

Data Set: Z:\GW Data Steward Working Area\APT and Slug Test Files\pos-2_Slug.aqt

Date: 08/25/16

Time: 14:14:13

PROJECT INFORMATION

Company: SFWMD

Location: Polk County

Test Well: POS-2

AQUIFER DATA

Saturated Thickness: 100. ft

Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: POS-2

X Location: 0. ft

Y Location: 0. ft

Initial Displacement: 6.5 ft

Static Water Column Height: 100. ft

Casing Radius: 0.33 ft

Well Radius: 0.33 ft

Well Skin Radius: 0.5 ft

Screen Length: 10. ft

Total Well Penetration Depth: 30. ft

No. of Observations: 111

Observation Data			
<u>Time (sec)</u>	<u>Displacement (ft)</u>	<u>Time (sec)</u>	<u>Displacement (ft)</u>
0.7	6.251	96.8	1.677
1.3	6.187	102.4	1.625
2.	6.122	108.4	1.578
2.6	6.058	114.7	1.531
3.3	5.967	121.4	1.492
4.	5.924	128.5	1.453
4.6	5.834	136.	1.423
5.3	5.791	144.	1.384
5.9	5.713	152.4	1.35
6.6	5.623	161.3	1.324
7.3	5.55	170.8	1.298
7.9	5.506	180.8	1.273
8.6	5.425	190.8	1.251
9.2	5.347	200.8	1.23
9.9	5.274	210.8	1.208
10.6	5.205	220.8	1.191
11.2	5.128	230.8	1.169
11.9	5.046	240.8	1.122
12.5	4.964	250.8	1.092
13.2	4.887	260.8	1.092

<u>Time (sec)</u>	<u>Displacement (ft)</u>	<u>Time (sec)</u>	<u>Displacement (ft)</u>
13.9	4.805	270.8	1.071
14.6	4.723	280.8	1.053
15.3	4.646	290.8	1.032
16.1	4.542	300.8	1.01
16.9	4.478	310.8	0.989
17.8	4.396	320.8	0.963
18.8	4.306	330.8	0.929
19.8	4.194	340.8	0.89
20.8	4.129	350.8	0.847
21.9	4.039	360.8	0.804
23.1	3.948	370.8	0.757
24.4	3.862	380.8	0.718
25.7	3.768	390.8	0.679
27.1	3.673	400.8	0.636
28.6	3.578	410.8	0.602
30.2	3.453	420.8	0.567
31.9	3.389	430.8	0.529
33.7	3.264	440.8	0.494
35.6	3.187	450.8	0.464
37.5	3.092	460.8	0.43
39.6	2.989	470.8	0.395
41.9	2.881	480.8	0.365
44.3	2.774	490.8	0.331
46.8	2.649	500.8	0.301
49.4	2.541	510.8	0.267
52.3	2.447	520.8	0.236
55.2	2.361	530.8	0.206
58.4	2.279	540.8	0.176
61.8	2.193	550.8	0.146
65.3	2.116	560.8	0.12
69.1	2.042	570.8	0.086
73.	1.969	580.8	0.06
77.3	1.905	590.8	0.021
81.7	1.845	600.8	0.004
86.5	1.784	610.8	0.
91.5	1.724		

SOLUTION

Slug Test
 Aquifer Model: Unconfined
 Solution Method: KGS Model w/skin

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
Kr	22.84	ft/day
Ss	1.0E-5	ft ⁻¹
Kz/Kr	1.	
Kr'	300.9	ft/day
Ss'	0.001	ft ⁻¹

Kz/Kr' 1.

K = 0.008057 cm/sec

T = K*b = 2283.9 ft²/day (24.56 sq. cm/sec)