

Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-735L_FHT_BUTLER.aqt
 Title: OW-735 L FALLING HEAD TEST 5-15-08
 Date: 06/08/16
 Time: 13:15:56

PROJECT INFORMATION

Company: Turkey Point
 Client: BECHTEL
 Project: 6468-07-1950
 Location: Turkey Point
 Test Date: 5-15-08
 Test Well: OW-735 L

AQUIFER DATA

Saturated Thickness: 87. ft
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: OW-735 L

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

Initial Displacement: 3.004 ft
 Static Water Column Height: 110.4 ft
 Casing Radius: 0.083 ft
 Well Radius: 0.25 ft
 Well Skin Radius: 0.25 ft
 Screen Length: 17.7 ft
 Total Well Penetration Depth: 110. ft

No. of Observations: 51

Time (sec)	Observation Data		Displacement (ft)
	Displacement (ft)	Time (sec)	
0.	3.004	49.38	0.01
0.84	1.211	52.98	0.007
1.741	0.948	57.18	0.006
2.701	0.711	61.38	0.009
3.661	0.52	65.58	0.004
4.741	0.367	70.38	0.008
5.881	0.235	75.78	0.007
7.081	0.163	80.58	0.009
8.34	0.115	86.58	0.003
9.66	0.076	92.58	0.006
11.1	0.06	98.58	0.003
12.6	0.054	105.2	0.003
14.16	0.039	112.4	-0.001
15.84	0.023	120.2	0.001
17.64	0.003	128.	0.007
19.5	0.002	136.4	0.

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
21.54	0.002	145.4	-0.003
23.64	0.008	155.	0.
25.86	0.006	164.6	0.003
28.26	0.006	175.4	0.002
30.78	0.009	186.8	0.003
33.42	0.012	198.8	0.
36.24	0.014	211.4	0.
39.24	0.001	224.6	0.007
42.42	0.009	239.	0.023
45.78	0.006		

SOLUTION

Slug Test
 Aquifer Model: Confined
 Solution Method: Butler
 Log Factor: 0.2019

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	49.09	ft/day
Le	0.1	ft

K = 0.01732 cm/sec
 T = K*b = 4270.9 ft²/day (45.92 sq. cm/sec)
 Le = 0.1 ft
 Solution is critically damped when C(D) = 2.

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
K	49.09	2.731	+/- 5.489	17.98	ft/day
Le	0.1	7.366	+/- 14.8	0.01358	ft

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

K = 0.01732 cm/sec
 T = K*b = 4270.9 ft²/day (45.92 sq. cm/sec)
 Le = 0.1 ft
 Solution is critically damped when C(D) = 2.

Parameter Correlations

	K	Le
K	1.00	-0.09
Le	-0.09	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.5016 ft²
Variance 0.01024 ft²
Std. Deviation..... 0.1012 ft
Mean..... 0.01955 ft
No. of Residuals .. 51
No. of Estimates .. 2