

Data Set: Z:\GW Data Steward Working Area\Kissimmee River Groundwater Effort\KRR Pool C Slug Test Data\KR
Date: 06/02/16
Time: 12:11:52

PROJECT INFORMATION

Company: SFWMD
Client: SFWMD
Test Date: 1/15/1997
Test Well: KRBFFM

AQUIFER DATA

Saturated Thickness: 73.26 ft
Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: KRBFFM

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

Initial Displacement: 4.03 ft
Static Water Column Height: 37.58 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: 37.58 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.0833 ft
Gravel Pack Porosity: 0.

No. of Observations: 97

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.03	1.	7.	0.4566
0.0333	0.6675	7.5	0.4466
0.05	0.6129	8.	0.4367
0.0666	0.6601	8.5	0.4293
0.0833	0.6501	9.	0.4194
0.1	0.6427	9.5	0.4094
0.1166	0.6402	10.	0.402
0.1333	0.6377	11.	0.3846
0.15	0.6352	12.	0.3697
0.1666	0.6328	13.	0.3499
0.1833	0.6328	14.	0.3375
0.2	0.6278	15.	0.3226
0.2166	0.6278	16.	0.3077
0.2333	0.6278	17.	0.2953
0.25	0.6253	18.	0.2804
0.2666	0.6253	19.	0.268
0.2833	0.6228	20.	0.2556

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.3	0.6228	21.	0.2457
0.3166	0.6203	22.	0.2308
0.3333	0.6203	23.	0.2184
0.4167	0.6154	24.	0.2084
0.5	0.6129	25.	0.1985
0.5833	0.6079	26.	0.1861
0.6667	0.6079	27.	0.1762
0.75	0.6055	28.	0.1687
0.8333	0.6005	29.	0.1588
0.9167	0.598	30.	0.1489
1.	0.5955	31.	0.139
1.083	0.5931	32.	0.129
1.167	0.5906	33.	0.1241
1.25	0.5881	34.	0.1141
1.333	0.5856	35.	0.1067
1.417	0.5831	36.	0.09677
1.5	0.5806	37.	0.08933
1.583	0.5782	38.	0.08437
1.667	0.5757	39.	0.07692
1.75	0.5732	40.	0.067
1.833	0.5707	41.	0.06203
1.917	0.5682	42.	0.05459
2.	0.5658	43.	0.04715
2.5	0.5558	44.	0.0397
3.	0.5409	45.	0.03722
3.5	0.5285	46.	0.02978
4.	0.5186	47.	0.02233
4.5	0.5087	48.	0.01737
5.	0.4963	49.	0.01241
5.5	0.4864	50.	0.004963
6.	0.4764	51.	0.
6.5	0.4665		

SOLUTION

Slug Test
 Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 ln(Re/rw): 2.258

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	0.1833	ft/day
y0	0.6447	ft

K = 6.466E-5 cm/sec
 T = K*b = 13.43 ft²/day (0.1444 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	0.1833	0.005935	+/- 0.01178	30.88	ft/day
y0	0.6447	0.006516	+/- 0.01294	98.93	ft

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

t-ratio = estimate/std. error

No estimation window

K = 6.466E-5 cm/sec

T = K*b = 13.43 ft²/day (0.1444 sq. cm/sec)

Parameter Correlations

	<u>K</u>	<u>y0</u>
K	1.00	0.46
y0	0.46	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.1576 ft²
 Variance 0.001659 ft²
 Std. Deviation 0.04073 ft
 Mean -0.002162 ft
 No. of Residuals .. 97
 No. of Estimates .. 2