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: 15:29:54

PROJECT INFORMATION

Company: SFWMD
Client: SFWMD
Test Date: 8/12/1999
Test Well: CRS05NS

AQUIFER DATA

Saturated Thickness: 23.65 ft
Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: CRS05NS

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

Initial Displacement: 4.554 ft
Static Water Column Height: 8.35 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: 8.35 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.0833 ft
Gravel Pack Porosity: 0.

No. of Observations: 91

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0163	4.552	1.376	0.449
0.0327	4.501	1.455	0.394
0.049	4.431	1.539	0.345
0.0653	4.334	1.627	0.303
0.0817	4.238	1.721	0.263
0.098	4.131	1.82	0.23
0.1143	4.029	1.926	0.201
0.1307	3.923	2.037	0.172
0.147	3.821	2.155	0.152
0.1633	3.715	2.281	0.132
0.1797	3.609	2.413	0.114
0.196	3.511	2.554	0.094
0.2123	3.409	2.702	0.086
0.2287	3.313	2.86	0.071
0.245	3.215	3.027	0.062
0.2613	3.122	3.204	0.051

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.2777	3.027	3.391	0.042
0.294	2.942	3.589	0.039
0.3103	2.85	3.799	0.035
0.3267	2.768	4.022	0.028
0.3433	2.68	4.258	0.022
0.361	2.618	4.508	0.024
0.3797	2.539	4.772	0.024
0.3995	2.457	5.053	0.024
0.4205	2.369	5.349	0.019
0.4427	2.284	5.664	0.021
0.4662	2.194	5.997	0.016
0.491	2.104	6.35	0.019
0.5173	2.013	6.724	0.013
0.5453	1.922	7.12	0.015
0.575	1.828	7.539	0.013
0.6063	1.771	7.984	0.015
0.6395	1.625	8.454	0.015
0.6747	1.53	8.953	0.011
0.712	1.428	9.481	0.015
0.7515	1.33	10.04	0.011
0.7933	1.234	10.63	0.009
0.8377	1.144	11.26	0.012
0.8847	1.051	11.92	0.005
0.9345	0.963	12.63	0.011
0.9872	0.876	13.37	0.009
1.043	0.796	14.16	0.005
1.102	0.72	15.	0.005
1.165	0.641	15.89	0.002
1.231	0.577	16.83	0.003
1.302	0.514		

SOLUTION

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

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	6.263	ft/day
y0	4.843	ft

K = 0.002209 cm/sec
T = K*b = 148.1 ft²/day (1.593 sq. cm/sec)

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
K	6.263	0.02753	+/- 0.0547	227.5	ft/day
y0	4.843	0.01113	+/- 0.02212	435.	ft

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

K = 0.002209 cm/sec
T = K*b = 148.1 ft²/day (1.593 sq. cm/sec)

Parameter Correlations

	K	y0
K	1.00	0.74
y0	0.74	1.00

Residual Statistics

for weighted residuals

Sum of Squares. . . 0.07509 ft^2
Variance . . . . . 0.0008437 ft^2
Std. Deviation . . . . . 0.02905 ft
Mean . . . . . 0.00617 ft
No. of Residuals . . 91
No. of Estimates . . 2

NOTES

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