

Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-621L_RHT_BUTLER_2.aqt
 Title: OW-621 L RISING HEAD TEST 5-20-08
 Date: 06/08/16
 Time: 10:06:38

PROJECT INFORMATION

Company: Turkey Point
 Client: BECHTEL
 Project: 6468-07-1950
 Location: Turkey Point
 Test Date: 5-17-08
 Test Well: OW-621 L

AQUIFER DATA

Saturated Thickness: 88.5 ft
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: OW-621 L

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

Initial Displacement: 12.05 ft
 Static Water Column Height: 108.3 ft
 Casing Radius: 0.083 ft
 Well Radius: 0.3 ft
 Well Skin Radius: 0.3 ft
 Screen Length: 15. ft
 Total Well Penetration Depth: 110. ft

No. of Observations: 53

Time (sec)	Observation Data		Displacement (ft)
	Displacement (ft)	Time (sec)	
0.	12.05	42.18	0.023
0.66	12.04	45.36	0.021
1.38	10.4	48.72	0.026
2.16	8.625	52.42	0.017
2.941	7.135	55.92	0.016
3.781	5.85	60.12	0.014
4.681	4.733	64.32	0.014
5.641	3.764	68.52	0.015
6.601	2.99	73.32	0.01
7.681	2.273	78.72	0.013
8.821	1.693	83.52	0.013
10.02	1.219	89.52	0.015
11.28	0.852	95.52	0.017
12.6	0.575	101.5	0.008
14.04	0.363	108.1	0.013
15.54	0.229	115.3	0.01

<u>Time (sec)</u>	<u>Displacement (ft)</u>	<u>Time (sec)</u>	<u>Displacement (ft)</u>
17.1	0.139	123.1	0.01
18.78	0.081	130.9	0.006
20.58	0.045	139.3	0.01
22.44	0.031	148.3	0.008
24.48	0.03	157.9	0.003
26.58	0.021	167.5	0.003
28.8	0.019	178.3	-0.001
31.2	0.021	189.7	-0.001
33.72	0.022	201.7	0.005
36.36	0.016	214.3	0.
39.18	0.018		

SOLUTION

Slug Test
 Aquifer Model: Confined
 Solution Method: Butler
 Log Factor: 0.2171

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	16.65	ft/day
Le	117.9	ft

$K = 0.005874$ cm/sec
 $T = K \cdot b = 1473.5$ ft²/day (15.84 sq. cm/sec)
 $Le = 117.9$ ft
 Solution is critically damped when $C(D) = 2$.