

Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-721L_RHT_BUTLER_2.aqt
 Title: OW-721 L RISING HEAD TEST 5-20-08
 Date: 06/08/16
 Time: 11:48:51

PROJECT INFORMATION

Company: Turkey Point
 Client: BECHTEL
 Project: 6468-07-1950
 Location: Turkey Point
 Test Date: 5-20-08
 Test Well: OW-721 L

AQUIFER DATA

Saturated Thickness: 90. ft
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: OW-721 L

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

Initial Displacement: 9.341 ft
 Static Water Column Height: 110.2 ft
 Casing Radius: 0.083 ft
 Well Radius: 0.25 ft
 Well Skin Radius: 0.25 ft
 Screen Length: 17. ft
 Total Well Penetration Depth: 109. ft

No. of Observations: 43

Time (sec)	Observation Data		Displacement (ft)
	Displacement (ft)	Time (sec)	
0.	9.341	19.26	4.119
0.42	9.261	20.82	3.928
0.9	8.944	22.5	3.738
1.44	8.348	24.3	3.545
1.92	7.936	26.16	3.367
2.521	7.599	28.2	3.183
3.121	7.366	30.3	3.011
3.721	7.156	32.52	2.833
4.38	6.951	34.92	2.667
5.1	6.738	37.44	2.517
5.88	6.516	40.08	2.367
6.66	6.321	42.9	2.223
7.5	6.117	45.9	2.092
8.4	5.918	49.08	1.972
9.36	5.708	52.44	1.861
10.32	5.523	56.04	1.753

<u>Time (sec)</u>	<u>Displacement (ft)</u>	<u>Time (sec)</u>	<u>Displacement (ft)</u>
11.4	5.321	59.64	1.668
12.54	5.121	63.84	1.586
13.74	4.917	68.04	1.515
15.	4.722	72.24	1.465
16.32	4.521	77.04	1.401
17.76	4.315		

SOLUTION

Slug Test
 Aquifer Model: Confined
 Solution Method: Butler
 Log Factor: 0.2036

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	2.839	ft/day
Le	0.1	ft

$K = 0.001001$ cm/sec
 $T = K \cdot b = 255.5$ ft²/day (2.747 sq. cm/sec)
 $Le = 0.1$ 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	2.839	0.12	+/- 0.2424	23.66	ft/day
Le	0.1	560.	+/- 1131.2	0.0001786	ft

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

$K = 0.001001$ cm/sec
 $T = K \cdot b = 255.5$ ft²/day (2.747 sq. cm/sec)
 $Le = 0.1$ ft
 Solution is critically damped when $C(D) = 2$.

Parameter Correlations

	<u>K</u>	<u>Le</u>
K	1.00	0.28
Le	0.28	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 17.37 ft²
Variance 0.4237 ft²
Std. Deviation 0.6509 ft
Mean -0.2005 ft
No. of Residuals .. 43
No. of Estimates .. 2