

Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-706L\_FHT\_BUTLER.aqt  
 Title: OW-706 L FALLING HEAD TEST 5-16-08  
 Date: 06/08/16  
 Time: 10:34:48

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PROJECT INFORMATION

Company: Turkey Point  
 Client: BECHTEL  
 Project: 6468-07-1950  
 Location: Turkey Point  
 Test Date: 5-16-08  
 Test Well: OW-706 L

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AQUIFER DATA

Saturated Thickness: 82.8 ft  
 Anisotropy Ratio (Kz/Kr): 1.

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SLUG TEST WELL DATA

Test Well: OW-706 L

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

Initial Displacement: 1.19 ft  
 Static Water Column Height: 113.7 ft  
 Casing Radius: 0.083 ft  
 Well Radius: 0.25 ft  
 Well Skin Radius: 0.25 ft  
 Screen Length: 15.1 ft  
 Total Well Penetration Depth: 112. ft

No. of Observations: 43

Time (sec)	Observation Data		Displacement (ft)
	Displacement (ft)	Time (sec)	
0.	1.19	72.42	-0.002
1.681	0.79	78.42	0.002
3.48	0.5	84.42	0.
5.34	0.303	91.02	0.
7.381	0.171	98.22	0.002
9.48	0.096	106.	0.
11.7	0.054	113.8	0.
14.1	0.029	122.2	-0.002
16.62	0.018	131.2	-0.002
19.26	0.016	140.8	0.
22.08	0.009	150.4	0.001
25.08	0.006	161.2	0.003
28.26	0.004	172.6	0.001
31.62	0.006	184.6	-0.001
35.22	0.007	197.2	0.001
38.82	0.003	210.4	-0.002

<u>Time (sec)</u>	<u>Displacement (ft)</u>	<u>Time (sec)</u>	<u>Displacement (ft)</u>
43.02	0.002	224.8	-0.005
47.22	0.009	239.8	-0.002
51.42	0.008	255.4	0.
56.22	0.001	272.2	0.004
61.62	0.001	290.2	0.
66.42	0.		

SOLUTION

Slug Test  
 Aquifer Model: Confined  
 Solution Method: Butler  
 Log Factor: 0.2086

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	21.2	ft/day
Le	17.46	ft

$K = 0.00748$  cm/sec  
 $T = K \cdot b = 1755.7$  ft<sup>2</sup>/day (18.88 sq. cm/sec)  
 $Le = 17.46$  ft  
 Solution is critically damped when  $C(D) = 2$ .

AUTOMATIC ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	<u>Std. Error</u>	<u>Approx. C.I.</u>	<u>t-Ratio</u>	
K	21.2	0.09432	+/- 0.1905	224.8	ft/day
Le	17.46	2.853	+/- 5.764	6.118	ft

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

$K = 0.00748$  cm/sec  
 $T = K \cdot b = 1755.7$  ft<sup>2</sup>/day (18.88 sq. cm/sec)  
 $Le = 17.46$  ft  
 Solution is critically damped when  $C(D) = 2$ .

Parameter Correlations

	<u>K</u>	<u>Le</u>
K	1.00	0.05
Le	0.05	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.0005722 ft<sup>2</sup>  
Variance ..... 1.395E-5 ft<sup>2</sup>  
Std. Deviation..... 0.003736 ft  
Mean..... 0.001191 ft  
No. of Residuals .. 43  
No. of Estimates .. 2