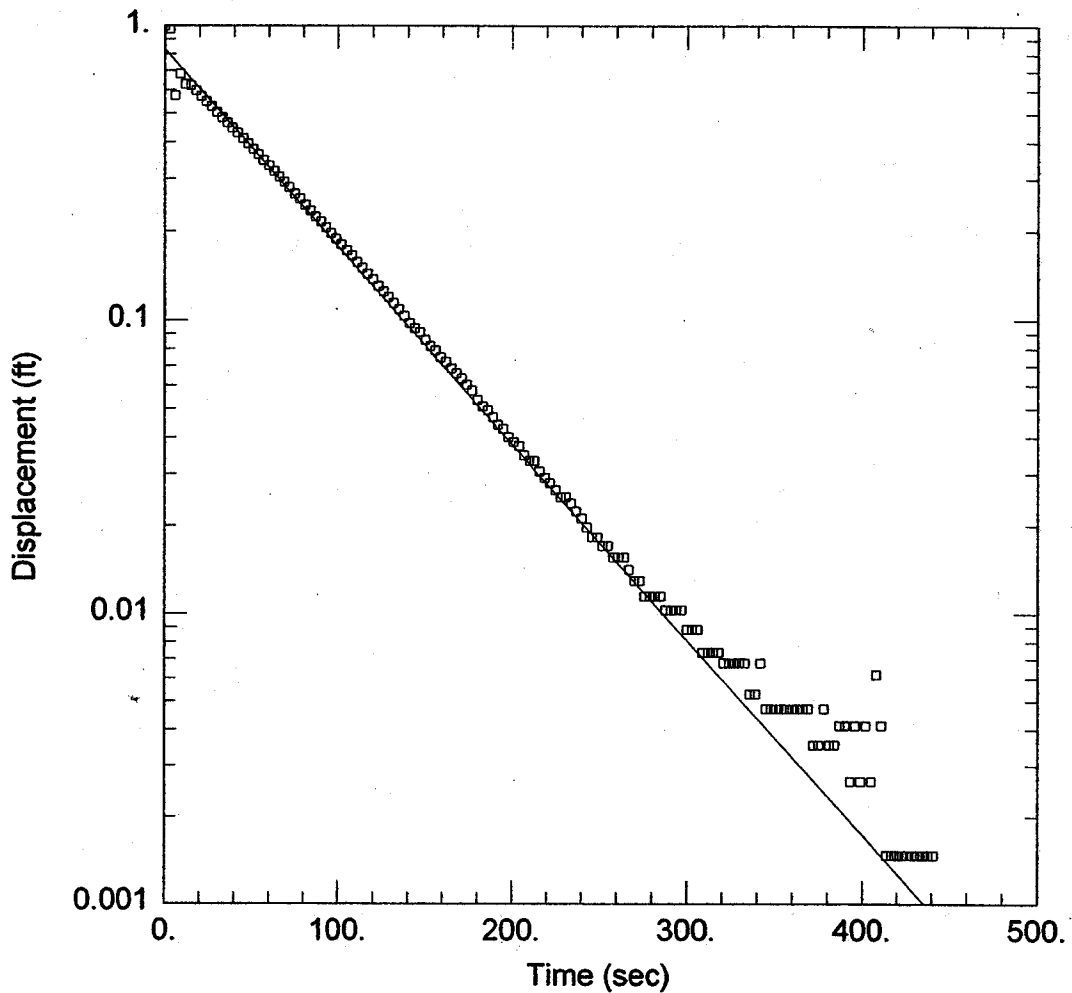


*Appendix D*  
*Aquifer Testing*



MW-33B

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-33B.AQT

Date: 07/27/00

Time: 09:08:40

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-33B

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio ( $K_z/K_r$ ): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 65. ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.164 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

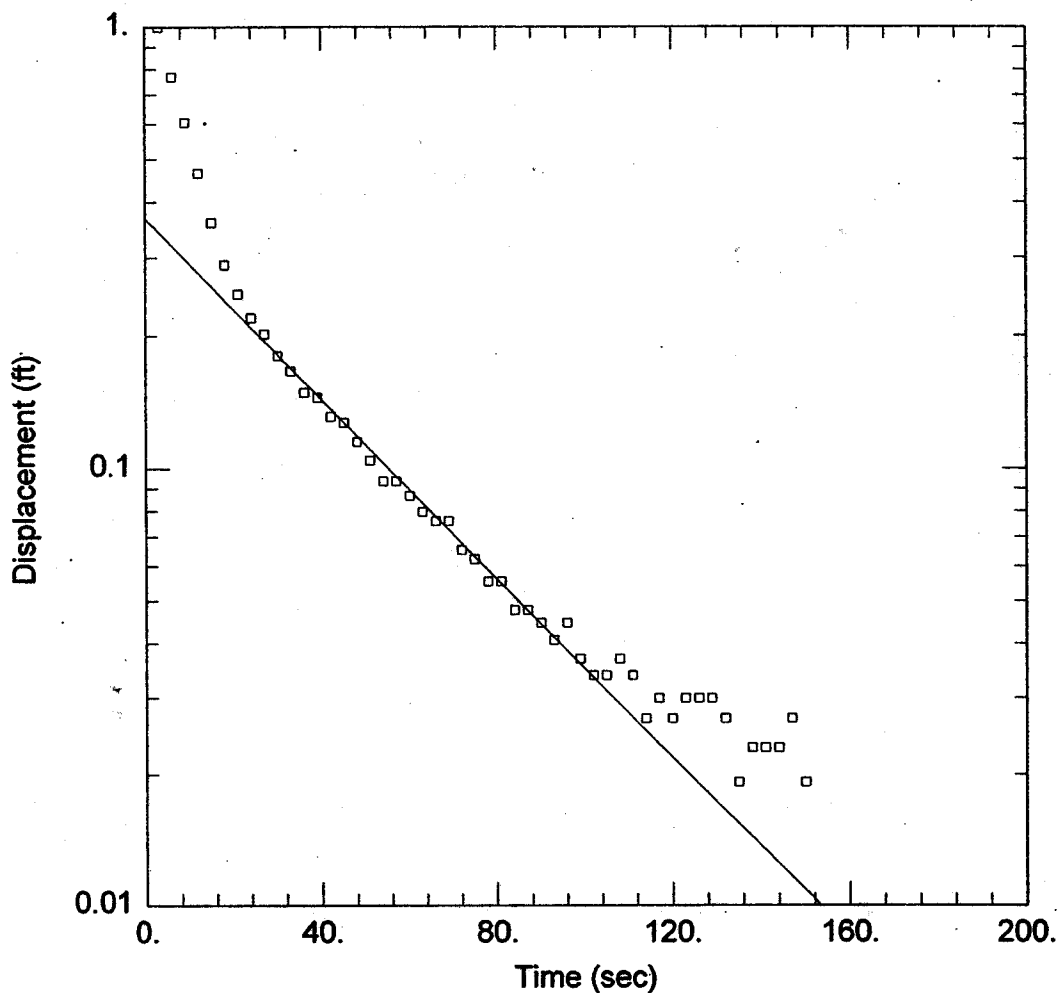
SOLUTION

Aquifer Model: Confined

$K = 0.002435$  cm/sec

Solution Method: Bouwer-Rice

$y_0 = 0.8302$  ft



MW-37

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-37.AQT

Date: 07/27/00

Time: 09:10:50

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-37

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 7.35 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 10. ft

Gravel Pack Porosity: 0.3

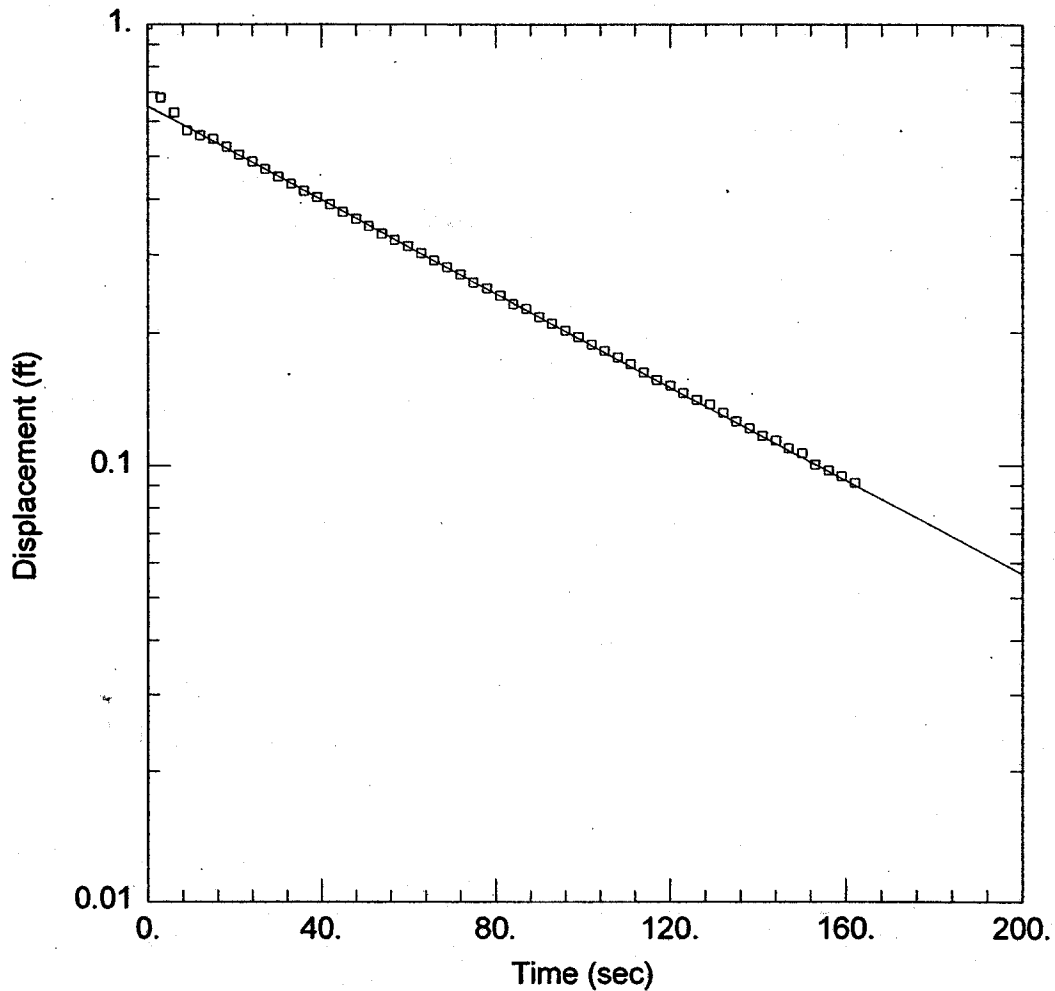
SOLUTION

Aquifer Model: Confined

K = 0.002278 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.3676 ft



MW-37M

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-37M.AQT

Date: 07/27/00

Time: 09:11:24

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-37M

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 31.95 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

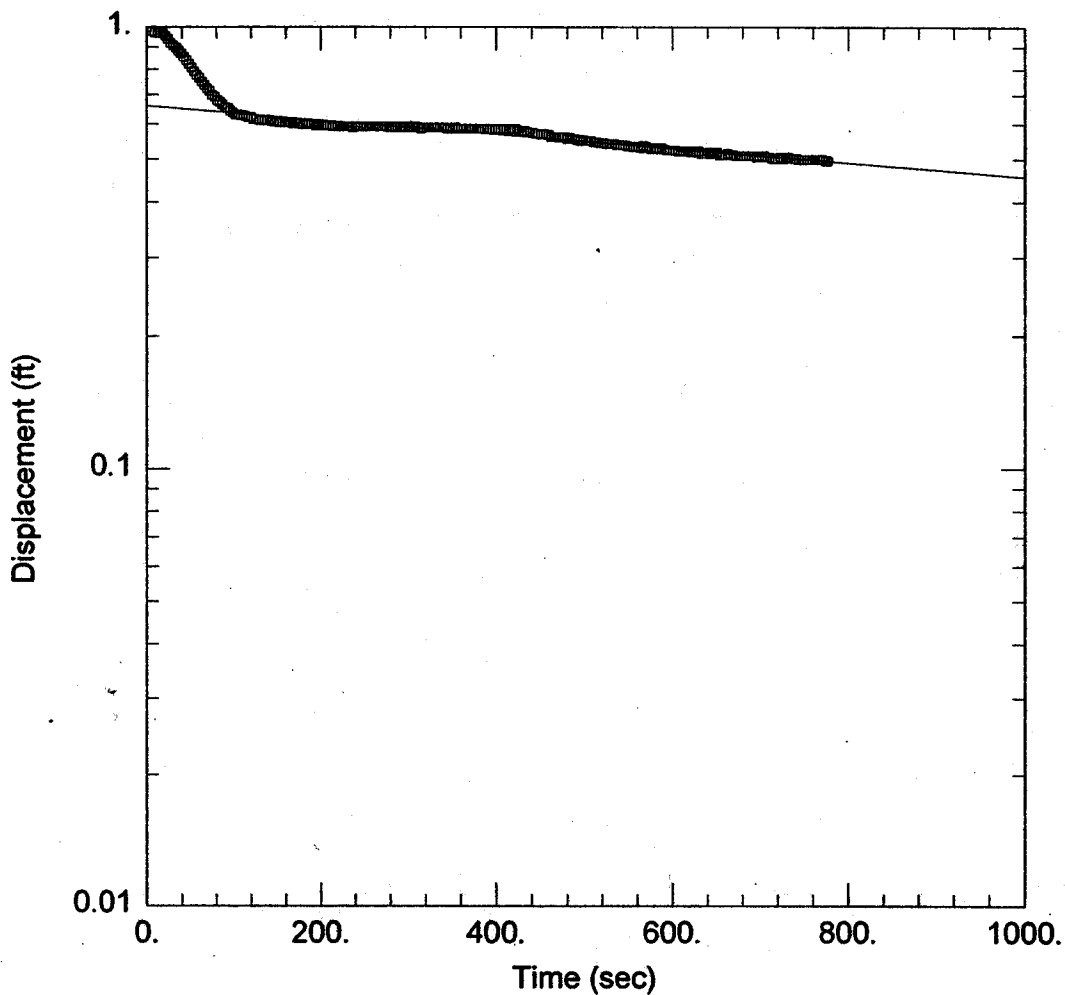
SOLUTION

Aquifer Model: Confined

K = 0.003217 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.6506 ft



MW-43S

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW43S.AQT

Date: 07/27/00

Time: 09:11:58

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON-WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-43S

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 6.79 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

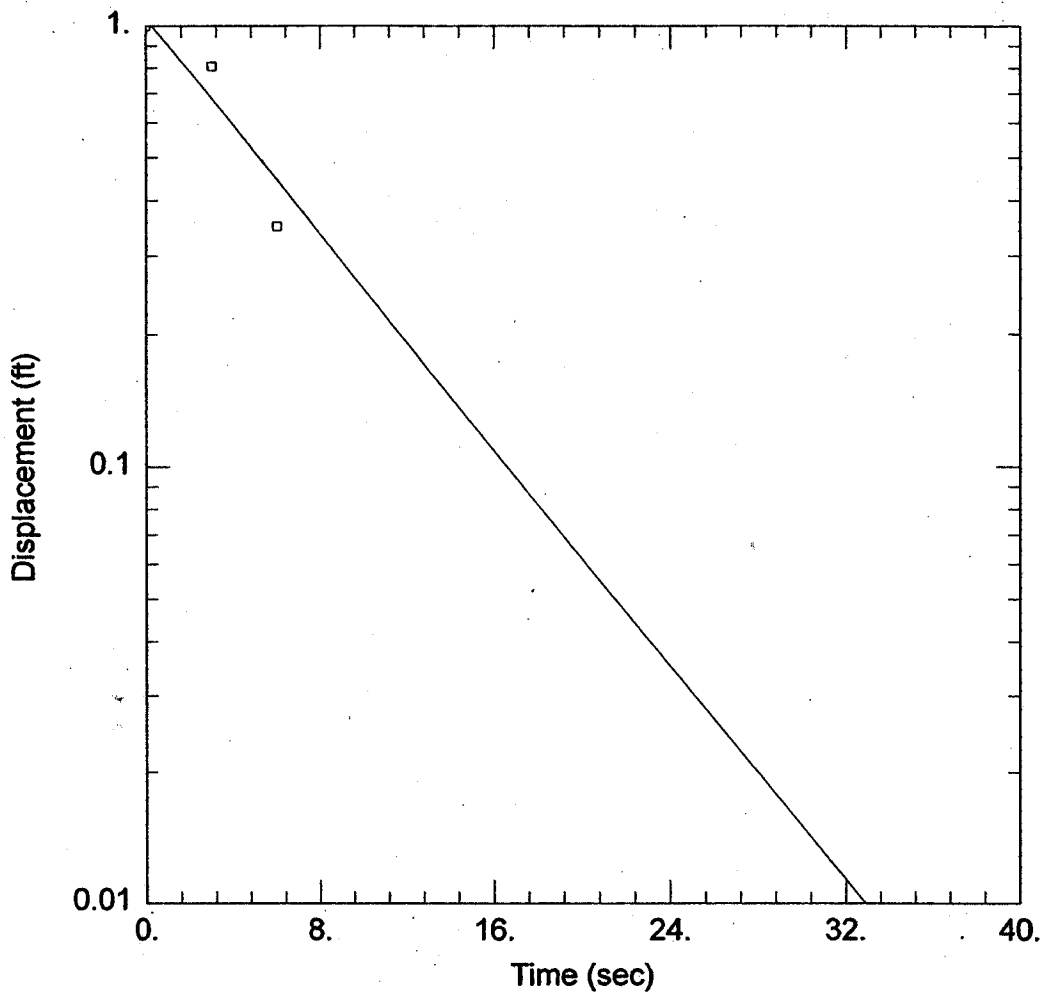
SOLUTION

Aquifer Model: Confined

$K = 7.245E-05$  cm/sec

Solution Method: Bower-Rice

$y_0 = 0.6605$  ft



MW-43D

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-43D.AQT

Date: 07/27/00

Time: 09:52:40

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON-WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-43D

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 40.15 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

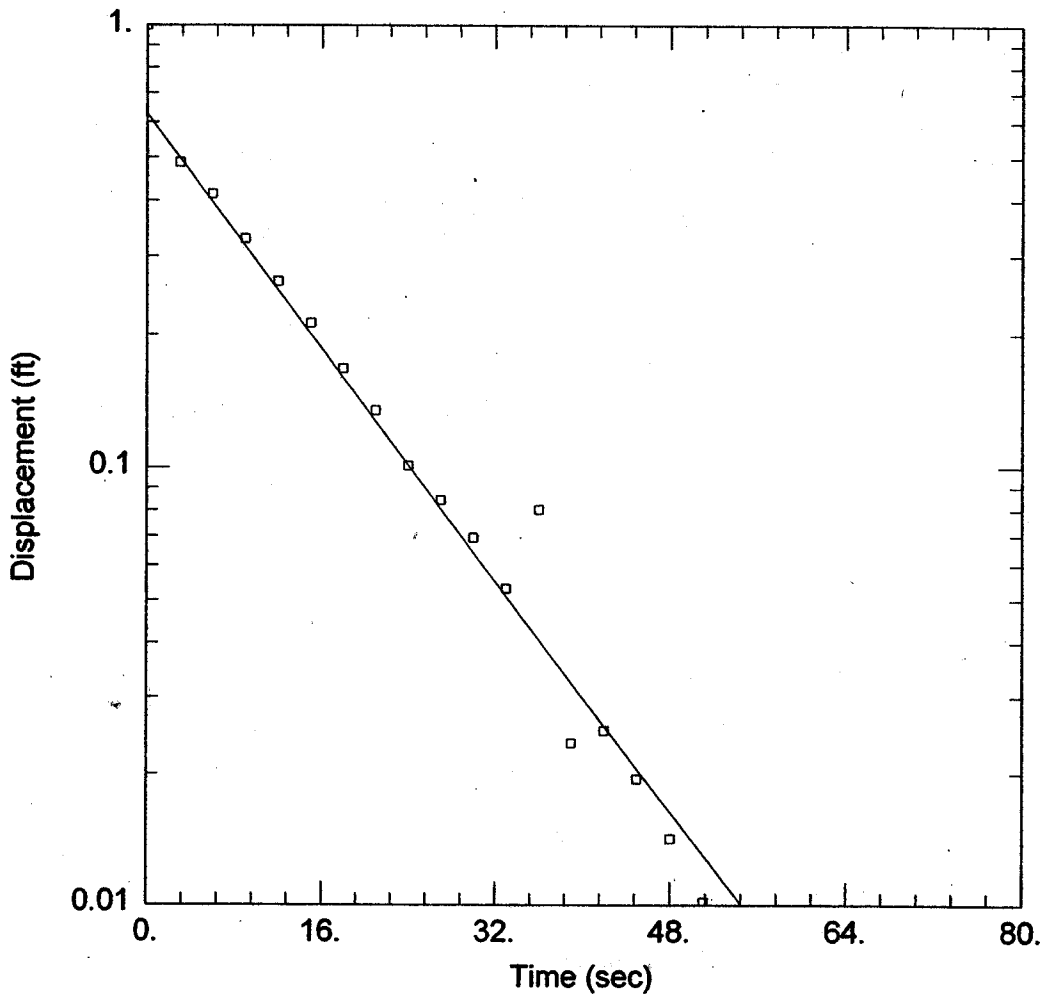
SOLUTION

Aquifer Model: Confined

K = 0.0385 cm/sec

Solution Method: Bower-Rice

y0 = 1.041 ft



MW-45S

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-45S.AQT

Date: 07/27/00

Time: 09:56:42

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-45S

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 21.25 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

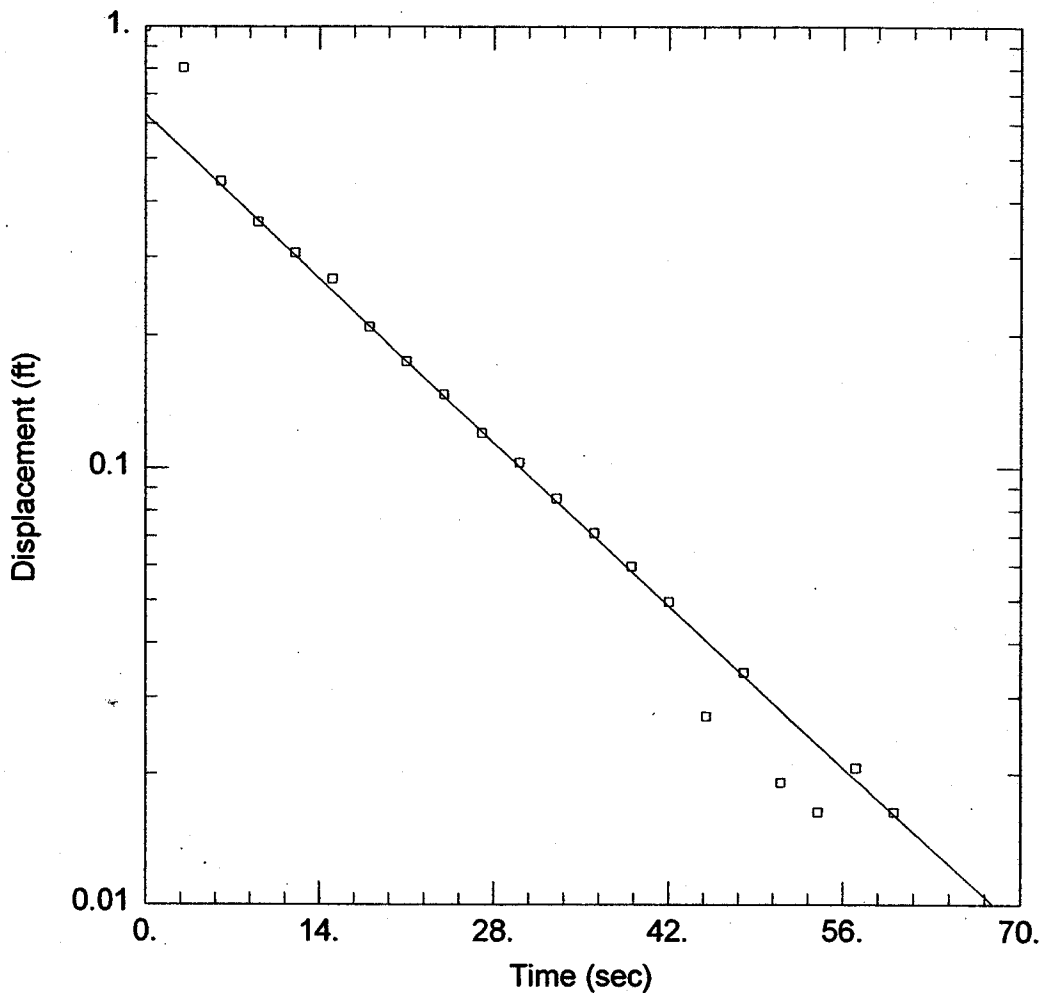
SOLUTION

Aquifer Model: Confined

K = 0.01875 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.6267 ft



**MW-45M**

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-45M.AQT

Date: 07/27/00

Time: 09:59:34

**PROJECT INFORMATION**

Company: ERM

Client: RAYTHEON WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-45M

Test Date: 4/25/00

**AQUIFER DATA**

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

**WELL DATA**

Initial Displacement: 2.64 ft

Water Column Height: 32.07 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

**SOLUTION**

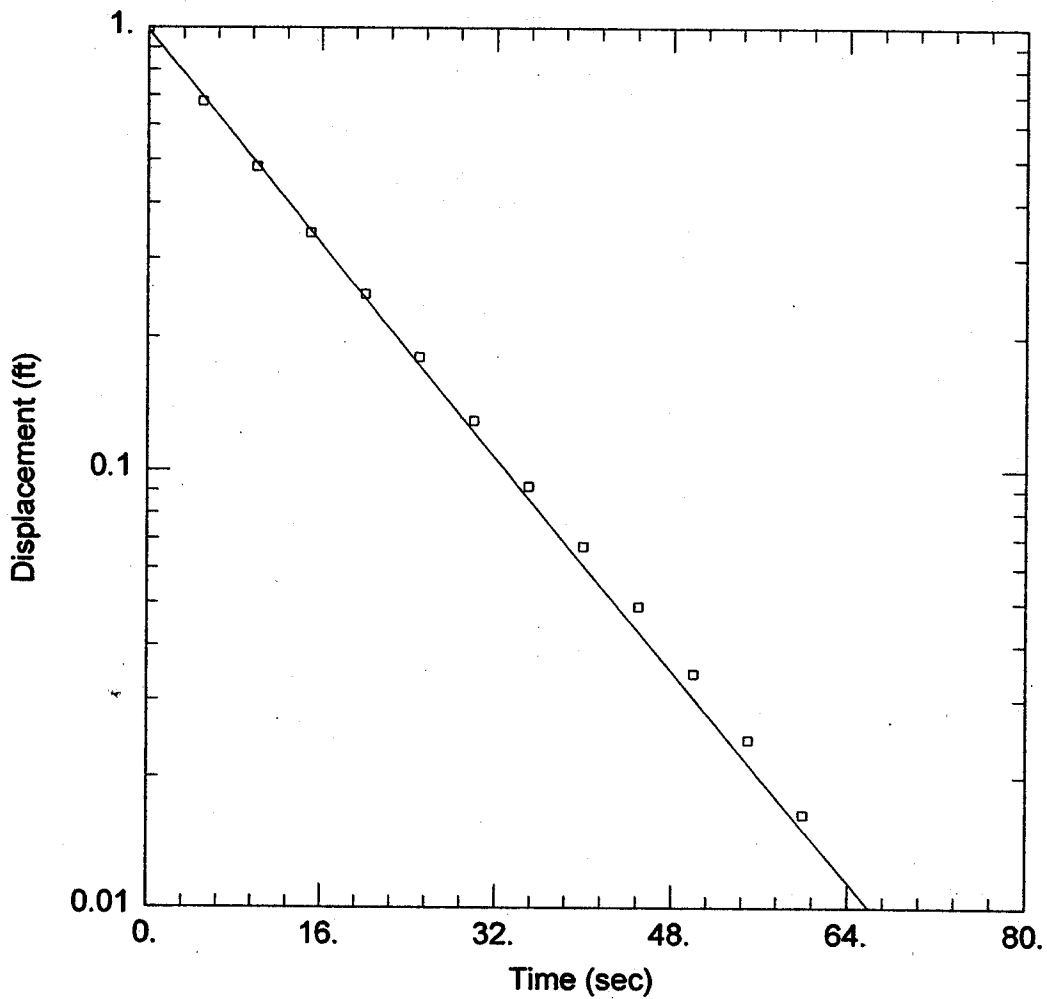
Aquifer Model: Confined

K = 0.0161 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.6291 ft





**MW-45M WAYLAND**

Data Set: G:\PROJECTS\143~1.XX\143~1.48-JOBFIL~1\SLUGTE~1\MW45M.AQT  
 Date: 07/27/00 Time: 09:36:01

**PROJECT INFORMATION**

Company: ERM  
 Client: Raytheon  
 Project: 143.48  
 Test Location: Wayland  
 Test Well: MW45M

**AQUIFER DATA**

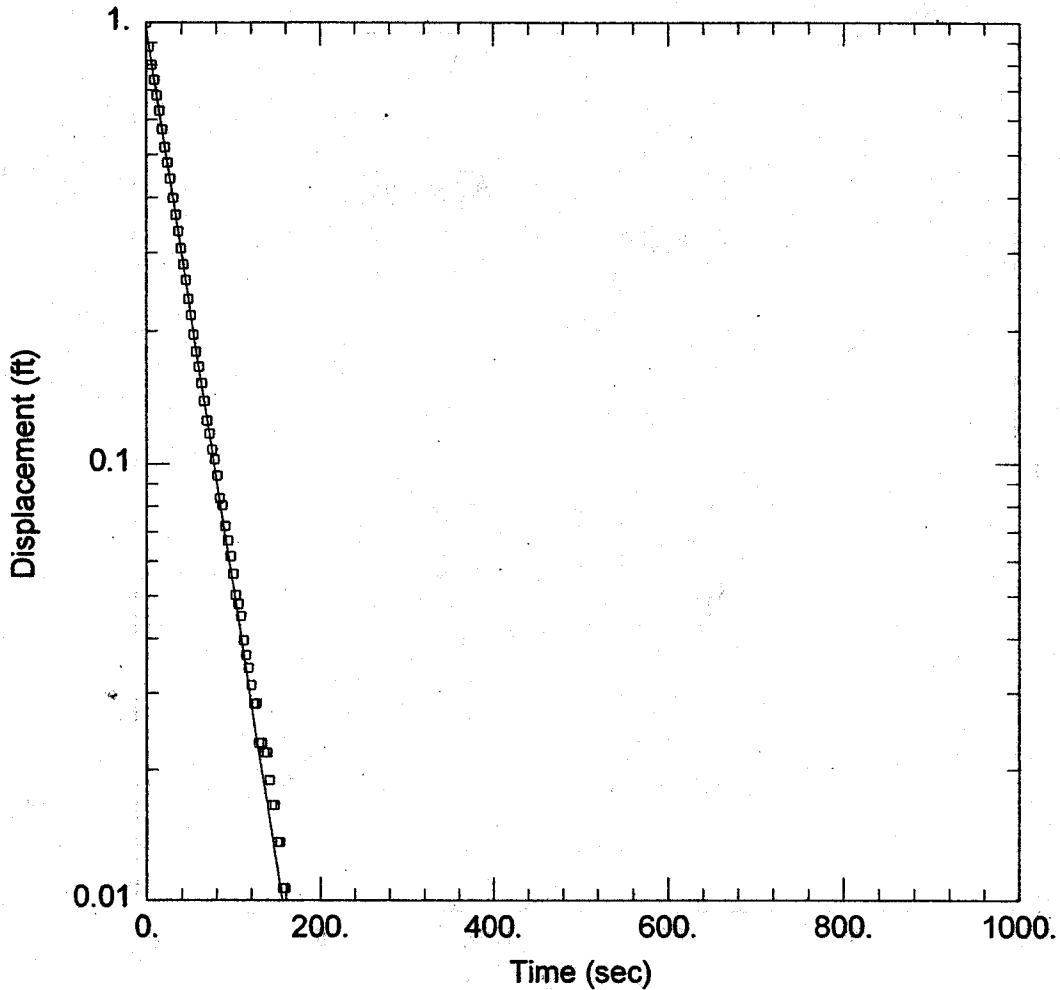
Saturated Thickness: 20. ft Anisotropy Ratio (Kz/Kr): 1.

**WELL DATA**

Initial Displacement: 2.15 ft Water Column Height: 29. ft  
 Casing Radius: 0.083 ft Wellbore Radius: 0.276 ft  
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

**SOLUTION**

Aquifer Model: Confined K = 0.01808 cm/sec  
 Solution Method: Bower-Rice y0 = 0.9853 ft



MW-46S

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-46S.AQT

Date: 07/27/00

Time: 09:32:36

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON

Project: 143.50

Test Location: WAYLAND

Test Well: MW-46S

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 11.49 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

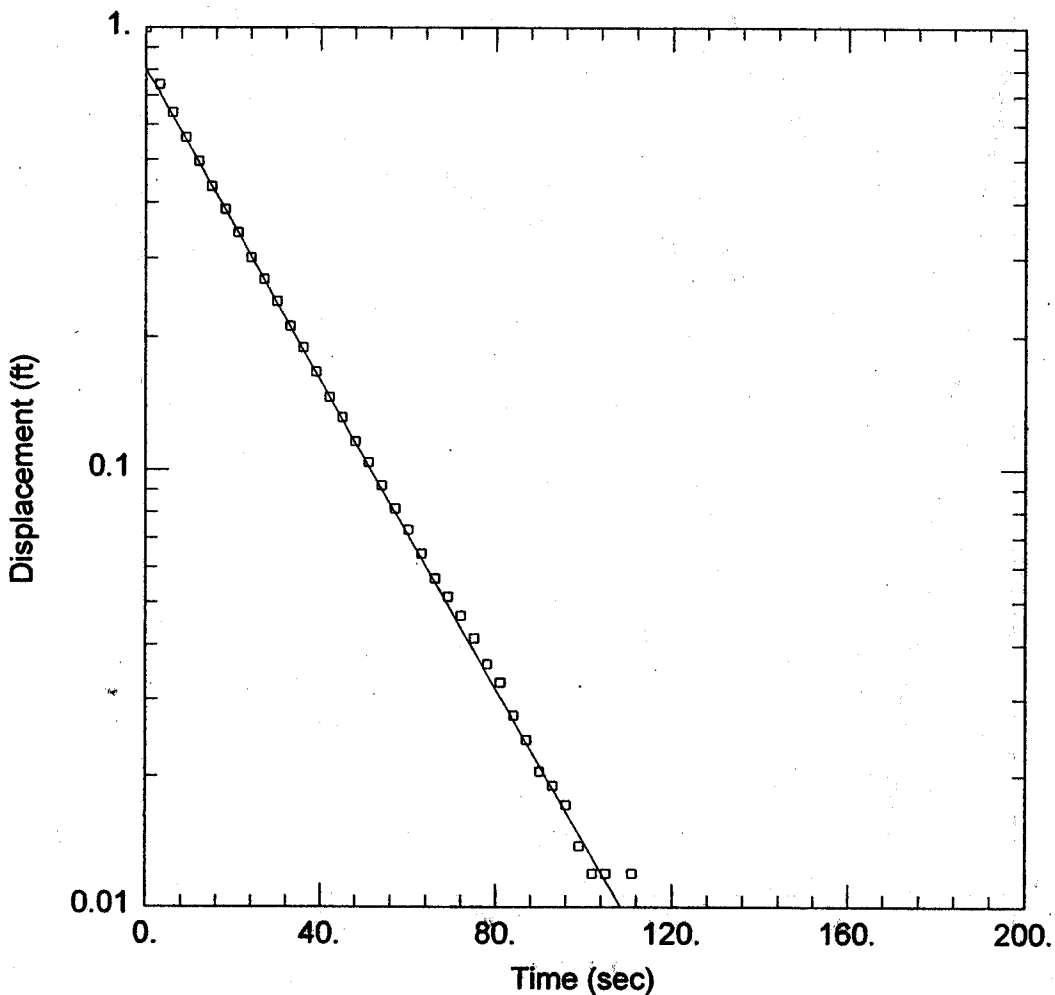
SOLUTION

Aquifer Model: Confined

K = 0.006472 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.9718 ft



MW-47S

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-47S.AQT

Date: 07/27/00

Time: 09:14:39

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-47S

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 20.15 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

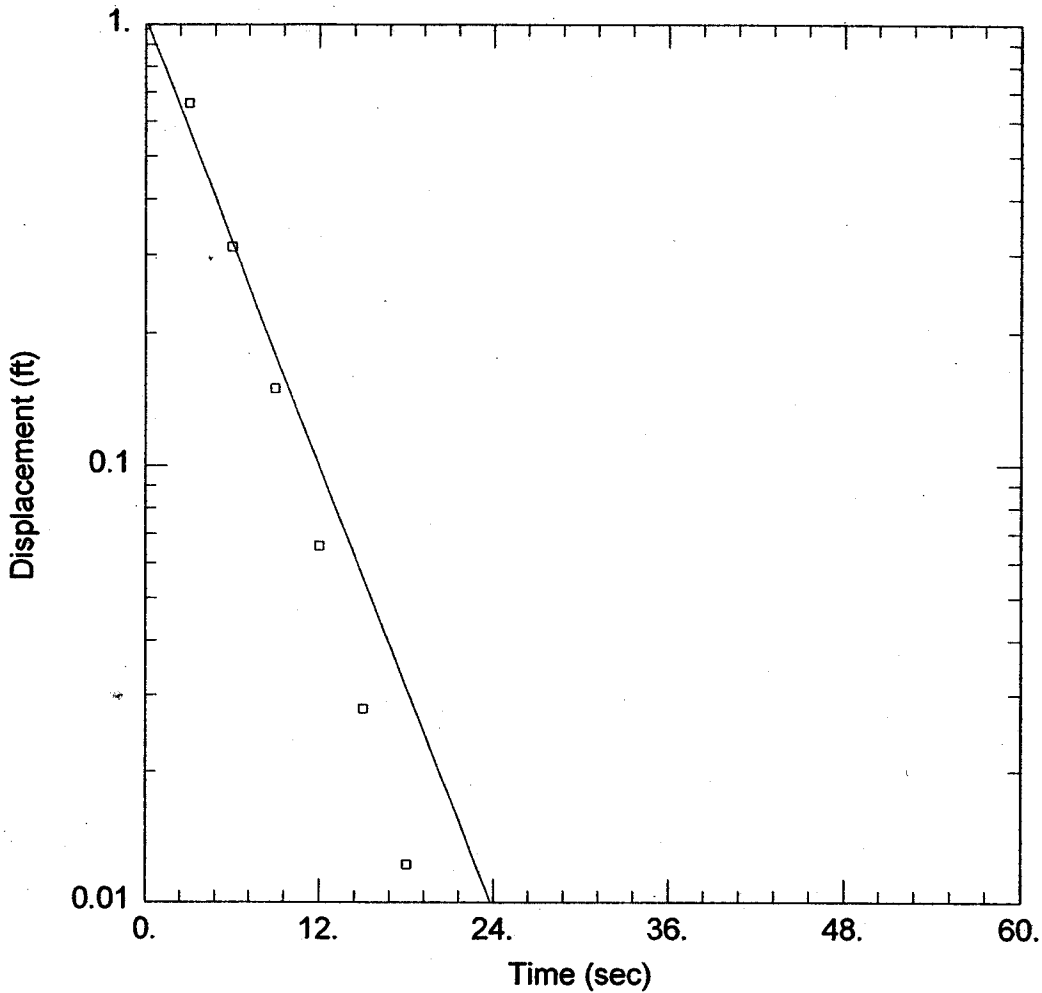
SOLUTION

Aquifer Model: Confined

K = 0.009883 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.8003 ft



MW-47D

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-47D.AQT

Date: 07/27/00

Time: 10:42:26

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-47D

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5 ft

Anisotropy Ratio (Kz/Kr): 1

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 56.83 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5 ft

Gravel Pack Porosity: 0.3

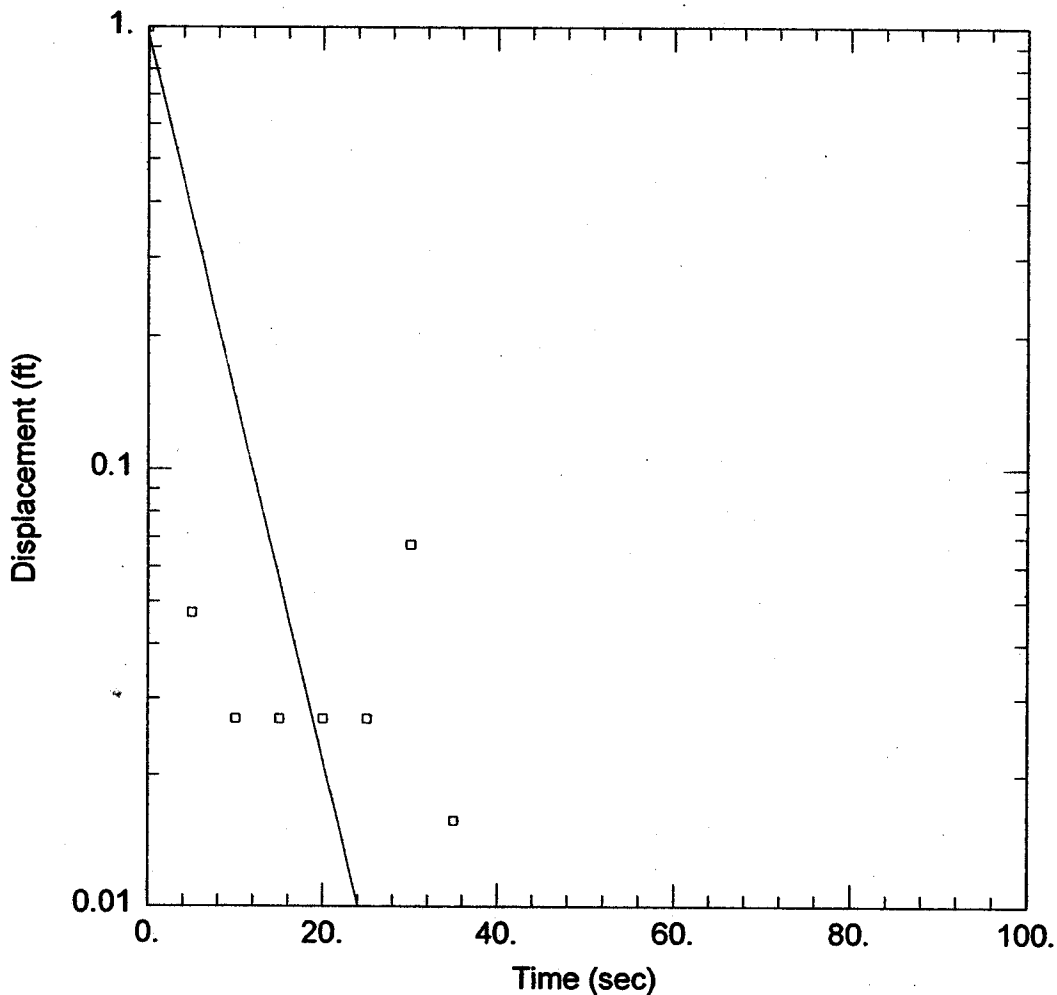
SOLUTION

Aquifer Model: Confined

K = 0.0557 cm/sec

Solution Method: Bouwer-Rice

y0 = 1.033 ft



**MW-33D WAYLAND**

Data Set: G:\PROJECTS\143~1.XX\143~1.48-JOBFIL~1\SLUGTE~1\MW33D.AQT

Date: 07/20/00

Time: 18:31:52

**PROJECT INFORMATION**

Company: ERM  
 Client: Raytheon-Wayland  
 Project: 143.48  
 Test Location: Wayland  
 Test Well: MW-33D  
 Test Date: 10/13/99

**AQUIFER DATA**

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

**WELL DATA**

Initial Displacement: 2.15 ft

Water Column Height: 40.83 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

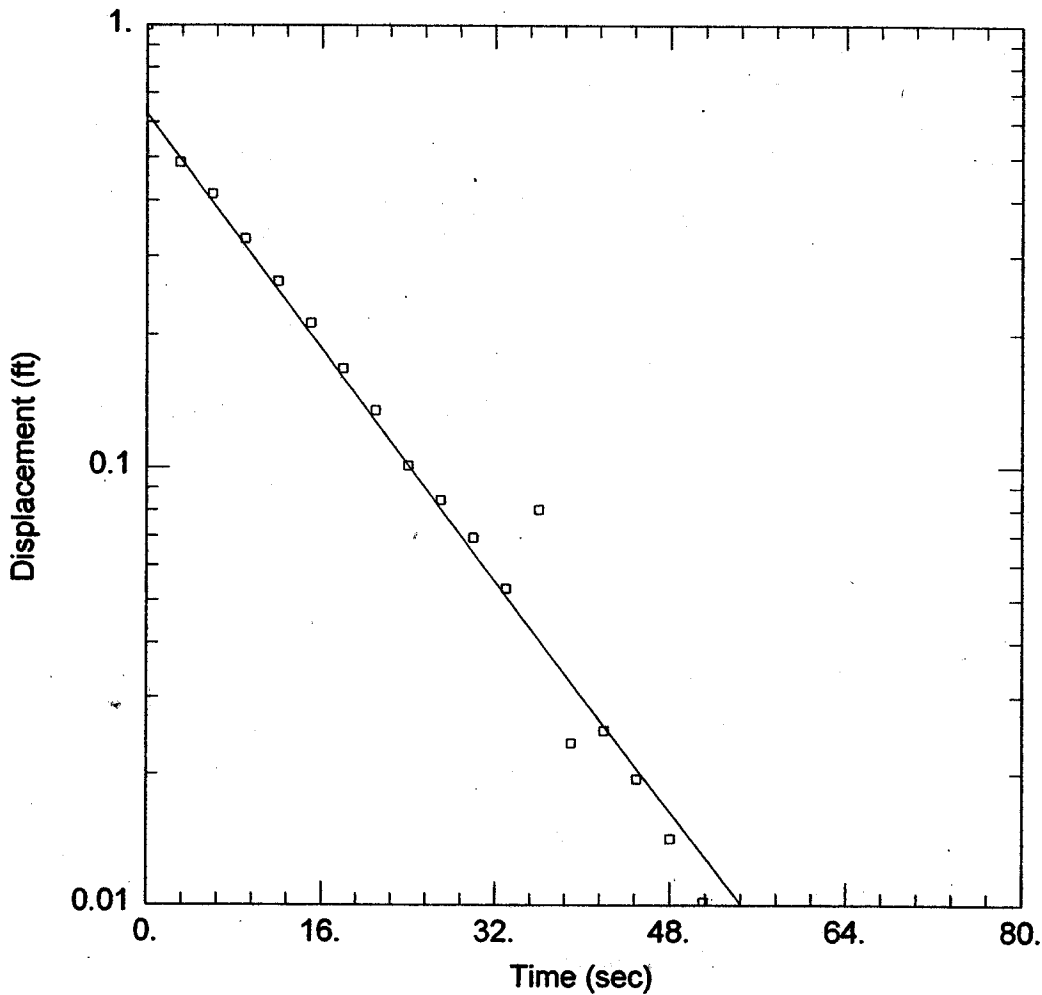
**SOLUTION**

Aquifer Model: Confined

K = 0.05185 cm/sec

Solution Method: Bower-Rice

y0 = 0.9607 ft



MW-45S

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-45S.AQT

Date: 07/27/00

Time: 09:56:42

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-45S

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 21.25 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

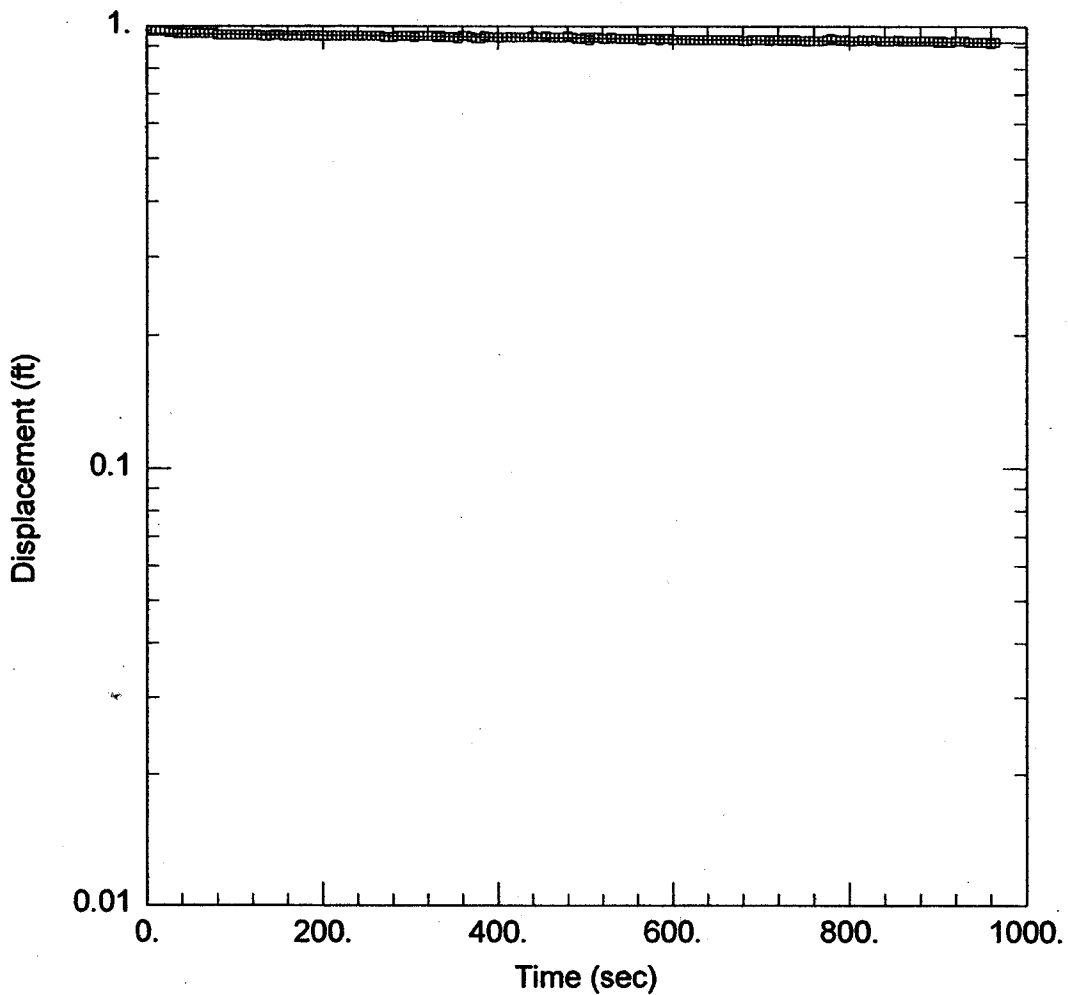
SOLUTION

Aquifer Model: Confined

K = 0.01875 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.6267 ft



MW-45D WAYLAND

Data Set: G:\PROJECTS\143~1.XX~143~1.48~JOBFIL~1\SLUGTE~1\MW45D.AQT

Date: 07/20/00

Time: 18:33:42

PROJECT INFORMATION

Company: ERM

Client: Raytheon

Project: 143.48

Test Location: Wayland

Test Well: MW-45D

Test Date: 10/14/99

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.15 ft

Water Column Height: 10. ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

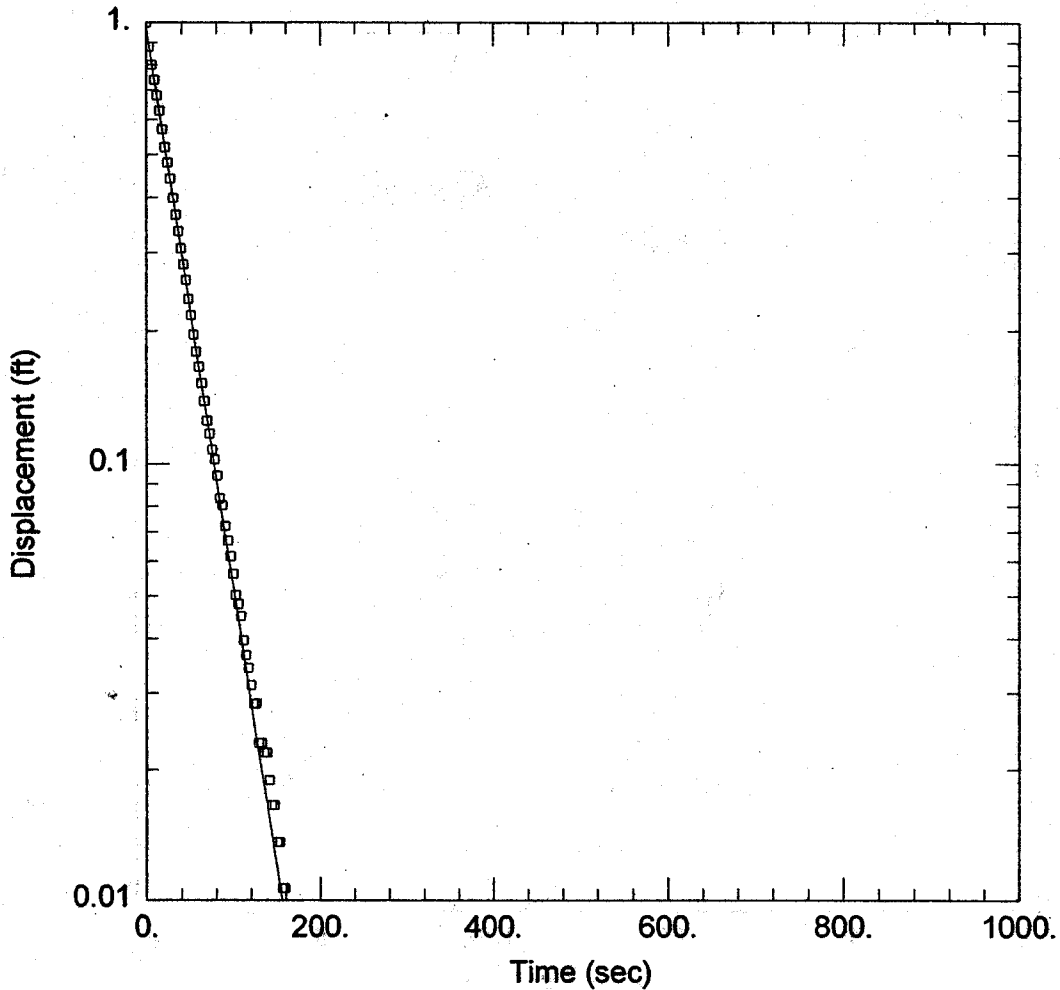
SOLUTION

Aquifer Model: Confined

K = 1.021E-05 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.9633 ft



MW-46S

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-46S.AQT

Date: 07/27/00

Time: 09:32:36

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON

Project: 143.50

Test Location: WAYLAND

Test Well: MW-46S

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 11.49 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

SOLUTION

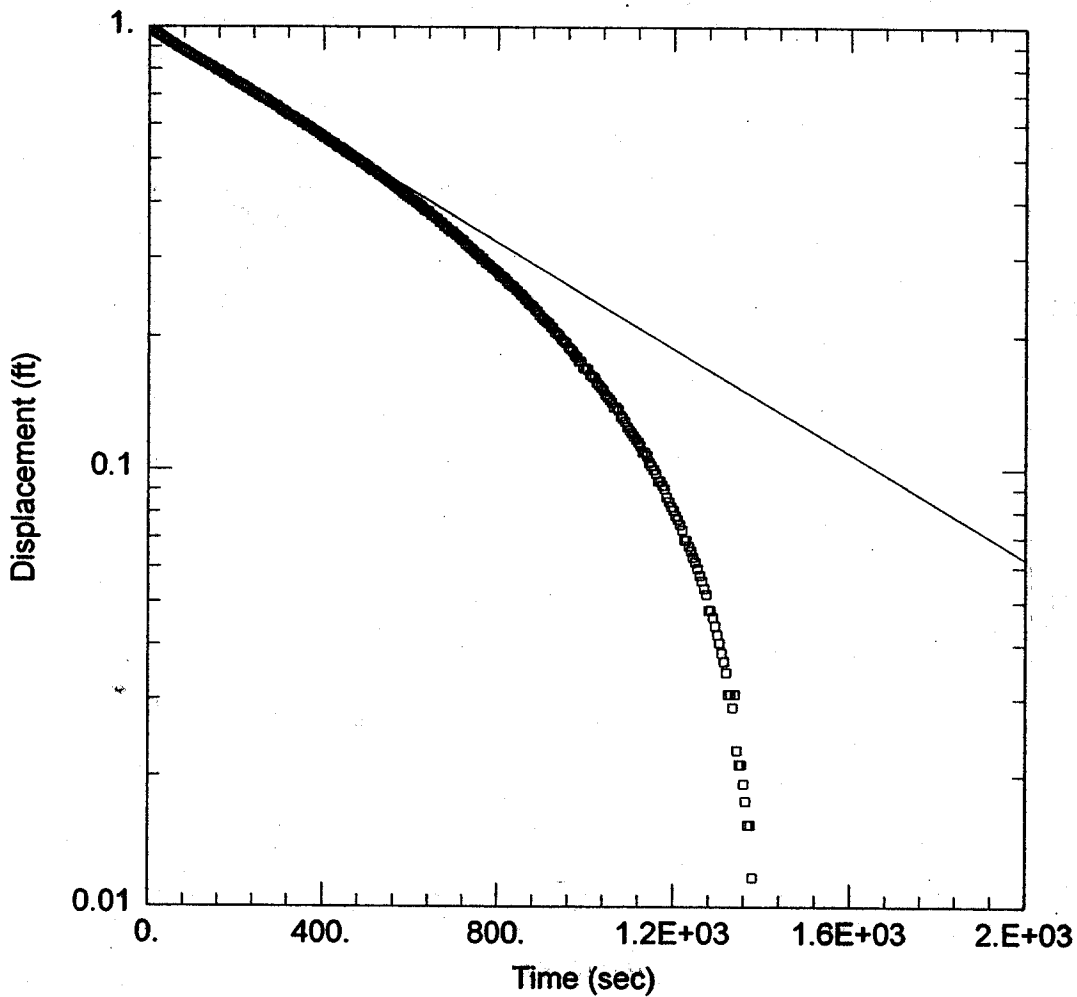
Aquifer Model: Confined

K = 0.006472 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.9718 ft





MW-46M WAYLAND MA

Data Set: G:\PROJECTS\143~1.XX-143~1.48-JOBFIL~1\SLUGTE~1\MW46M.AQT  
 Date: 07/20/00 Time: 18:44:16

PROJECT INFORMATION

Company: ERM  
 Client: Raytheon - Way  
 Project: 143.48  
 Test Well: MW46M  
 Test Date: 10/13/99

AQUIFER DATA

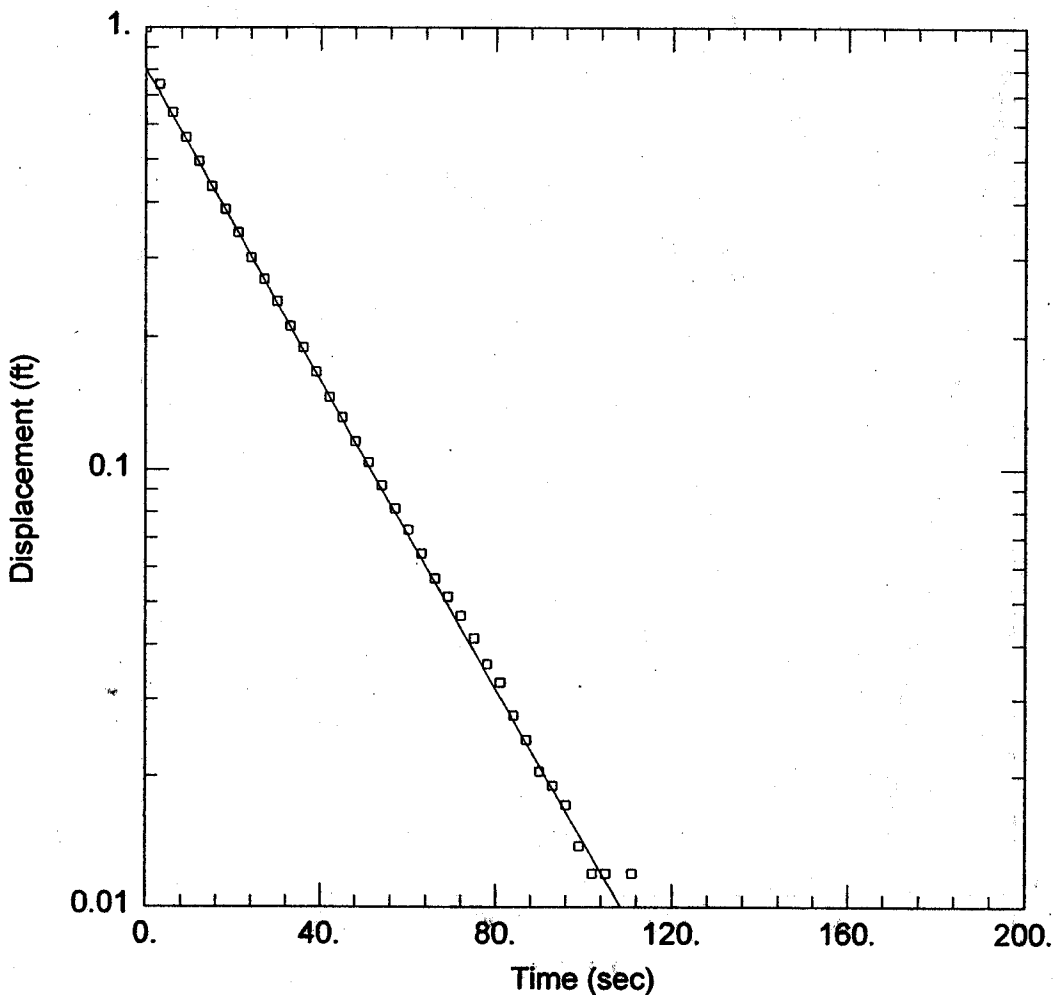
Saturated Thickness: 10. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.15 ft Water Column Height: 10. ft  
 Casing Radius: 0.083 ft Wellbore Radius: 0.276 ft  
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined K = 0.0002928 cm/sec  
 Solution Method: Bower-Rice y0 = 0.9723 ft



MW-47S

Data Set: C:\MYDOCU~1\WAYLAND\TEXTFI~1\MW-47S.AQT

Date: 07/27/00

Time: 09:14:39

PROJECT INFORMATION

Company: ERM

Client: RAYTHEON WAY

Project: 143.50

Test Location: WAYLAND

Test Well: MW-47S

Test Date: 4/25/00

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.64 ft

Water Column Height: 20.15 ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.276 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

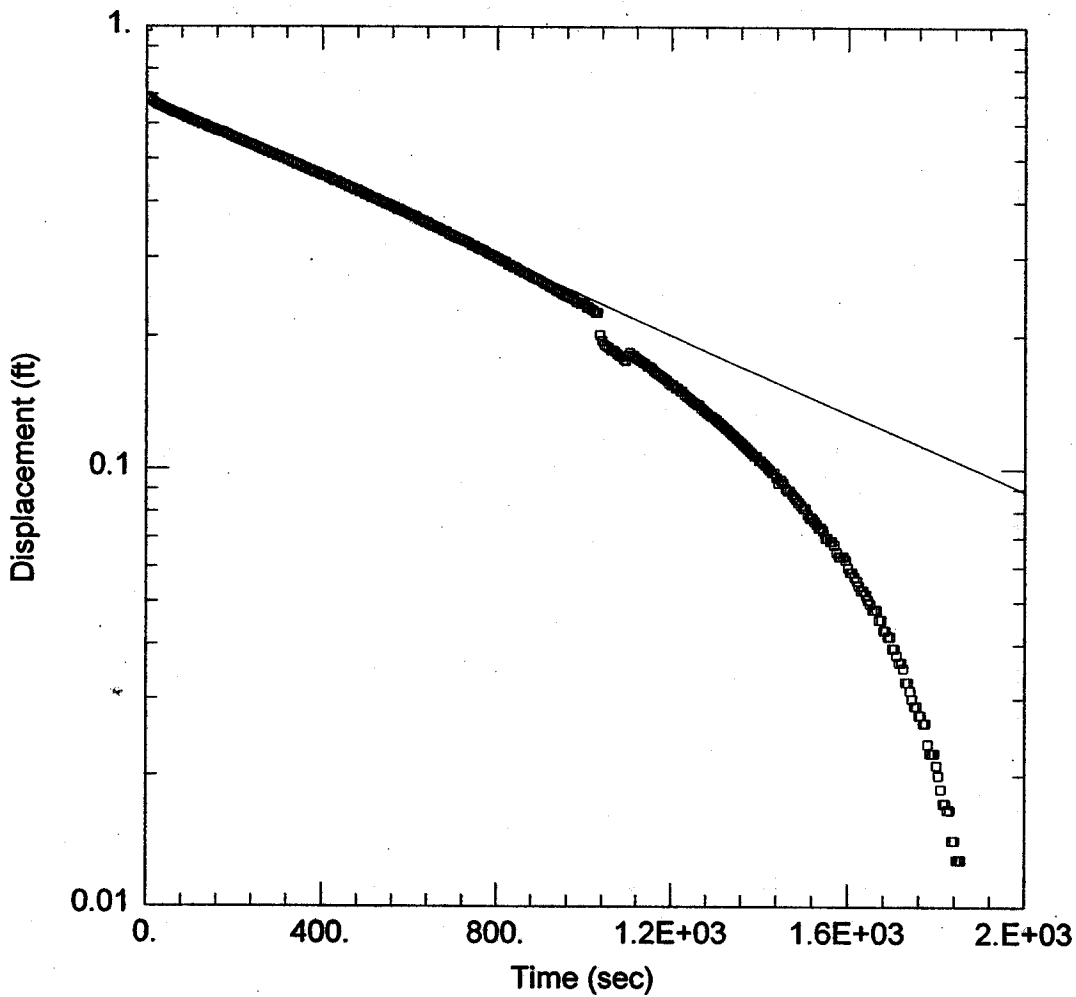
SOLUTION

Aquifer Model: Confined

K = 0.009883 cm/sec

Solution Method: Bouwer-Rice

y0 = 0.8003 ft



MW-47M WAYLAND

Data Set: G:\PROJECTS\143~1.XX-143~1.48-JOBFIL~1\SLUGTE~1\MW47M.AQT  
 Date: 07/20/00 Time: 18:37:23

PROJECT INFORMATION

Company: ERM  
 Project: 143.48  
 Test Location: Wayland  
 Test Well: MW-47M  
 Test Date: 10/14/99

AQUIFER DATA

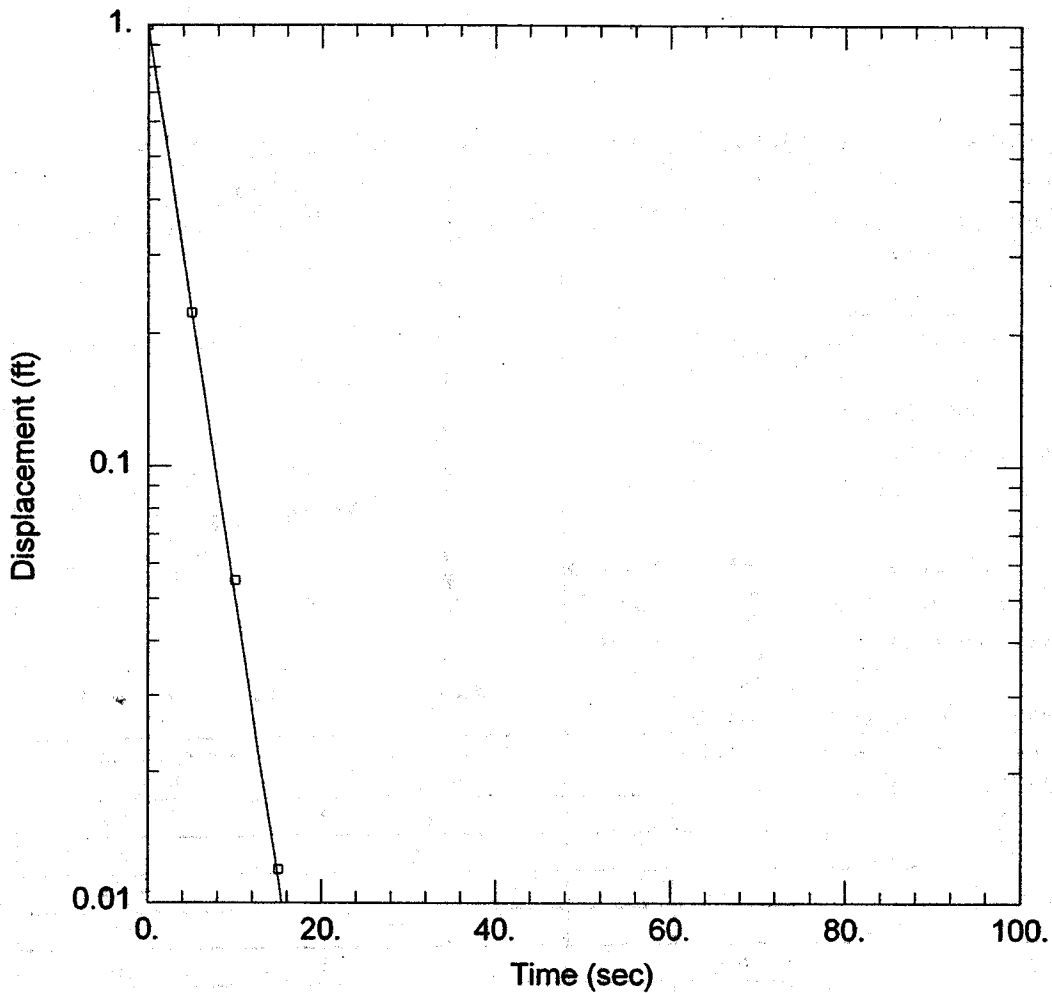
Saturated Thickness: 24. ft Anisotropy Ratio ( $K_z/K_r$ ): 1.

WELL DATA

Initial Displacement: 2.15 ft Water Column Height: 30. ft  
 Casing Radius: 0.083 ft Wellbore Radius: 0.276 ft  
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined  $K = 0.0002655$  cm/sec  
 Solution Method: Bouwer-Rice  $y_0 = 0.6798$  ft



MW-47D WAYLAND

Data Set: G:\PROJECTS\143~1.XX~143~1.48-JOBFIL~1\SLUGTE~1\MW47D.AQT  
 Date: 07/20/00 Time: 18:38:37

PROJECT INFORMATION

Company: ERM  
 Client: Raytheon  
 Project: 143.48  
 Test Location: Wayland  
 Test Well: MW-47D  
 Test Date: 10/14/99

AQUIFER DATA

Saturated Thickness: 10. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 2.15 ft Water Column Height: 53. ft  
 Casing Radius: 0.083 ft Wellbore Radius: 0.276 ft  
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined K = 0.08459 cm/sec  
 Solution Method: Bouwer-Rice y0 = 0.9998 ft

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

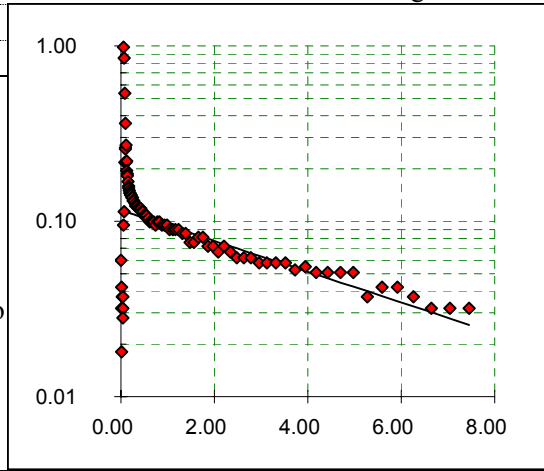
Client Name: Raytheon Systems

Identification: MW-32 Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	10.35 feet
Water Table Depth:	2.65 feet
Aquifer Thickness:	10.35 feet
Line Fit Starting No.:	40 Min 1 to
Line Fit Ending No.:	90 Max 95
Specify Output Units:	7 1 to 9
K(h):	8.05E-05 cm./sec.
Correlation Coefficient:	0.9703



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.01	2.71	0.06	-2.813	-2.156
2)	0.01	2.67	0.02	-4.017	-2.157
3)	0.02	2.69	0.04	-3.170	-2.158
4)	0.02	2.68	0.03	-3.442	-2.159
5)	0.03	2.68	0.03	-3.442	-2.160
6)	0.03	2.69	0.04	-3.297	-2.162
7)	0.04	2.68	0.03	-3.442	-2.163
8)	0.04	2.69	0.04	-3.297	-2.164
9)	0.05	2.68	0.03	-3.576	-2.165
10)	0.05	1.60	1.05	0.046	-2.166
11)	0.06	1.67	0.98	-0.017	-2.167
12)	0.06	2.75	0.10	-2.354	-2.168
13)	0.07	1.36	1.29	0.252	-2.169
14)	0.07	2.54	0.11	-2.180	-2.170
15)	0.08	1.80	0.85	-0.161	-2.171
16)	0.08	2.43	0.22	-1.528	-2.172
17)	0.09	2.12	0.54	-0.625	-2.173
18)	0.09	2.39	0.26	-1.336	-2.174
19)	0.10	2.29	0.36	-1.016	-2.175
20)	0.10	2.39	0.26	-1.355	-2.176
21)	0.11	2.38	0.27	-1.302	-2.177
22)	0.11	2.43	0.22	-1.528	-2.178
23)	0.12	2.43	0.22	-1.510	-2.179
24)	0.13	2.46	0.19	-1.640	-2.181
25)	0.13	2.46	0.19	-1.677	-2.182
26)	0.14	2.47	0.18	-1.704	-2.184
27)	0.15	2.48	0.17	-1.784	-2.186
28)	0.16	2.49	0.16	-1.839	-2.187
29)	0.17	2.50	0.16	-1.864	-2.189
30)	0.18	2.50	0.15	-1.897	-2.191
31)	0.19	2.51	0.15	-1.931	-2.193
32)	0.20	2.51	0.15	-1.931	-2.196
33)	0.21	2.51	0.14	-1.959	-2.198

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

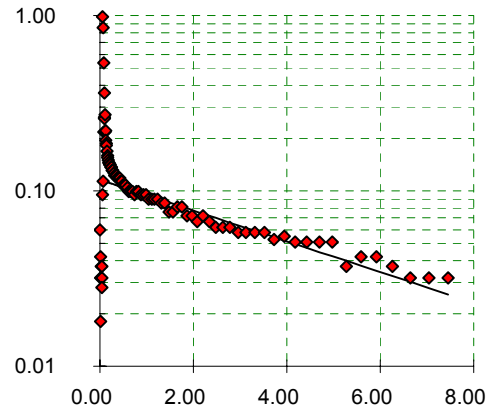
Client Name: Raytheon Systems

Identification: MW-32 Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	10.35 feet
Water Table Depth:	2.65 feet
Aquifer Thickness:	10.35 feet
Line Fit Starting No.:	40     Min 1 to
Line Fit Ending No.:	90     Max 95
Specify Output Units:	7     1 to 9
K(h):	8.05E-05 cm./sec.
Correlation Coefficient:	0.9703



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
34)	0.22	2.51	0.14	-1.959	-2.201
35)	0.24	2.51	0.14	-1.995	-2.203
36)	0.25	2.51	0.14	-1.995	-2.206
37)	0.26	2.52	0.13	-2.033	-2.209
38)	0.28	2.52	0.13	-2.033	-2.212
39)	0.30	2.52	0.13	-2.064	-2.216
40)	0.31	2.53	0.12	-2.104	-2.219
41)	0.33	2.53	0.12	-2.104	-2.223
42)	0.35	2.53	0.12	-2.104	-2.227
43)	0.37	2.53	0.12	-2.137	-2.231
44)	0.40	2.53	0.12	-2.137	-2.236
45)	0.42	2.53	0.12	-2.137	-2.240
46)	0.44	2.54	0.11	-2.180	-2.245
47)	0.47	2.54	0.11	-2.180	-2.251
48)	0.50	2.54	0.11	-2.226	-2.256
49)	0.52	2.54	0.11	-2.226	-2.262
50)	0.55	2.54	0.11	-2.226	-2.268
51)	0.59	2.55	0.10	-2.263	-2.274
52)	0.62	2.55	0.10	-2.313	-2.281
53)	0.66	2.55	0.10	-2.313	-2.289
54)	0.70	2.55	0.10	-2.313	-2.296
55)	0.74	2.56	0.09	-2.354	-2.305
56)	0.78	2.55	0.10	-2.313	-2.314
57)	0.83	2.55	0.10	-2.313	-2.323
58)	0.88	2.56	0.09	-2.354	-2.333
59)	0.93	2.56	0.09	-2.354	-2.343
60)	0.98	2.56	0.09	-2.354	-2.354
61)	1.04	2.56	0.09	-2.408	-2.366
62)	1.10	2.56	0.09	-2.408	-2.379
63)	1.17	2.56	0.09	-2.408	-2.392
64)	1.24	2.56	0.09	-2.408	-2.406
65)	1.31	2.57	0.09	-2.465	-2.421
66)	1.39	2.57	0.09	-2.465	-2.437
67)	1.47	2.57	0.08	-2.577	-2.454
68)	1.56	2.57	0.08	-2.577	-2.471
69)	1.65	2.57	0.08	-2.513	-2.490
70)	1.75	2.57	0.08	-2.513	-2.510
71)	1.86	2.58	0.07	-2.631	-2.532

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

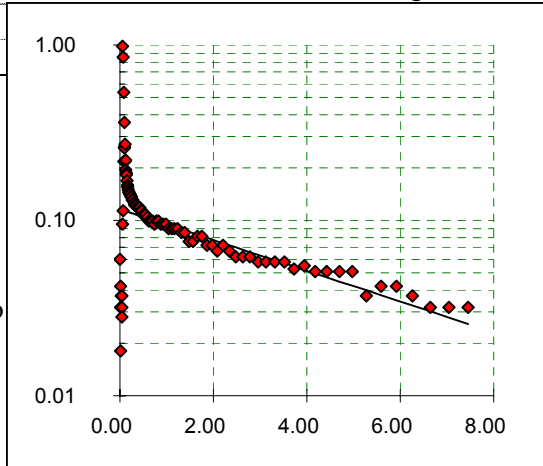
Client Name: Raytheon Systems

Identification: MW-32 Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	10.35 feet
Water Table Depth:	2.65 feet
Aquifer Thickness:	10.35 feet
Line Fit Starting No.:	40 Min 1 to
Line Fit Ending No.:	90 Max 95
Specify Output Units:	7 1 to 9
K(h):	8.05E-05 cm./sec.
Correlation Coefficient:	0.9703

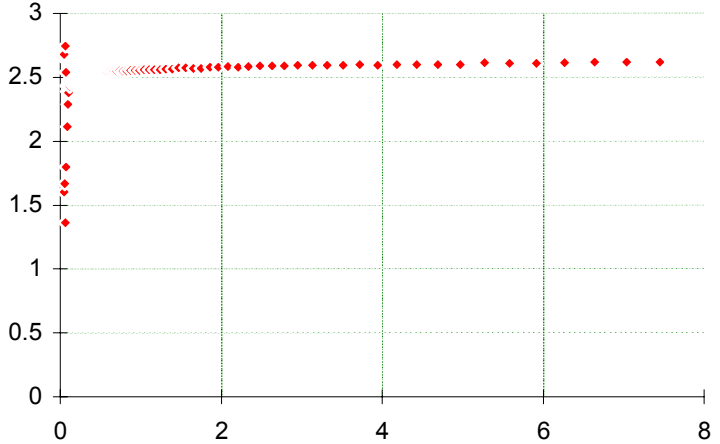


Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
72)	1.97	2.58	0.07	-2.631	-2.554
73)	2.08	2.58	0.07	-2.703	-2.577
74)	2.21	2.58	0.07	-2.631	-2.603
75)	2.34	2.58	0.07	-2.703	-2.629
76)	2.48	2.59	0.06	-2.781	-2.658
77)	2.63	2.59	0.06	-2.781	-2.688
78)	2.79	2.59	0.06	-2.781	-2.719
79)	2.95	2.59	0.06	-2.847	-2.753
80)	3.13	2.59	0.06	-2.847	-2.789
81)	3.32	2.59	0.06	-2.847	-2.827
82)	3.51	2.59	0.06	-2.847	-2.867
83)	3.72	2.60	0.05	-2.937	-2.909
84)	3.95	2.60	0.05	-2.900	-2.954
85)	4.18	2.60	0.05	-2.976	-3.002
86)	4.43	2.60	0.05	-2.976	-3.052
87)	4.69	2.60	0.05	-2.976	-3.105
88)	4.97	2.60	0.05	-2.976	-3.162
89)	5.27	2.61	0.04	-3.297	-3.222
90)	5.58	2.61	0.04	-3.170	-3.286
91)	5.91	2.61	0.04	-3.170	-3.353
92)	6.27	2.61	0.04	-3.297	-3.424
93)	6.64	2.62	0.03	-3.442	-3.499
94)	7.03	2.62	0.03	-3.442	-3.579
95)	7.45	2.62	0.03	-3.442	-3.664

### SLUG TEST DATA ENTRY FORM

Client Name: Raytheon Systems      Well Number: MW-32      Test Type: Rising Head  
 Project No.: 143.45      Topo. Elev.:      Weather: Sunny, clear, 70's  
 Project Name: Wayland, MA      Tested By: JD/RB      Date Started: 6/9/1998

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	12.00
Static W/L-Depth (ft.):	2.65
Riser Pipe Diameter (feet):	0.166
Initial Test Depth Value (ft.):	2.65
TOC Elevation (feet):	124.43
Intake/Soil Col. Diam. (feet):	0.75
Depth to Top of Pack (feet):	3
Intake/Soil Col. Length (ft.):	11
Saturat. Col. Thickness (ft.):	10.35
Casing Soil Length (if appl.):	
Casing Stickup (feet):	3
Slug Volume (ft3):	
Thickness of Aquifer (feet):	10.35



AQUIFER RECOVERY DATA							
Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0.005	2.71	0.1407	2.468	0.5863	2.546	2.4813	2.588
0.01	2.668	0.149	2.482	0.6213	2.551	2.6297	2.588
0.015	2.692	0.1578	2.491	0.658	2.551	2.7863	2.588
0.02	2.682	0.1672	2.495	0.6963	2.551	2.953	2.592
0.025	2.682	0.177	2.5	0.738	2.555	3.1297	2.592
0.03	2.687	0.1875	2.505	0.7813	2.551	3.3163	2.592
0.035	2.682	0.1985	2.505	0.828	2.551	3.5147	2.592
0.04	2.687	0.2102	2.509	0.8763	2.555	3.7247	2.597
0.045	2.678	0.2227	2.509	0.928	2.555	3.9463	2.595
0.05	1.603	0.2358	2.514	0.983	2.555	4.1813	2.599
0.055	1.667	0.2498	2.514	1.0413	2.56	4.4297	2.599
0.06	2.745	0.2647	2.519	1.103	2.56	4.693	2.599
0.065	1.363	0.2803	2.519	1.168	2.56	4.973	2.599
0.07	2.537	0.297	2.523	1.238	2.56	5.2697	2.613
0.075	1.799	0.3147	2.528	1.3113	2.565	5.583	2.608
0.08	2.433	0.3333	2.528	1.3897	2.565	5.9147	2.608
0.085	2.115	0.3532	2.528	1.473	2.574	6.2663	2.613
0.09	2.387	0.3742	2.532	1.5613	2.574	6.6397	2.618
0.095	2.288	0.3963	2.532	1.6547	2.569	7.0347	2.618
0.1	2.392	0.4198	2.532	1.753	2.569	7.453	2.618
0.1058	2.378	0.4447	2.537	1.858	2.578		
0.112	2.433	0.4697	2.537	1.968	2.578		
0.1185	2.429	0.4963	2.542	2.0847	2.583		
0.1255	2.456	0.5247	2.542	2.2097	2.578		
0.1328	2.463	0.5547	2.542	2.3413	2.583		



## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

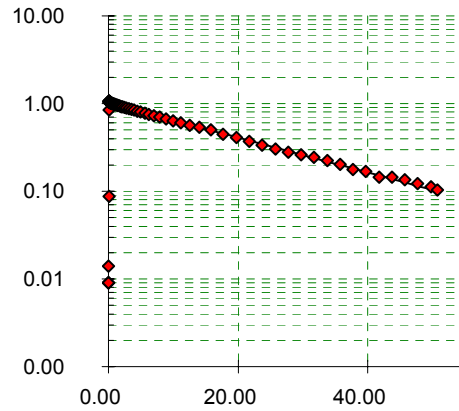
Client Name: Raytheon Systems

Identification: MW-33M Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	30.6 feet
Water Table Depth:	19.4 feet
Aquifer Thickness:	30.6 feet
Line Fit Starting No.:	10 Min 1 to
Line Fit Ending No.:	70 Max 73
Specify Output Units:	7 1 to 9
K(h):	2.29E-05 cm./sec.
Correlation Coefficient:	0.9993



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.00	19.40	0.00	#NUM!	0.025
2)	0.01	19.41	0.01	-4.711	0.024
3)	0.02	19.41	0.01	-4.269	0.024
4)	0.03	19.41	0.01	-4.711	0.023
5)	0.04	19.41	0.01	-4.711	0.023
6)	0.05	19.31	0.09	-2.430	0.022
7)	0.06	18.56	0.84	-0.172	0.022
8)	0.07	18.33	1.07	0.066	0.021
9)	0.08	18.34	1.06	0.057	0.021
10)	0.09	18.36	1.04	0.035	0.021
11)	0.10	18.35	1.05	0.053	0.020
12)	0.11	18.32	1.08	0.074	0.020
13)	0.13	18.32	1.08	0.074	0.019
14)	0.14	18.37	1.03	0.029	0.018
15)	0.16	18.36	1.05	0.044	0.017
16)	0.18	18.36	1.05	0.044	0.017
17)	0.20	18.36	1.04	0.037	0.016
18)	0.22	18.37	1.03	0.032	0.014
19)	0.25	18.37	1.03	0.029	0.013
20)	0.28	18.38	1.02	0.024	0.012
21)	0.31	18.38	1.02	0.024	0.010
22)	0.35	18.38	1.02	0.020	0.008
23)	0.40	18.39	1.02	0.015	0.007
24)	0.44	18.39	1.01	0.010	0.004
25)	0.50	18.39	1.01	0.006	0.002
26)	0.55	18.39	1.01	0.006	-0.001
27)	0.62	18.40	1.00	-0.004	-0.004
28)	0.70	18.41	0.99	-0.008	-0.007
29)	0.78	18.41	0.99	-0.013	-0.011
30)	0.88	18.42	0.98	-0.017	-0.015
31)	0.98	18.42	0.98	-0.022	-0.020
32)	1.10	18.43	0.97	-0.027	-0.026
33)	1.24	18.43	0.97	-0.031	-0.032

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

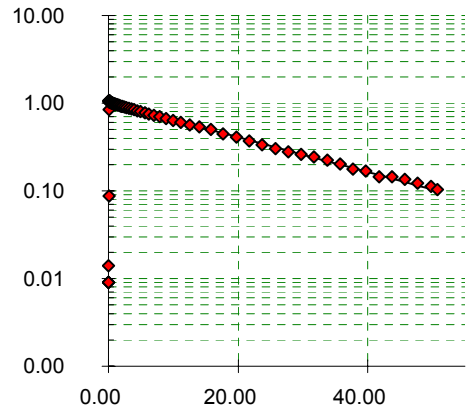
Client Name: Raytheon Systems

Identification: MW-33M Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	30.6 feet
Water Table Depth:	19.4 feet
Aquifer Thickness:	30.6 feet
Line Fit Starting No.:	10 Min 1 to
Line Fit Ending No.:	70 Max 73
Specify Output Units:	7 1 to 9
K(h):	2.29E-05 cm./sec.
Correlation Coefficient:	0.9993



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
34)	1.39	18.45	0.95	-0.046	-0.039
35)	1.56	18.45	0.95	-0.056	-0.047
36)	1.75	18.46	0.94	-0.061	-0.056
37)	1.97	18.47	0.93	-0.076	-0.066
38)	2.21	18.49	0.91	-0.091	-0.077
39)	2.48	18.50	0.90	-0.101	-0.089
40)	2.79	18.51	0.89	-0.117	-0.103
41)	3.13	18.52	0.88	-0.129	-0.119
42)	3.51	18.54	0.86	-0.145	-0.136
43)	3.95	18.56	0.84	-0.172	-0.156
44)	4.43	18.58	0.82	-0.195	-0.178
45)	4.97	18.60	0.80	-0.223	-0.203
46)	5.58	18.62	0.78	-0.252	-0.231
47)	6.27	18.65	0.75	-0.288	-0.263
48)	7.03	18.67	0.73	-0.319	-0.298
49)	7.90	18.70	0.70	-0.355	-0.337
50)	8.86	18.73	0.67	-0.402	-0.382
51)	9.95	18.76	0.64	-0.451	-0.432
52)	11.17	18.80	0.60	-0.511	-0.487
53)	12.53	18.84	0.56	-0.571	-0.550
54)	14.07	18.87	0.53	-0.629	-0.621
55)	15.79	18.90	0.50	-0.691	-0.700
56)	17.72	18.96	0.45	-0.810	-0.788
57)	19.72	18.99	0.41	-0.889	-0.880
58)	21.72	19.03	0.37	-0.997	-0.972
59)	23.72	19.06	0.34	-1.088	-1.063
60)	25.72	19.10	0.30	-1.191	-1.155
61)	27.72	19.12	0.28	-1.269	-1.247
62)	29.72	19.14	0.26	-1.343	-1.338
63)	31.72	19.16	0.24	-1.419	-1.430
64)	33.72	19.18	0.22	-1.496	-1.522
65)	35.72	19.20	0.20	-1.604	-1.614
66)	37.72	19.22	0.18	-1.726	-1.705
67)	39.72	19.23	0.17	-1.784	-1.797
68)	41.72	19.26	0.15	-1.931	-1.889
69)	43.72	19.26	0.15	-1.931	-1.980
70)	45.72	19.26	0.14	-1.995	-2.072
71)	47.72	19.28	0.12	-2.104	-2.164

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

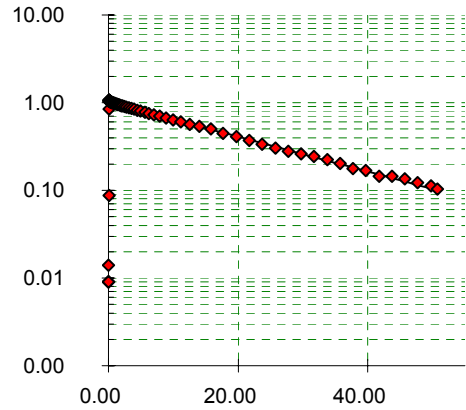
Client Name: Raytheon Systems

Identification: MW-33M Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166	feet
Intake Diameter:	0.75	feet
Intake Length:	11	feet
Saturated Column Length:	30.6	feet
Water Table Depth:	19.4	feet
Aquifer Thickness:	30.6	feet
Line Fit Starting No.:	10	Min 1 to
Line Fit Ending No.:	70	Max 73
Specify Output Units:	7	1 to 9
K(h):	2.29E-05	cm./sec.
Correlation Coefficient:	0.9993	

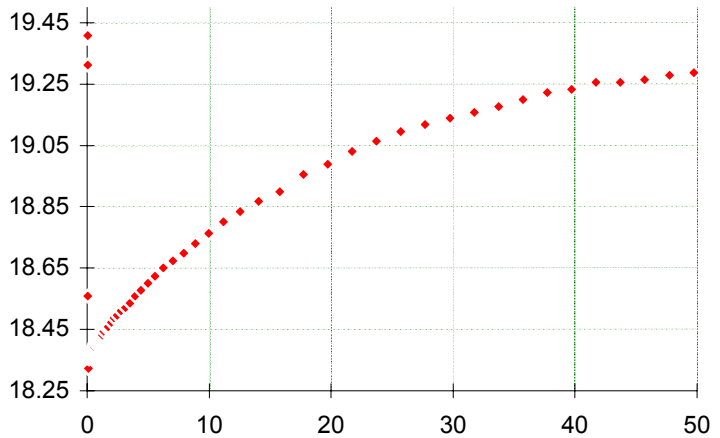


Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
72)	49.72	19.29	0.11	-2.180	-2.256
73)	50.72	19.30	0.10	-2.263	-2.301

### SLUG TEST DATA ENTRY FORM

Client Name: Raytheon Systems      Well Number: MW-33M      Test Type: Rising Head  
 Project No.: 143.45      Topo. Elev.:      Weather: Sunny, clear, 70's  
 Project Name: Wayland, MA      Tested By: JD/RB      Date Started: 6/9/1998

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	50.00
Static W/L-Depth (ft.):	19.4
Riser Pipe Diameter (feet):	0.166
Initial Test Depth Value (ft.):	19.4
TOC Elevation (feet):	136.1
Intake/Soil Col. Diam. (feet):	0.75
Depth to Top of Pack (feet):	3
Intake/Soil Col. Length (ft.):	11
Saturat. Col. Thickness (ft.):	30.6
Casing Soil Length (if appl.):	
Casing Stickup (feet):	3
Slug Volume (ft3):	
Thickness of Aquifer (feet):	30.6



AQUIFER RECOVERY DATA							
Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0	19.4	0.5547	18.394	9.9497	18.763		
0.01	19.409	0.6213	18.404	11.168	18.8		
0.02	19.414	0.6963	18.408	12.5347	18.835		
0.03	19.409	0.7813	18.413	14.0697	18.867		
0.04	19.409	0.8763	18.417	15.7913	18.899		
0.05	19.312	0.983	18.422	17.723	18.955		
0.06	18.558	1.103	18.427	19.723	18.989		
0.07	18.332	1.238	18.431	21.723	19.031		
0.08	18.341	1.3897	18.445	23.723	19.063		
0.09	18.364	1.5613	18.454	25.723	19.096		
0.1	18.346	1.753	18.459	27.723	19.119		
0.112	18.323	1.968	18.473	29.723	19.139		
0.1255	18.323	2.2097	18.487	31.723	19.158		
0.1407	18.371	2.4813	18.496	33.723	19.176		
0.1578	18.355	2.7863	18.51	35.723	19.199		
0.177	18.355	3.1297	18.521	37.723	19.222		
0.1985	18.362	3.5147	18.535	39.723	19.232		
0.2227	18.367	3.9463	18.558	41.723	19.255		
0.2498	18.371	4.4297	18.577	43.723	19.255		
0.2803	18.376	4.973	18.6	45.723	19.264		
0.3147	18.376	5.583	18.623	47.723	19.278		
0.3532	18.38	6.2663	18.65	49.723	19.287		
0.3963	18.385	7.0347	18.673	50.723	19.296		
0.4447	18.39	7.8963	18.699				
0.4963	18.394	8.8647	18.731				

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

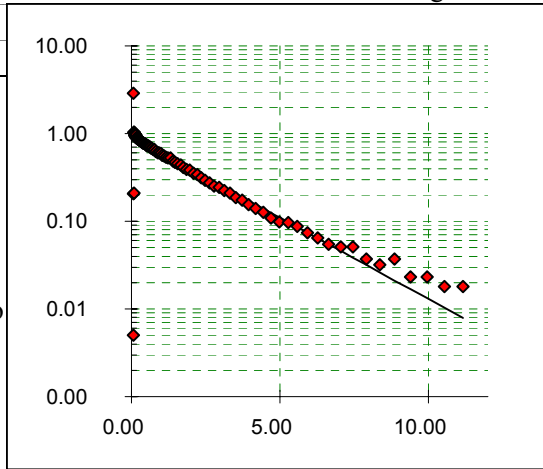
Client Name: Raytheon Systems

Identification: MW-33A Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	12.21 feet
Water Table Depth:	17.79 feet
Aquifer Thickness:	12.21 feet
Line Fit Starting No.:	5 Min 1 to
Line Fit Ending No.:	85 Max 90
Specify Output Units:	7 1 to 9
K(h):	1.77E-04 cm./sec.
Correlation Coefficient:	0.9965



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.07	17.79	0.00	-5.298	-0.105
2)	0.07	17.59	0.20	-1.585	-0.107
3)	0.08	14.93	2.86	1.052	-0.109
4)	0.08	17.58	0.21	-1.561	-0.111
5)	0.09	16.75	1.04	0.035	-0.113
6)	0.09	16.76	1.03	0.026	-0.115
7)	0.10	16.76	1.03	0.026	-0.117
8)	0.10	16.79	1.00	-0.001	-0.120
9)	0.11	16.80	0.99	-0.006	-0.122
10)	0.11	16.83	0.96	-0.044	-0.125
11)	0.12	16.81	0.98	-0.020	-0.127
12)	0.13	16.85	0.94	-0.059	-0.130
13)	0.13	16.85	0.94	-0.063	-0.134
14)	0.14	16.88	0.91	-0.095	-0.137
15)	0.15	16.88	0.91	-0.095	-0.141
16)	0.16	16.82	0.97	-0.035	-0.144
17)	0.17	16.89	0.90	-0.101	-0.148
18)	0.18	16.90	0.90	-0.111	-0.152
19)	0.19	16.90	0.89	-0.121	-0.157
20)	0.20	16.91	0.88	-0.127	-0.162
21)	0.21	16.92	0.87	-0.137	-0.167
22)	0.22	16.92	0.87	-0.143	-0.172
23)	0.24	16.93	0.86	-0.153	-0.178
24)	0.25	16.94	0.85	-0.164	-0.184
25)	0.26	16.95	0.84	-0.174	-0.190
26)	0.28	16.96	0.84	-0.180	-0.197
27)	0.30	16.96	0.83	-0.191	-0.204
28)	0.31	16.97	0.82	-0.202	-0.211
29)	0.33	16.98	0.81	-0.206	-0.219
30)	0.35	16.99	0.80	-0.223	-0.228
31)	0.37	16.99	0.80	-0.228	-0.237
32)	0.40	17.01	0.78	-0.246	-0.246
33)	0.42	17.01	0.78	-0.252	-0.256

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

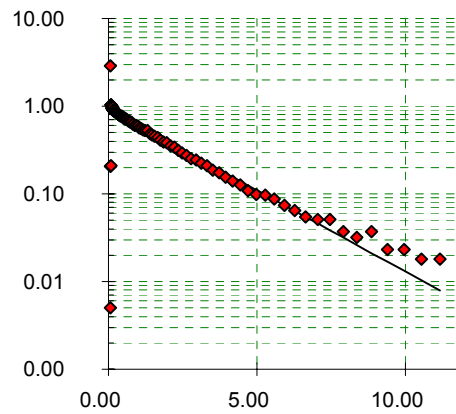
Client Name: Raytheon Systems

Identification: MW-33A Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	12.21 feet
Water Table Depth:	17.79 feet
Aquifer Thickness:	12.21 feet
Line Fit Starting No.:	5 Min 1 to
Line Fit Ending No.:	85 Max 90
Specify Output Units:	7 1 to 9
K(h):	1.77E-04 cm./sec.
Correlation Coefficient:	0.9965



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
34)	0.44	17.02	0.77	-0.264	-0.267
35)	0.47	17.03	0.76	-0.276	-0.277
36)	0.50	17.05	0.74	-0.294	-0.289
37)	0.52	17.06	0.73	-0.313	-0.301
38)	0.55	17.06	0.73	-0.319	-0.314
39)	0.59	17.08	0.71	-0.338	-0.327
40)	0.62	17.09	0.70	-0.358	-0.342
41)	0.66	17.11	0.68	-0.378	-0.358
42)	0.70	17.11	0.68	-0.392	-0.374
43)	0.74	17.14	0.65	-0.423	-0.392
44)	0.78	17.14	0.65	-0.423	-0.410
45)	0.83	17.16	0.63	-0.467	-0.430
46)	0.88	17.18	0.61	-0.496	-0.451
47)	0.93	17.19	0.60	-0.511	-0.473
48)	0.98	17.20	0.59	-0.526	-0.496
49)	1.04	17.22	0.57	-0.567	-0.521
50)	1.10	17.24	0.55	-0.591	-0.548
51)	1.17	17.26	0.54	-0.625	-0.575
52)	1.24	17.26	0.53	-0.639	-0.605
53)	1.31	17.27	0.52	-0.646	-0.637
54)	1.39	17.31	0.48	-0.730	-0.670
55)	1.47	17.32	0.47	-0.759	-0.706
56)	1.56	17.34	0.45	-0.790	-0.743
57)	1.65	17.35	0.44	-0.830	-0.783
58)	1.75	17.38	0.41	-0.884	-0.825
59)	1.86	17.40	0.39	-0.936	-0.870
60)	1.97	17.41	0.38	-0.960	-0.917
61)	2.08	17.44	0.35	-1.047	-0.967
62)	2.21	17.45	0.34	-1.076	-1.020
63)	2.34	17.48	0.31	-1.158	-1.076
64)	2.48	17.50	0.29	-1.221	-1.136
65)	2.63	17.52	0.27	-1.302	-1.199
66)	2.79	17.54	0.25	-1.370	-1.266
67)	2.95	17.55	0.24	-1.419	-1.337
68)	3.13	17.57	0.22	-1.496	-1.412
69)	3.32	17.58	0.21	-1.561	-1.492
70)	3.51	17.60	0.19	-1.677	-1.577
71)	3.72	17.62	0.17	-1.754	-1.666

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

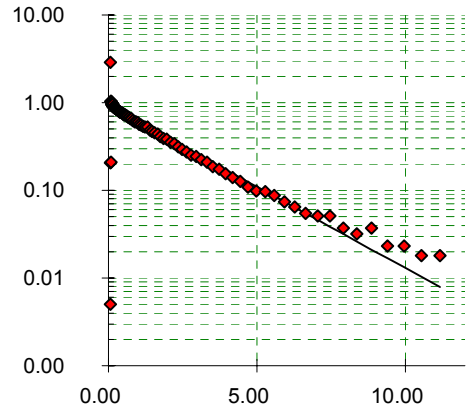
Client Name: Raytheon Systems

Identification: MW-33A Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	12.21 feet
Water Table Depth:	17.79 feet
Aquifer Thickness:	12.21 feet
Line Fit Starting No.:	5 Min 1 to
Line Fit Ending No.:	85 Max 90
Specify Output Units:	7 1 to 9
K(h):	1.77E-04 cm./sec.
Correlation Coefficient:	0.9965

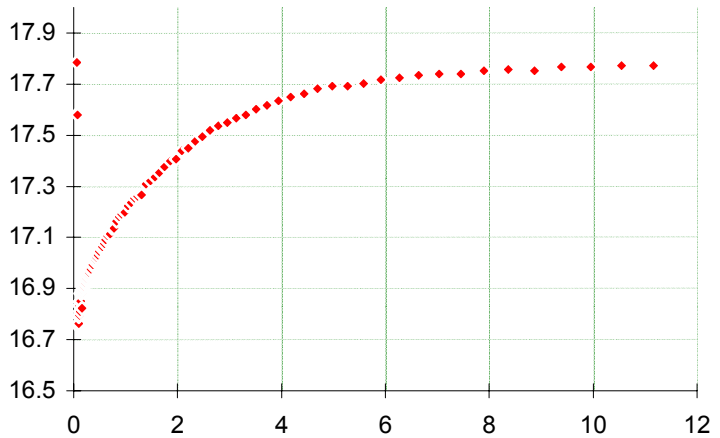


Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
72)	3.95	17.64	0.15	-1.864	-1.761
73)	4.18	17.65	0.14	-1.959	-1.861
74)	4.43	17.66	0.13	-2.064	-1.967
75)	4.69	17.68	0.11	-2.226	-2.080
76)	4.97	17.69	0.10	-2.313	-2.199
77)	5.27	17.69	0.10	-2.333	-2.326
78)	5.58	17.70	0.09	-2.430	-2.459
79)	5.91	17.72	0.07	-2.604	-2.601
80)	6.27	17.73	0.06	-2.733	-2.751
81)	6.64	17.74	0.05	-2.900	-2.910
82)	7.03	17.74	0.05	-2.976	-3.079
83)	7.45	17.74	0.05	-2.976	-3.257
84)	7.90	17.75	0.04	-3.297	-3.447
85)	8.37	17.76	0.03	-3.442	-3.647
86)	8.86	17.75	0.04	-3.297	-3.860
87)	9.39	17.77	0.02	-3.772	-4.084
88)	9.95	17.77	0.02	-3.772	-4.323
89)	10.54	17.77	0.02	-4.017	-4.575
90)	11.17	17.77	0.02	-4.017	-4.843

### SLUG TEST DATA ENTRY FORM

Client Name: Raytheon Systems      Well Number: MW-33A      Test Type: Rising Head  
 Project No.: 143.45      Topo. Elev.: \_\_\_\_\_      Weather: Sunny, clear, 70's  
 Project Name: Wayland, MA      Tested By: JD/RB      Date Started: 6/9/1998

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	30.00
Static W/L-Depth (ft.):	17.79
Riser Pipe Diameter (feet):	0.166
Initial Test Depth Value (ft.):	17.79
TOC Elevation (feet):	136.1
Intake/Soil Col. Diam. (feet):	0.75
Depth to Top of Pack (feet):	3
Intake/Soil Col. Length (ft.):	11
Saturat. Col. Thickness (ft.):	12.21
Casing Soil Length (if appl.):	
Casing Stickup (feet):	3
Slug Volume (ft3):	
Thickness of Aquifer (feet):	12.21



AQUIFER RECOVERY DATA							
Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0.065	17.785	0.2803	16.955	1.168	17.255	4.973	17.691
0.07	17.585	0.297	16.964	1.238	17.262	5.2697	17.693
0.075	14.927	0.3147	16.973	1.3113	17.266	5.583	17.702
0.08	17.58	0.3333	16.976	1.3897	17.308	5.9147	17.716
0.085	16.754	0.3532	16.99	1.473	17.322	6.2663	17.725
0.09	16.764	0.3742	16.994	1.5613	17.336	6.6397	17.735
0.095	16.764	0.3963	17.008	1.6547	17.354	7.0347	17.739
0.1	16.791	0.4198	17.013	1.753	17.377	7.453	17.739
0.1058	16.796	0.4447	17.022	1.858	17.398	7.8963	17.753
0.112	16.833	0.4697	17.031	1.968	17.407	8.3663	17.758
0.1185	16.81	0.4963	17.045	2.0847	17.439	8.8647	17.753
0.1255	16.847	0.5247	17.059	2.2097	17.449	9.3913	17.767
0.1328	16.851	0.5547	17.063	2.3413	17.476	9.9497	17.767
0.1407	16.881	0.5863	17.077	2.4813	17.495	10.5413	17.772
0.149	16.881	0.6213	17.091	2.6297	17.518	11.168	17.772
0.1578	16.824	0.658	17.105	2.7863	17.536		
0.1672	16.886	0.6963	17.114	2.953	17.548		
0.177	16.895	0.738	17.135	3.1297	17.566		
0.1875	16.904	0.7813	17.135	3.3163	17.58		
0.1985	16.909	0.828	17.163	3.5147	17.603		
0.2102	16.918	0.8763	17.181	3.7247	17.617		
0.2227	16.923	0.928	17.19	3.9463	17.635		
0.2358	16.932	0.983	17.199	4.1813	17.649		
0.2498	16.941	1.0413	17.223	4.4297	17.663		
0.2647	16.95	1.103	17.236	4.693	17.682		



## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

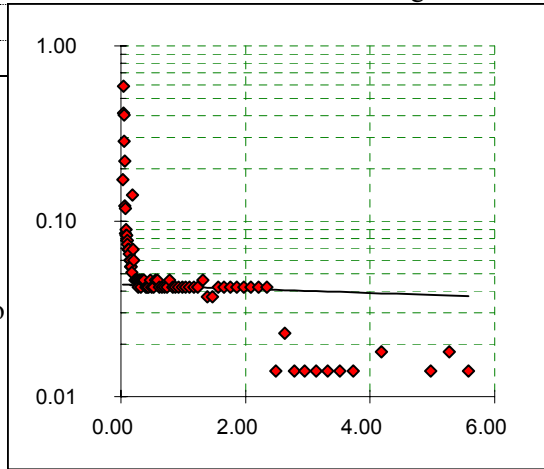
Client Name: Raytheon Systems

Identification: MW-35 Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	8.76 feet
Water Table Depth:	13.24 feet
Aquifer Thickness:	8.76 feet
Line Fit Starting No.:	38 Min 1 to
Line Fit Ending No.:	68 Max 84
Specify Output Units:	7 1 to 9
K(h):	1.04E-05 cm./sec.
Correlation Coefficient:	0.3009



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.04	13.07	0.17	-1.754	-3.136
2)	0.04	12.65	0.59	-0.531	-3.136
3)	0.05	12.83	0.41	-0.884	-3.136
4)	0.05	12.84	0.40	-0.906	-3.136
5)	0.06	12.95	0.29	-1.252	-3.136
6)	0.06	13.02	0.22	-1.510	-3.136
7)	0.07	13.12	0.12	-2.104	-3.136
8)	0.07	13.12	0.12	-2.137	-3.137
9)	0.08	13.16	0.09	-2.465	-3.137
10)	0.08	13.15	0.09	-2.408	-3.137
11)	0.09	13.16	0.08	-2.489	-3.137
12)	0.09	13.16	0.08	-2.551	-3.137
13)	0.10	13.16	0.08	-2.489	-3.137
14)	0.10	13.16	0.08	-2.551	-3.137
15)	0.11	13.17	0.07	-2.604	-3.138
16)	0.11	13.17	0.07	-2.674	-3.138
17)	0.12	13.17	0.07	-2.674	-3.138
18)	0.13	13.17	0.07	-2.674	-3.138
19)	0.13	13.18	0.06	-2.733	-3.138
20)	0.14	13.18	0.06	-2.813	-3.138
21)	0.15	13.18	0.06	-2.813	-3.139
22)	0.16	13.19	0.05	-2.900	-3.139
23)	0.17	13.19	0.05	-2.900	-3.139
24)	0.18	13.19	0.05	-2.976	-3.139
25)	0.19	13.10	0.14	-1.959	-3.140
26)	0.20	13.17	0.07	-2.674	-3.140
27)	0.21	13.18	0.06	-2.813	-3.140
28)	0.22	13.19	0.05	-3.079	-3.141
29)	0.24	13.19	0.05	-3.079	-3.141
30)	0.25	13.19	0.05	-3.079	-3.141
31)	0.26	13.19	0.05	-3.079	-3.142
32)	0.28	13.20	0.04	-3.170	-3.142
33)	0.30	13.19	0.05	-3.079	-3.143

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

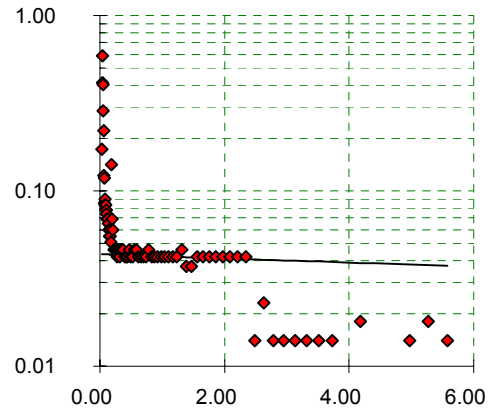
Client Name: Raytheon Systems

Identification: MW-35 Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	8.76 feet
Water Table Depth:	13.24 feet
Aquifer Thickness:	8.76 feet
Line Fit Starting No.:	38 Min 1 to
Line Fit Ending No.:	68 Max 84
Specify Output Units:	7 1 to 9
K(h):	1.04E-05 cm./sec.
Correlation Coefficient:	0.3009



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
34)	0.31	13.20	0.04	-3.170	-3.143
35)	0.33	13.19	0.05	-3.079	-3.144
36)	0.35	13.19	0.05	-3.079	-3.144
37)	0.37	13.19	0.05	-3.079	-3.145
38)	0.40	13.20	0.04	-3.170	-3.145
39)	0.42	13.20	0.04	-3.170	-3.146
40)	0.44	13.20	0.04	-3.170	-3.147
41)	0.47	13.19	0.05	-3.079	-3.147
42)	0.50	13.20	0.04	-3.170	-3.148
43)	0.52	13.20	0.04	-3.170	-3.149
44)	0.55	13.19	0.05	-3.079	-3.150
45)	0.59	13.19	0.05	-3.079	-3.151
46)	0.62	13.20	0.04	-3.170	-3.152
47)	0.66	13.20	0.04	-3.170	-3.153
48)	0.70	13.20	0.04	-3.170	-3.154
49)	0.74	13.20	0.04	-3.170	-3.155
50)	0.78	13.19	0.05	-3.079	-3.156
51)	0.83	13.20	0.04	-3.170	-3.157
52)	0.88	13.20	0.04	-3.170	-3.159
53)	0.93	13.20	0.04	-3.170	-3.160
54)	0.98	13.20	0.04	-3.170	-3.162
55)	1.04	13.20	0.04	-3.170	-3.163
56)	1.10	13.20	0.04	-3.170	-3.165
57)	1.17	13.20	0.04	-3.170	-3.167
58)	1.24	13.20	0.04	-3.170	-3.168
59)	1.31	13.19	0.05	-3.079	-3.170
60)	1.39	13.20	0.04	-3.297	-3.173
61)	1.47	13.20	0.04	-3.297	-3.175
62)	1.56	13.20	0.04	-3.170	-3.177
63)	1.65	13.20	0.04	-3.170	-3.180
64)	1.75	13.20	0.04	-3.170	-3.183
65)	1.86	13.20	0.04	-3.170	-3.185
66)	1.97	13.20	0.04	-3.170	-3.188
67)	2.08	13.20	0.04	-3.170	-3.192
68)	2.21	13.20	0.04	-3.170	-3.195
69)	2.34	13.20	0.04	-3.170	-3.199
70)	2.48	13.23	0.01	-4.269	-3.202
71)	2.63	13.22	0.02	-3.772	-3.207

### Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

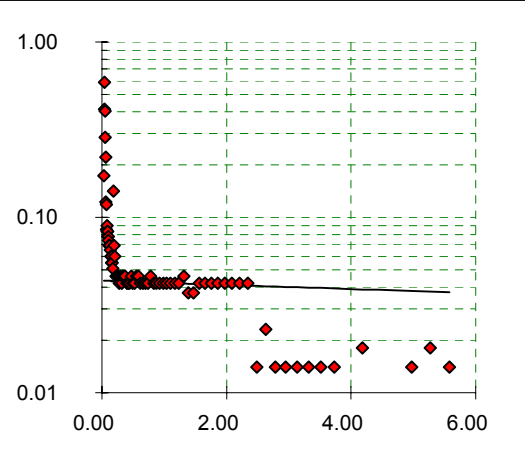
Client Name: Raytheon Systems

Identification: MW-35 Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	8.76 feet
Water Table Depth:	13.24 feet
Aquifer Thickness:	8.76 feet
Line Fit Starting No.:	38      Min 1 to
Line Fit Ending No.:	68      Max 84
Specify Output Units:	7      1 to 9
K(h):	1.04E-05 cm./sec.
Correlation Coefficient:	0.3009

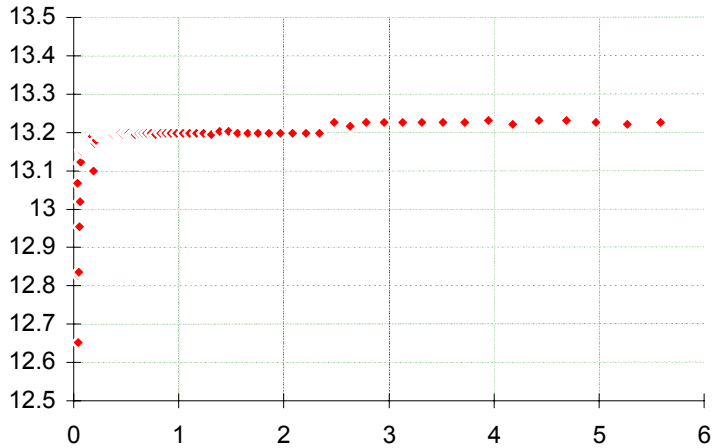


Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
72)	2.79	13.23	0.01	-4.269	-3.211
73)	2.95	13.23	0.01	-4.269	-3.215
74)	3.13	13.23	0.01	-4.269	-3.220
75)	3.32	13.23	0.01	-4.269	-3.225
76)	3.51	13.23	0.01	-4.269	-3.231
77)	3.72	13.23	0.01	-4.269	-3.236
78)	3.95	13.23	0.01	-4.711	-3.243
79)	4.18	13.22	0.02	-4.017	-3.249
80)	4.43	13.23	0.01	-4.711	-3.256
81)	4.69	13.23	0.01	-4.711	-3.263
82)	4.97	13.23	0.01	-4.269	-3.271
83)	5.27	13.22	0.02	-4.017	-3.279
84)	5.58	13.23	0.01	-4.269	-3.287

### SLUG TEST DATA ENTRY FORM

Client Name: Raytheon Systems      Well Number: MW-35      Test Type: Rising Head  
 Project No.: 143.45      Topo. Elev.:      Weather: Sunny, clear, 70's  
 Project Name: Wayland, MA      Tested By: JD/RB      Date Started: 6/9/1998

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	22.00
Static W/L-Depth (ft.):	13.24
Riser Pipe Diameter (feet):	0.166
Initial Test Depth Value (ft.):	13.24
TOC Elevation (feet):	132.8
Intake/Soil Col. Diam. (feet):	0.75
Depth to Top of Pack (feet):	3
Intake/Soil Col. Length (ft.):	11
Saturat. Col. Thickness (ft.):	8.76
Casing Soil Length (if appl.):	
Casing Stickup (feet):	3
Slug Volume (ft3):	
Thickness of Aquifer (feet):	8.76

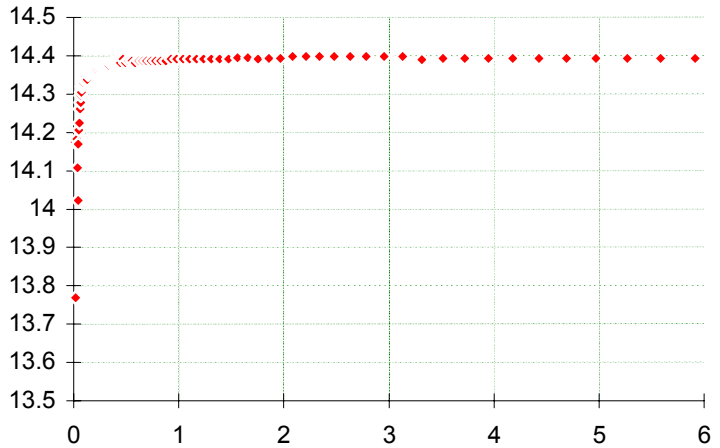


AQUIFER RECOVERY DATA							
Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0.035	13.067	0.1985	13.171	0.828	13.198	3.5147	13.226
0.04	12.652	0.2102	13.18	0.8763	13.198	3.7247	13.226
0.045	12.827	0.2227	13.194	0.928	13.198	3.9463	13.231
0.05	12.836	0.2358	13.194	0.983	13.198	4.1813	13.222
0.055	12.954	0.2498	13.194	1.0413	13.198	4.4297	13.231
0.06	13.019	0.2647	13.194	1.103	13.198	4.693	13.231
0.065	13.118	0.2803	13.198	1.168	13.198	4.973	13.226
0.07	13.122	0.297	13.194	1.238	13.198	5.2697	13.222
0.075	13.155	0.3147	13.198	1.3113	13.194	5.583	13.226
0.08	13.15	0.3333	13.194	1.3897	13.203		
0.085	13.157	0.3532	13.194	1.473	13.203		
0.09	13.162	0.3742	13.194	1.5613	13.198		
0.095	13.157	0.3963	13.198	1.6547	13.198		
0.1	13.162	0.4198	13.198	1.753	13.198		
0.1058	13.166	0.4447	13.198	1.858	13.198		
0.112	13.171	0.4697	13.194	1.968	13.198		
0.1185	13.171	0.4963	13.198	2.0847	13.198		
0.1255	13.171	0.5247	13.198	2.2097	13.198		
0.1328	13.175	0.5547	13.194	2.3413	13.198		
0.1407	13.18	0.5863	13.194	2.4813	13.226		
0.149	13.18	0.6213	13.198	2.6297	13.217		
0.1578	13.185	0.658	13.198	2.7863	13.226		
0.1672	13.185	0.6963	13.198	2.953	13.226		
0.177	13.189	0.738	13.198	3.1297	13.226		
0.1875	13.099	0.7813	13.194	3.3163	13.226		

### SLUG TEST DATA ENTRY FORM

Client Name: Raytheon Systems Well Number: MW-36 Test Type: Rising Head  
 Project No.: 143.45 Topo. Elev.: \_\_\_\_\_ Weather: Sunny, clear, 70's  
 Project Name: Wayland, MA Tested By: JD/RB Date Started: 6/9/1998

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	22.00
Static W/L-Depth (ft.):	14.52
Riser Pipe Diameter (feet):	0.166
Initial Test Depth Value (ft.):	14.52
TOC Elevation (feet):	132.52
Intake/Soil Col. Diam. (feet):	0.75
Depth to Top of Pack (feet):	3
Intake/Soil Col. Length (ft.):	11
Saturat. Col. Thickness (ft.):	7.48
Casing Soil Length (if appl.):	
Casing Stickup (feet):	3
Slug Volume (ft3):	
Thickness of Aquifer (feet):	7.48



AQUIFER RECOVERY DATA							
Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0.015	14.174	0.1578	14.356	0.658	14.386	2.7863	14.398
0.02	13.768	0.1672	14.361	0.6963	14.386	2.953	14.398
0.025	12.928	0.177	14.361	0.738	14.386	3.1297	14.398
0.03	14.183	0.1875	14.365	0.7813	14.386	3.3163	14.389
0.035	14.107	0.1985	14.365	0.828	14.386	3.5147	14.393
0.04	14.022	0.2102	14.365	0.8763	14.386	3.7247	14.393
0.045	14.169	0.2227	14.37	0.928	14.391	3.9463	14.393
0.05	14.206	0.2358	14.375	0.983	14.391	4.1813	14.393
0.055	14.225	0.2498	14.375	1.0413	14.391	4.4297	14.393
0.06	14.262	0.2647	14.375	1.103	14.391	4.693	14.393
0.065	14.278	0.2803	14.375	1.168	14.391	4.973	14.393
0.07	14.296	0.297	14.375	1.238	14.391	5.2697	14.393
0.075	14.305	0.3147	14.375	1.3113	14.391	5.583	14.393
0.08	14.319	0.3333	14.375	1.3897	14.391	5.9147	14.393
0.085	14.324	0.3532	14.379	1.473	14.391		
0.09	14.329	0.3742	14.382	1.5613	14.395		
0.095	14.338	0.3963	14.382	1.6547	14.395		
0.1	14.338	0.4198	14.382	1.753	14.391		
0.1058	14.342	0.4447	14.382	1.858	14.393		
0.112	14.342	0.4697	14.391	1.968	14.393		
0.1185	14.347	0.4963	14.382	2.0847	14.398		
0.1255	14.338	0.5247	14.386	2.2097	14.398		
0.1328	14.352	0.5547	14.386	2.3413	14.398		
0.1407	14.352	0.5863	14.382	2.4813	14.398		
0.149	14.356	0.6213	14.386	2.6297	14.398		

## Bower & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

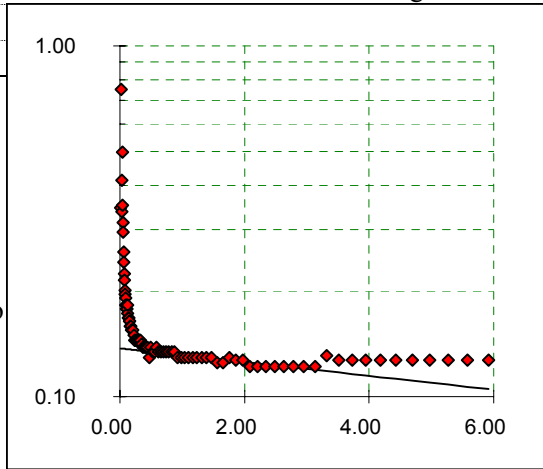
Client Name: Raytheon Systems

Identification: MW-36 Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	7.48 feet
Water Table Depth:	14.52 feet
Aquifer Thickness:	7.48 feet
Line Fit Starting No.:	48 Min 1 to
Line Fit Ending No.:	78 Max 89
Specify Output Units:	7 1 to 9
K(h):	1.66E-05 cm./sec.
Correlation Coefficient:	0.9235



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.02	14.17	0.35	-1.061	-1.986
2)	0.02	13.77	0.75	-0.285	-1.986
3)	0.03	12.93	1.59	0.465	-1.987
4)	0.03	14.18	0.34	-1.088	-1.987
5)	0.04	14.11	0.41	-0.884	-1.987
6)	0.04	14.02	0.50	-0.697	-1.987
7)	0.05	14.17	0.35	-1.047	-1.988
8)	0.05	14.21	0.31	-1.158	-1.988
9)	0.06	14.23	0.30	-1.221	-1.988
10)	0.06	14.26	0.26	-1.355	-1.988
11)	0.07	14.28	0.24	-1.419	-1.988
12)	0.07	14.30	0.22	-1.496	-1.989
13)	0.08	14.31	0.22	-1.537	-1.989
14)	0.08	14.32	0.20	-1.604	-1.989
15)	0.09	14.32	0.20	-1.630	-1.989
16)	0.09	14.33	0.19	-1.655	-1.990
17)	0.10	14.34	0.18	-1.704	-1.990
18)	0.10	14.34	0.18	-1.704	-1.990
19)	0.11	14.34	0.18	-1.726	-1.990
20)	0.11	14.34	0.18	-1.726	-1.991
21)	0.12	14.35	0.17	-1.754	-1.991
22)	0.13	14.34	0.18	-1.704	-1.991
23)	0.13	14.35	0.17	-1.784	-1.992
24)	0.14	14.35	0.17	-1.784	-1.992
25)	0.15	14.36	0.16	-1.808	-1.992
26)	0.16	14.36	0.16	-1.808	-1.993
27)	0.17	14.36	0.16	-1.839	-1.993
28)	0.18	14.36	0.16	-1.839	-1.994
29)	0.19	14.37	0.15	-1.864	-1.994
30)	0.20	14.37	0.15	-1.864	-1.995
31)	0.21	14.37	0.15	-1.864	-1.995
32)	0.22	14.37	0.15	-1.897	-1.996
33)	0.24	14.38	0.15	-1.931	-1.996

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA

Project No.: 143.45

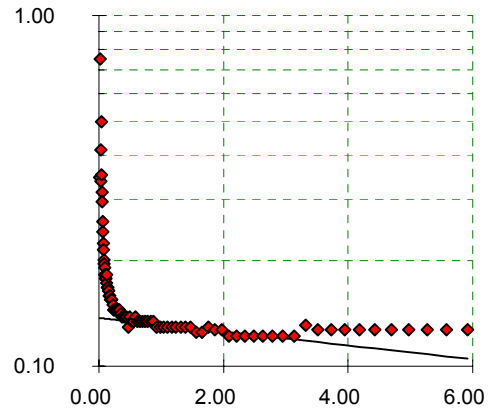
Client Name: Raytheon Systems

Identification: MW-36 Rising Head

User Name: JD/RB

Run Date: 6/9/1998

Riser Pipe Diameter:	0.166 feet
Intake Diameter:	0.75 feet
Intake Length:	11 feet
Saturated Column Length:	7.48 feet
Water Table Depth:	14.52 feet
Aquifer Thickness:	7.48 feet
Line Fit Starting No.:	48 Min 1 to
Line Fit Ending No.:	78 Max 89
Specify Output Units:	7 1 to 9
K(h):	1.66E-05 cm./sec.
Correlation Coefficient:	0.9235

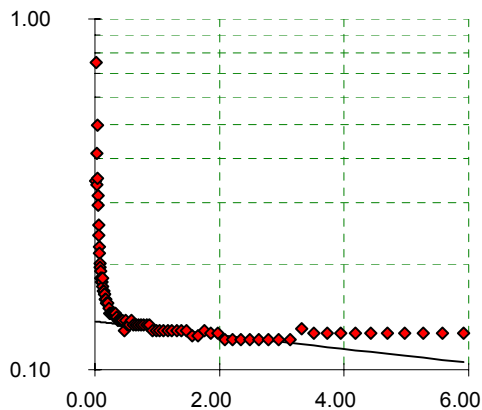


Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
34)	0.25	14.38	0.15	-1.931	-1.997
35)	0.26	14.38	0.15	-1.931	-1.998
36)	0.28	14.38	0.15	-1.931	-1.998
37)	0.30	14.38	0.15	-1.931	-1.999
38)	0.31	14.38	0.15	-1.931	-2.000
39)	0.33	14.38	0.15	-1.931	-2.001
40)	0.35	14.38	0.14	-1.959	-2.002
41)	0.37	14.38	0.14	-1.981	-2.002
42)	0.40	14.38	0.14	-1.981	-2.003
43)	0.42	14.38	0.14	-1.981	-2.005
44)	0.44	14.38	0.14	-1.981	-2.006
45)	0.47	14.39	0.13	-2.048	-2.007
46)	0.50	14.38	0.14	-1.981	-2.008
47)	0.52	14.39	0.13	-2.010	-2.009
48)	0.55	14.39	0.13	-2.010	-2.011
49)	0.59	14.38	0.14	-1.981	-2.012
50)	0.62	14.39	0.13	-2.010	-2.014
51)	0.66	14.39	0.13	-2.010	-2.015
52)	0.70	14.39	0.13	-2.010	-2.017
53)	0.74	14.39	0.13	-2.010	-2.019
54)	0.78	14.39	0.13	-2.010	-2.021
55)	0.83	14.39	0.13	-2.010	-2.023
56)	0.88	14.39	0.13	-2.010	-2.025
57)	0.93	14.39	0.13	-2.048	-2.028
58)	0.98	14.39	0.13	-2.048	-2.030
59)	1.04	14.39	0.13	-2.048	-2.033
60)	1.10	14.39	0.13	-2.048	-2.036
61)	1.17	14.39	0.13	-2.048	-2.038
62)	1.24	14.39	0.13	-2.048	-2.042
63)	1.31	14.39	0.13	-2.048	-2.045
64)	1.39	14.39	0.13	-2.048	-2.049
65)	1.47	14.39	0.13	-2.048	-2.052
66)	1.56	14.40	0.13	-2.079	-2.056
67)	1.65	14.40	0.13	-2.079	-2.061
68)	1.75	14.39	0.13	-2.048	-2.065
69)	1.86	14.39	0.13	-2.064	-2.070
70)	1.97	14.39	0.13	-2.064	-2.075
71)	2.08	14.40	0.12	-2.104	-2.080

## Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project Name: Wayland, MA Project No.: 143.45  
 Client Name: Raytheon Systems Identification: MW-36 Rising Head  
 User Name: JD/RB  
 Run Date: 6/9/1998

Riser Pipe Diameter: 0.166 feet  
 Intake Diameter: 0.75 feet  
 Intake Length: 11 feet  
 Saturated Column Length: 7.48 feet  
 Water Table Depth: 14.52 feet  
 Aquifer Thickness: 7.48 feet  
 Line Fit Starting No.: 48 Min 1 to  
 Line Fit Ending No.: 78 Max 89  
 Specify Output Units: 7 1 to 9  
 K(h): 1.66E-05 cm./sec.  
 Correlation Coefficient: 0.9235



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
72)	2.21	14.40	0.12	-2.104	-2.086
73)	2.34	14.40	0.12	-2.104	-2.092
74)	2.48	14.40	0.12	-2.104	-2.098
75)	2.63	14.40	0.12	-2.104	-2.105
76)	2.79	14.40	0.12	-2.104	-2.112
77)	2.95	14.40	0.12	-2.104	-2.119
78)	3.13	14.40	0.12	-2.104	-2.127
79)	3.32	14.39	0.13	-2.033	-2.136
80)	3.51	14.39	0.13	-2.064	-2.145
81)	3.72	14.39	0.13	-2.064	-2.154
82)	3.95	14.39	0.13	-2.064	-2.165
83)	4.18	14.39	0.13	-2.064	-2.175
84)	4.43	14.39	0.13	-2.064	-2.186
85)	4.69	14.39	0.13	-2.064	-2.198
86)	4.97	14.39	0.13	-2.064	-2.211
87)	5.27	14.39	0.13	-2.064	-2.225
88)	5.58	14.39	0.13	-2.064	-2.239
89)	5.91	14.39	0.13	-2.064	-2.254