2805	1.568	4.261	0.034
0.297	1.418	4.511	0.034
0.3135	1.286	4.776	0.033
0.33	1.184	5.056	0.03
0.3467	1.063	5.353	0.027
0.3643	0.968	5.667	0.049
0.383	0.881	6.	0.028
0.4028	0.795	6.353	0.027
0.4238	0.718	6.727	0.027
0.446	0.646	7.123	0.024
0.4695	0.578	7.543	0.024
0.4943	0.518	7.987	0.023
0.5207	0.459	8.457	0.021
0.5487	0.412	8.956	0.021
0.5783	0.366	9.484	0.021
0.6097	0.329	10.04	0.02
0.6428	0.308	10.64	0.017
0.678	0.252	11.26	0.02
0.7153	0.23	11.93	0.018
0.7548	0.207	12.63	0.017
0.7967	0.186	13.38	0.017
0.841	0.168	14.17	0.017
0.888	0.154	15.01	0.015
0.9378	0.142	15.89	0.015
0.9905	0.129	16.83	0.017
1.046	0.122	17.83	0.017
1.105	0.114	18.83	0.017
1.168	0.108	19.83	0.015
1.234	0.102	20.83	0.015
1.305	0.096	21.83	0.018
1.379	0.09	22.83	0.012
1.458	0.086	23.83	0.017
1.542	0.083	24.83	0.015
1.631	0.079	25.83	0.012

SOLUTION

Slug Test

Aquifer Model: Confined

Solution Method: Butler-Zhan

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
Kr	23.38	ft/day
Ss	1.172E-5	ft ⁻¹
Kz/Kr	0.25	
Le	374.5	ft

K = 0.008249 cm/sec

T = K*b = 1169.1 ft²/day (12.57 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	23.38	0.1642	+/- 0.3259	142.4	ft/day
Ss	1.172E-5	1.605E-6	+/- 3.185E-6	7.305	ft ⁻¹
Kz/Kr	0.25	not estimated			
Le	374.5	12.9	+/- 25.6	29.03	ft

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

t-ratio = estimate/std. error

No estimation window

K = 0.008249 cm/sec

T = K*b = 1169.1 ft²/day (12.57 sq. cm/sec)

Parameter Correlations

	<u>Kr</u>	<u>Ss</u>	<u>Le</u>
Kr	1.00	-0.88	-0.65
Ss	-0.88	1.00	0.72
Le	-0.65	0.72	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.2057 ft²
 Variance 0.00212 ft²
 Std. Deviation 0.04605 ft
 Mean 0.01866 ft
 No. of Residuals .. 100
 No. of Estimates .. 3

NOTES

Estimated thickness water table aquifer - 30 feet

Estimated thickness Lower Tamiami Aquifer - 50 feet - leaky confined