Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-735U_RHT_SPRINGER-GELHAR.a
Title: OW-735 U RISING HEAD TEST 5-15-08
Date: 06/08/16
Time: 13:29:24

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel
Project: 6468-07-1950
Location: Turkey Point COL
Test Date: 5/15/2008
Test Well: OW-735 U

AQUIFER DATA

Saturated Thickness: 26.45 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: OW-735 U

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

Initial Displacement: 1.519 ft
Static Water Column Height: 26.45 ft
Casing Radius: 0.083 ft
Well Radius: 0.25 ft
Well Skin Radius: 0.25 ft
Screen Length: 16. ft
Total Well Penetration Depth: 28. ft

No. of Observations: 33

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.	1.519	41.88	0.015
1.499	0.339	46.08	0.016
3.059	-0.053	50.28	0.014
4.74	-0.108	54.48	0.014
6.539	0.03	59.28	0.016
8.4	0.077	64.68	0.017
10.44	-0.01	69.48	0.014
12.54	-0.005	75.48	0.02
14.76	0.04	81.48	0.02
17.16	0.008	87.48	0.015
19.68	0.015	94.08	0.02
22.32	0.025	101.3	0.015
25.14	0.015	109.1	0.021
28.14	0.018	116.9	0.018
31.32	0.012	125.3	0.014
34.68	0.015	134.3	-0.006
38.28	0.012		

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
ln(Re/rw): 3.546

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	58.21	ft/day
Le	15.64	ft

K = 0.02053 cm/sec
T = K*b = 1539.5 ft²/day (16.55 sq. cm/sec)
Le = 15.64 ft
Solution is critically damped when C(D) = 1.

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
K	58.21	2.227	+/- 4.541	26.14	ft/day
Le	15.64	1.541	+/- 3.143	10.14	ft

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

K = 0.02053 cm/sec
T = K*b = 1539.5 ft²/day (16.55 sq. cm/sec)
Le = 15.64 ft
Solution is critically damped when C(D) = 1.

Parameter Correlations

	K	Le
K	1.00	0.16
Le	0.16	1.00

Residual Statistics

for weighted residuals

Sum of Squares. . . 0.02424 ft^2
Variance . . . . . 0.0007821 ft^2
Std. Deviation . . . . . 0.02797 ft
Mean . . . . . 0.01194 ft
No. of Residuals . . 33
No. of Estimates . . 2