

Data Set: Z:\GW Data Steward Working Area\Kissimmee River Groundwater Effort\KRR Pool C Slug Test Data\KR
Date: 06/02/16
Time: 12:20:43

PROJECT INFORMATION

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

AQUIFER DATA

Saturated Thickness: 27.24 ft
Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: KRBNS

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

Initial Displacement: 4.8 ft
Static Water Column Height: 19.97 ft
Casing Radius: 0.083 ft
Well Radius: 0.25 ft
Well Skin Radius: 0.25 ft
Screen Length: 4. ft
Total Well Penetration Depth: 19.97 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.083 ft
Gravel Pack Porosity: 0.

No. of Observations: 63

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.0233	1.	1.25	0.3042
0.0266	0.8021	1.333	0.2875
0.03	0.9229	1.417	0.2708
0.0333	0.8187	1.5	0.2562
0.05	0.8125	1.583	0.2417
0.0666	0.8208	1.667	0.2271
0.0833	0.7854	1.75	0.2146
0.1	0.7688	1.833	0.2021
0.1166	0.7521	1.917	0.1896
0.1333	0.7396	2.	0.1792
0.15	0.7292	2.5	0.1292
0.1666	0.7167	3.	0.09375
0.1833	0.7042	3.5	0.06875
0.2	0.6917	4.	0.05
0.2166	0.6833	4.5	0.03542
0.2333	0.6729	5.	0.02708
0.25	0.6625	5.5	0.02083

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.2666	0.6542	6.	0.01667
0.2833	0.6438	6.5	0.0125
0.3	0.6333	7.	0.01042
0.3166	0.625	7.5	0.008333
0.3333	0.6188	8.	0.00625
0.4167	0.5771	8.5	0.004167
0.5	0.5396	9.	0.002083
0.5833	0.5042	9.5	0.002083
0.6667	0.4708	10.	0.002083
0.75	0.4417	11.	0.002083
0.8333	0.4146	12.	0.
0.9167	0.3917	13.	0.
1.	0.3667	14.	0.
1.083	0.3458	15.	0.
1.167	0.325		

SOLUTION

Slug Test
 Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 ln(Re/rw): 2.253

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	2.962	ft/day
y0	0.8439	ft

K = 0.001045 cm/sec
 T = K*b = 80.69 ft²/day (0.8676 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	2.962	0.07935	+/- 0.1587	37.33	ft/day
y0	0.8439	0.008293	+/- 0.01659	101.8	ft

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

K = 0.001045 cm/sec
 T = K*b = 80.69 ft²/day (0.8676 sq. cm/sec)

Parameter Correlations

	<u>K</u>	<u>y0</u>
K	1.00	0.62

y0 0.62 1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.05335 ft²
Variance 0.0008746 ft²
Std. Deviation 0.02957 ft
Mean 0.003073 ft
No. of Residuals .. 63
No. of Estimates .. 2