

Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-606U\_SPRINGER-GELHAR\_TEST  
 Title: OW-606 U RISING HEAD 5/20/08 TEST 2  
 Date: 06/08/16  
 Time: 09:44:42

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PROJECT INFORMATION

Company: Turkey Point  
 Client: BECHTEL  
 Project: 6468-07-1950  
 Location: Turkey Point  
 Test Date: 5-20-08  
 Test Well: OW-606 U

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AQUIFER DATA

Saturated Thickness: 29.89 ft  
 Anisotropy Ratio (Kz/Kr): 1.

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SLUG TEST WELL DATA

Test Well: OW-606 U

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

Initial Displacement: 3.394 ft  
 Static Water Column Height: 29.89 ft  
 Casing Radius: 0.083 ft  
 Well Radius: 0.3 ft  
 Well Skin Radius: 0.3 ft  
 Screen Length: 15.17 ft  
 Total Well Penetration Depth: 30.17 ft

No. of Observations: 42

Observation Data			
<u>Time (sec)</u>	<u>Displacement (ft)</u>	<u>Time (sec)</u>	<u>Displacement (ft)</u>
0.	3.394	13.84	-0.179
0.223	3.267	15.04	0.066
0.46	2.656	16.3	0.143
0.88	1.385	17.62	-0.06
1.3	0.294	19.06	-0.132
1.72	-0.448	20.56	0.038
2.2	-0.828	22.12	0.051
2.74	-0.794	23.8	-0.095
3.22	-0.484	25.6	-0.015
3.82	0.007	27.46	0.028
4.421	0.42	29.5	-0.067
5.02	0.648	31.6	0.01
5.68	0.569	33.82	-0.023
6.4	0.166	36.22	-0.033
7.18	-0.273	38.74	-0.008
7.96	-0.395	41.38	-0.036

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
8.8	-0.178	44.2	-0.012
9.7	0.155	47.2	-0.026
10.66	0.288	50.38	-0.023
11.62	0.1	53.78	-0.021
12.7	-0.194	57.34	-0.047

SOLUTION

Slug Test

Aquifer Model: Unconfined

Solution Method: Springer-Gelhar

ln(Re/rw): 3.434

VISUAL ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	
K	123.1	ft/day
Le	16.66	ft

K = 0.04343 cm/sec

T = K\*b = 3679.5 ft<sup>2</sup>/day (39.56 sq. cm/sec)

Le = 16.66 ft

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

AUTOMATIC ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
K	123.1	6.574	+/- 13.29	18.73	ft/day
Le	16.66	0.7134	+/- 1.442	23.36	ft

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

t-ratio = estimate/std. error

No estimation window

K = 0.04343 cm/sec

T = K\*b = 3679.5 ft<sup>2</sup>/day (39.56 sq. cm/sec)

Le = 16.66 ft

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

Parameter Correlations

	K	Le
K	1.00	0.06
Le	0.06	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.9312 ft<sup>2</sup>  
Variance ..... 0.02328 ft<sup>2</sup>  
Std. Deviation ..... 0.1526 ft  
Mean ..... 0.008921 ft  
No. of Residuals .. 42  
No. of Estimates .. 2