

Data Set: Z:\GW Data Steward Working Area\Kissimmee River Groundwater Effort\KRR Pool C Slug Test Data\KR
Date: 06/02/16
Time: 12:19:13

PROJECT INFORMATION

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

AQUIFER DATA

Saturated Thickness: 73. ft
Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: KRBNNM

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

Initial Displacement: 7.3 ft
Static Water Column Height: 40.25 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: 40.25 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.083 ft
Gravel Pack Porosity: 0.

No. of Observations: 115

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0333	1.	14.	0.2452
0.05	0.4932	15.	0.2342
0.0666	0.5096	16.	0.2247
0.0833	0.4918	17.	0.2151
0.1	0.489	18.	0.2055
0.1166	0.4904	19.	0.1986
0.1333	0.4836	20.	0.189
0.15	0.4822	21.	0.1808
0.1666	0.4808	22.	0.174
0.1833	0.4795	23.	0.1671
0.2	0.4781	24.	0.1589
0.2166	0.4767	25.	0.1534
0.2333	0.4753	26.	0.1466
0.25	0.474	27.	0.1397
0.2666	0.474	28.	0.1329
0.2833	0.4726	29.	0.1274
0.3	0.4712	30.	0.1219

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.3166	0.4712	31.	0.1164
0.3333	0.4699	32.	0.111
0.4167	0.4671	33.	0.1068
0.5	0.4644	34.	0.1014
0.5833	0.4616	35.	0.09726
0.6667	0.4589	36.	0.09178
0.75	0.4562	37.	0.0863
0.8333	0.4534	38.	0.08356
0.9167	0.4507	39.	0.07945
1.	0.4479	40.	0.07534
1.083	0.4452	41.	0.07123
1.167	0.4452	42.	0.06712
1.25	0.4425	43.	0.06301
1.333	0.4397	44.	0.06027
1.417	0.4384	45.	0.05753
1.5	0.4356	46.	0.05479
1.583	0.4342	47.	0.05068
1.667	0.4315	48.	0.04795
1.75	0.4301	49.	0.04521
1.833	0.4288	50.	0.0411
1.917	0.426	51.	0.03836
2.	0.4233	52.	0.03699
2.5	0.4137	53.	0.03425
3.	0.4027	54.	0.03151
3.5	0.3945	55.	0.02877
4.	0.3836	56.	0.02603
4.5	0.374	57.	0.02466
5.	0.3658	58.	0.02192
5.5	0.3575	59.	0.01918
6.	0.3493	60.	0.01781
6.5	0.3425	61.	0.01507
7.	0.3342	62.	0.0137
7.5	0.326	63.	0.01233
8.	0.3192	64.	0.01096
8.5	0.3123	65.	0.008219
9.	0.3055	66.	0.006849
9.5	0.3	67.	0.005479
10.	0.2918	68.	0.00274
11.	0.2781	69.	0.00137
12.	0.2671	70.	0.
13.	0.2548		

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
 $\ln(R_e/r_w)$: 2.281

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	0.1809	ft/day
y0	0.4898	ft

K = 6.383E-5 cm/sec
 T = K*b = 13.21 ft²/day (0.142 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	0.1809	0.008922	+/- 0.01767	20.28	ft/day
y0	0.4898	0.007942	+/- 0.01573	61.68	ft

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

K = 6.383E-5 cm/sec
 T = K*b = 13.21 ft²/day (0.142 sq. cm/sec)

Parameter Correlations

	<u>K</u>	<u>y0</u>
K	1.00	0.45
y0	0.45	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.276 ft²
 Variance 0.002442 ft²
 Std. Deviation 0.04942 ft
 Mean -0.0001061 ft
 No. of Residuals .. 115
 No. of Estimates .. 2