

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: 15:10:45

PROJECT INFORMATION

Company: SFWMD

Client: SFWMD

Test Date: 7/23/1999

Test Well: CRS03FS

AQUIFER DATA

Saturated Thickness: 27.52 ft

Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: CRS03FS

X Location: 0. ft

Y Location: 0. ft

Initial Displacement: 6.758 ft

Static Water Column Height: 15.82 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: 15.82 ft

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

Gravel Pack Porosity: 0.

No. of Observations: 80

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0165	6.159	0.9905	0.038
0.033	4.955	1.046	0.036
0.0495	3.841	1.105	0.035
0.066	2.895	1.168	0.035
0.0825	2.183	1.234	0.032
0.099	1.633	1.305	0.029
0.1155	1.208	1.379	0.029
0.132	0.896	1.458	0.028
0.1485	0.662	1.542	0.026
0.165	0.491	1.631	0.025
0.1815	0.368	1.724	0.023
0.198	0.279	1.824	0.022
0.2145	0.215	1.929	0.022
0.231	0.173	2.041	0.02
0.2475	0.142	2.159	0.019
0.264	0.12	2.284	0.017

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.2805	0.105	2.416	0.017
0.297	0.094	2.557	0.017
0.3135	0.087	2.706	0.015
0.33	0.081	2.863	0.015
0.3467	0.077	3.03	0.013
0.3643	0.072	3.207	0.012
0.383	0.071	3.394	0.012
0.4028	0.068	3.592	0.01
0.4238	0.065	3.803	0.009
0.446	0.062	4.025	0.006
0.4695	0.059	4.261	0.006
0.4943	0.058	4.511	0.004
0.5207	0.055	4.776	0.004
0.5487	0.054	5.056	0.004
0.5783	0.051	5.353	0.002
0.6097	0.049	5.667	0.002
0.6428	0.049	6.	0.
0.678	0.048	6.353	0.002
0.7153	0.046	6.727	0.
0.7548	0.043	7.123	0.
0.7967	0.043	7.543	0.003
0.841	0.041	7.987	0.002
0.888	0.041	8.457	0.002
0.9378	0.039	8.956	0.

SOLUTION

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

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	59.86	ft/day
y0	8.261	ft

K = 0.02112 cm/sec
 T = K*b = 1647.5 ft²/day (17.71 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>	
K	59.86	0.572	+/- 1.139	104.7	ft/day
y0	8.261	0.0637	+/- 0.1268	129.7	ft

C.I. is approximate 95% confidence interval for parameter
 t-ratio = estimate/std. error

No estimation window

$K = 0.02112$ cm/sec

$T = K*b = 1647.5$ ft²/day (17.71 sq. cm/sec)

Parameter Correlations

	<u>K</u>	<u>y0</u>
K	1.00	0.80
y0	0.80	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.1635 ft²
 Variance 0.002096 ft²
 Std. Deviation 0.04578 ft
 Mean 0.01757 ft
 No. of Residuals .. 80
 No. of Estimates .. 2

NOTES

Estimated thickness of water table aquifer - 30 feet

Estimated thickness of Lower Tamiami Aquifer - 50 feet - leaky confined