Data Set: Z:\GW Data Steward Working Area\Caloosahatchee River Seepage\Caloosahatchee Well Drawdown Res
Title: Caloosahatchee River Seepage Project
Date: 06/15/16
Time: 15:04:48

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

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
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

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
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: Butler-Zhan

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
Kr	27.89	ft/day
Ss	2.0E-12	ft^{-1}
Kz/Kr	0.25	
Le	267.7	ft

K = 0.009837 cm/sec
T = K*b = 1394.3 ft^2/day (14.99 sq. cm/sec)

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
Kr	27.89	6.817	+/- 13.59	4.091	ft/day
Ss	2.0E-12	3.989E-11	+/- 7.949E-11	0.05014	ft^{-1}
Kz/Kr	0.25	not estimated			
Le	267.7	9.519	+/- 18.97	28.13	ft

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

t-ratio = estimate/std. error
No estimation window

K = 0.009837 cm/sec
T = K*b = 1394.3 ft²/day (14.99 sq. cm/sec)

Parameter Correlations

	Kr	Ss	Le
Kr	1.00	-1.00	-0.68
Ss	-1.00	1.00	0.68
Le	-0.68	0.68	1.00

Residual Statistics

for weighted residuals

Sum of Squares. . . 0.1789 ft^2
Variance . . . . . 0.002485 ft^2
Std. Deviation . . . . . 0.04985 ft
Mean . . . . . 0.001551 ft
No. of Residuals . . 75
No. of Estimates . . 3

NOTES

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