

Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-706U_RHT_SPRINGER-GELHAR.a

Title: OW-706 U RISING HEAD TEST 5-16-08

Date: 06/08/16

Time: 11:39:56

PROJECT INFORMATION

Company: Turkey Point

Client: BECHTEL

Project: 6468-07-1950

Location: Turkey Point

Test Date: 5-16-08

Test Well: OW-706 U

AQUIFER DATA

Saturated Thickness: 30.66 ft

Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: OW-706 U

X Location: 0. ft

Y Location: 0. ft

Initial Displacement: 0.96 ft

Static Water Column Height: 28.46 ft

Casing Radius: 0.083 ft

Well Radius: 0.25 ft

Well Skin Radius: 0.25 ft

Screen Length: 15.5 ft

Total Well Penetration Depth: 28.9 ft

No. of Observations: 48

Time (sec)	Observation Data		Displacement (ft)
	Displacement (ft)	Time (sec)	
0.	0.96	79.98	0.009
1.56	0.59	85.98	0.014
3.24	0.186	92.58	0.02
5.04	-0.166	99.78	0.014
6.9	0.144	107.6	0.013
8.94	-0.013	115.4	0.014
11.04	-0.004	123.8	0.015
13.26	0.054	132.8	0.012
15.66	-0.015	142.4	0.014
18.18	0.041	152.	0.012
20.82	0.005	162.8	0.013
23.64	0.028	174.2	0.016
26.64	0.01	186.2	0.013
29.82	0.013	198.8	0.012
33.18	0.018	212.	0.012
36.78	0.016	226.4	0.013

<u>Time (sec)</u>	<u>Displacement (ft)</u>	<u>Time (sec)</u>	<u>Displacement (ft)</u>
40.38	0.018	241.4	0.015
44.58	0.01	257.	0.013
48.78	0.015	273.8	0.017
52.98	0.013	291.8	0.017
57.78	0.014	310.4	0.02
63.18	0.017	330.8	0.017
67.98	0.014	351.8	0.019
73.98	0.018	374.	0.02

SOLUTION

Slug Test

Aquifer Model: Unconfined

Solution Method: Springer-Gelhar

ln(Re/rw): 3.287

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	30.27	ft/day
Le	56.23	ft

K = 0.01068 cm/sec

T = K*b = 927.9 ft²/day (9.978 sq. cm/sec)

Le = 56.23 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	30.27	1.921	+/- 3.867	15.75	ft/day
Le	56.23	8.067	+/- 16.24	6.97	ft

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

t-ratio = estimate/std. error

No estimation window

K = 0.01068 cm/sec

T = K*b = 927.9 ft²/day (9.978 sq. cm/sec)

Le = 56.23 ft

Solution is critically damped when C(D) = 2.

Parameter Correlations

	<u>K</u>	<u>Le</u>
K	1.00	0.04
Le	0.04	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.06523 ft²
Variance 0.001418 ft²
Std. Deviation..... 0.03766 ft
Mean 0.01556 ft
No. of Residuals .. 48
No. of Estimates .. 2