

Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-606L_FHT_McZ.aqt

Title: OW-606 L FALLING HEAD TEST 5-18-08

Date: 06/08/16

Time: 09:28:36

PROJECT INFORMATION

Company: Turkey Point

Client: BECHTEL

Project: 6468-07-1950

Location: Turkey Point

Test Date: 5-18-08

Test Well: OW-606 L

AQUIFER DATA

Saturated Thickness: 92. ft

Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: OW-606 L

X Location: 0. ft

Y Location: 0. ft

Initial Displacement: 1.013 ft

Static Water Column Height: 108.6 ft

Casing Radius: 0.083 ft

Well Radius: 0.29 ft

Well Skin Radius: 0.29 ft

Screen Length: 16.2 ft

Total Well Penetration Depth: 109. ft

No. of Observations: 48

<u>Time (sec)</u>	<u>Observation Data</u>		<u>Displacement (ft)</u>
	<u>Displacement (ft)</u>	<u>Time (sec)</u>	
0.	1.013	189.6	-0.011
3.601	-0.31	204.6	-0.008
7.801	-0.144	220.2	-0.005
12.	0.181	237.	-0.01
16.2	-0.123	255.	-0.012
21.	0.02	273.6	-0.01
26.4	-0.021	294.	-0.011
31.2	-0.02	315.	-0.004
37.2	-0.008	337.2	-0.004
43.2	-0.016	361.2	0.
49.2	-0.014	386.4	-0.009
55.8	-0.012	412.8	0.002
63.	-0.011	441.	0.
70.8	-0.013	471.	0.002
78.6	-0.014	502.8	-0.002
87.	-0.008	536.4	0.003

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
96.	-0.015	572.4	-0.001
105.6	-0.014	608.4	-0.003
115.2	-0.015	650.4	0.004
126.	-0.013	692.4	0.006
137.4	-0.012	734.4	0.004
149.4	-0.012	782.4	0.006
162.	-0.01	836.4	0.007
175.2	-0.009	884.4	0.009

SOLUTION

Slug Test

Aquifer Model: Confined

Solution Method: McElwee-Zenner

Log Factor: 0.212

VISUAL ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	
K	117.8	ft/day
β	-22.15	ft
A	0.	
v(0)	0.	ft/day

K = 0.04157 cm/sec

T = K*b = 1.084E+4 ft²/day (116.6 sq. cm/sec)

Le = -22.15 ft

AUTOMATIC ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
K	117.8	4.288	+/- 8.632	27.48	ft/day
β	-22.15	1.119	+/- 2.253	-19.79	ft
A	0.	not estimated			
v(0)	0.	not estimated			ft/day

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

t-ratio = estimate/std. error

No estimation window

K = 0.04157 cm/sec

T = K*b = 1.084E+4 ft²/day (116.6 sq. cm/sec)

Le = -22.15 ft

Parameter Correlations

	K	β
K	1.00	-0.07
β	-0.07	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.01361 ft²
Variance 0.0002959 ft²
Std. Deviation..... 0.0172 ft
Mean..... -0.008447 ft
No. of Residuals .. 48
No. of Estimates .. 2