Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-721U_RHT_SPRINGER-GELHAR.a
Title: OW-721 U RISING HEAD 5-15-08
Date: 06/08/16
Time: 13:05:01

PROJECT INFORMATION

Company: Turkey Point
Client: BECHTEL
Project: 6468-07-1950
Location: Turkey Point
Test Date: 5-15-08
Test Well: OW-721 U

AQUIFER DATA

Saturated Thickness: 24.75 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: OW-721 U

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

Initial Displacement: 1.444 ft
Static Water Column Height: 24.75 ft
Casing Radius: 0.083 ft
Well Radius: 0.25 ft
Well Skin Radius: 0.25 ft
Screen Length: 16.1 ft
Total Well Penetration Depth: 26. ft

No. of Observations: 34

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	1.444	37.44	0.018
1.32	1.035	41.04	0.018
2.76	0.347	44.64	0.018
4.26	0.103	48.84	0.022
5.82	0.039	53.04	0.018
7.5	0.028	57.24	0.019
9.3	0.027	62.04	0.021
11.16	0.024	67.44	0.018
13.2	0.022	72.24	0.022
15.3	0.021	78.24	0.02
17.52	0.018	84.24	0.017
19.92	0.019	90.24	0.016
22.44	0.019	96.84	0.02
25.08	0.017	104.	0.014
27.9	0.021	111.8	0.018
30.9	0.019	119.6	0.021

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
34.08	0.019	128.2	-0.002

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
ln(Re/rw): 3.501

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	27.03	ft/day
Le	46.33	ft

K = 0.009537 cm/sec
T = K*b = 669.1 ft²/day (7.195 sq. cm/sec)
Le = 46.33 ft
Solution is critically damped when C(D) = 2.

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
K	27.03	0.6614	+/- 1.347	40.88	ft/day
Le	46.33	3.798	+/- 7.737	12.2	ft

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

K = 0.009537 cm/sec
T = K*b = 669.1 ft²/day (7.195 sq. cm/sec)
Le = 46.33 ft
Solution is critically damped when C(D) = 2.

Parameter Correlations

	K	Le
K	1.00	0.04
Le	0.04	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.01792 ft^2
Variance ..... 0.00056 ft^2
Std. Deviation..... 0.02367 ft
Mean..... 0.01766 ft

No. of Residuals . . 34
No. of Estimates . . 2