

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: 15:03:01

PROJECT INFORMATION

Company: SFWMD
 Client: SFWMD
 Test Date: 8/10/1999
 Test Well: CRS02NS

AQUIFER DATA

Saturated Thickness: 22. ft
 Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: CRS02NS

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

Initial Displacement: 6.998 ft
 Static Water Column Height: 16.11 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: 16.11 ft
 Corrected Casing Radius (Bouwer-Rice Method): 0.0833 ft
 Gravel Pack Porosity: 0.

No. of Observations: 115

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0163	6.922	2.702	0.928
0.0327	6.803	2.86	0.868
0.049	6.681	3.027	0.81
0.0653	6.563	3.204	0.761
0.0817	6.446	3.391	0.708
0.098	6.334	3.589	0.663
0.1143	6.22	3.799	0.622
0.1307	6.112	4.022	0.583
0.147	6.005	4.258	0.549
0.1633	5.901	4.508	0.514
0.1797	5.798	4.772	0.485
0.196	5.7	5.053	0.458
0.2123	5.603	5.349	0.431
0.2287	5.511	5.664	0.412
0.245	5.423	5.997	0.387
0.2613	5.338	6.35	0.366

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.2777	5.253	6.724	0.345
0.294	5.173	7.12	0.328
0.3103	5.09	7.539	0.306
0.3267	5.011	7.984	0.289
0.3433	4.928	8.454	0.272
0.361	4.851	8.953	0.256
0.3797	4.768	9.481	0.24
0.3995	4.683	10.04	0.227
0.4205	4.597	10.63	0.213
0.4427	4.505	11.26	0.198
0.4662	4.412	11.92	0.187
0.491	4.314	12.63	0.174
0.5173	4.216	13.37	0.161
0.5453	4.114	14.16	0.154
0.575	4.009	15.	0.143
0.6063	3.944	15.89	0.13
0.6395	3.775	16.83	0.119
0.6747	3.655	17.82	0.109
0.712	3.536	18.82	0.104
0.7515	3.41	19.82	0.096
0.7933	3.288	20.82	0.089
0.8377	3.162	21.82	0.078
0.8847	3.035	22.82	0.074
0.9345	2.907	23.82	0.066
0.9872	2.783	24.82	0.068
1.043	2.655	25.82	0.066
1.102	2.529	26.82	0.055
1.165	2.405	27.82	0.041
1.231	2.283	28.82	0.051
1.302	2.16	29.82	0.04
1.376	2.032	30.82	0.038
1.455	1.925	31.82	0.037
1.539	1.812	32.82	0.035
1.627	1.704	33.82	0.027
1.721	1.598	34.82	0.018
1.82	1.499	35.82	0.028
1.926	1.401	36.82	0.018
2.037	1.309	37.82	0.009
2.155	1.224	38.82	0.006
2.281	1.143	39.82	0.014
2.413	1.067	40.82	0.016
2.554	0.996		

SOLUTION

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

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	3.135	ft/day
y0	6.724	ft

K = 0.001106 cm/sec
 T = K*b = 68.98 ft²/day (0.7417 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	3.135	0.05649	+/- 0.1119	55.5	ft/day
y0	6.724	0.05144	+/- 0.1019	130.7	ft

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

K = 0.001106 cm/sec
 T = K*b = 68.98 ft²/day (0.7417 sq. cm/sec)

Parameter Correlations

	<u>K</u>	<u>y0</u>
K	1.00	0.70
y0	0.70	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 3.662 ft²
 Variance 0.0324 ft²
 Std. Deviation 0.18 ft
 Mean 0.08427 ft
 No. of Residuals .. 115
 No. of Estimates .. 2

NOTES

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