

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel
Project: 6468-07-1950
Location: Turkey Point COL
Test Date: 5/15/2008
Test Well: OW-809 U

AQUIFER DATA

Saturated Thickness: 25.52 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: OW-809 U

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

Initial Displacement: 6.358 ft
Static Water Column Height: 25.52 ft
Casing Radius: 0.083 ft
Well Radius: 0.25 ft
Well Skin Radius: 0.25 ft
Screen Length: 14.4 ft
Total Well Penetration Depth: 27. ft

No. of Observations: 37

Observation Data			
<u>Time (sec)</u>	<u>Displacement (ft)</u>	<u>Time (sec)</u>	<u>Displacement (ft)</u>
0.	6.358	52.98	0.007
1.56	0.603	57.78	0.005
3.24	0.439	63.18	0.01
5.04	0.127	67.98	0.008
6.901	0.015	73.98	0.012
8.941	-0.008	79.98	0.013
11.04	-0.003	85.98	0.011
13.26	0.	92.58	0.011
15.66	-0.001	99.78	0.009
18.18	-0.004	107.6	0.008
20.82	0.004	115.4	0.009
23.64	0.	123.8	0.013
26.64	0.003	132.8	0.011
29.82	0.002	142.4	0.01
33.18	0.	152.	0.009
36.78	0.002	162.8	0.009
40.38	0.006	174.2	0.014
44.58	0.004	186.2	0.033
48.78	0.002		

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Springer-Gelhar
ln(Re/rw): 3.504

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	91.2	ft/day
Le	0.1	ft

$K = 0.03217$ cm/sec

$T = K*b = 2327.4$ ft²/day (25.03 sq. cm/sec)

Le = 0.1 ft

Solution is critically damped when $C(D) = 1$.

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	<u>Std. Error</u>	<u>Approx. C.I.</u>	<u>t-Ratio</u>	
K	91.2	54.45	+/- 110.5	1.675	ft/day
Le	0.1	16.1	+/- 32.69	0.006211	ft

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

t-ratio = estimate/std. error

No estimation window

$K = 0.03217$ cm/sec

$T = K*b = 2327.4$ ft²/day (25.03 sq. cm/sec)

Le = 0.1 ft

Solution is critically damped when $C(D) = 1$.

Parameter Correlations

	<u>K</u>	<u>Le</u>
K	1.00	-1.00
Le	-1.00	1.00

Residual Statistics

for weighted residuals

Sum of Squares... 0.1672 ft²
Variance 0.004777 ft²
Std. Deviation 0.06912 ft
Mean 0.01778 ft
No. of Residuals .. 37
No. of Estimates .. 2