

Data Set: Z:\GW Data Steward Working Area\Kissimmee River Groundwater Effort\KRR Pool C Slug Test Data\KR
Date: 06/02/16
Time: 12:14:06

PROJECT INFORMATION

Company: SFWMD
Client: SFWMD
Test Date: 1/15/1997
Test Well: KRBFFS-Test 4

AQUIFER DATA

Saturated Thickness: 27.64 ft
Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: KRBFFS-Test 4

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

Initial Displacement: 4.57 ft
Static Water Column Height: 16.81 ft
Casing Radius: 0.0833 ft
Well Radius: 0.25 ft
Well Skin Radius: 0.25 ft
Screen Length: 4. ft
Total Well Penetration Depth: 18.81 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.0833 ft
Gravel Pack Porosity: 0.

No. of Observations: 54

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0666	1.	1.25	0.3063
0.0833	0.9803	1.333	0.2867
0.1	0.9147	1.417	0.267
0.1166	0.7834	1.5	0.2495
0.1333	0.779	1.583	0.2341
0.15	0.7681	1.667	0.2166
0.1666	0.7549	1.75	0.2057
0.1833	0.7462	1.833	0.1904
0.2	0.733	1.917	0.1772
0.2166	0.7243	2.	0.1685
0.2333	0.7112	2.5	0.1116
0.25	0.7024	3.	0.0744
0.2666	0.6915	3.5	0.05033
0.2833	0.6805	4.	0.03282
0.3	0.6718	4.5	0.01969
0.3166	0.663	5.	0.01532
0.3333	0.6543	5.5	0.01094

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.4167	0.6083	6.	0.006565
0.5	0.5667	6.5	0.004376
0.5833	0.5274	7.	0.002188
0.6667	0.4923	7.5	0.
0.75	0.4595	8.	0.
0.8333	0.4311	8.5	-0.002188
0.9167	0.4026	9.	0.
1.	0.3742	9.5	-0.002188
1.083	0.3501	10.	-0.002188
1.167	0.326	11.	0.

SOLUTION

Slug Test
 Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 ln(Re/rw): 2.216

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	3.187	ft/day
y0	0.913	ft

K = 0.001124 cm/sec
 T = K*b = 88.1 ft²/day (0.9473 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	3.187	0.09798	+/- 0.1966	32.53	ft/day
y0	0.913	0.01196	+/- 0.02401	76.32	ft

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

K = 0.001124 cm/sec
 T = K*b = 88.1 ft²/day (0.9473 sq. cm/sec)

Parameter Correlations

	K	y0
K	1.00	0.69
y0	0.69	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.05875 ft²
Variance 0.00113 ft²
Std. Deviation..... 0.03361 ft
Mean..... 0.001712 ft
No. of Residuals .. 54
No. of Estimates .. 2