

Data Set: Z:\GW Data Steward Working Area\Caloosahatchee River Seepage\Caloosahatchee Well Drawdown Re
Date: 06/15/16
Time: 14:44:24

PROJECT INFORMATION

Company: SFWMD
Client: SFWMD
Test Date: 7/22/1999
Test Well: CRS01FM

AQUIFER DATA

Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: CRS01FM

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

Initial Displacement: 11.62 ft
Static Water Column Height: 47.6 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: 47.6 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.0833 ft
Gravel Pack Porosity: 0.

No. of Observations: 146

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0163	11.49	6.35	0.326
0.0327	11.15	6.724	0.316
0.049	10.73	7.12	0.305
0.0653	10.23	7.539	0.287
0.0817	9.749	7.984	0.277
0.098	9.344	8.454	0.265
0.1143	8.951	8.953	0.255
0.1307	8.573	9.481	0.248
0.147	8.221	10.04	0.236
0.1633	7.895	10.63	0.227
0.1797	7.585	11.26	0.216
0.196	7.289	11.92	0.21
0.2123	7.008	12.63	0.199
0.2287	6.74	13.37	0.186
0.245	6.479	14.16	0.181
0.2613	6.239	15.	0.175
0.2777	6.004	15.89	0.164

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.294	5.782	16.83	0.158
0.3103	5.571	17.82	0.152
0.3267	5.366	18.82	0.145
0.3433	5.16	19.82	0.144
0.361	4.974	20.82	0.139
0.3797	4.782	21.82	0.135
0.3995	4.596	22.82	0.129
0.4205	4.404	23.82	0.124
0.4427	4.212	24.82	0.124
0.4662	4.022	25.82	0.122
0.491	3.833	26.82	0.106
0.5173	3.645	27.82	0.108
0.5453	3.462	28.82	0.112
0.575	3.28	29.82	0.102
0.6063	3.171	30.82	0.099
0.6395	2.903	31.82	0.103
0.6747	2.73	32.82	0.099
0.712	2.558	33.82	0.095
0.7515	2.386	34.82	0.095
0.7933	2.233	35.82	0.092
0.8377	2.083	36.82	0.085
0.8847	1.939	37.82	0.086
0.9345	1.806	38.82	0.095
0.9872	1.682	39.82	0.087
1.043	1.565	40.82	0.085
1.102	1.455	41.82	0.083
1.165	1.352	42.82	0.082
1.231	1.26	43.82	0.083
1.302	1.173	44.82	0.086
1.376	1.094	45.82	0.082
1.455	1.022	46.82	0.08
1.539	0.955	47.82	0.082
1.627	0.899	48.82	0.085
1.721	0.846	49.82	0.076
1.82	0.798	50.82	0.079
1.926	0.753	51.82	0.077
2.037	0.714	52.82	0.074
2.155	0.68	53.82	0.076
2.281	0.648	54.82	0.076
2.413	0.616	55.82	0.077
2.554	0.593	56.82	0.072
2.702	0.568	57.82	0.072
2.86	0.554	58.82	0.072
3.027	0.522	59.82	0.073
3.204	0.505	60.82	0.069
3.391	0.487	61.82	0.069
3.589	0.47	62.82	0.07
3.799	0.453	63.82	0.069
4.022	0.437	64.82	0.07
4.258	0.424	65.82	0.074
4.508	0.408	66.82	0.061
4.772	0.392	67.82	0.063
5.053	0.381	68.82	0.066

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
5.349	0.362	69.82	0.069
5.664	0.35	70.82	0.069
5.997	0.333	71.82	0.069

SOLUTION

Slug Test
 Aquifer Model: Confined
 Solution Method: Butler-Zhan

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
Kr	6.712	ft/day
Ss	3.121E-5	ft ⁻¹
Kz/Kr	0.25	
Le	1000.	ft

K = 0.002368 cm/sec
 T = K*b = 335.6 ft²/day (3.609 sq. cm/sec)

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
Kr	6.712	0.01974	+/- 0.03903	340.	ft/day
Ss	3.121E-5	2.063E-7	+/- 4.078E-7	151.3	ft ⁻¹
Kz/Kr	0.25	not estimated			
Le	1000.	7.803	+/- 15.43	128.2	ft

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

K = 0.002368 cm/sec
 T = K*b = 335.6 ft²/day (3.609 sq. cm/sec)

Parameter Correlations

	Kr	Ss	Le
Kr	1.00	0.04	0.01
Ss	0.04	1.00	0.01
Le	0.01	0.01	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 5.703 ft²
 Variance 0.03988 ft²

Std. Deviation 0.1997 ft
Mean 0.1097 ft
No. of Residuals . . 146
No. of Estimates . . 3