

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: 15:13:56

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

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
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: Hvorslev
 Log Factor: 0.2282

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	28.38	ft/day
y0	9.724	ft

K = 0.01001 cm/sec
 T = K*b = 1418.8 ft²/day (15.26 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	28.38	0.2445	+/- 0.485	116.1	ft/day
y0	9.724	0.06076	+/- 0.1206	160.	ft

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

t-ratio = estimate/std. error

No estimation window

K = 0.01001 cm/sec

T = K*b = 1418.8 ft²/day (15.26 sq. cm/sec)

Parameter Correlations

	<u>K</u>	<u>y0</u>
<u>K</u>	1.00	0.75
<u>y0</u>	0.75	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.6553 ft²
 Variance 0.006687 ft²
 Std. Deviation 0.08178 ft
 Mean 0.0432 ft
 No. of Residuals .. 100
 No. of Estimates .. 2

NOTES

Estimated thickness water table aquifer - 30 feet

Estimated thickness Lower Tamiami Aquifer - 50 feet - leaky confined