Appendix F

Slug Test Analysis (Bouwer-Rice Method) for MW-0001A Using Partial Data Set

Data Set: G:\COMMON\SGANDHI\BOEING\BOEING~1\BMW01A.AQT
Title: Test # 2 Boeing
Date: 10/17/02
Time: 12:30:35

AQUIFER DATA

Saturated Thickness: 7 ft
Anisotropy Ratio (Kz/Kr): 1

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW0001A

X Location: 0 ft
Y Location: 0 ft

Observation Data

Time (sec)	Displacement (ft)
0.	0.192
1.	0.114
2.	0.101
3.	0.097
4.	0.103
5.	0.092
6.	0.078
7.	0.084
8.	0.086
9.	0.086
10.	0.088
11.	0.086
12.	0.084
13.	0.082
14.	0.08
15.	0.078
16.	0.078
17.	0.076
18.	0.08
19.	0.08
20.	0.08
21.	0.08
22.	0.08
23.	0.078
24.	0.08
25.	0.08
26.	0.078
27.	0.078
28.	0.08
29.	0.08
30.	0.082

31.	0.082
32.	0.082
33.	0.084
34.	0.082
35.	0.08
36.	0.082
37.	0.082
38.	0.08
39.	0.08
40.	0.082
41.	0.08
42.	0.08
43.	0.082
44.	0.082
45.	0.086
46.	0.086
47.	0.091
48.	0.089
49.	0.088
50.	0.088
51.	0.088
52.	0.091
53.	0.088
54.	0.088
55.	0.088
56.	0.086
57.	0.097
58.	0.038
59.	0.042
60.	0.042
61.	0.046
62.	0.046
63.	0.048
64.	0.048
65.	0.048
66.	0.048
67.	0.05
68.	0.052
69.	0.05
70.	0.05
71.	0.052
72.	0.05
73.	0.052
74.	0.052
75.	0.052
76.	0.052
77.	0.05
78.	0.05
79.	0.052
80.	0.05
81.	0.051
82.	0.053

83.	0.065
84.	0.063
85.	0.063
86.	0.042
87.	0.044
88.	0.048
89.	0.048
90.	0.05
91.	0.05
92.	0.053
93.	0.053
94.	0.053
95.	0.053
96.	0.053
97.	0.053
98.	0.054
99.	0.053
100.	0.053
101.	0.053
102.	0.053
103.	0.053
104.	0.059
105.	0.059
106.	0.059
107.	0.061
108.	0.067
109.	0.067
110.	0.065
111.	0.065
112.	0.063
113.	0.068
114.	0.023
115.	0.027
116.	0.067
117.	0.016
118.	0.031
119.	0.034
120.	0.036
121.	0.036
122.	0.038
123.	0.038
124.	0.038
125.	0.038
126.	0.038
127.	0.038
128.	0.038
129.	0.04
130.	0.04
131.	0.04
132.	0.04
133.	0.044
134.	0.046

135.	0.046
136.	0.002
137.	0.031
138.	0.038
139.	0.04
140.	0.04
141.	0.044
142.	0.048
143.	0.038
144.	0.038
145.	0.033
146.	0.034
147.	0.004
148.	0.014
149.	0.029
150.	0.033
151.	0.034
152.	0.036
153.	0.04
154.	0.046
155.	0.048
156.	0.05
157.	0.005
158.	0.033
159.	0.034
160.	0.036
161.	0.036
162.	0.034
163.	0.034
164.	0.034
165.	0.034
166.	0.038
167.	0.038
168.	0.04
169.	0.04
170.	0.038
171.	0.04
172.	0.04
173.	0.04
174.	0.04
175.	0.04
176.	0.038
177.	0.038
178.	0.04
179.	0.04
180.	0.04
181.	0.04
182.	0.04
183.	0.04
184.	0.042
185.	0.055
186.	0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0001203	ft/sec
y0	0.09889	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0001203	6.439E-06	ft/sec
y0	0.09889	0.002613	ft

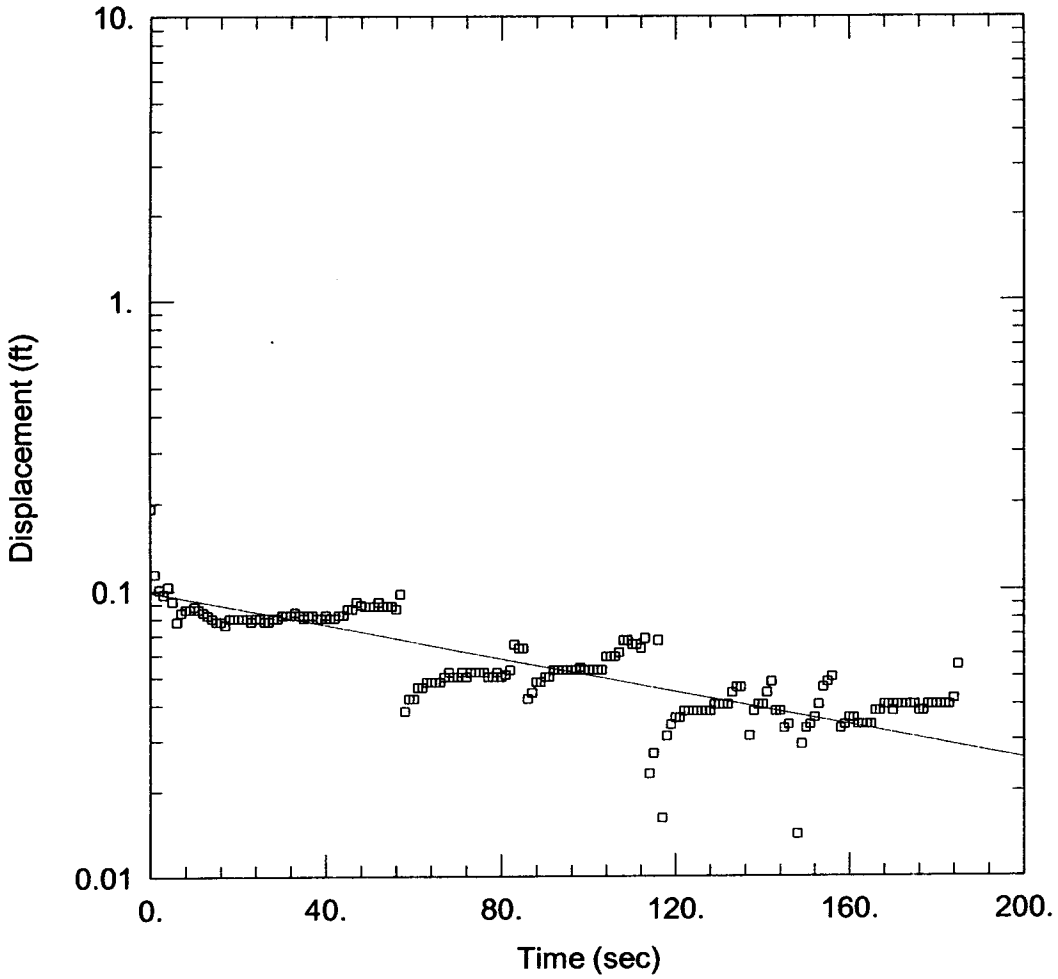
Parameter Correlations

	K	y0
K	1.00	0.78
y0	0.78	1.00

Residual Statistics

for weighted residuals

Sum of Squares ... 0.03464 ft^2
Variance..... 0.0001872 ft^2
Std. Deviation..... 0.01368 ft
Mean ..... 0.0001282 ft
No. of Residuals ... 187
No. of Estimates ... 2



TEST # 2 BOEING

Data Set: G:\COMMON\SGANDHI\BOEING\BOEING~1\BMW01A.AQT
Date: 10/17/02 Time: 12:30:47

AQUIFER DATA

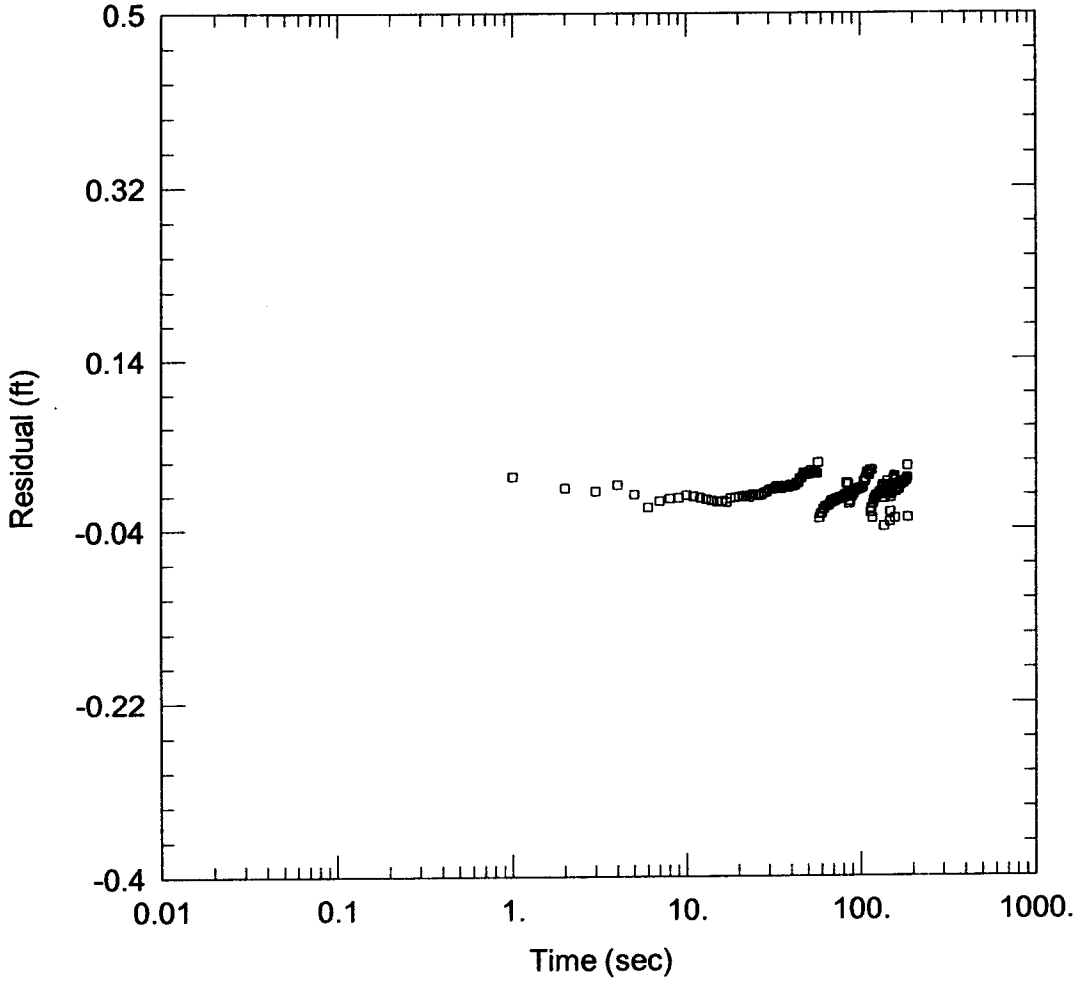
Saturated Thickness: 7. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 0.192 ft
Casing Radius: 0.167 ft
Screen Length: 10. ft
Water Column Height: 7. ft
Wellbore Radius: 0.833 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001203 ft/sec
y0 = 0.09889 ft



TEST # 2 BOEING

Data Set: G:\COMMON\SGANDHI\BOEING\BOEING~1\BMW01A.AQT
Date: 10/17/02 Time: 12:30:56

AQUIFER DATA

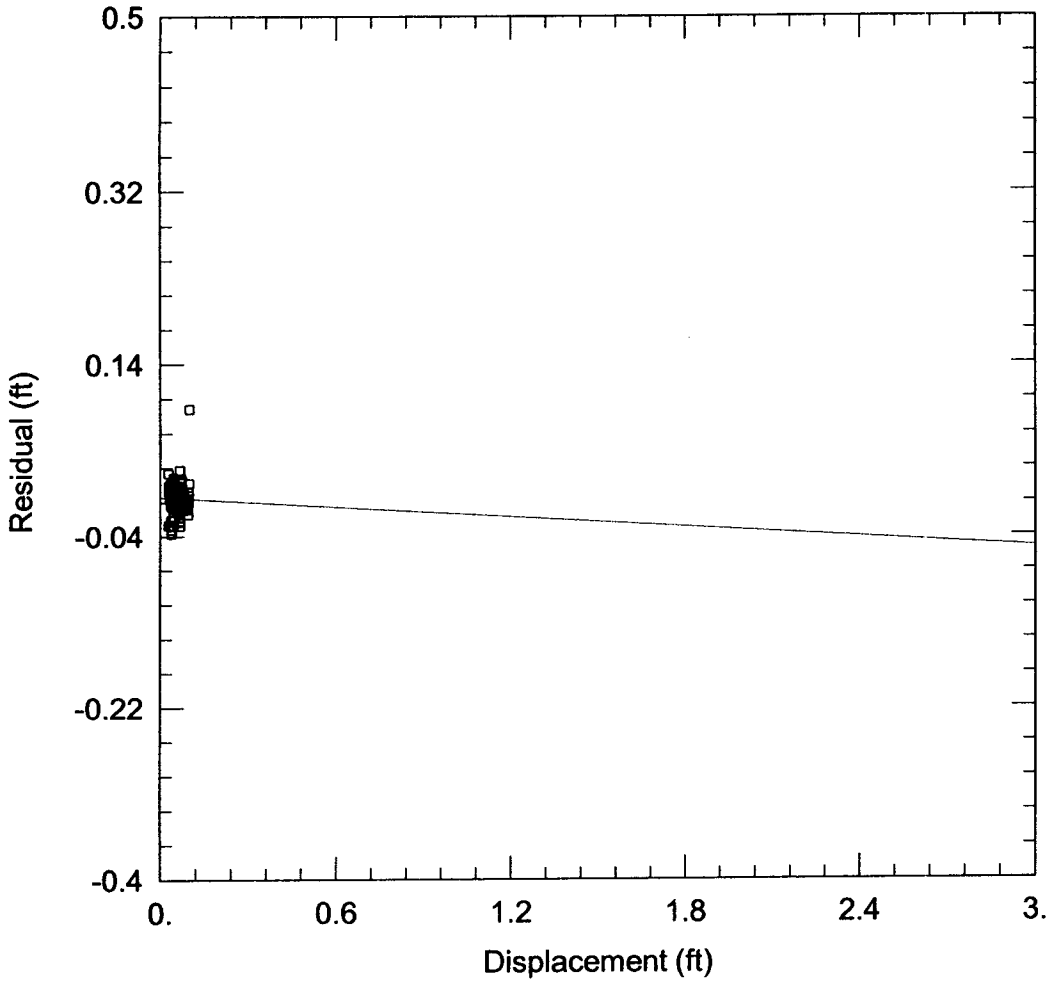
Saturated Thickness: 7. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 0.192 ft
Casing Radius: 0.167 ft
Screen Length: 10. ft
Water Column Height: 7. ft
Wellbore Radius: 0.833 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001203 ft/sec
y0 = 0.09889 ft



TEST # 2 BOEING

Data Set: G:\COMMON\SGANDHI\BOEING\BOEING~1\BMW01A.AQT
Date: 10/17/02 Time: 12:31:02

AQUIFER DATA

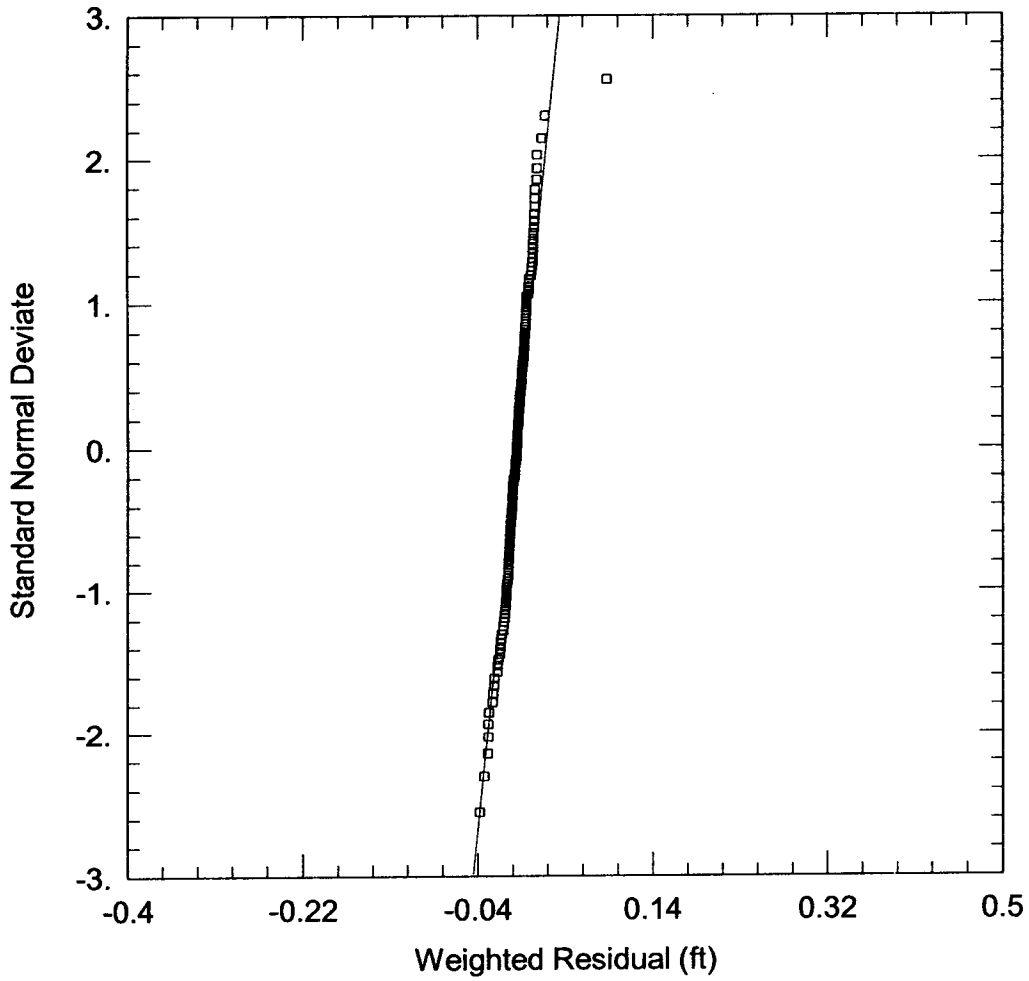
Saturated Thickness: 7. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 0.192 ft
Casing Radius: 0.167 ft
Screen Length: 10. ft
Water Column Height: 7. ft
Wellbore Radius: 0.833 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001203 ft/sec
y0 = 0.09889 ft



TEST # 2 BOEING

Data Set: G:\COMMON\SGANDHI\BOEING\BOEING~1\BMW01A.AQT
Date: 10/17/02 Time: 12:31:06

AQUIFER DATA

Saturated Thickness: 7. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 0.192 ft
Casing Radius: 0.167 ft
Screen Length: 10. ft
Water Column Height: 7. ft
Wellbore Radius: 0.833 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001203 ft/sec
y0 = 0.09889 ft

Diagnostic Statistics

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0001203	6.439E-06	ft/sec
y0	0.09889	0.002613	ft

Parameter Correlations

	K	y0
K	1.00	0.78
y0	0.78	1.00

Residual Statistics

for weighted residuals

Sum of Squares ... 0.03464 ft^2
Variance..... 0.0001872 ft^2
Std. Deviation..... 0.01368 ft
Mean ..... 0.0001282 ft
No. of Residuals ... 187
No. of Estimates ... 2

Errors Detected in Data Set

No errors detected!

Options Available

Choose a solution to perform forward solution or curve matching analyses.