

Data Set: Z:\Turkey Point FPL Units 6 and 7\Hydrogeology\Slug Test Files\OW-721U_FHT_KGS.aqt
 Title: OW-721 U FALLING HEAD 5-15-08
 Date: 06/08/16
 Time: 11:57:33

PROJECT INFORMATION

Company: Turkey Point
 Client: BECHTEL
 Project: 6468-07-1950
 Location: Turkey Point
 Test Date: 5-15-08
 Test Well: OW-721 U

AQUIFER DATA

Saturated Thickness: 24.75 ft
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: OW-721 U

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

Initial Displacement: 3.338 ft
 Static Water Column Height: 24.75 ft
 Casing Radius: 0.083 ft
 Well Radius: 0.25 ft
 Well Skin Radius: 0.25 ft
 Screen Length: 16.1 ft
 Total Well Penetration Depth: 26. ft

No. of Observations: 45

Time (sec)	Observation Data		Displacement (ft)
	Displacement (ft)	Time (sec)	
0.	3.338	62.04	0.019
1.319	0.93	67.44	0.017
2.76	0.486	72.24	0.022
4.26	0.257	78.24	0.019
5.82	0.109	84.24	0.02
7.5	0.045	90.24	0.023
9.299	0.027	96.84	0.02
11.16	0.026	104.	0.018
13.2	0.03	111.8	0.021
15.3	0.023	119.6	0.018
17.52	0.025	128.	0.017
19.92	0.025	137.	0.017
22.44	0.026	146.6	0.014
25.08	0.026	156.2	0.017
27.9	0.022	167.	0.014
30.9	0.02	178.4	0.017

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
34.08	0.026	190.4	0.015
37.44	0.02	203.	0.013
41.04	0.02	216.2	0.013
44.64	0.019	230.6	0.013
48.84	0.02	245.6	0.01
53.04	0.021	261.2	0.013
57.24	0.021		

SOLUTION

Slug Test

Aquifer Model: Unconfined

Solution Method: KGS Model

VISUAL ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	
Kr	45.5	ft/day
Ss	9.486E-5	ft ⁻¹
Kz/Kr	1.	

K = 0.01605 cm/sec

T = K*b = 1126. ft²/day (12.11 sq. cm/sec)AUTOMATIC ESTIMATION RESULTSEstimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
Kr	45.5	2.14	+/- 4.317	21.26	ft/day
Ss	9.486E-5	3.019E-5	+/- 6.09E-5	3.142	ft ⁻¹
Kz/Kr	1.	not estimated			

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

t-ratio = estimate/std. error

No estimation window

K = 0.01605 cm/sec

T = K*b = 1126. ft²/day (12.11 sq. cm/sec)Parameter Correlations

	Kr	Ss
Kr	1.00	-0.90
Ss	-0.90	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.0241 ft²

Variance 0.0005606 ft²
Std. Deviation 0.02368 ft
Mean 0.005151 ft
No. of Residuals .. 45
No. of Estimates .. 2