

Data Set: Z:\GW Data Steward Working Area\Kissimmee River Groundwater Effort\KRR Pool C Slug Test Data\KR
Date: 06/02/16
Time: 12:48:24

PROJECT INFORMATION

Company: SFWMD
Client: SFWMD
Test Date: 1/15/1997
Test Well: KRDNM1

AQUIFER DATA

Saturated Thickness: 62.76 ft
Anisotropy Ratio (Kz/Kr): 0.25

SLUG TEST WELL DATA

Test Well: KRDNM1

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

Initial Displacement: 2.97 ft
Static Water Column Height: 41.77 ft
Casing Radius: 0.083 ft
Well Radius: 0.25 ft
Well Skin Radius: 0.25 ft
Screen Length: 5.5 ft
Total Well Penetration Depth: 41.77 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.083 ft
Gravel Pack Porosity: 0.

No. of Observations: 100

<u>Observation Data</u>			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.0233	1.	6.5	0.4949
0.0266	0.9091	7.	0.4714
0.03	0.9125	7.5	0.4545
0.0333	0.9327	8.	0.4377
0.05	0.8956	8.5	0.4175
0.0666	0.9226	9.	0.4007
0.0833	0.9057	9.5	0.3838
0.1	0.9226	10.	0.3704
0.1166	0.9091	11.	0.3434
0.1333	0.9226	12.	0.3131
0.15	0.8889	13.	0.2896
0.1666	0.8889	14.	0.266
0.1833	0.8889	15.	0.2458
0.2	0.8855	16.	0.229
0.2166	0.8855	17.	0.2121
0.2333	0.8822	18.	0.1919
0.25	0.8822	19.	0.1751

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.2666	0.8788	20.	0.165
0.2833	0.8788	21.	0.1515
0.3	0.8754	22.	0.1414
0.3166	0.8721	23.	0.1279
0.3333	0.8721	24.	0.1178
0.4167	0.862	25.	0.1111
0.5	0.8519	26.	0.1044
0.5833	0.8451	27.	0.09428
0.6667	0.835	28.	0.08418
0.75	0.8283	29.	0.07744
0.8333	0.8215	30.	0.07407
0.9167	0.8148	31.	0.06734
1.	0.8081	32.	0.06061
1.083	0.8013	33.	0.05387
1.167	0.7946	34.	0.05387
1.25	0.7912	35.	0.05051
1.333	0.7845	36.	0.04377
1.417	0.7778	37.	0.03704
1.5	0.771	38.	0.03367
1.583	0.7609	39.	0.0303
1.667	0.7609	40.	0.02694
1.75	0.7576	41.	0.02694
1.833	0.7508	42.	0.02357
1.917	0.7475	43.	0.0202
2.	0.7374	44.	0.01683
2.5	0.7037	45.	0.01347
3.	0.67	46.	0.01347
3.5	0.6431	47.	0.0101
4.	0.6128	48.	0.006734
4.5	0.5859	49.	0.006734
5.	0.5623	50.	0.003367
5.5	0.5354	51.	0.003367
6.	0.5152	52.	0.

SOLUTION

Slug Test
 Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 ln(Re/rw): 3.234

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	0.2597	ft/day
y0	0.8994	ft

K = 9.163E-5 cm/sec
 T = K*b = 16.3 ft²/day (0.1753 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	0.2597	0.00273	+/- 0.005417	95.14	ft/day
y0	0.8994	0.002721	+/- 0.005398	330.5	ft

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

t-ratio = estimate/std. error

No estimation window

K = 9.163E-5 cm/sec

T = K*b = 16.3 ft²/day (0.1753 sq. cm/sec)

Parameter Correlations

	<u>K</u>	<u>y0</u>
K	1.00	0.47
y0	0.47	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.02507 ft²
 Variance 0.0002558 ft²
 Std. Deviation 0.01599 ft
 Mean 0.001273 ft
 No. of Residuals .. 100
 No. of Estimates .. 2