

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: 15:07:18

PROJECT INFORMATION

Company: SFWMD

Client: SFWMD

Test Date: 7/23/1999

Test Well: CRS03FM

AQUIFER DATA

Saturated Thickness: 50. ft

Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: CRS03FM

X Location: 0. ft

Y Location: 0. ft

Initial Displacement: 11.95 ft

Static Water Column Height: 61.17 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: 61.17 ft

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

Gravel Pack Porosity: 0.

No. of Observations: 75

<u>Time (min)</u>	<u>Observation Data</u>		<u>Displacement (ft)</u>
	<u>Displacement (ft)</u>	<u>Time (min)</u>	
0.0163	11.71	0.8847	0.058
0.0327	10.55	0.9345	0.049
0.049	9.161	0.9872	0.046
0.0653	8.15	1.043	0.045
0.0817	7.246	1.102	0.042
0.098	6.45	1.165	0.039
0.1143	5.717	1.231	0.011
0.1307	5.167	1.302	0.033
0.147	4.474	1.376	0.032
0.1633	4.014	1.455	0.027
0.1797	3.503	1.539	0.026
0.196	3.074	1.627	0.027
0.2123	2.728	1.721	0.026
0.2287	2.433	1.82	0.024
0.245	2.14	1.926	0.023
0.2613	1.871	2.037	0.022

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.2777	1.7	2.155	0.022
0.294	1.466	2.281	0.022
0.3103	1.3	2.413	0.016
0.3267	1.148	2.554	0.017
0.3433	1.008	2.702	0.01
0.361	0.892	2.86	0.006
0.3797	0.787	3.027	0.011
0.3995	0.689	3.204	0.011
0.4205	0.591	3.391	0.009
0.4427	0.508	3.589	0.007
0.4662	0.436	3.799	0.006
0.491	0.368	4.022	0.007
0.5173	0.312	4.258	0.006
0.5453	0.263	4.508	0.003
0.575	0.235	4.772	0.001
0.6063	0.212	5.053	0.
0.6395	0.154	5.349	0.004
0.6747	0.127	5.664	0.004
0.712	0.105	5.997	0.003
0.7515	0.088	6.35	0.003
0.7933	0.076	6.724	0.003
0.8377	0.066		

SOLUTION

Slug Test

Aquifer Model: Confined

Solution Method: Hvorslev

Log Factor: 0.2282

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	32.44	ft/day
y0	13.29	ft

K = 0.01144 cm/sec

T = K*b = 1622. ft²/day (17.44 sq. cm/sec)AUTOMATIC ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	<u>Std. Error</u>	<u>Approx. C.I.</u>	<u>t-Ratio</u>	
K	32.44	0.0932	+/- 0.1857	348.1	ft/day
y0	13.29	0.02811	+/- 0.05602	472.7	ft

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

t-ratio = estimate/std. error

No estimation window

$K = 0.01144 \text{ cm/sec}$

$T = K*b = 1622. \text{ ft}^2/\text{day} (17.44 \text{ sq. cm/sec})$

Parameter Correlations

	<u>K</u>	<u>y0</u>
K	1.00	0.76
y0	0.76	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.09033 ft²
 Variance 0.001237 ft²
 Std. Deviation 0.03518 ft
 Mean 0.01213 ft
 No. of Residuals .. 75
 No. of Estimates .. 2

NOTES

Estimated thickness of water table aquifer 30 feet

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