

WELL TEST ANALYSIS

Data Set: J:\...\MW-1.aqt
 Date: 03/08/11

Time: 12:10:44

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester
 Test Well: MW-1
 Test Date: 3/11/10

AQUIFER DATA

Saturated Thickness: 7.02 ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW-1)

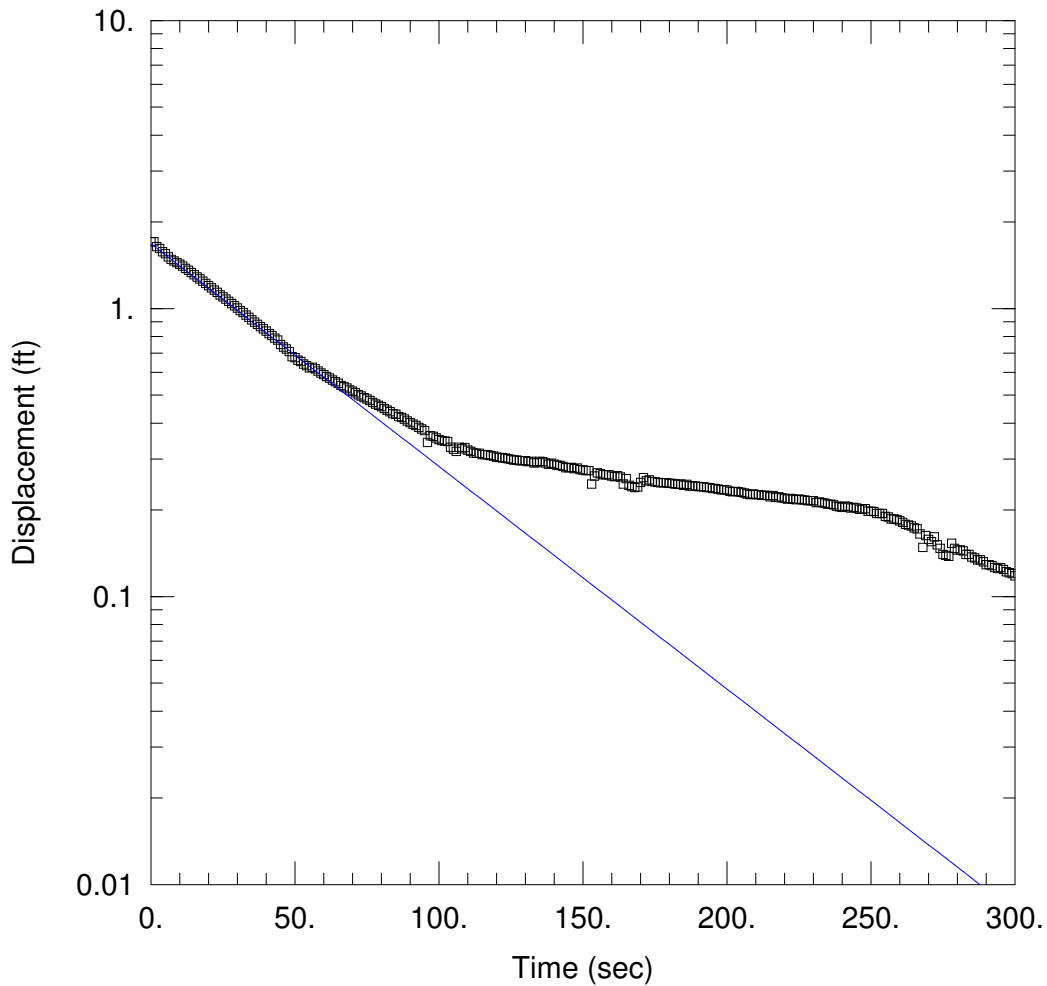
Initial Displacement: 1.791 ft
 Total Well Penetration Depth: 7.02 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 7.02 ft
 Screen Length: 7.02 ft
 Wellbore Radius: 0.3333 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 20.6 ft/day

Solution Method: Bouwer-Rice
 y_0 = 1.821 ft



WELL TEST ANALYSIS

Data Set: J:\...MW-3A.aqt
 Date: 03/08/11

Time: 13:56:27

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-3
 Test Date: 3/10/10

AQUIFER DATA

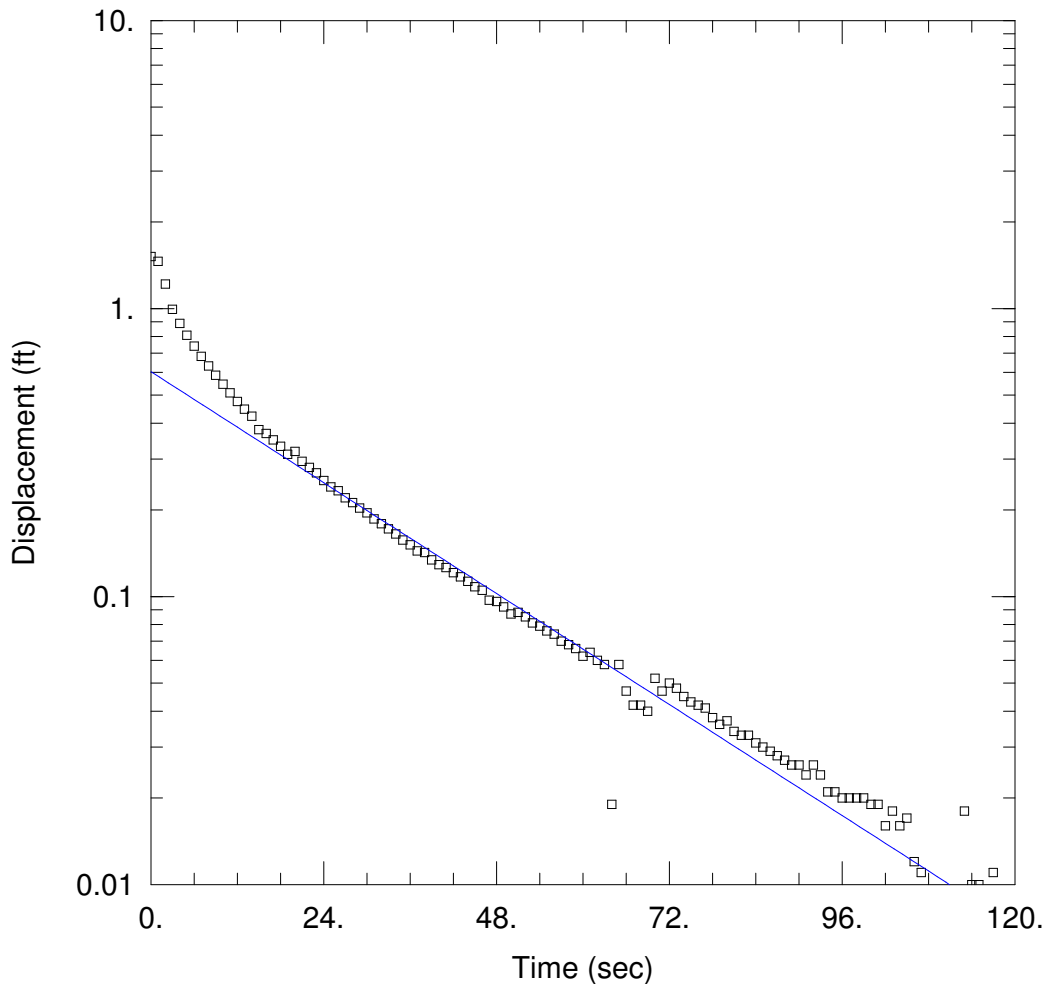
Saturated Thickness: 7.05 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-3A)

Initial Displacement: <u>1.704</u> ft	Static Water Column Height: <u>7.05</u> ft
Total Well Penetration Depth: <u>7.05</u> ft	Screen Length: <u>7.05</u> ft
Casing Radius: <u>0.0833</u> ft	Wellbore Radius: <u>0.18</u> ft
	Gravel Pack Porosity: <u>0.25</u>

SOLUTION

Aquifer Model: <u>Unconfined</u>	Solution Method: <u>Bouwer-Rice</u>
K = <u>4.054</u> ft/day	y0 = <u>1.677</u> ft



WELL TEST ANALYSIS

Data Set: J:\...MW-3B.aqt
 Date: 03/09/11

Time: 09:09:35

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: ENV-MW2D
 Test Date: 3/10/10

AQUIFER DATA

Saturated Thickness: 12.8 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-3B)

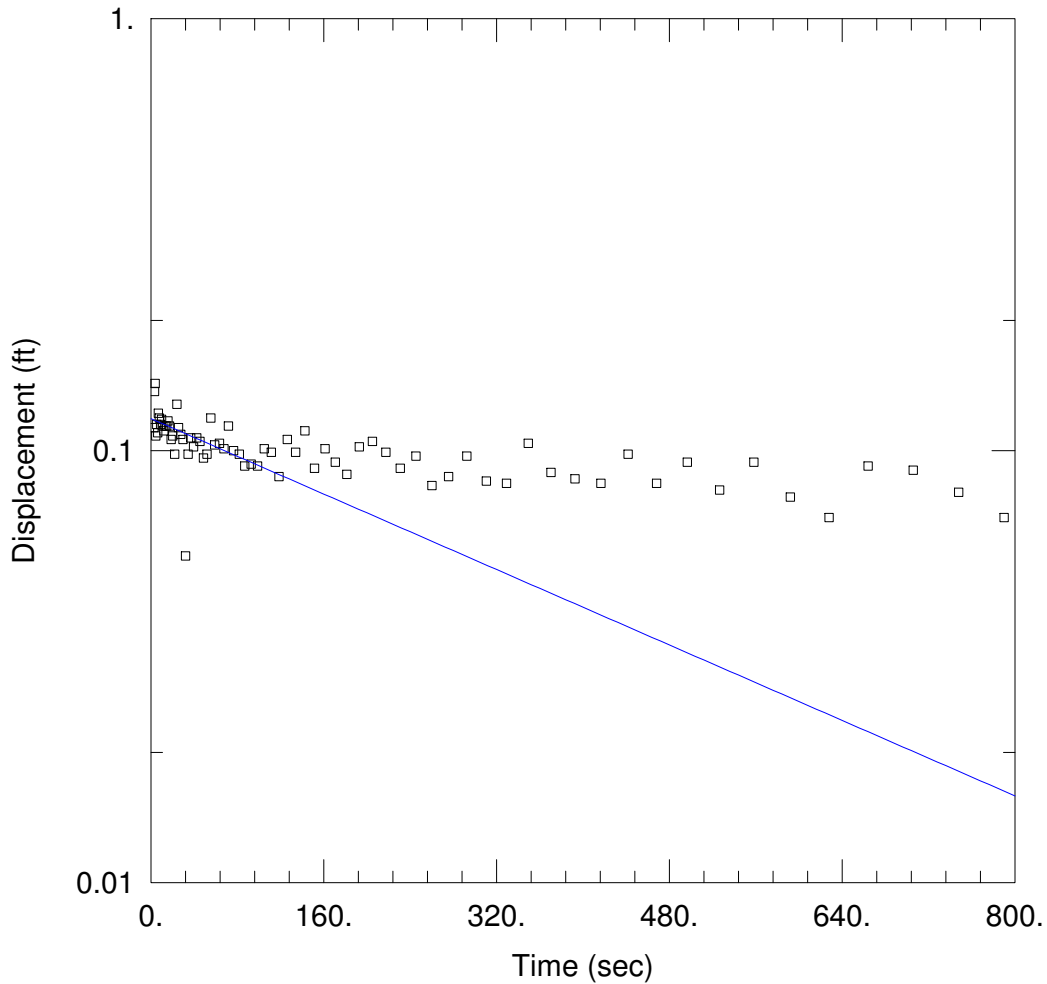
Initial Displacement: 1.517 ft
 Total Well Penetration Depth: 12.8 ft
 Casing Radius: 0.0833 ft

Static Water Column Height: 12.8 ft
 Screen Length: 10.5 ft
 Wellbore Radius: 0.3333 ft

SOLUTION

Aquifer Model: Unconfined
 K = 3.872 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.6034 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-2B falling 1.aqt
 Date: 07/26/11

Time: 12:39:05

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-2B
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 11. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (GZ-2B)

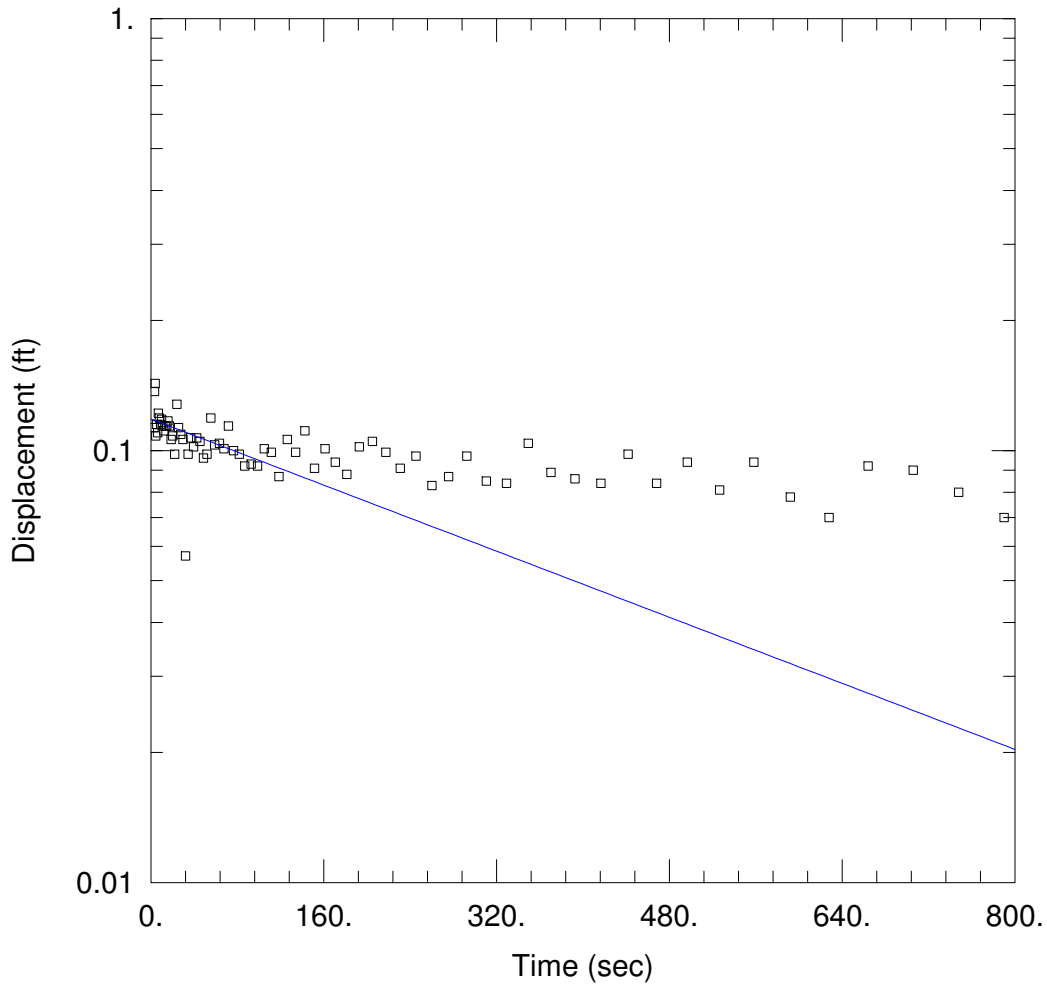
Initial Displacement: 1.6 ft
 Total Well Penetration Depth: 11. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 60. ft
 Screen Length: 11. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 $K = 0.1966$ ft/day

Solution Method: Bouwer-Rice
 $y_0 = 0.1186$ ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-2B rising 1.aqt
 Date: 07/26/11

Time: 12:40:12

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-2B
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 11. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GZ-2B)

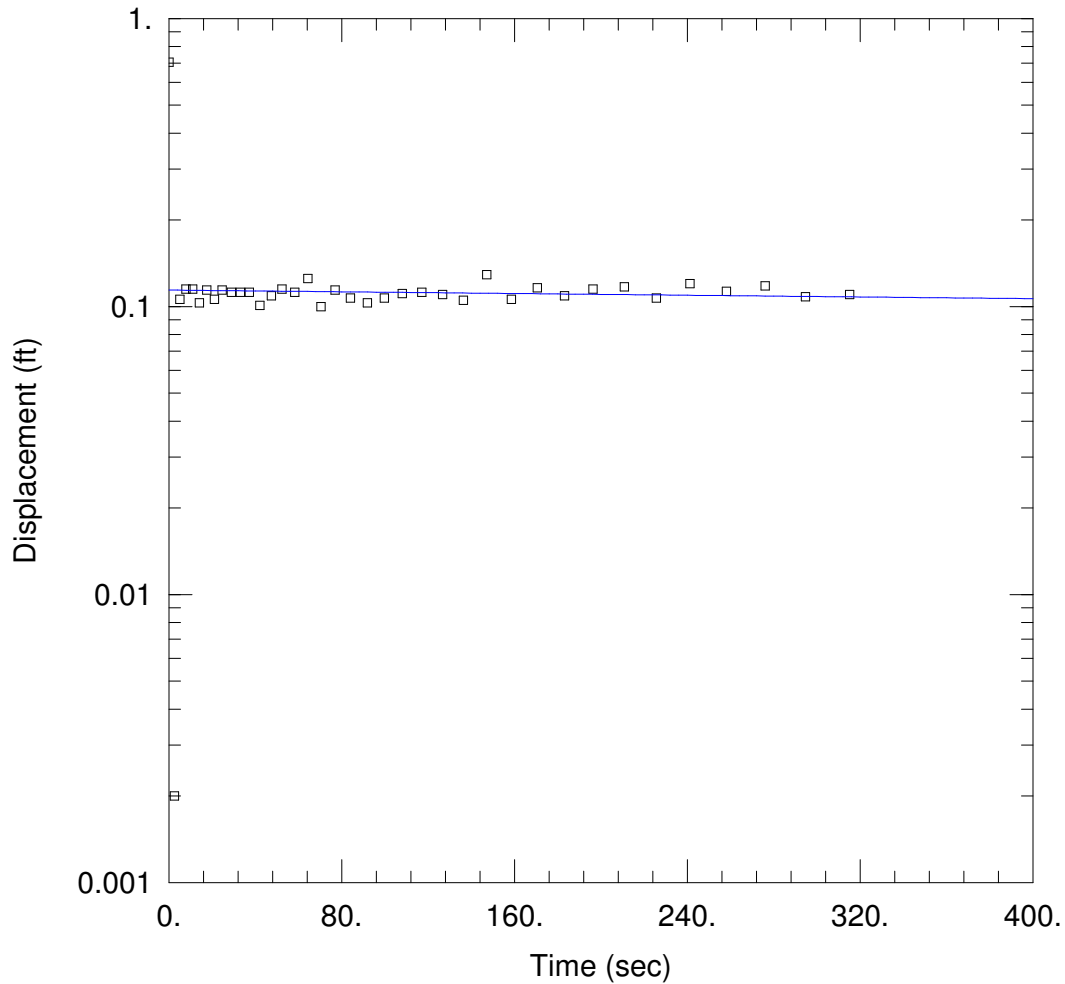
Initial Displacement: 3.095 ft
 Total Well Penetration Depth: 11. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 60. ft
 Screen Length: 11. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 0.1721 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.1183 ft



WELL TEST ANALYSIS

Data Set: \...\GZ-4C falling 1.aqt
 Date: 01/03/11

Time: 14:11:34

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-4C
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 6. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GZ-4C)

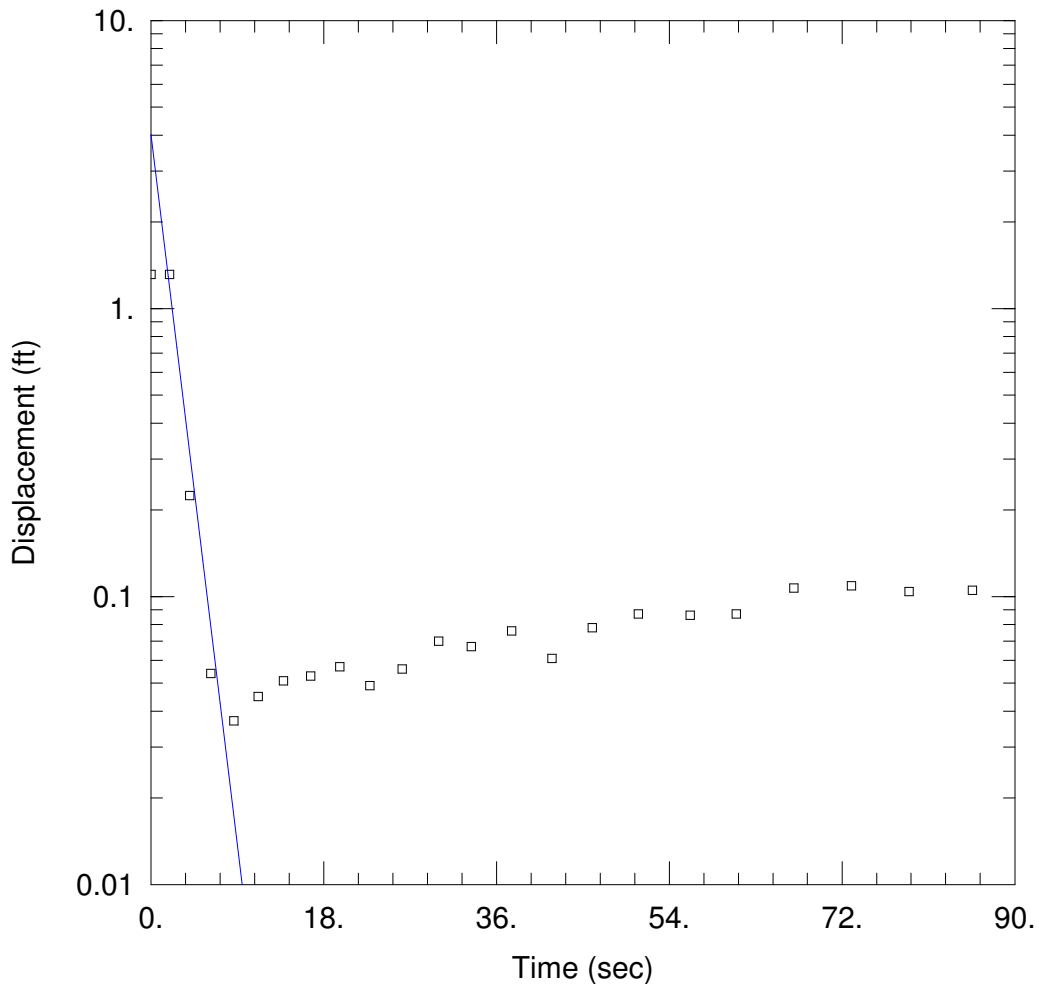
Initial Displacement: 1.905 ft
 Total Well Penetration Depth: 6. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 24. ft
 Screen Length: 6. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 0.02027 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.114 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-4E rising 1.aqt
 Date: 03/09/11

Time: 16:09:24

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-4E
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 2.2 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GZ-4E)

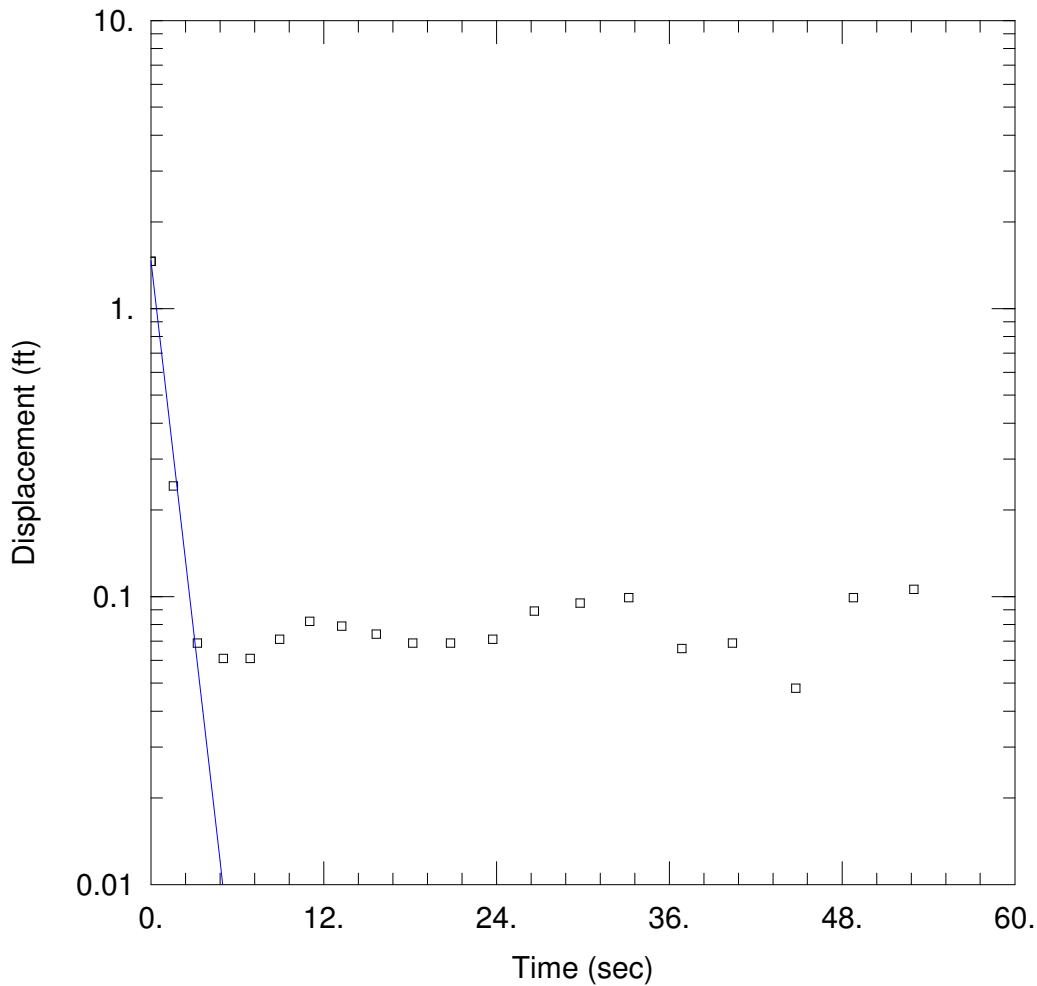
Initial Displacement: 1.313 ft
 Total Well Penetration Depth: 2.2 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 8.2 ft
 Screen Length: 2.2 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 400.4 ft/day

Solution Method: Bouwer-Rice
 y0 = 4.014 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-4E rising 2.aqt
 Date: 03/09/11

Time: 16:09:50

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-4E
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 2.2 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GZ-4E)

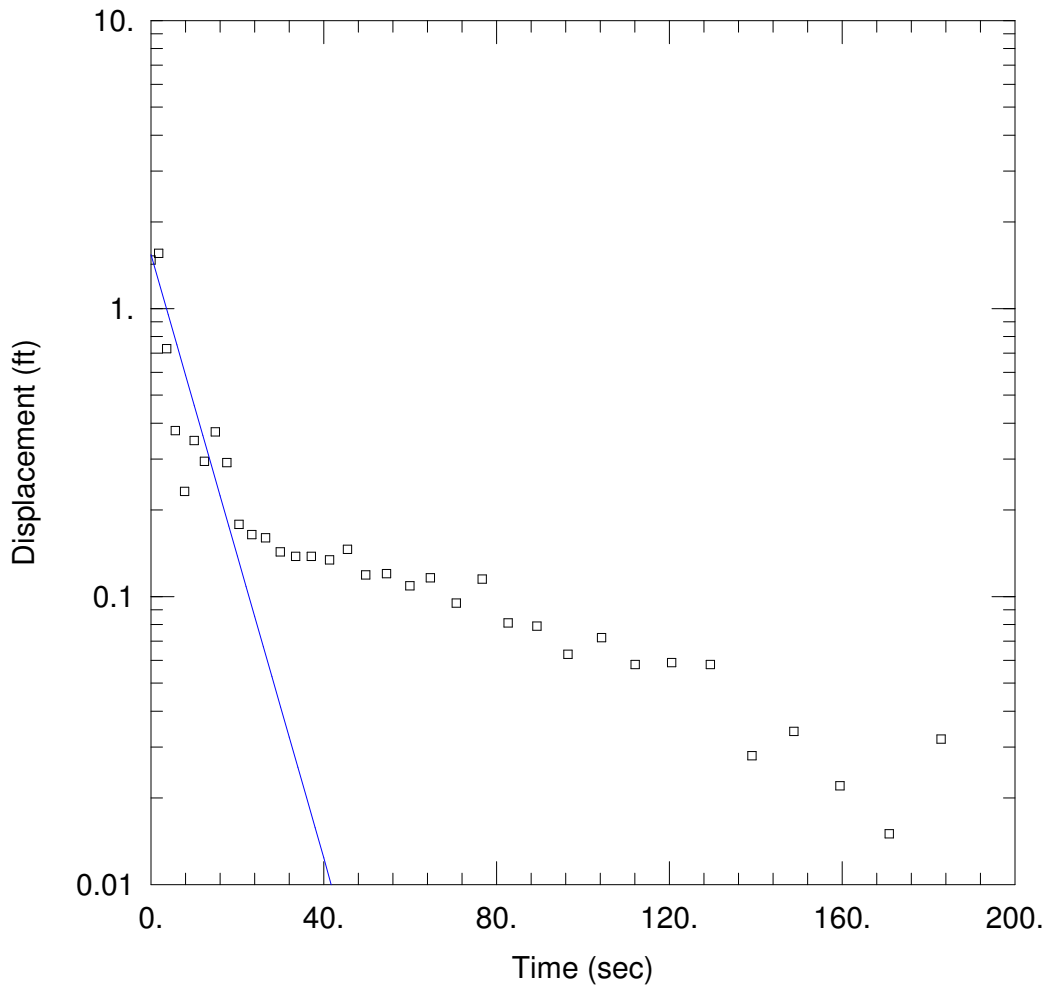
Initial Displacement: 1.457 ft
 Total Well Penetration Depth: 2.2 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 8.2 ft
 Screen Length: 2.2 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 634.2 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.463 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-4F falling 1.aqt
 Date: 03/10/11

Time: 10:16:00

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-4F
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 15. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GZ-4F)

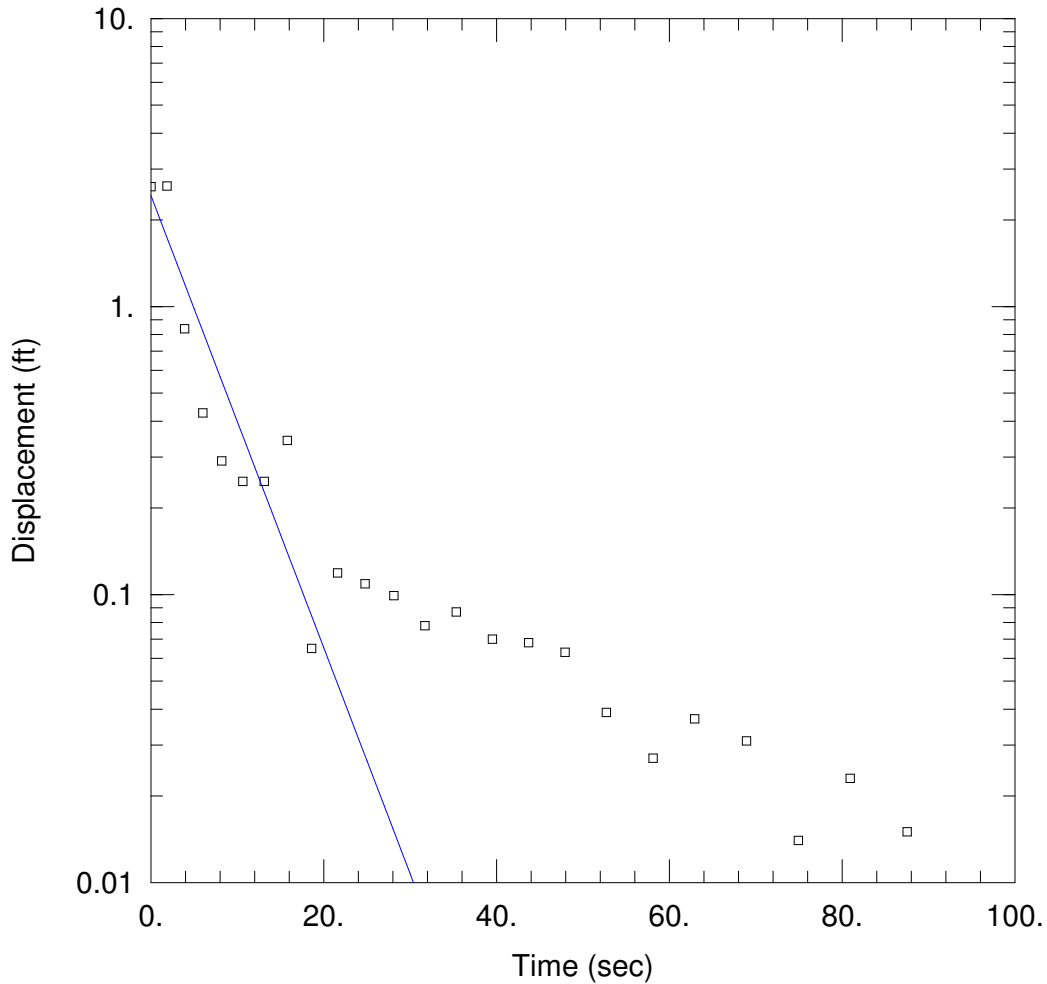
Initial Displacement: 1.473 ft
 Total Well Penetration Depth: 15. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 33. ft
 Screen Length: 11. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 13.1 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.541 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-4F falling 2.aqt
Date: 03/10/11

Time: 10:15:25

PROJECT INFORMATION

Company: GZA
Client: National Grid
Project: 09.0025623.00
Location: Gloucester, MA
Test Well: GZ-4F
Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 15. ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (GZ-4F)

Initial Displacement: 2.61 ft
Total Well Penetration Depth: 15. ft
Casing Radius: 0.083 ft

Static Water Column Height: 33. ft
Screen Length: 11. ft
Wellbore Radius: 0.25 ft

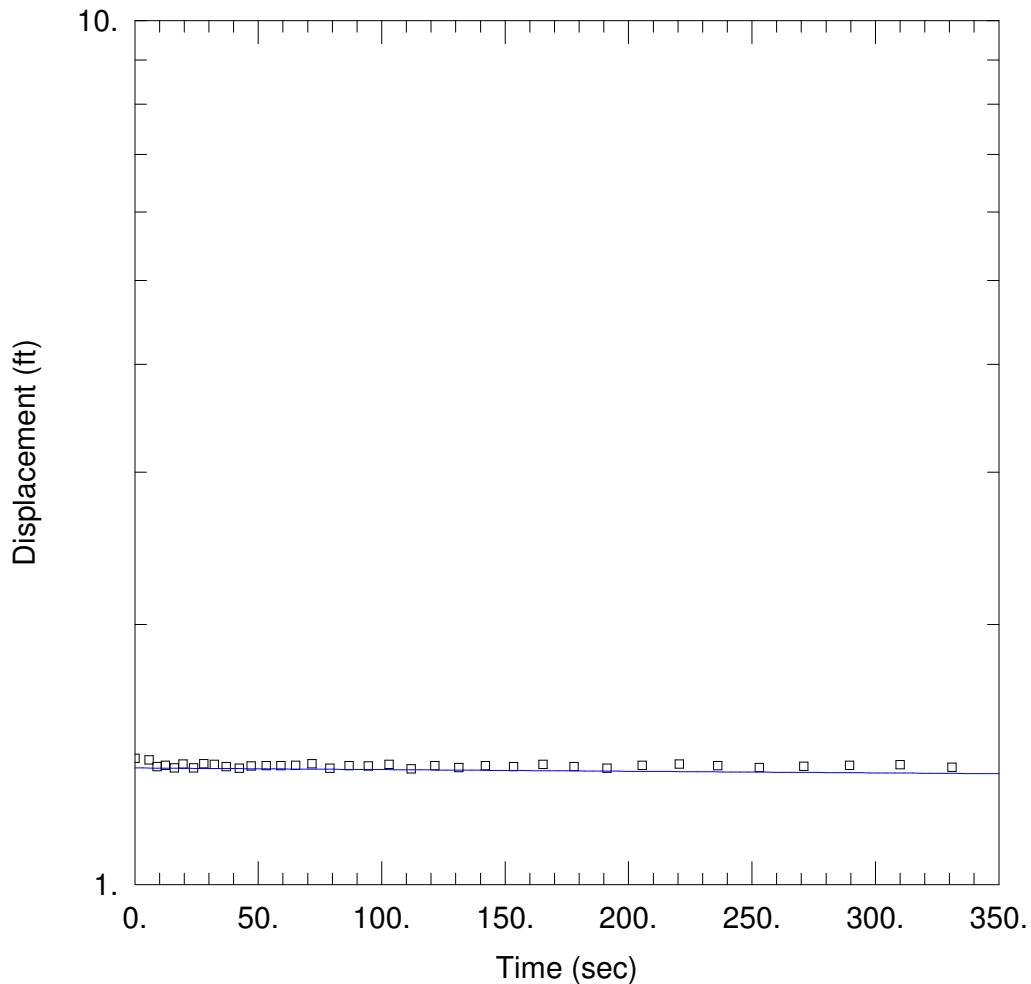
SOLUTION

Aquifer Model: Confined

Solution Method: Bouwer-Rice

$K =$ 19.63 ft/day

$y_0 =$ 2.424 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-6B falling 1.aqt
 Date: 03/08/11

Time: 14:59:41

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester
 Test Well: GZ-6B
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 11. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GZ-6B)

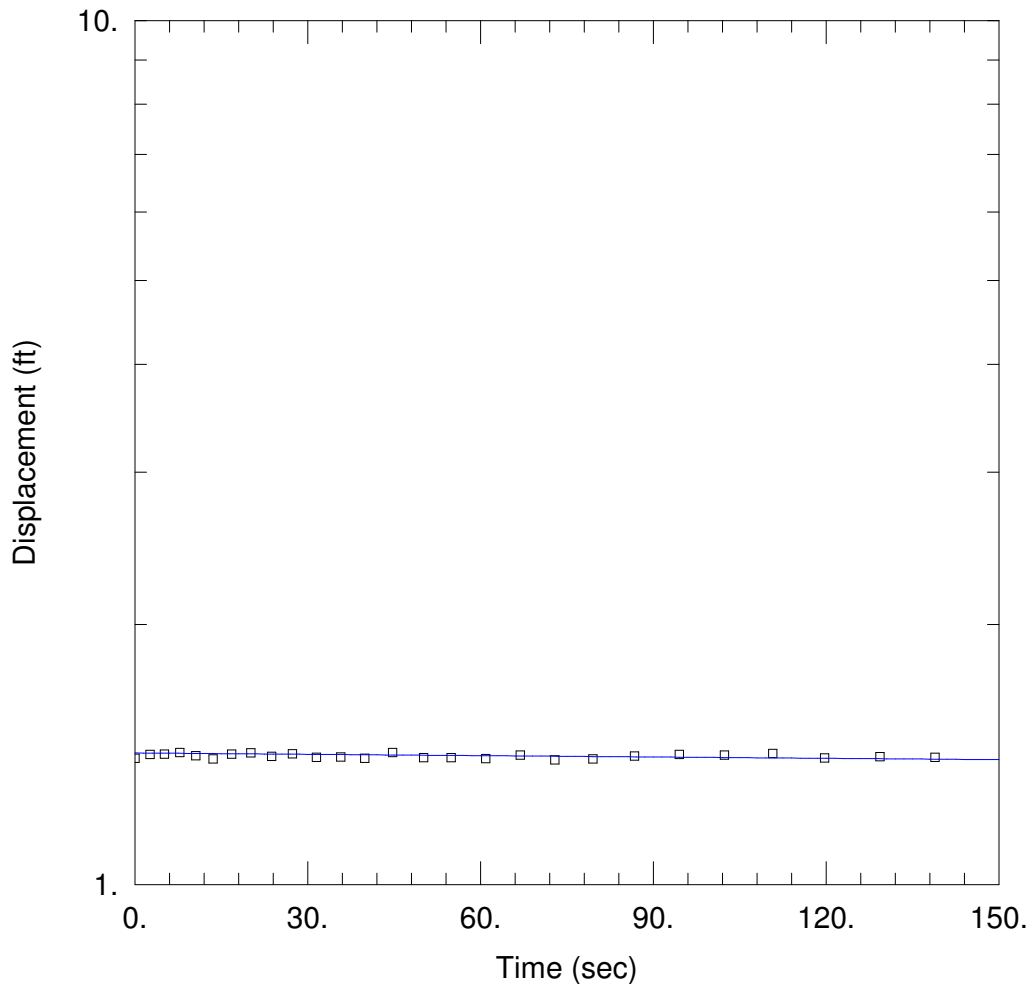
Initial Displacement: 1.4 ft
 Total Well Penetration Depth: 11. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 41.38 ft
 Screen Length: 11. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 0.00343 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.364 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-6B rising 2.aqt
 Date: 03/08/11

Time: 15:00:03

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-6B
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 11. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GZ-6B)

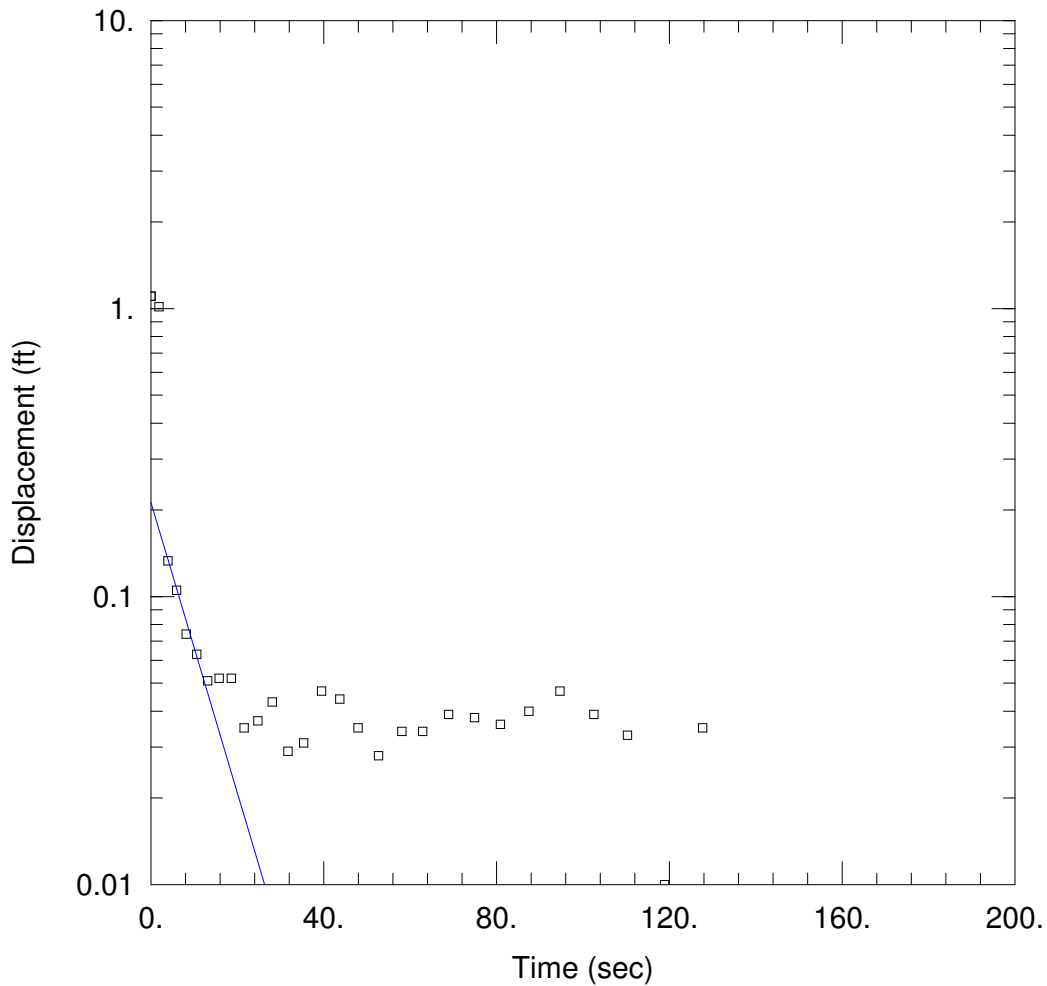
Initial Displacement: 1.4 ft
 Total Well Penetration Depth: 11. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 41.38 ft
 Screen Length: 11. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 0.009307 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.42 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-6C rising 1.aqt
 Date: 03/10/11

Time: 10:21:03

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-6C
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 11. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GZ-6C)

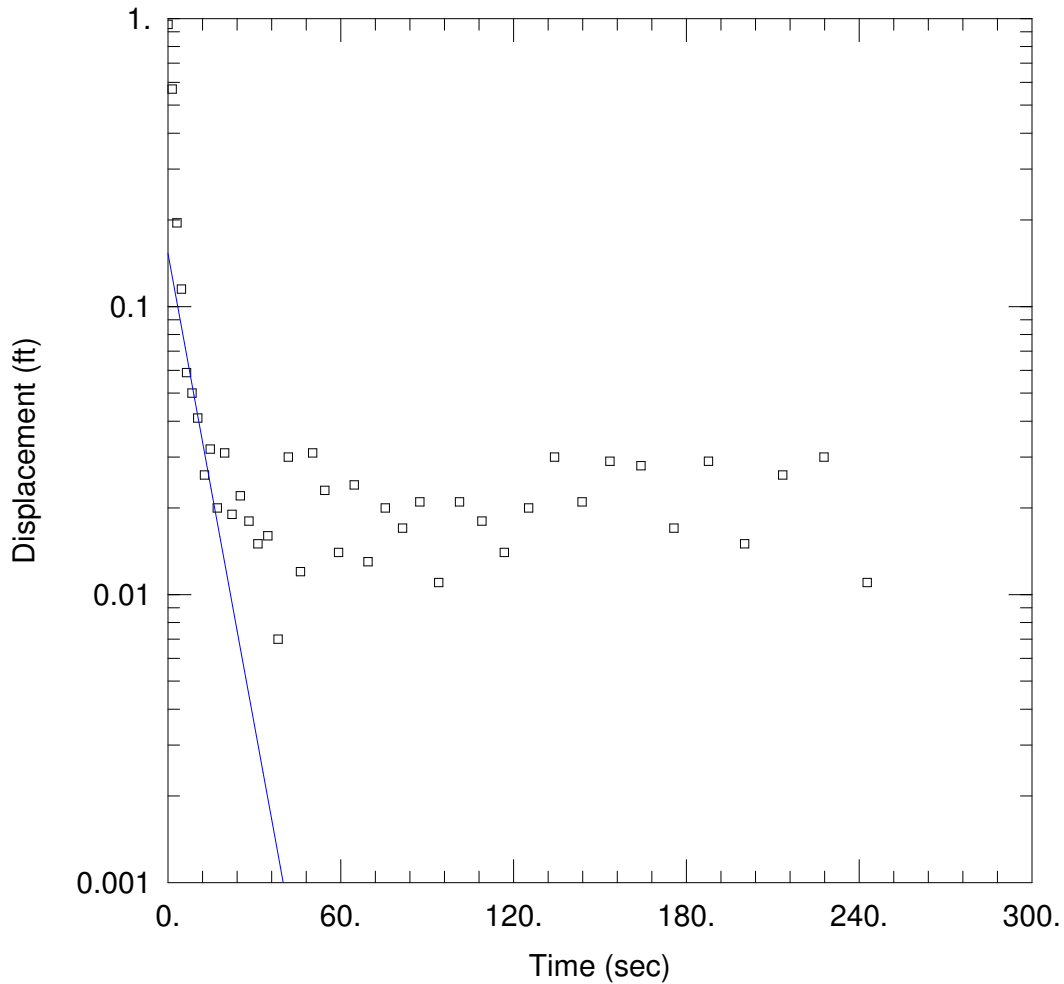
Initial Displacement: 1.104 ft
 Total Well Penetration Depth: 11. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 16. ft
 Screen Length: 11. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 9.08 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.212 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-6C rising 2.aqt
 Date: 03/10/11

Time: 10:22:01

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-6C
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 11. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GZ-6C)

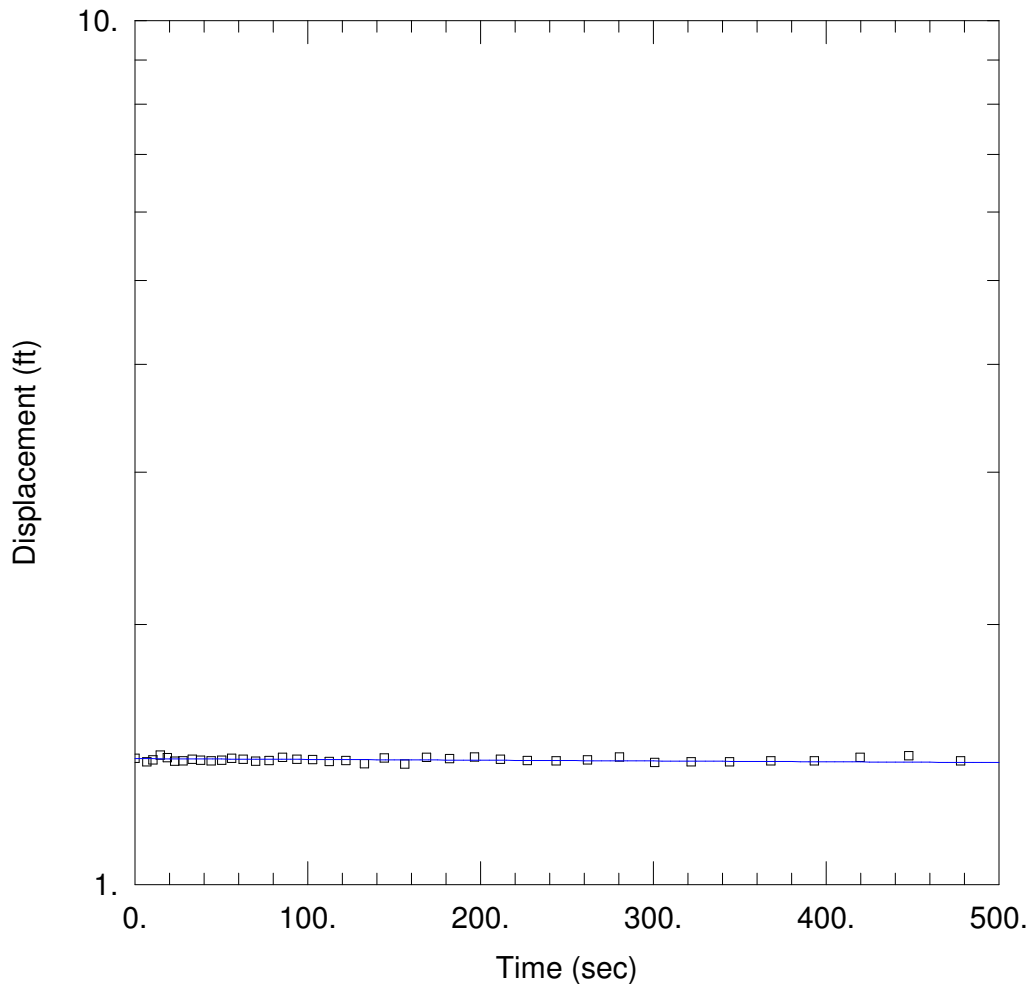
Initial Displacement: 1.079 ft
 Total Well Penetration Depth: 11. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 16. ft
 Screen Length: 11. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 9.828 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.1528 ft



WELL TEST ANALYSIS

Data Set: \...\GZ-7B falling 1.aqt
 Date: 02/10/11

Time: 15:12:05

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-7B
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 11.5 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (GZ-7B)

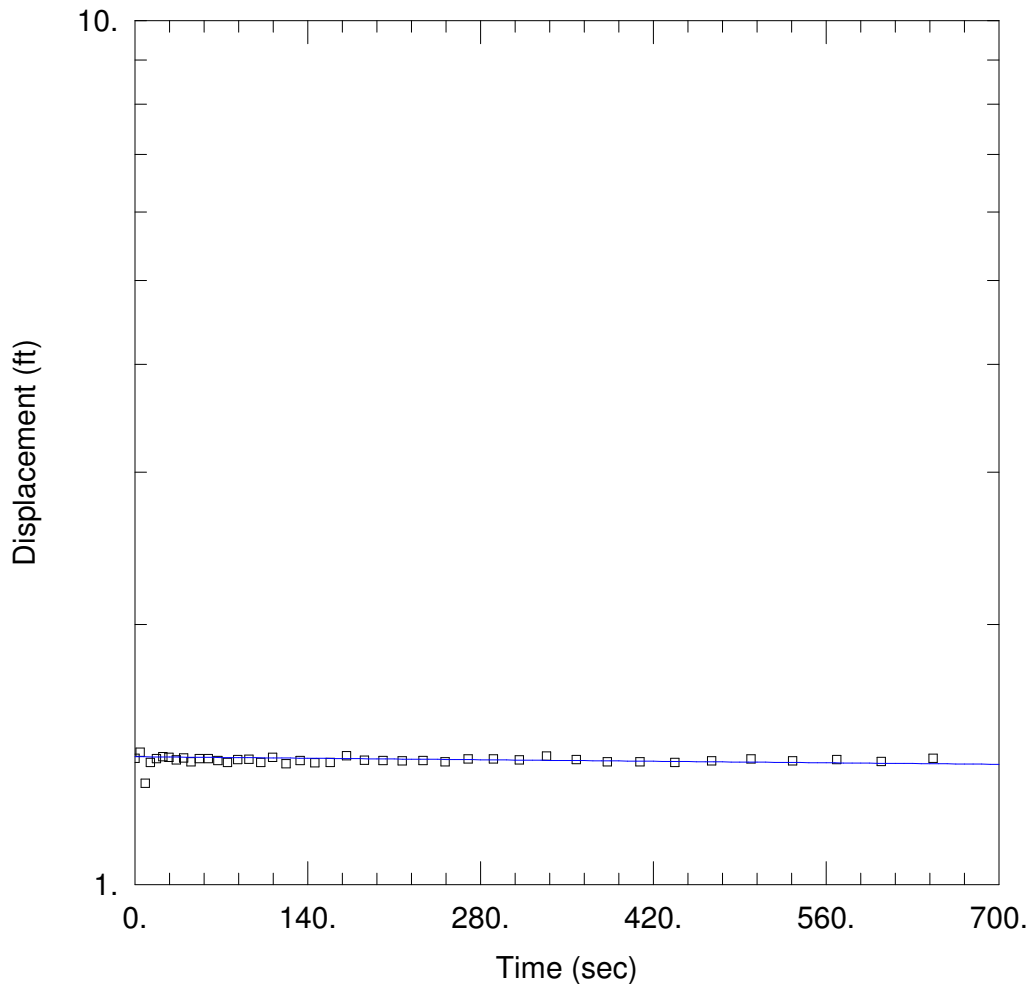
Initial Displacement: 1.4 ft
 Total Well Penetration Depth: 11.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 59. ft
 Screen Length: 11.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 $K = 0.001578$ ft/day

Solution Method: Bouwer-Rice
 $y_0 = 1.399$ ft



WELL TEST ANALYSIS

Data Set: \...\GZ-7B falling 2.aqt
 Date: 02/10/11

Time: 15:21:10

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-7B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 11.5 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GZ-7B)

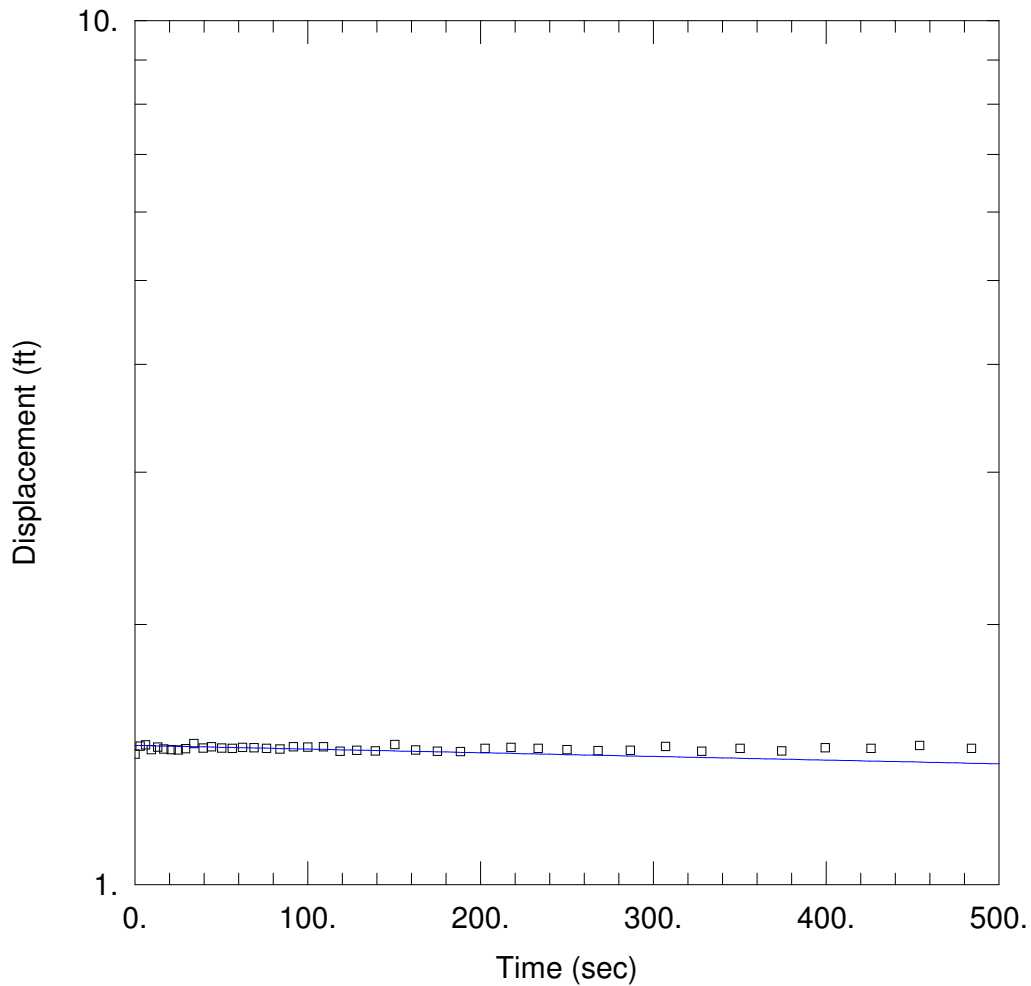
Initial Displacement: 1.4 ft
 Total Well Penetration Depth: 11.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 59. ft
 Screen Length: 11.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 0.002186 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.406 ft



WELL TEST ANALYSIS

Data Set: \...\GZ-7B rising 2.aqt
 Date: 02/10/11

Time: 15:25:35

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-7B
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 11.5 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GZ-7B)

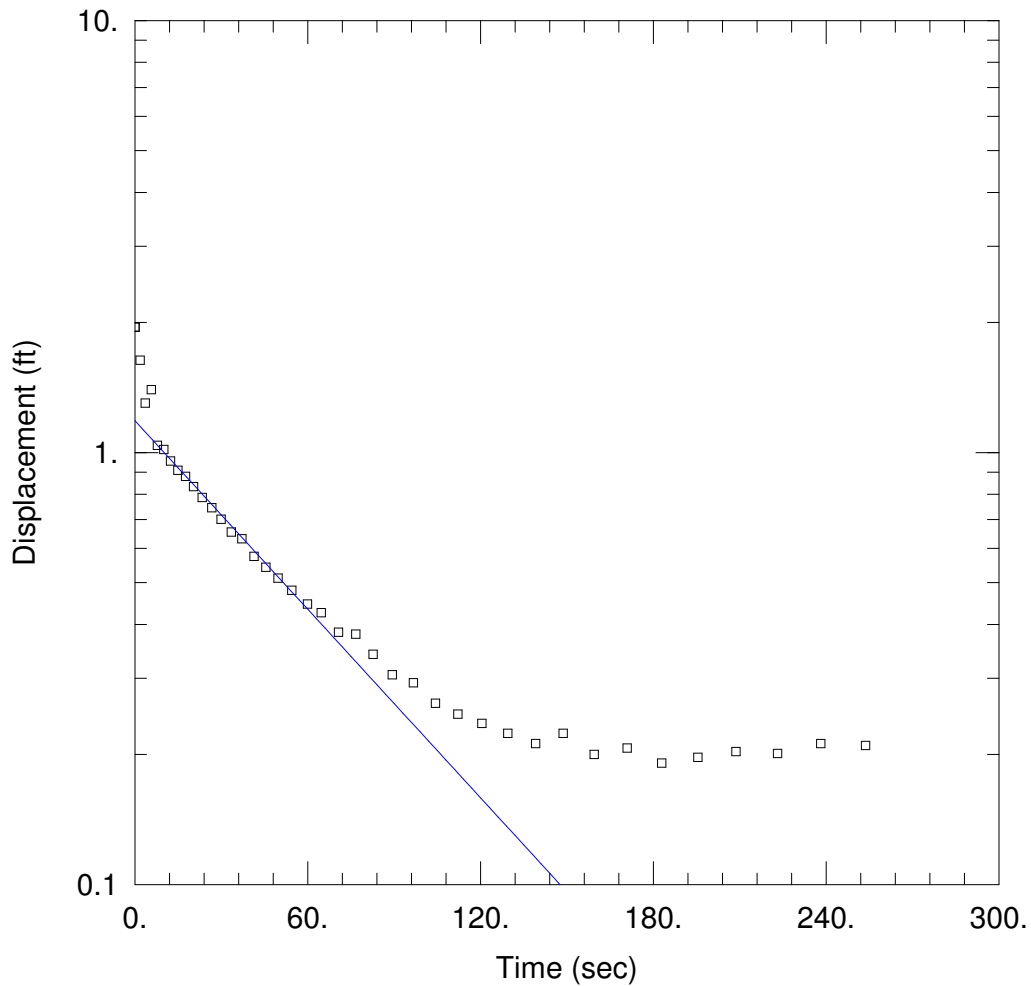
Initial Displacement: 1.415 ft
 Total Well Penetration Depth: 11.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 59. ft
 Screen Length: 11.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 0.007422 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.449 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-7C rising 1.aqt
 Date: 03/10/11

Time: 10:25:11

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-7C
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 6. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GZ-7C)

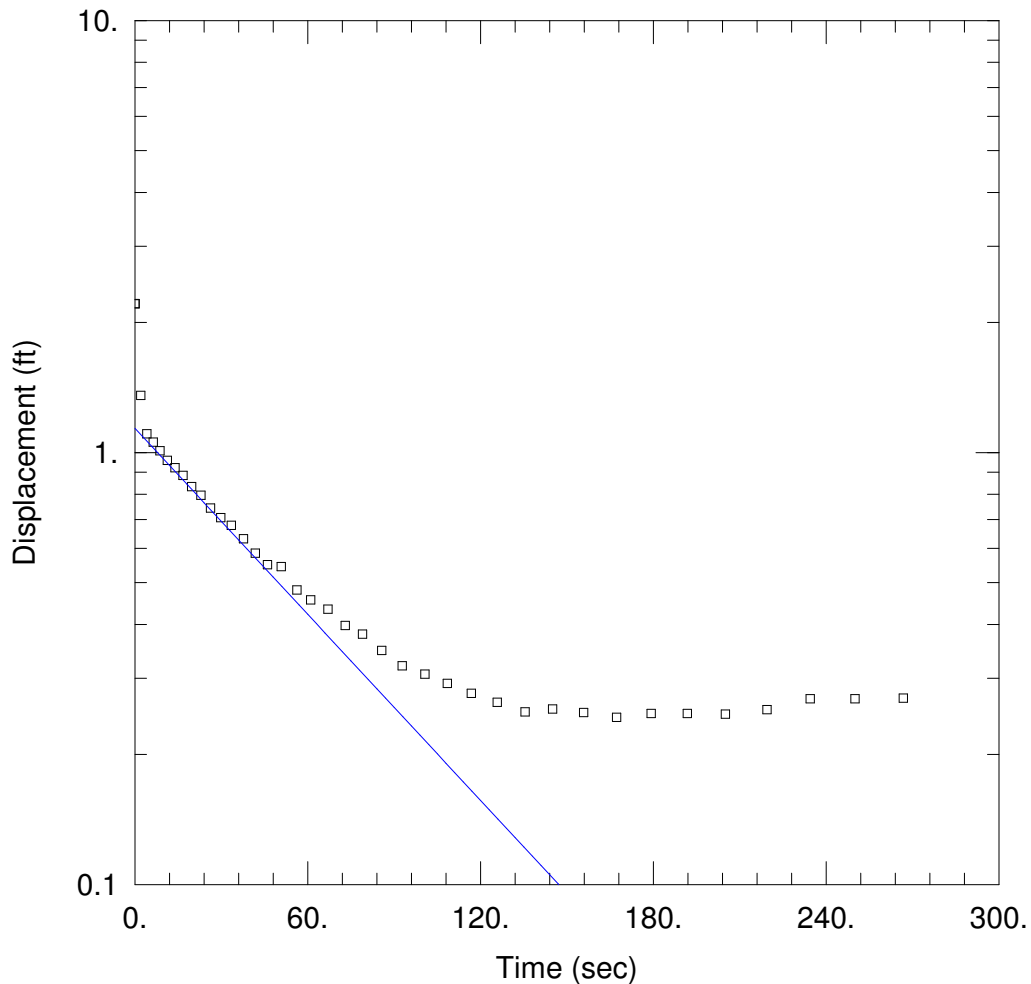
Initial Displacement: 1.95 ft
 Total Well Penetration Depth: 6. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 35. ft
 Screen Length: 5. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 3.289 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.184 ft



WELL TEST ANALYSIS

Data Set: J:\...\GZ-7C rising 2.aqt
 Date: 03/10/11

Time: 10:25:51

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: GZ-7C
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 6. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GZ-7C)

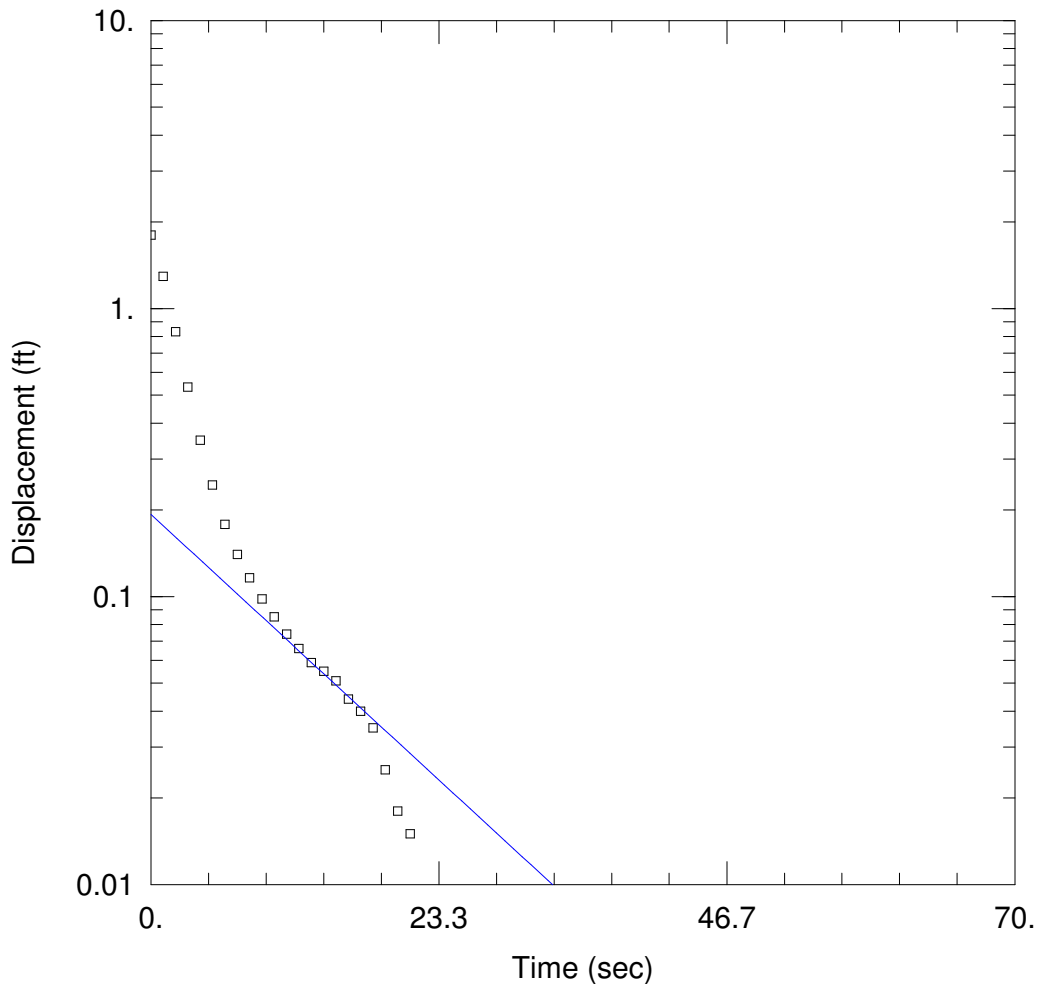
Initial Displacement: 2.21 ft
 Total Well Penetration Depth: 6. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 35. ft
 Screen Length: 5. ft
 Wellbore Radius: 0.5 ft

SOLUTION

Aquifer Model: Confined
 K = 2.685 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.138 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-101.aqt
 Date: 03/10/11

Time: 09:37:23

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-101
 Test Date: 3/9/10

AQUIFER DATA

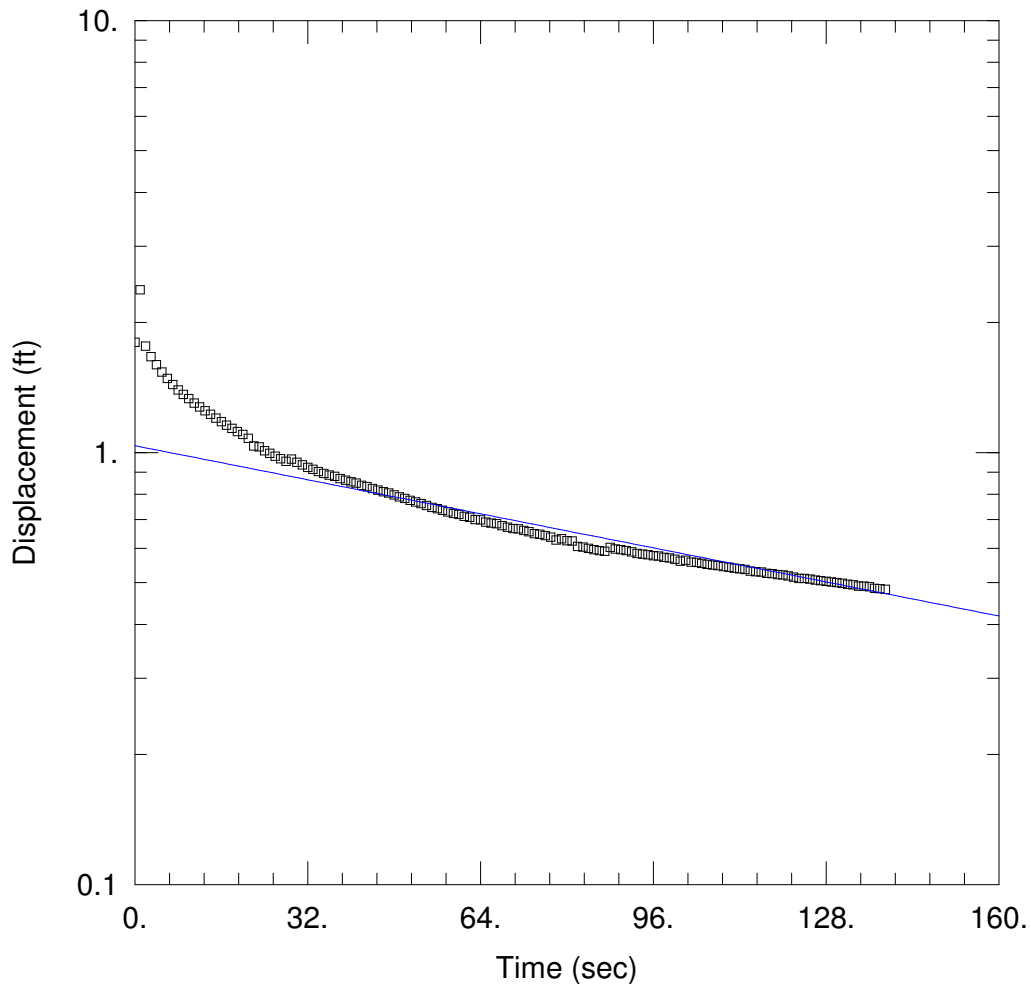
Saturated Thickness: 7.5 ft Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW-101)

Initial Displacement: <u>1.8</u> ft	Static Water Column Height: <u>6.5</u> ft
Total Well Penetration Depth: <u>6.5</u> ft	Screen Length: <u>6.5</u> ft
Casing Radius: <u>0.083</u> ft	Wellbore Radius: <u>0.333</u> ft
	Gravel Pack Porosity: <u>0.25</u>

SOLUTION

Aquifer Model: <u>Unconfined</u>	Solution Method: <u>Bouwer-Rice</u>
$K =$ <u>58.05</u> ft/day	$y_0 =$ <u>0.1927</u> ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-102.aqt
 Date: 03/09/11

Time: 16:02:51

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-102
 Test Date: 3/10/10

AQUIFER DATA

Saturated Thickness: 1.46 ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW-102)

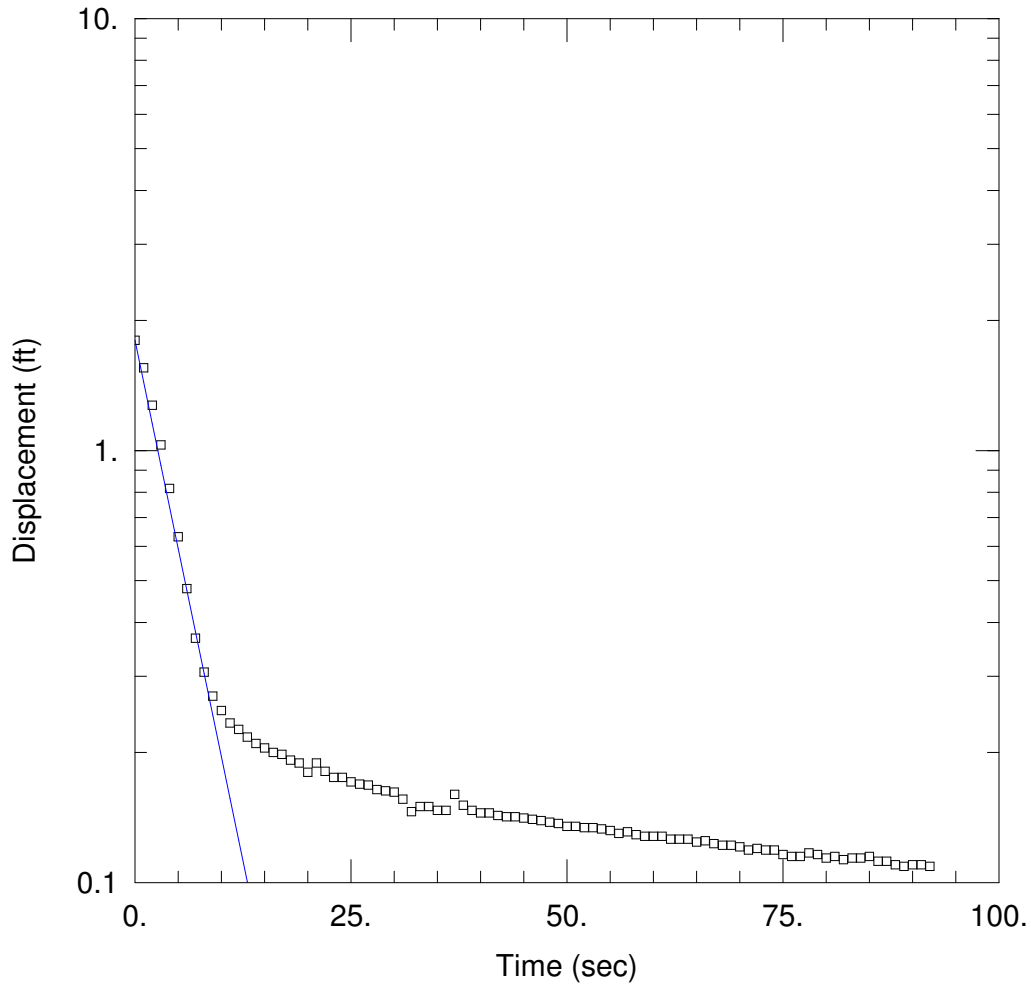
Initial Displacement: 1.8 ft
 Total Well Penetration Depth: 1.46 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 6.86 ft
 Screen Length: 1.46 ft
 Wellbore Radius: 0.333 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 5.952 ft/day

Solution Method: Bouwer-Rice
 y_0 = 1.037 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-103.aqt
 Date: 03/08/11

Time: 13:43:32

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-103
 Test Date: 3/10/10

AQUIFER DATA

Saturated Thickness: 5.38 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-103)

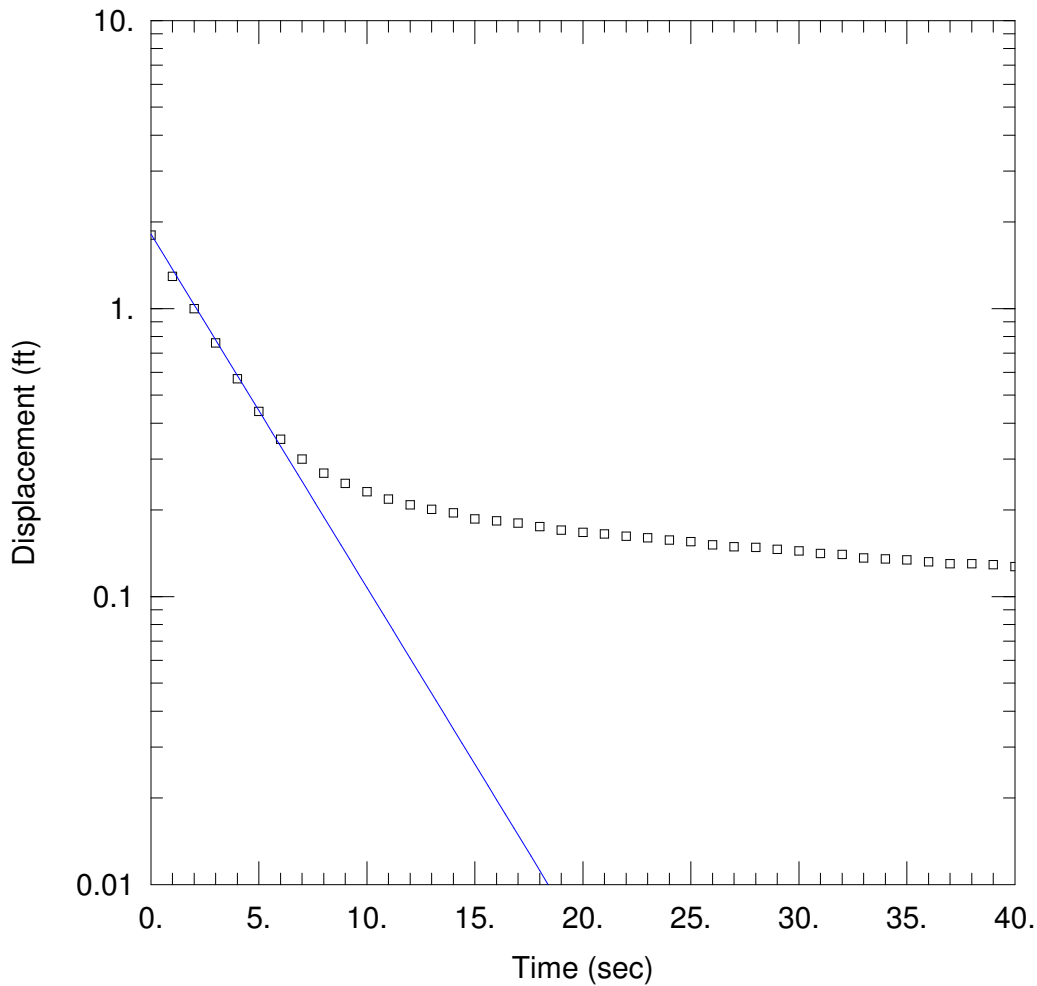
Initial Displacement: 1.8 ft
 Total Well Penetration Depth: 5.38 ft
 Casing Radius: 0.0833 ft

Static Water Column Height: 5.38 ft
 Screen Length: 5.38 ft
 Wellbore Radius: 0.333 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 119.6 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.799 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-201.aqt
 Date: 03/08/11

Time: 14:01:17

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-201
 Test Date: 3/10/10

AQUIFER DATA

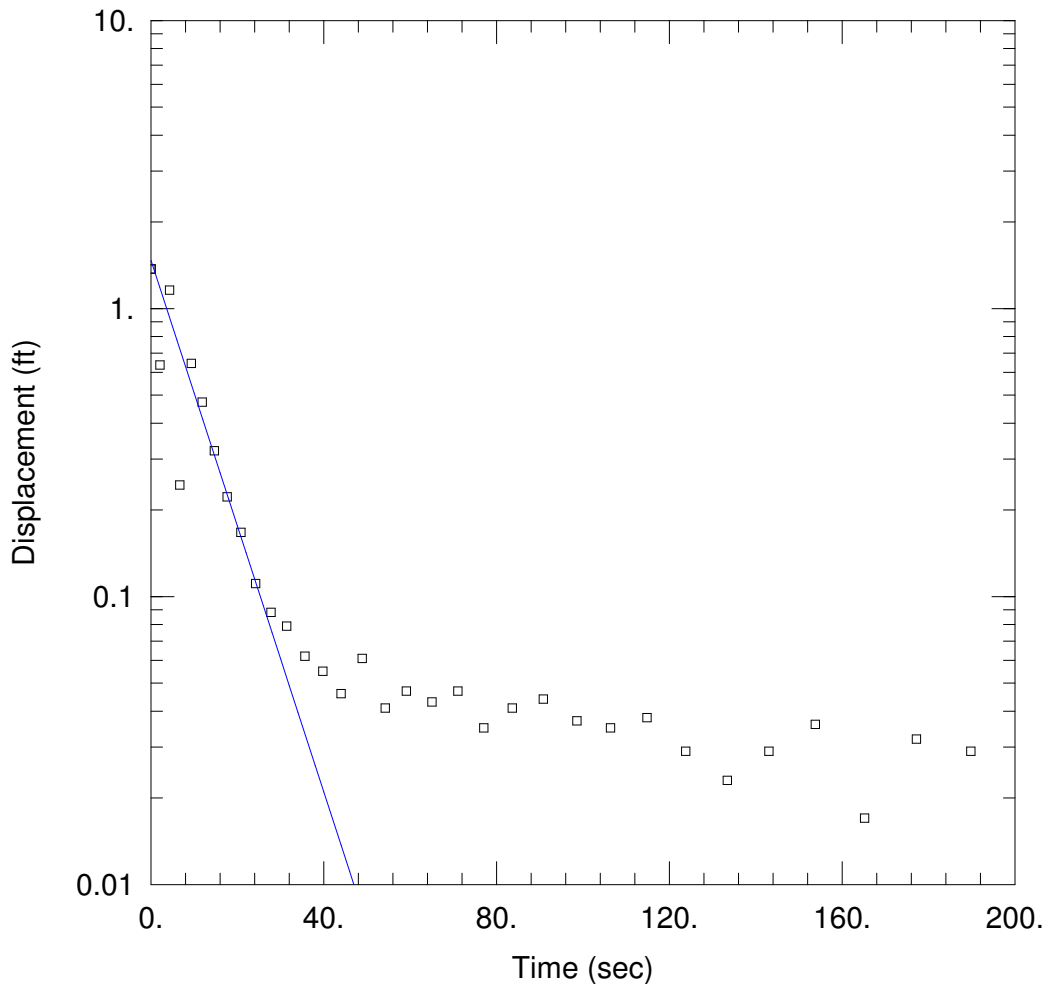
Saturated Thickness: 9.07 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-201)

Initial Displacement: <u>1.8</u> ft	Static Water Column Height: <u>9.07</u> ft
Total Well Penetration Depth: <u>9.07</u> ft	Screen Length: <u>9.07</u> ft
Casing Radius: <u>0.083</u> ft	Wellbore Radius: <u>0.333</u> ft
	Gravel Pack Porosity: <u>0.25</u>

SOLUTION

Aquifer Model: <u>Unconfined</u>	Solution Method: <u>Bouwer-Rice</u>
K = <u>110.1</u> ft/day	y0 = <u>1.813</u> ft



WELL TEST ANALYSIS

Data Set: \...\MW-201B rising 1.aqt
 Date: 01/03/11

Time: 13:18:32

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-201B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 11.5 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-201B)

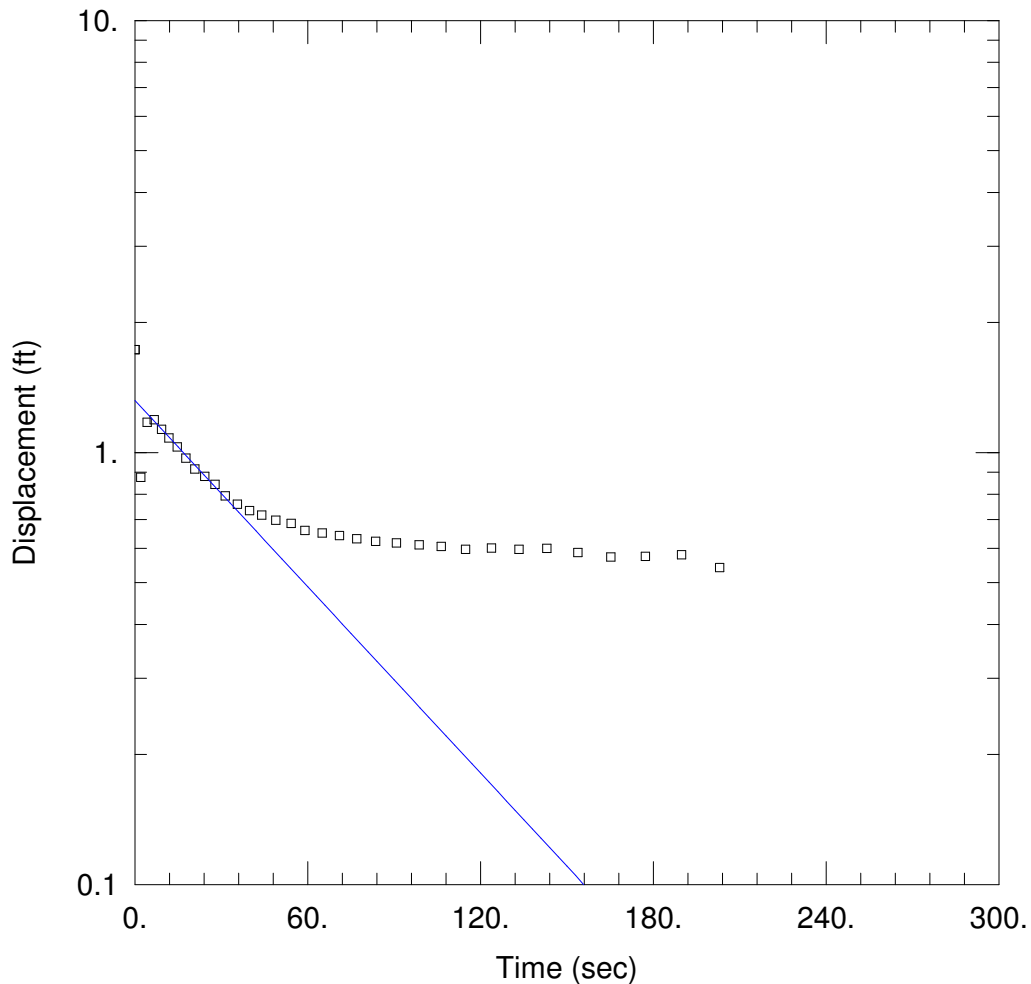
Initial Displacement: 1.37 ft
 Total Well Penetration Depth: 11.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 27.5 ft
 Screen Length: 11.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 8.047 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.471 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-203a rising 2.aqt
 Date: 03/09/11

Time: 08:42:44

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-203A
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 8.56 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-203A)

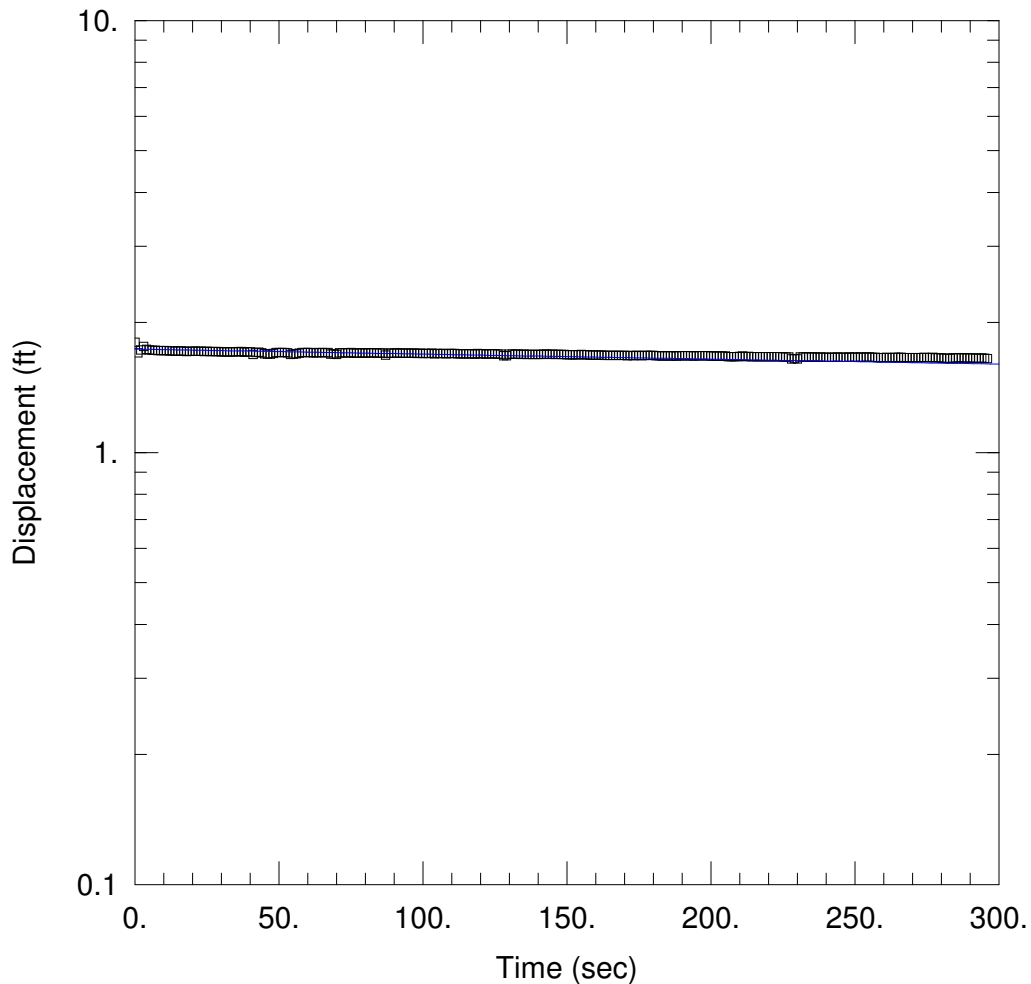
Initial Displacement: 1.731 ft
 Total Well Penetration Depth: 8.56 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 8.56 ft
 Screen Length: 8.56 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Confined
 K = 1.543 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.32 ft



WELL TEST ANALYSIS

Data Set: \...\MW-203B.aqt
 Date: 01/21/11

Time: 09:37:15

PROJECT INFORMATION

Company: GZA
 Client: Natioanl Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-203B
 Test Date: 3/9/10

AQUIFER DATA

Saturated Thickness: 12. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-203B)

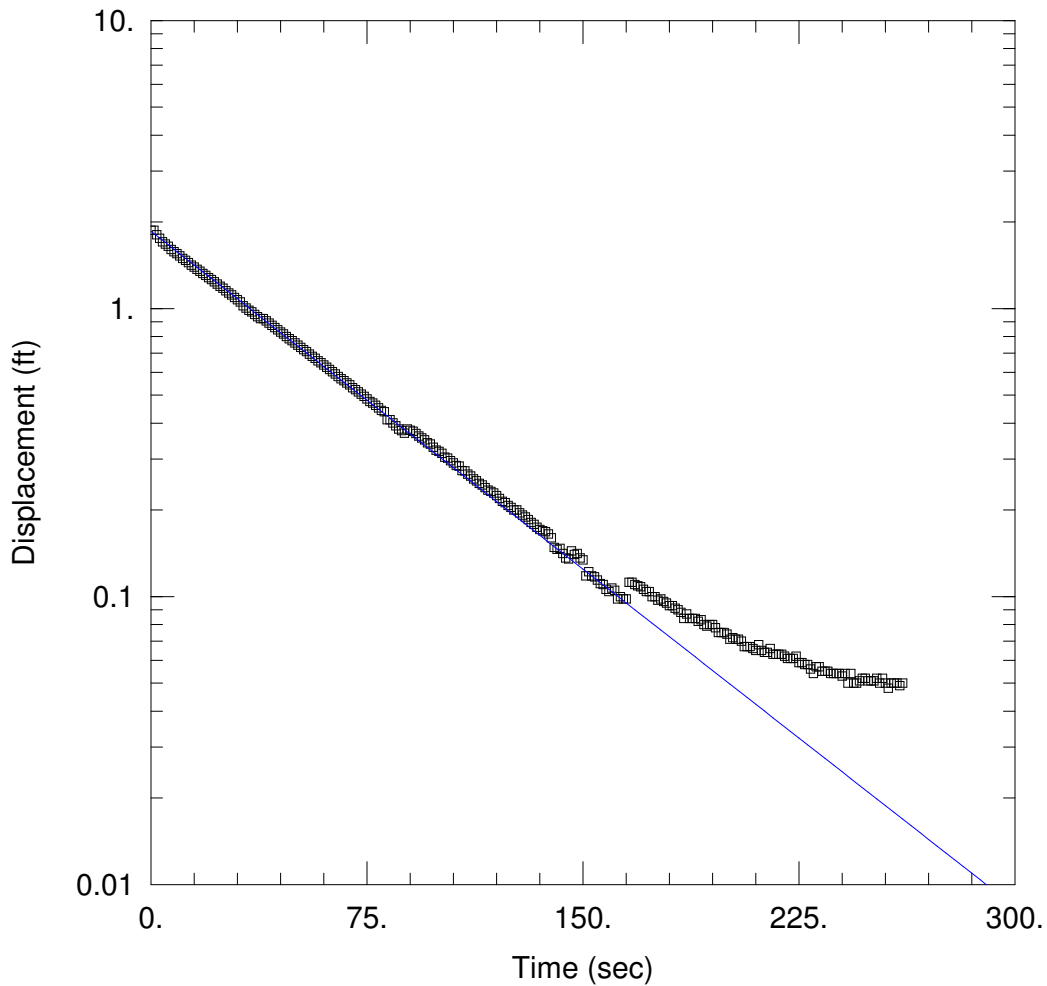
Initial Displacement: 1.8 ft
 Total Well Penetration Depth: 12. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 25.2 ft
 Screen Length: 12. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 0.01961 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.735 ft



WELL TEST ANALYSIS

Data Set: J:\...MW-204A.aqt
 Date: 03/10/11

Time: 09:48:39

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-204A
 Test Date: 3/10/10

AQUIFER DATA

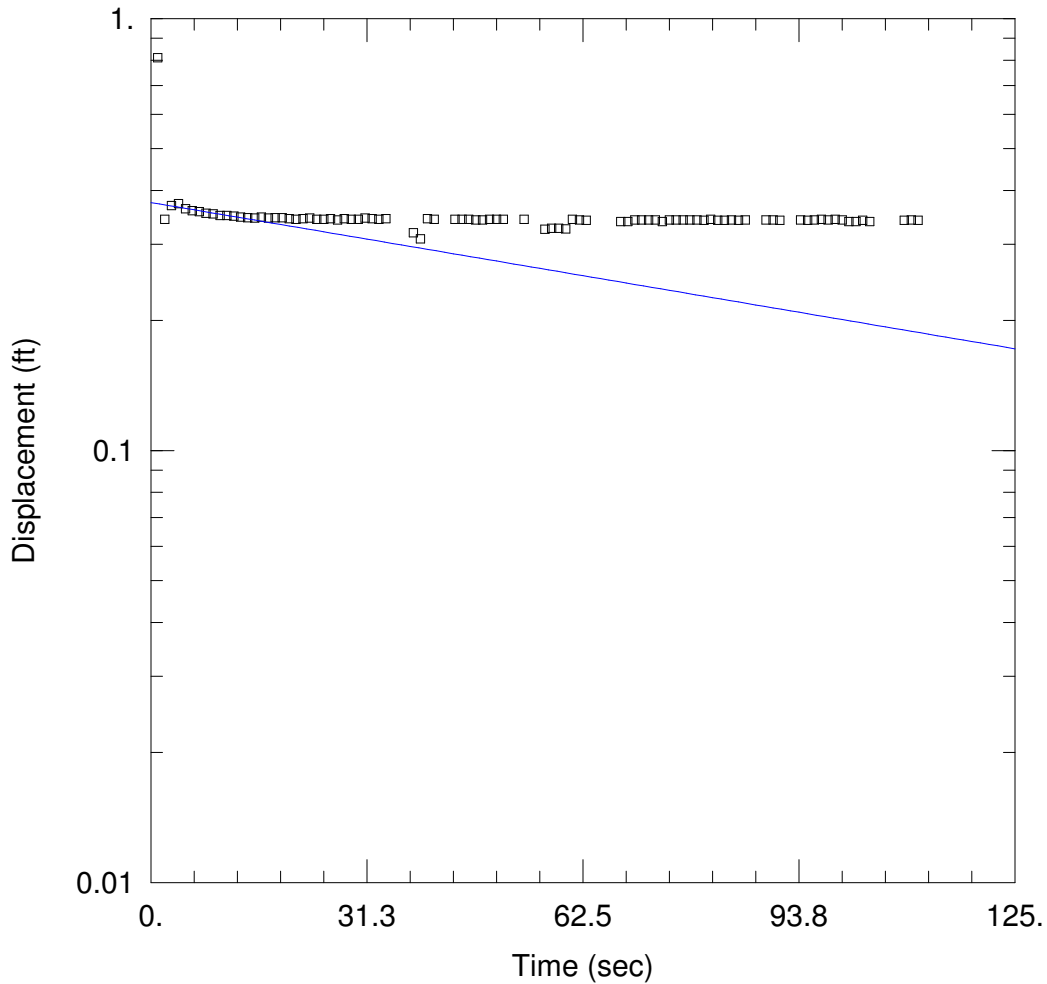
Saturated Thickness: 26. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-204A)

Initial Displacement: 1.868 ft Static Water Column Height: 31.9 ft
 Total Well Penetration Depth: 26. ft Screen Length: 18. ft
 Casing Radius: 0.08 ft Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice
 K = 1.243 ft/day $y_0 =$ 1.854 ft



WELL TEST ANALYSIS

Data Set: \...\MW-204B.aqt
Date: 01/03/11

Time: 13:57:18

PROJECT INFORMATION

Company: GZA
Client: National Grid
Project: 25623
Location: Gloucester, MA
Test Well: MW-204B
Test Date: 3/10/10

AQUIFER DATA

Saturated Thickness: 12. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-204B)

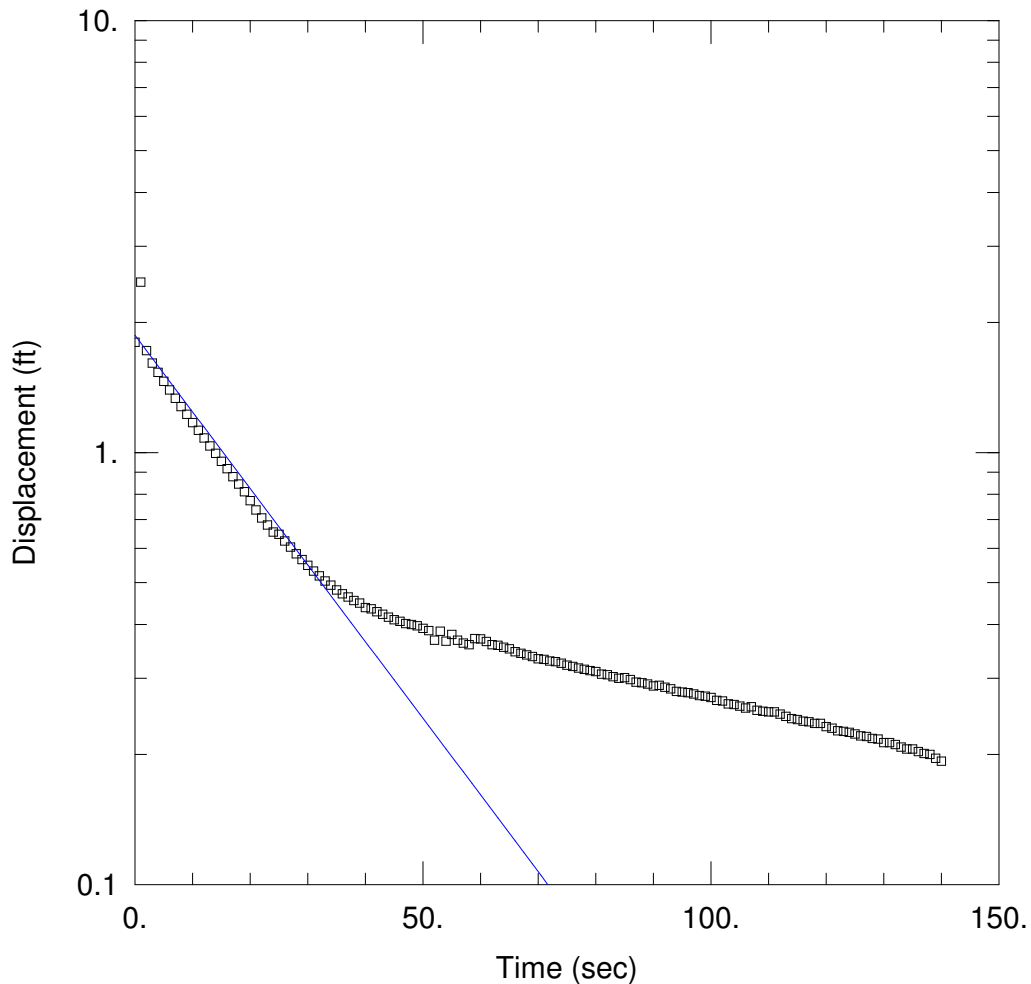
Initial Displacement: 1.8 ft
Total Well Penetration Depth: 12. ft
Casing Radius: 0.0833 ft

Static Water Column Height: 50.14 ft
Screen Length: 12. ft
Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
K = 0.4613 ft/day

Solution Method: Bouwer-Rice
y0 = 0.375 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-205A.aqt
 Date: 03/09/11

Time: 16:07:17

PROJECT INFORMATION

Company: GZA
 Client: Client
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-205A
 Test Date: 3/11/10

AQUIFER DATA

Saturated Thickness: 6.99 ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW-205A)

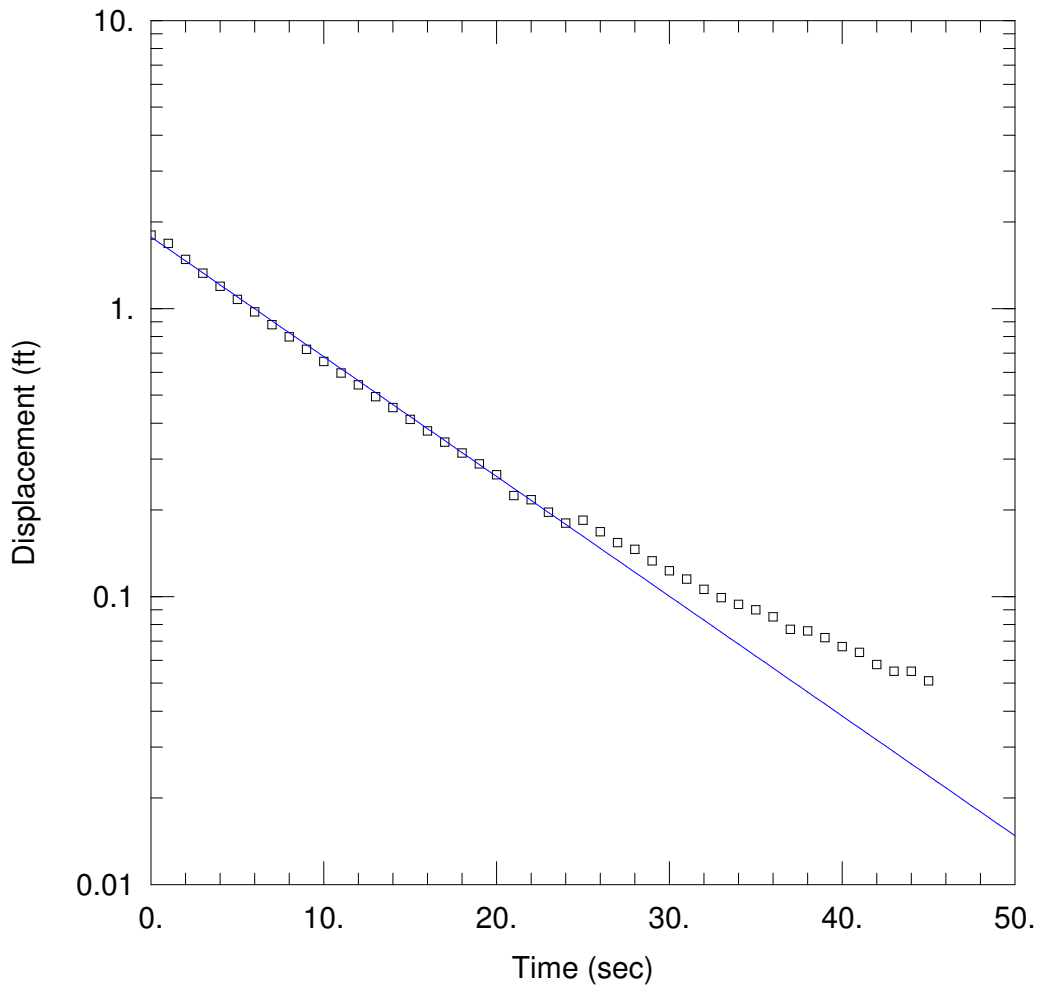
Initial Displacement: 1.8 ft
 Total Well Penetration Depth: 6.99 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 6.99 ft
 Screen Length: 6.99 ft
 Wellbore Radius: 0.333 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 18.78 ft/day

Solution Method: Bouwer-Rice
 y_0 = 1.868 ft



WELL TEST ANALYSIS

Data Set: J:\...MW-205B.aqt
 Date: 03/10/11

Time: 09:50:52

PROJECT INFORMATION

Company: GZA
 Client: Natioanl Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-205B
 Test Date: 3/11/10

AQUIFER DATA

Saturated Thickness: 18. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-205B)

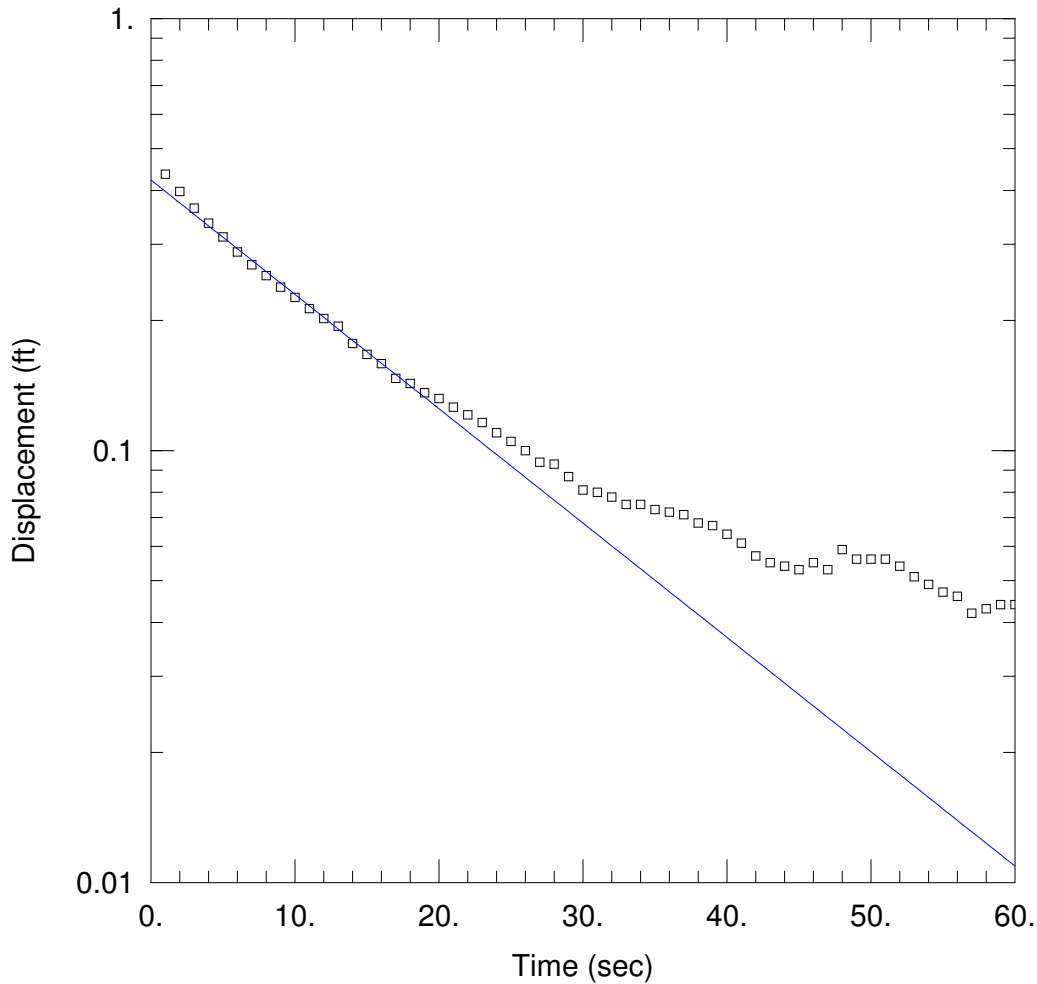
Initial Displacement: 1.8 ft
 Total Well Penetration Depth: 18. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 27.14 ft
 Screen Length: 12. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 7.641 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.772 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-206B.aqt
 Date: 03/10/11

Time: 10:10:07

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-206B
 Test Date: 3/11/10

AQUIFER DATA

Saturated Thickness: 21. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-206B)

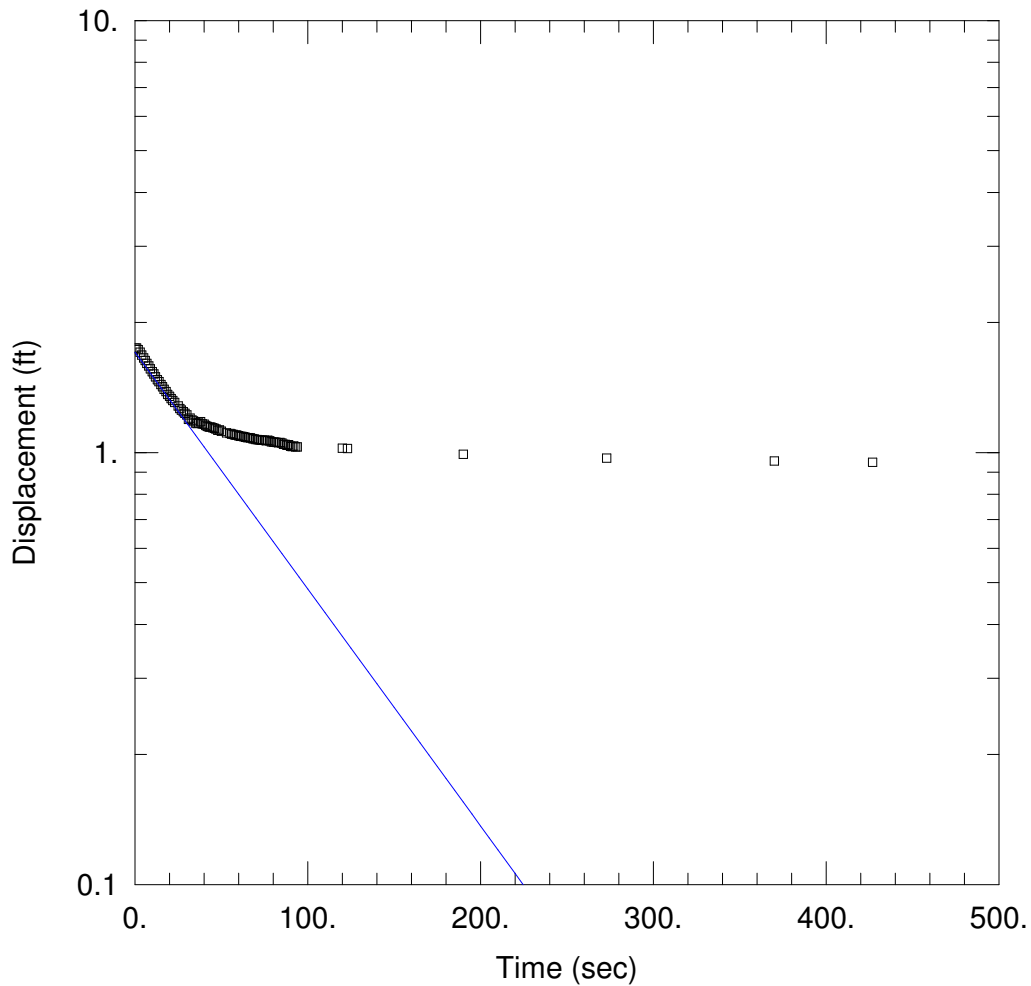
Initial Displacement: 1.8 ft
 Total Well Penetration Depth: 11. ft
 Casing Radius: 0.167 ft

Static Water Column Height: 34.9 ft
 Screen Length: 7. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 34.25 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.4226 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-210.aqt
 Date: 03/09/11

Time: 16:22:04

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-210
 Test Date: 3/9/10

AQUIFER DATA

Saturated Thickness: 3.06 ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW-210)

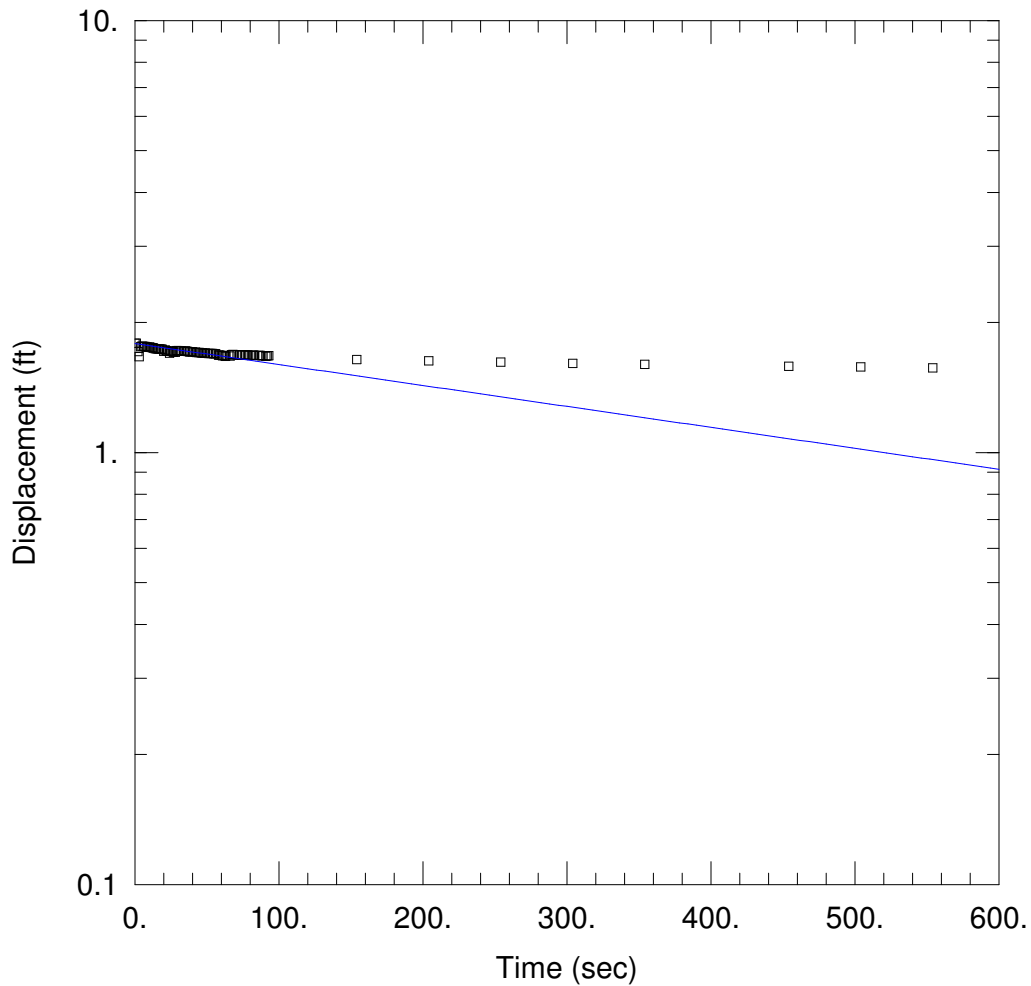
Initial Displacement: 1.746 ft
 Total Well Penetration Depth: 3.06 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 14.56 ft
 Screen Length: 3.06 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 6.702 ft/day

Solution Method: Bouwer-Rice
 y_0 = 1.706 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-211.aqt
 Date: 03/08/11

Time: 09:43:59

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-211
 Test Date: 3/9/10

AQUIFER DATA

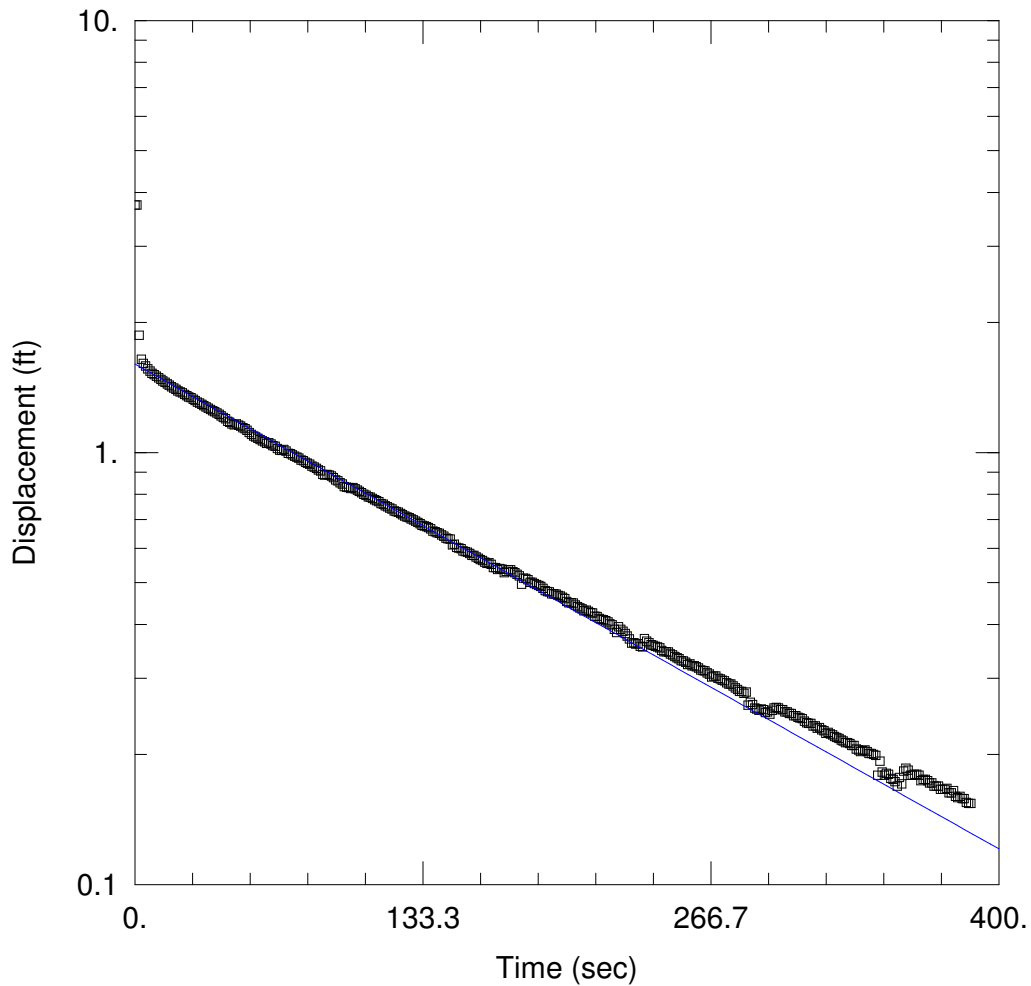
Saturated Thickness: 12.77 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-211)

Initial Displacement: <u>1.79 ft</u>	Static Water Column Height: <u>10.27 ft</u>
Total Well Penetration Depth: <u>10.27 ft</u>	Screen Length: <u>10.27 ft</u>
Casing Radius: <u>0.083 ft</u>	Wellbore Radius: <u>0.25 ft</u>
	Gravel Pack Porosity: <u>0.25</u>

SOLUTION

Aquifer Model: <u>Unconfined</u>	Solution Method: <u>Bouwer-Rice</u>
K = <u>0.3397 ft/day</u>	y0 = <u>1.787 ft</u>



WELL TEST ANALYSIS

Data Set: J:\...\MW-212.aqt
 Date: 03/10/11

Time: 10:30:59

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-212
 Test Date: 3/9/10

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-212)

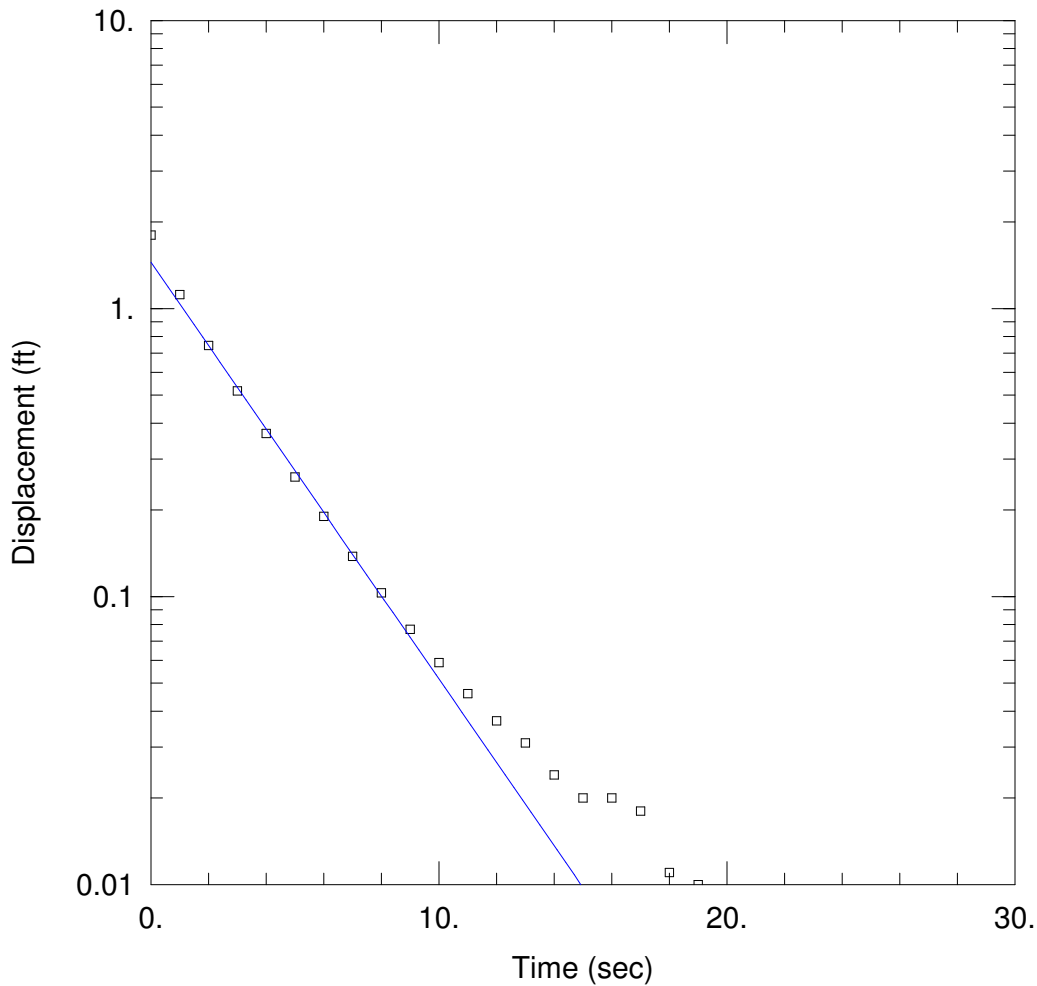
Initial Displacement: 3.742 ft
 Total Well Penetration Depth: 7. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 13.69 ft
 Screen Length: 7. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 0.6899 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.603 ft



WELL TEST ANALYSIS

Data Set: J:\...MW-214.aqt
 Date: 03/09/11

Time: 16:13:42

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-214
 Test Date: 3/9/10

AQUIFER DATA

Saturated Thickness: 3.8 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-214)

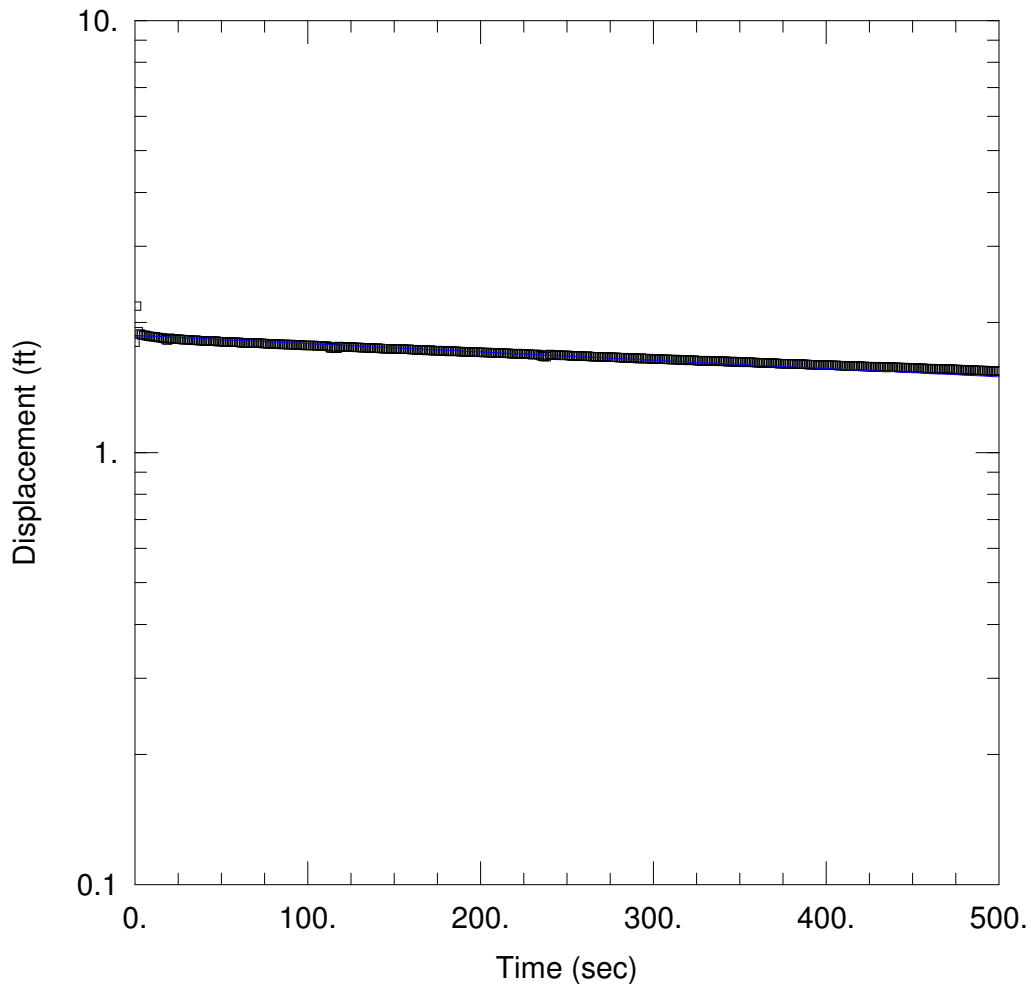
Initial Displacement: 1.8 ft
 Total Well Penetration Depth: 3.8 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 9. ft
 Screen Length: 3. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
 K = 96.44 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.447 ft



WELL TEST ANALYSIS

Data Set: \\...\mw-215.aqt
 Date: 01/18/11

Time: 12:55:38

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 25623
 Location: Gloucester, MA
 Test Well: MW-215
 Test Date: 3/11/10

AQUIFER DATA

Saturated Thickness: 6. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-215)

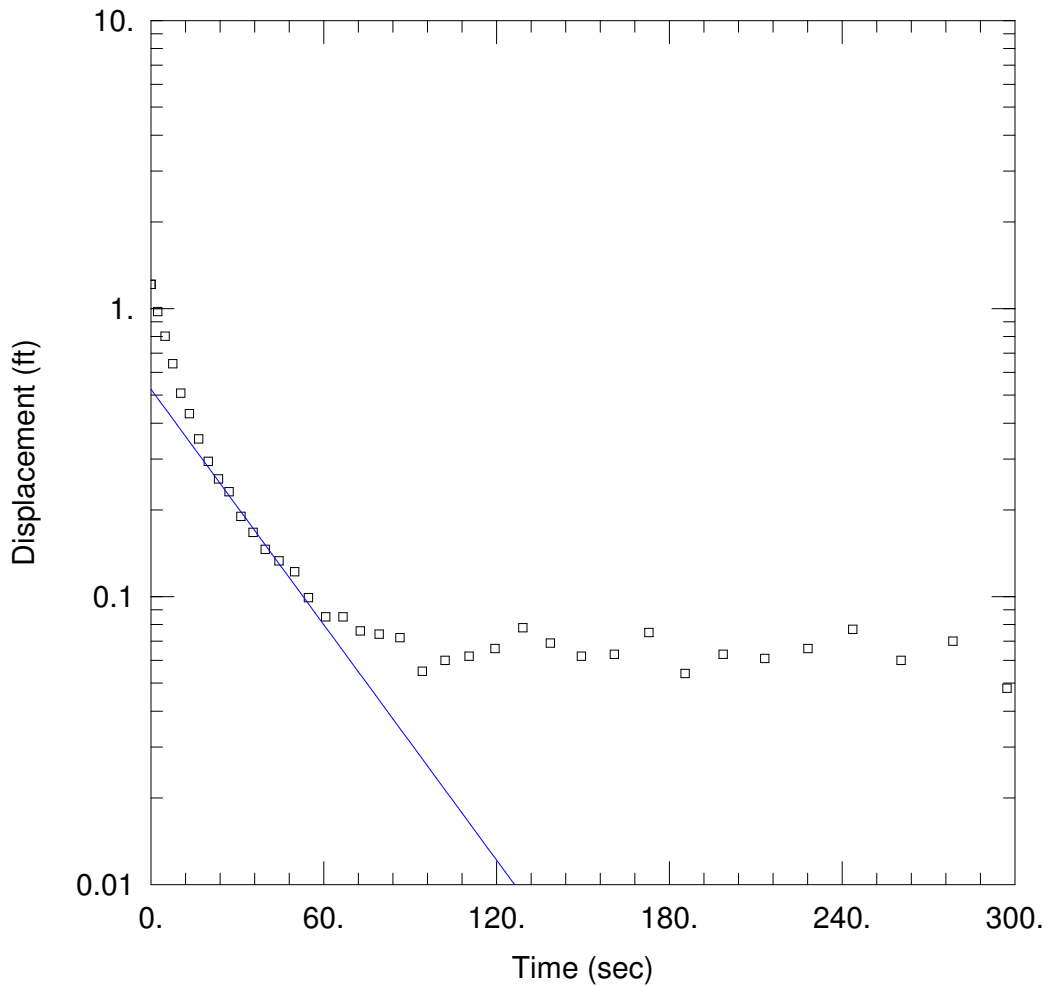
Initial Displacement: 1.8 ft
 Total Well Penetration Depth: 6. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 32.96 ft
 Screen Length: 6. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 0.05203 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.866 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-216B rising 1.aqt
 Date: 03/08/11

Time: 15:16:32

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-216B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 10.7 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-216B)

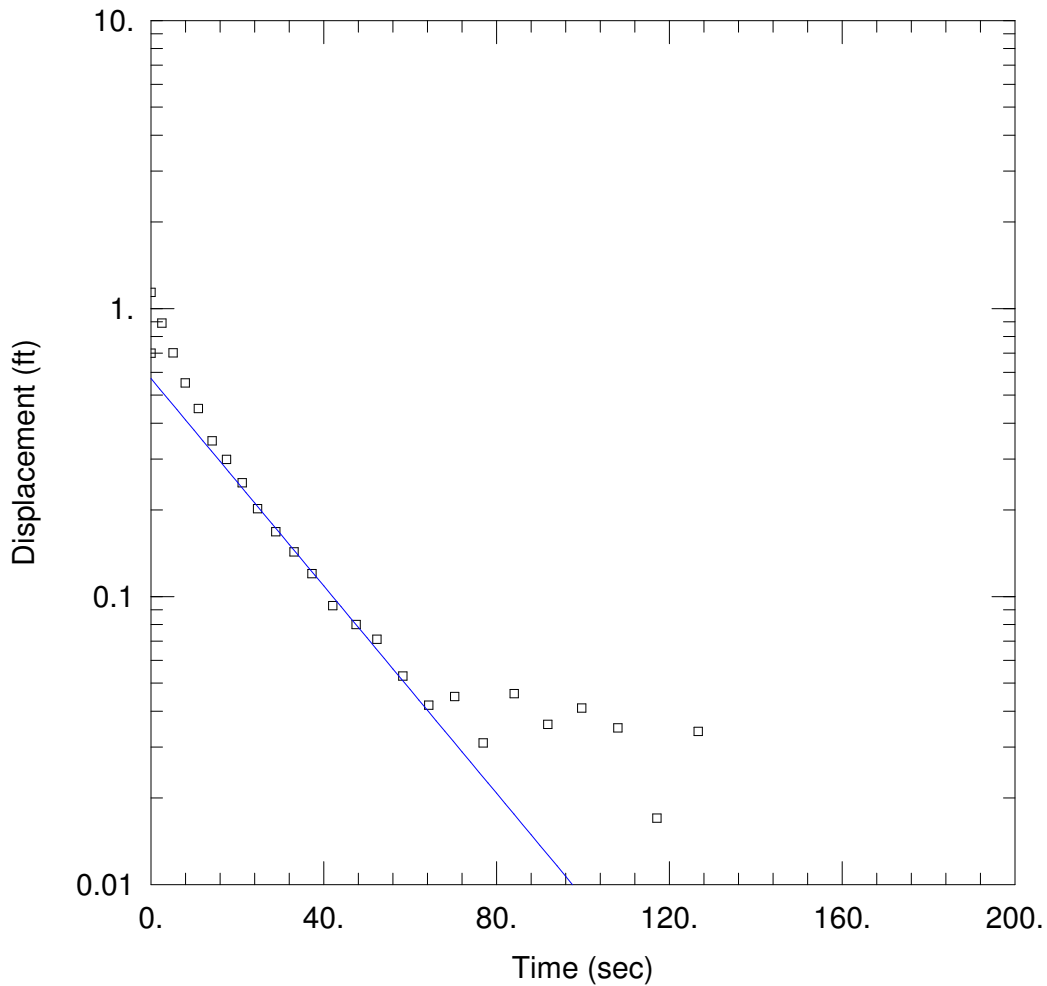
Initial Displacement: 1.212 ft
 Total Well Penetration Depth: 10.7 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 10.7 ft
 Screen Length: 10.7 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Confined
 K = 2.502 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.5245 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-216B rising 2.aqt
 Date: 03/08/11

Time: 15:17:16

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-216B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 10.7 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-216B)

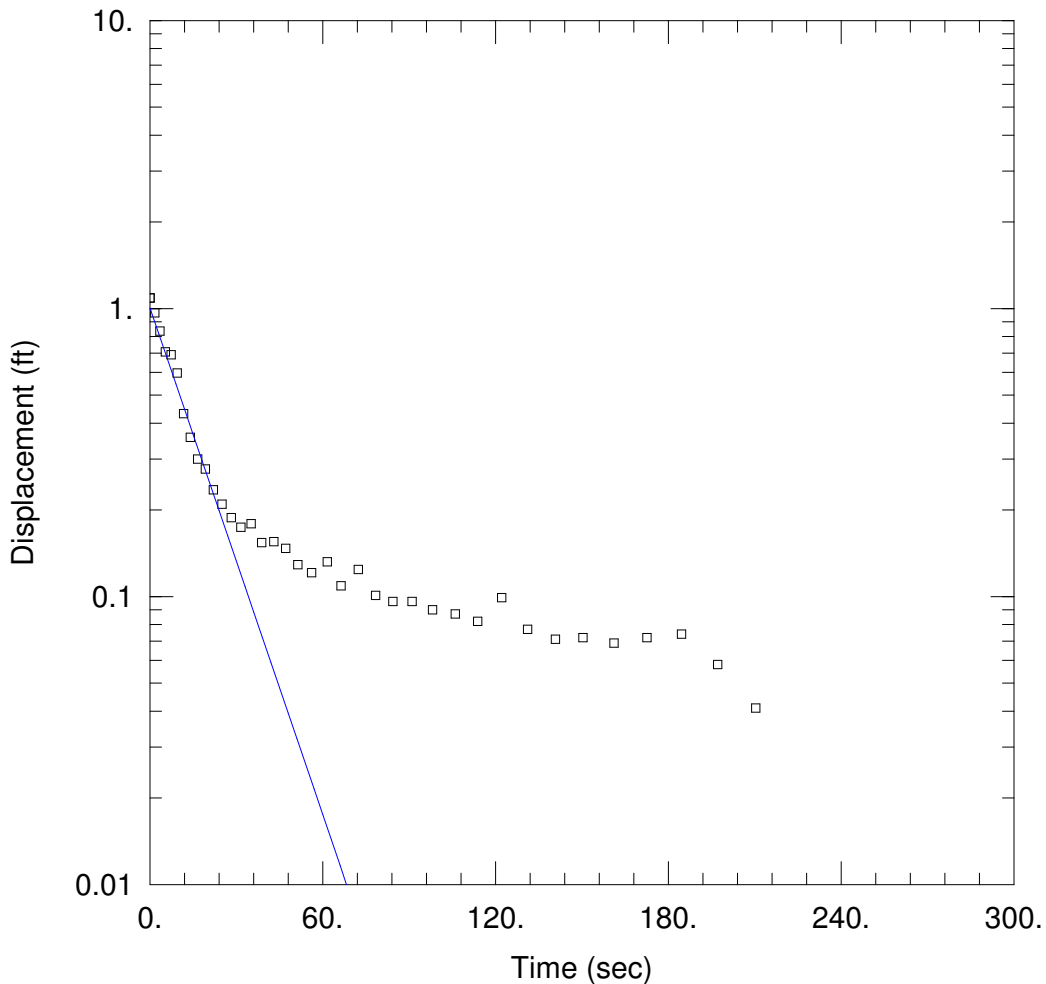
Initial Displacement: 0.7 ft
 Total Well Penetration Depth: 10.7 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 10.7 ft
 Screen Length: 10.7 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Confined
 K = 3.306 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.5714 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-217A rising 1.aqt
 Date: 03/08/11

Time: 09:40:22

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester
 Test Well: MW-217A
 Test Date: 9/8/10

AQUIFER DATA

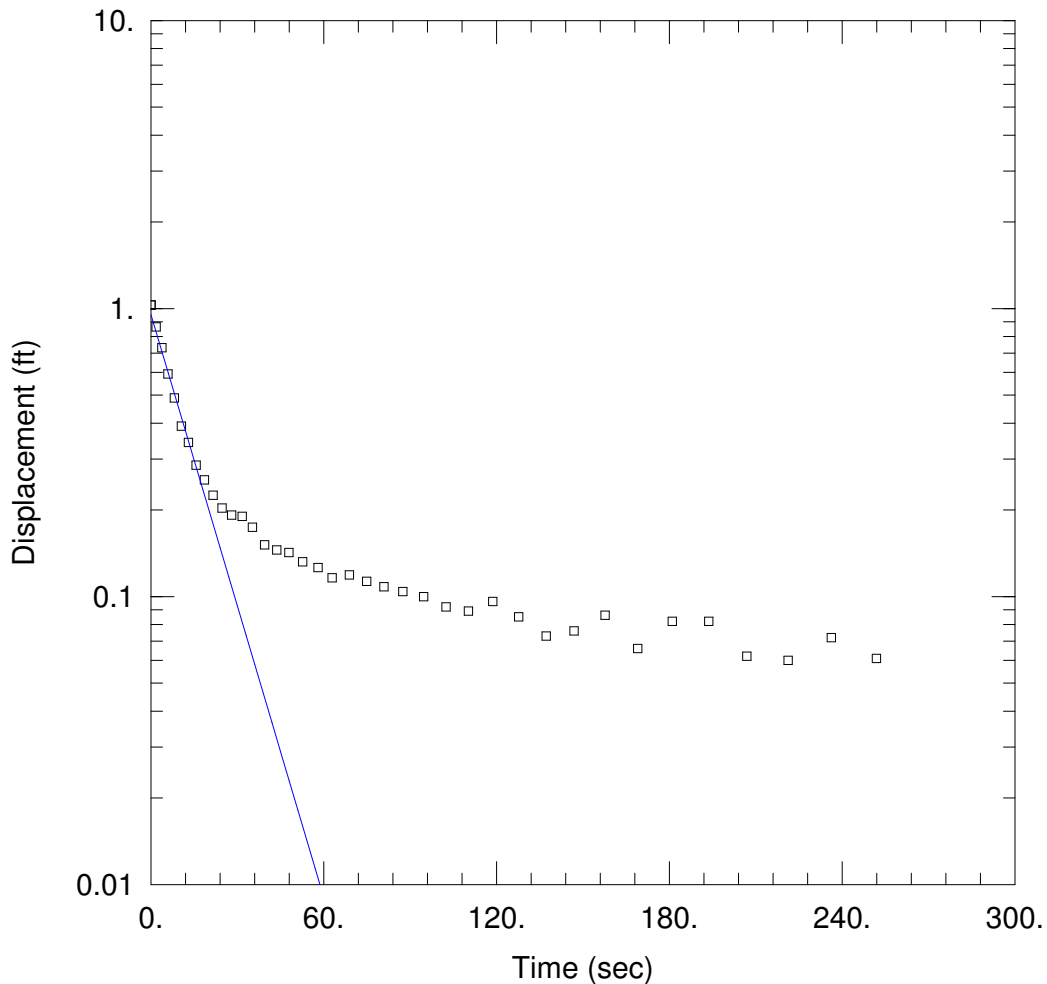
Saturated Thickness: 10. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-217A)

Initial Displacement: <u>1.09 ft</u>	Static Water Column Height: <u>10. ft</u>
Total Well Penetration Depth: <u>10. ft</u>	Screen Length: <u>10. ft</u>
Casing Radius: <u>0.083 ft</u>	Wellbore Radius: <u>0.25 ft</u>
	Gravel Pack Porosity: <u>0.25</u>

SOLUTION

Aquifer Model: <u>Unconfined</u>	Solution Method: <u>Bouwer-Rice</u>
K = <u>17.04 ft/day</u>	y0 = <u>1.004 ft</u>



WELL TEST ANALYSIS

Data Set: J:\...\MW-217A rising 2.aqt
 Date: 03/08/11

Time: 09:40:56

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-217A
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-217A)

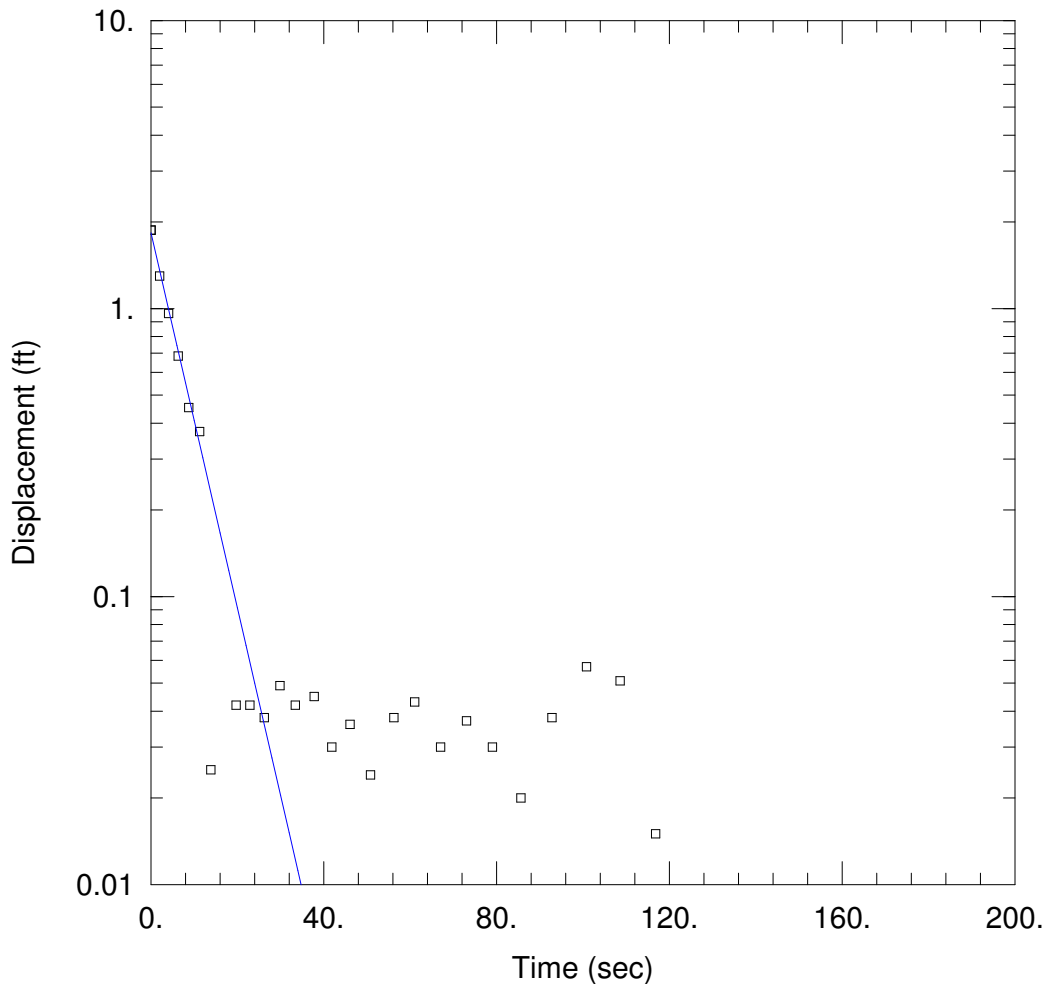
Initial Displacement: 1.03 ft
 Total Well Penetration Depth: 10. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 10. ft
 Screen Length: 10. ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 19.61 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.9517 ft



WELL TEST ANALYSIS

Data Set: \...\MW-217B falling 1.aqt
 Date: 01/03/11

Time: 13:03:33

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-217B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 13.5 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-217B)

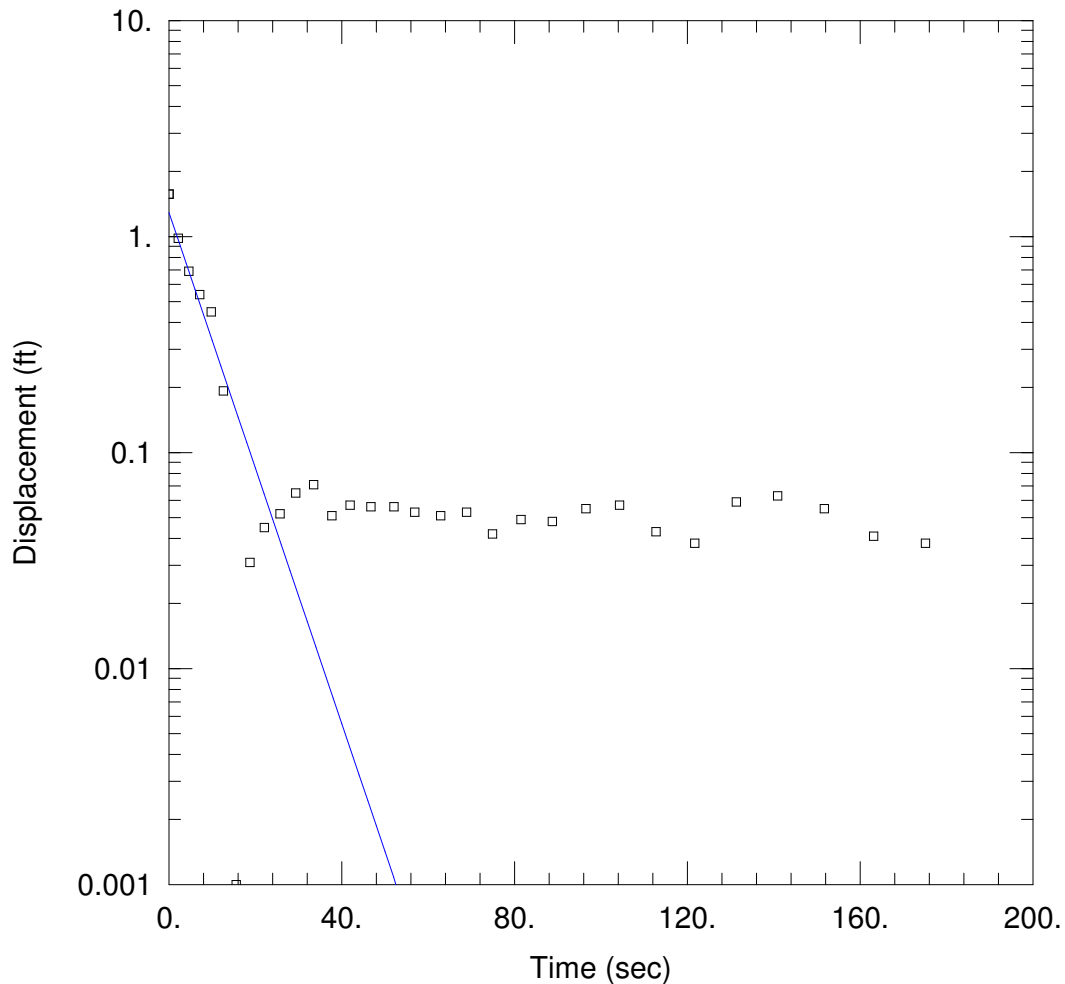
Initial Displacement: 1.87 ft
 Total Well Penetration Depth: 13.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 32.5 ft
 Screen Length: 13.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 10.1 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.83 ft



WELL TEST ANALYSIS

Data Set: \...\MW-217B falling 2.aqt
 Date: 01/03/11

Time: 13:05:12

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-217B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 13.5 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-217B)

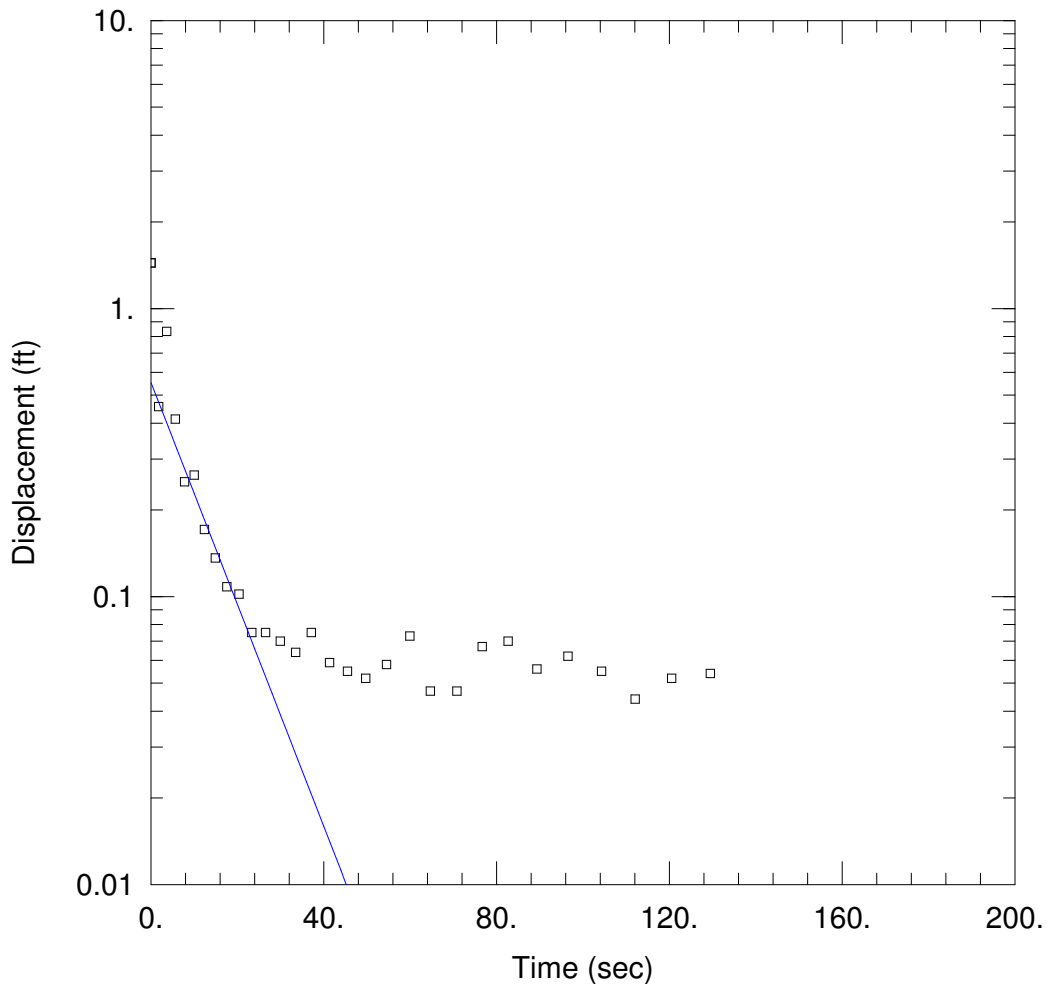
Initial Displacement: 1.57 ft
 Total Well Penetration Depth: 13.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 32.5 ft
 Screen Length: 13.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 9.176 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.291 ft



WELL TEST ANALYSIS

Data Set: \...\MW-217B rising 1.aqt
 Date: 01/03/11

Time: 12:59:24

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-217B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 13.5 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-217B)

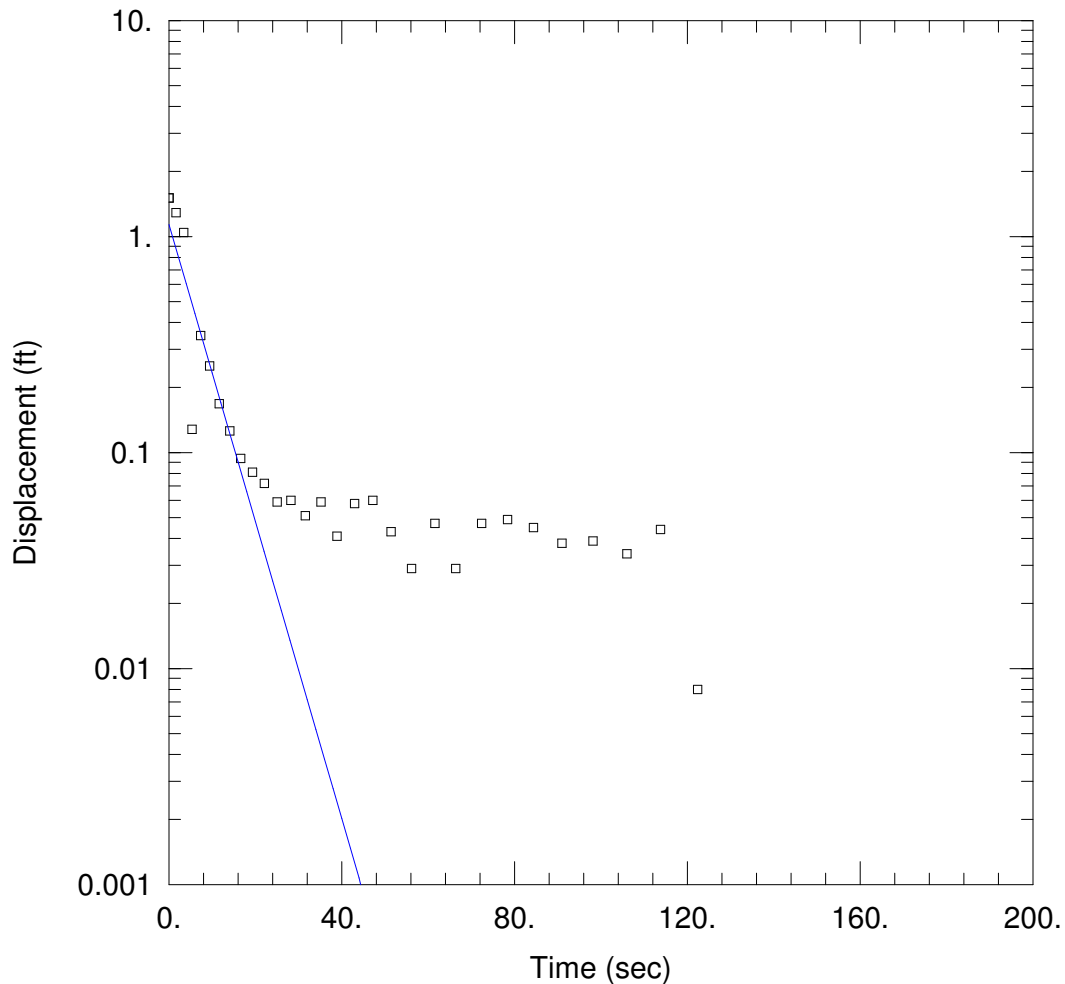
Initial Displacement: 1.44 ft
 Total Well Penetration Depth: 13.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 32.5 ft
 Screen Length: 13.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 5.977 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.5538 ft



WELL TEST ANALYSIS

Data Set: \...\MW-217B rising 2.aqt
 Date: 01/03/11

Time: 13:01:56

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-217B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 13.5 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-217B)

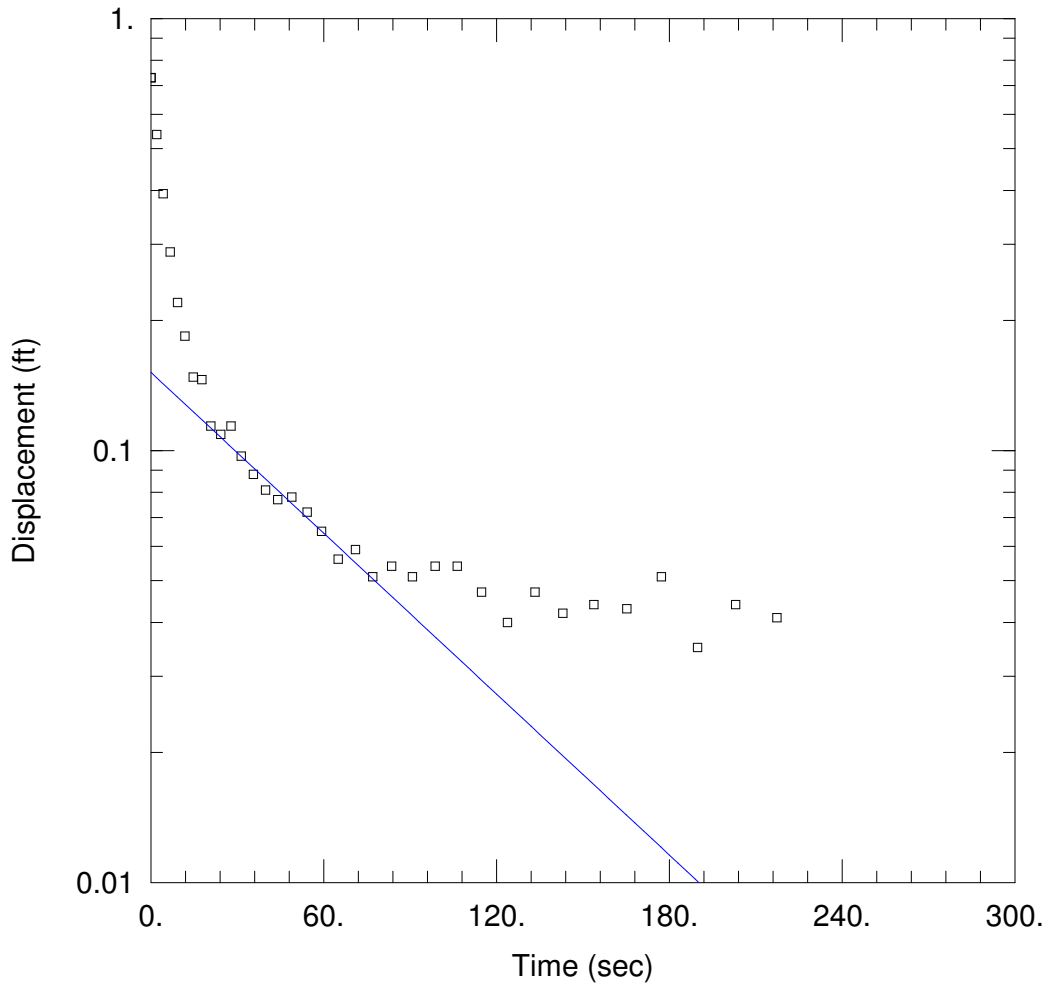
Initial Displacement: 1.51 ft
 Total Well Penetration Depth: 13.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 32.5 ft
 Screen Length: 13.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 10.67 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.138 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-219 rising 1.aqt
 Date: 03/10/11

Time: 10:41:22

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-219
 Test Date: 9/8/10

AQUIFER DATA

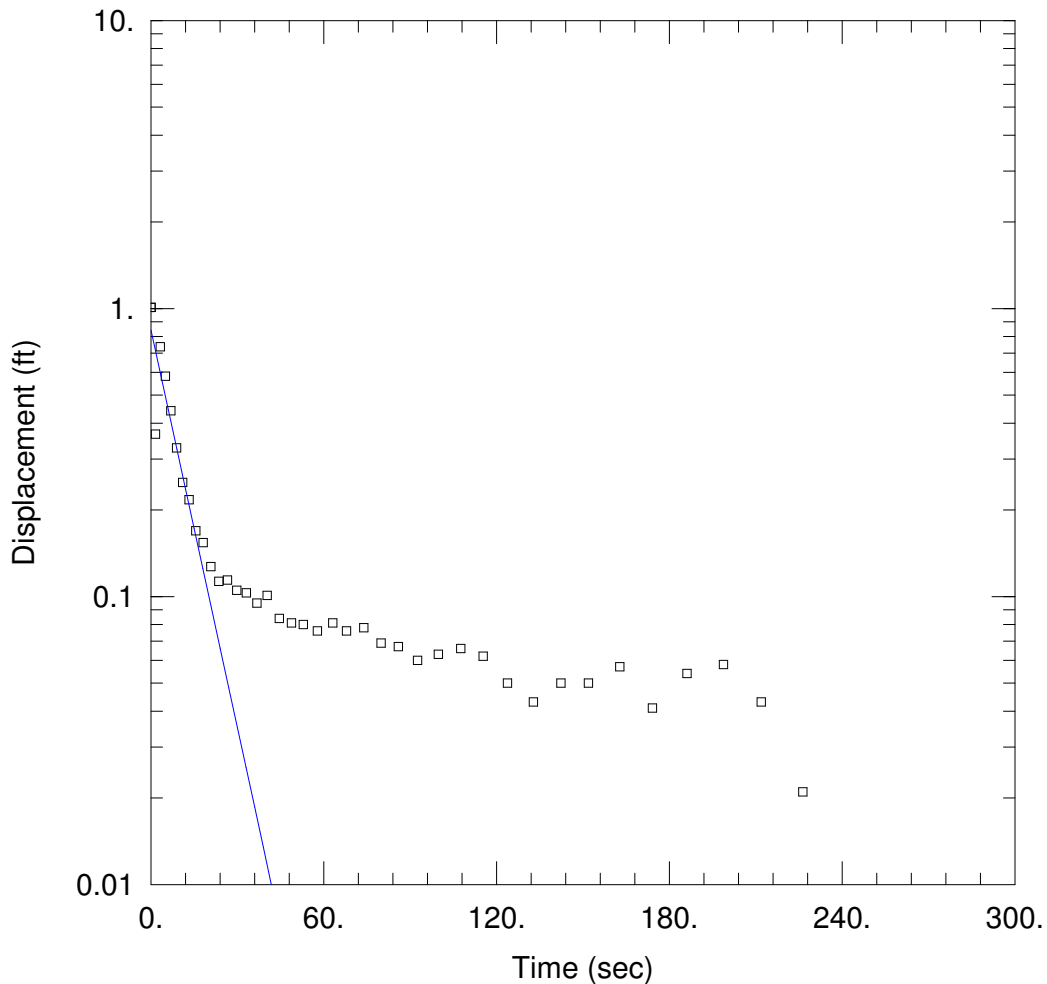
Saturated Thickness: 21.5 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-219)

Initial Displacement: <u>0.73 ft</u>	Static Water Column Height: <u>15.5 ft</u>
Total Well Penetration Depth: <u>15.5 ft</u>	Screen Length: <u>15.5 ft</u>
Casing Radius: <u>0.083 ft</u>	Wellbore Radius: <u>0.25 ft</u>
	Gravel Pack Porosity: <u>0.25</u>

SOLUTION

Aquifer Model: <u>Unconfined</u>	Solution Method: <u>Bouwer-Rice</u>
K = <u>3.131 ft/day</u>	y0 = <u>0.1516 ft</u>



WELL TEST ANALYSIS

Data Set: J:\...MW-219 rising 2.aqt
 Date: 03/10/11

Time: 10:42:34

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-219
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 21.5 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-219)

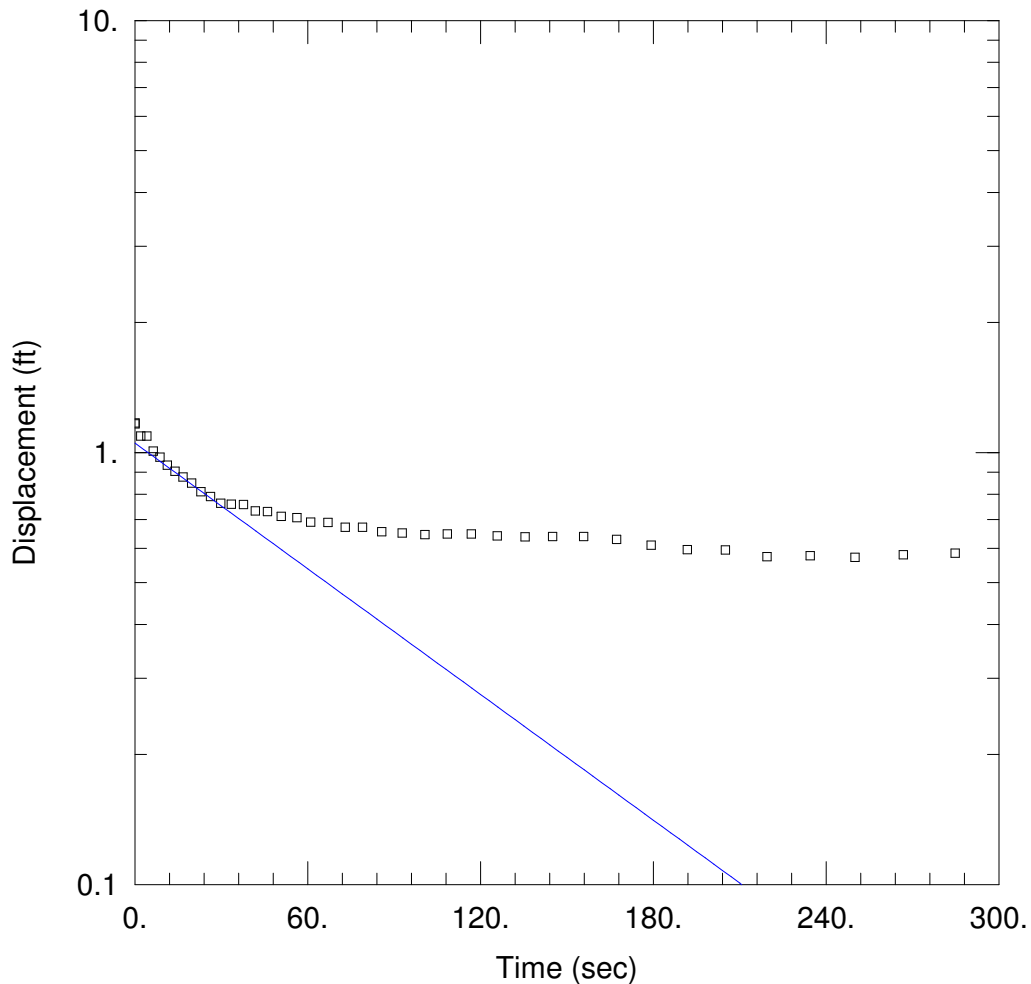
Initial Displacement: 1.01 ft
 Total Well Penetration Depth: 15.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 15.5 ft
 Screen Length: 15.5 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 23.21 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.8418 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-220A rising 1.aqt
 Date: 03/10/11

Time: 09:38:37

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-220A
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 2. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-220A)

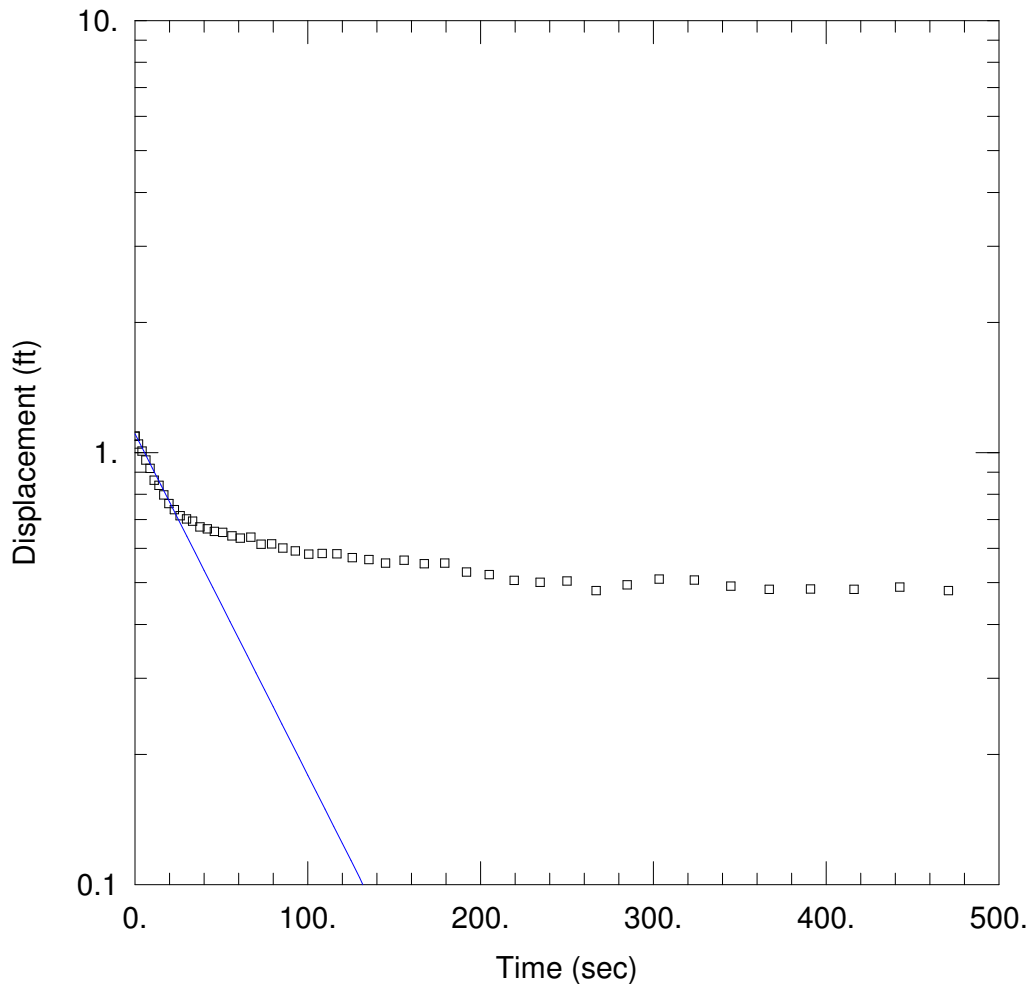
Initial Displacement: 1.17 ft
 Total Well Penetration Depth: 0.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 3.5 ft
 Screen Length: 0.5 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Confined
 K = 6.693 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.051 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-220A rising 2.aqt
 Date: 03/10/11

Time: 09:38:52

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-220A
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 2. ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-220A)

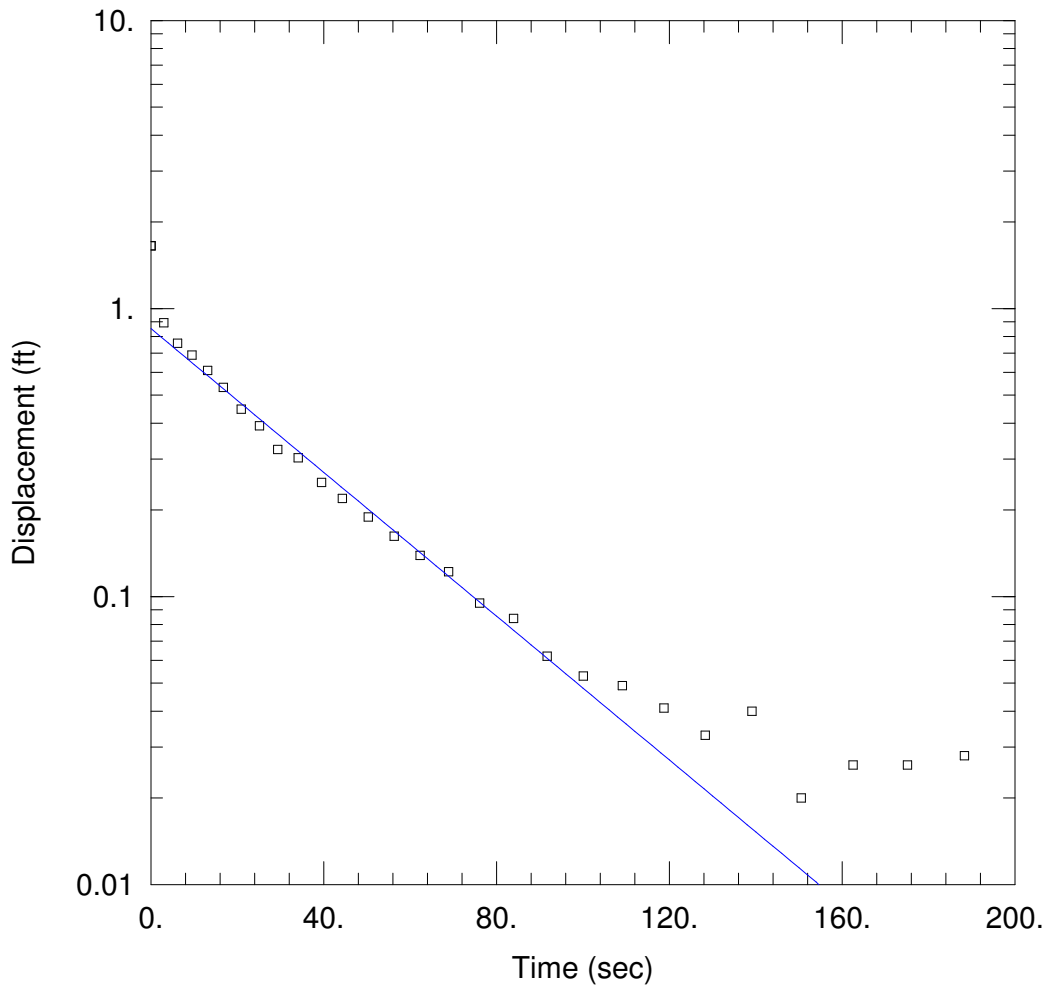
Initial Displacement: 1.09 ft
 Total Well Penetration Depth: 0.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 3.5 ft
 Screen Length: 0.5 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Confined
 K = 10.9 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.105 ft



WELL TEST ANALYSIS

Data Set: \...\MW-220B falling 2.aqt
 Date: 01/03/11

Time: 13:22:12

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-220B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 6. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-220B)

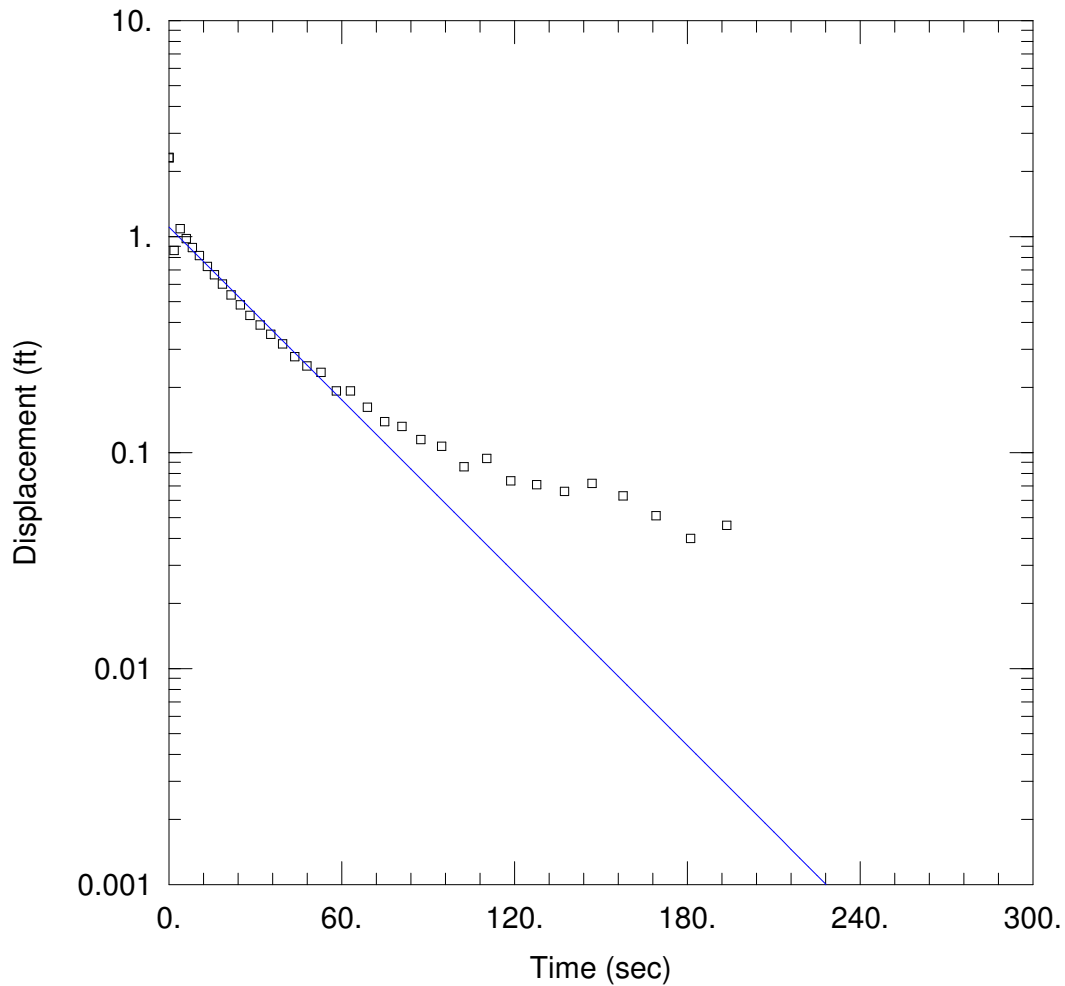
Initial Displacement: 1.65 ft
 Total Well Penetration Depth: 6. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 14.5 ft
 Screen Length: 6. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 3.391 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.8518 ft



WELL TEST ANALYSIS

Data Set: \...\MW-220B rising 1.aqt
 Date: 01/03/11

Time: 13:23:04

PROJECT INFORMATION

Company: GZA
 Client: National Gird
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-220B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 6. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-220B)

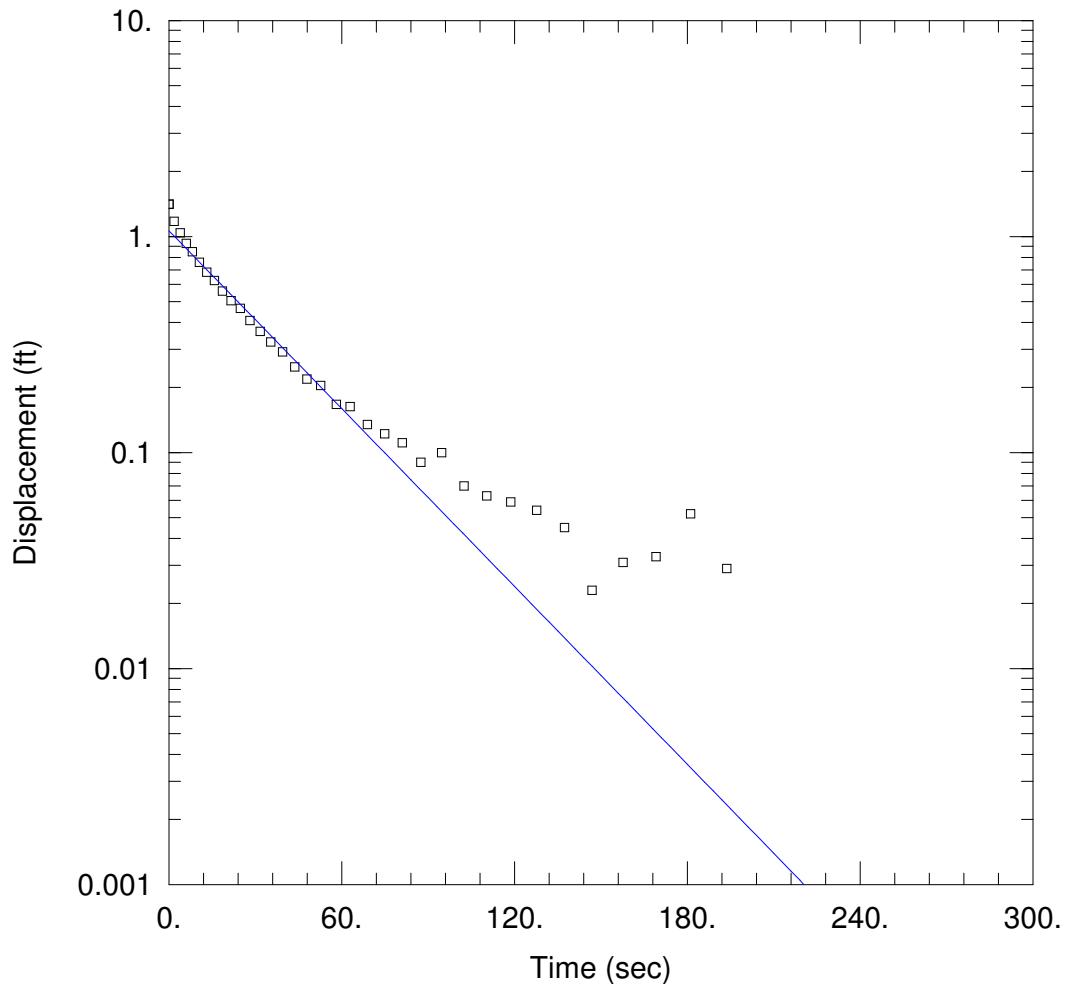
Initial Displacement: 2.31 ft
 Total Well Penetration Depth: 6. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 14.5 ft
 Screen Length: 6. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 3.623 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.105 ft



WELL TEST ANALYSIS

Data Set: \...\MW-220B rising 2.aqt
 Date: 01/03/11

Time: 13:24:05

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-220B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 6. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-220B)

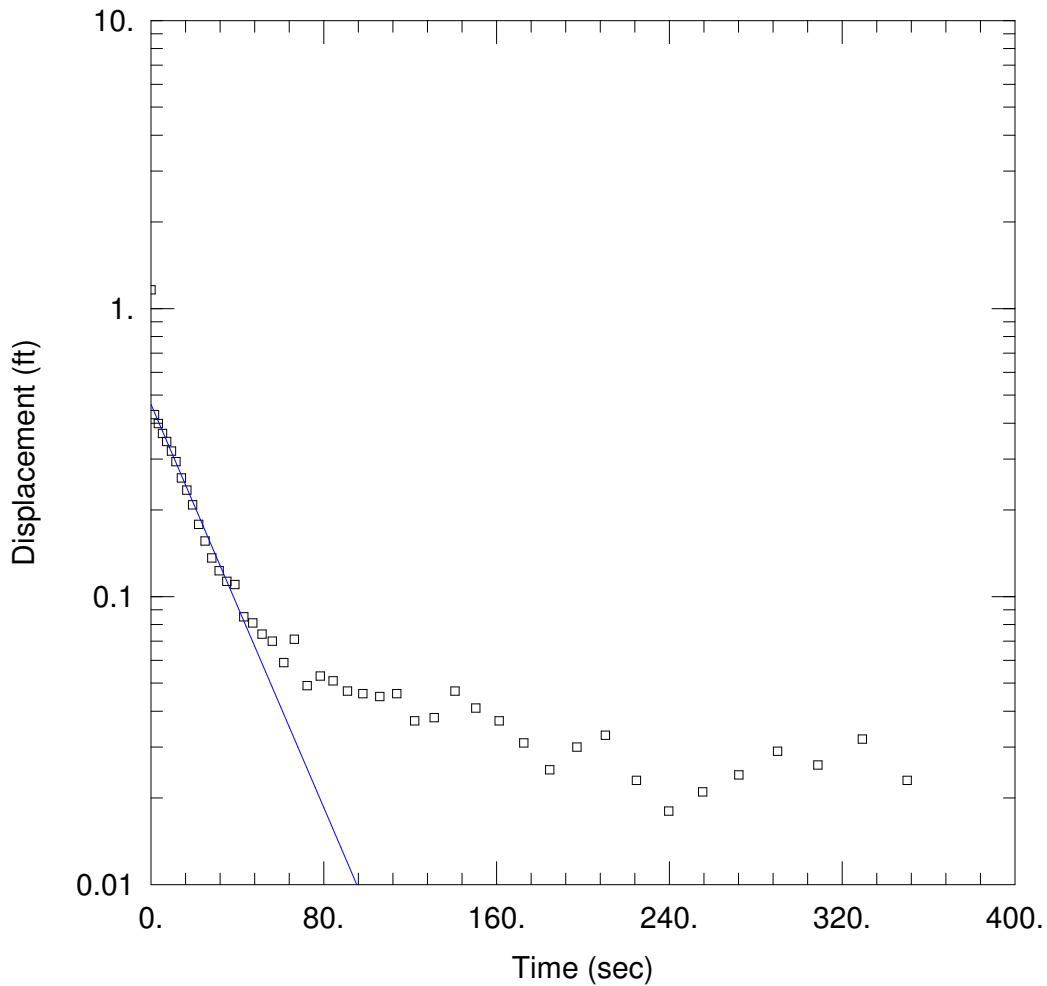
Initial Displacement: 1.41 ft
 Total Well Penetration Depth: 6. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 14.5 ft
 Screen Length: 6. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 3.728 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.063 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-228A rising 1.aqt
 Date: 03/08/11

Time: 15:20:56

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-228A
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 4.3 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-228A)

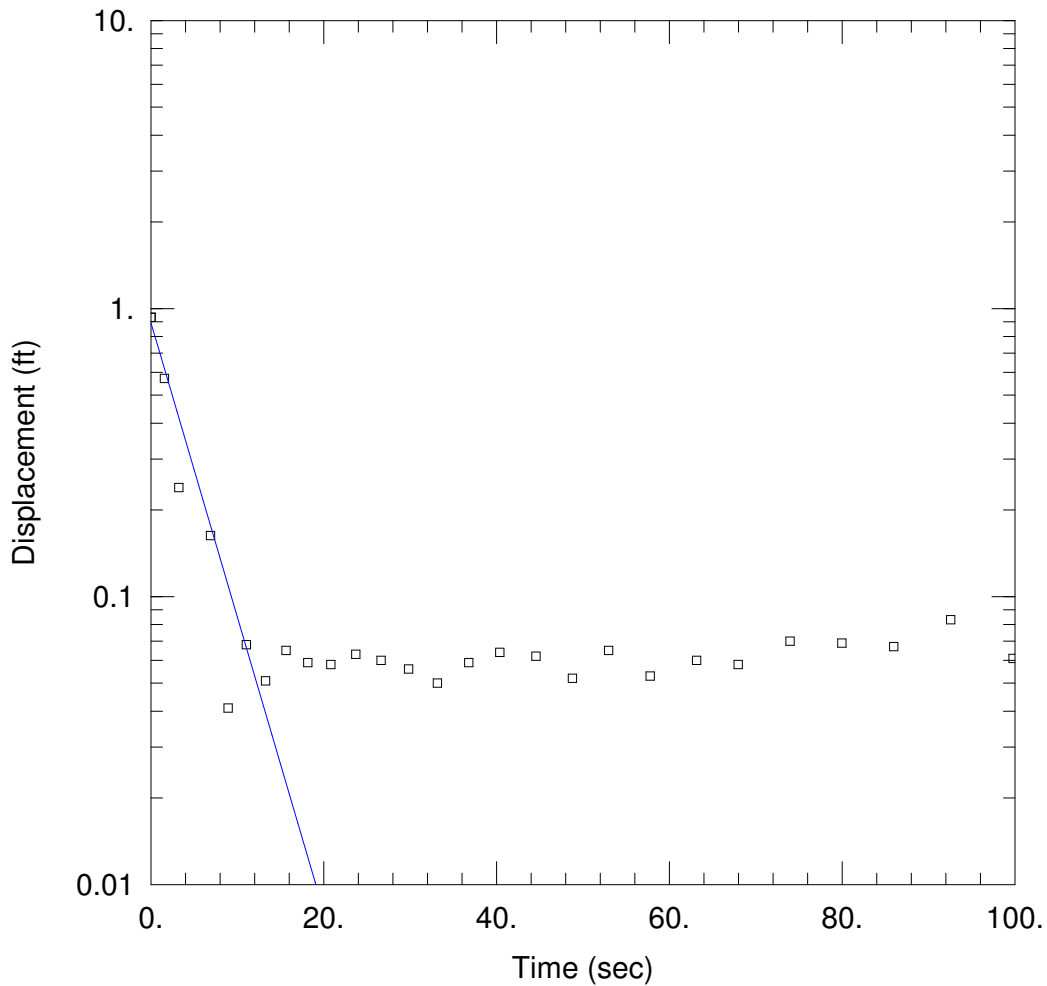
Initial Displacement: 1.16 ft
 Total Well Penetration Depth: 4.3 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 4.3 ft
 Screen Length: 4.3 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Confined
 K = 5.834 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.4649 ft



WELL TEST ANALYSIS

Data Set: \...\MW-228B rising 1.aqt
 Date: 01/03/11

Time: 13:10:11

PROJECT INFORMATION

Client: N. Grid
 Project: 09.0025623.00
 Location: Gloucester
 Test Well: MW-228B
 Test Date: 9/8/10

AQUIFER DATA

Saturated Thickness: 11. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-228B)

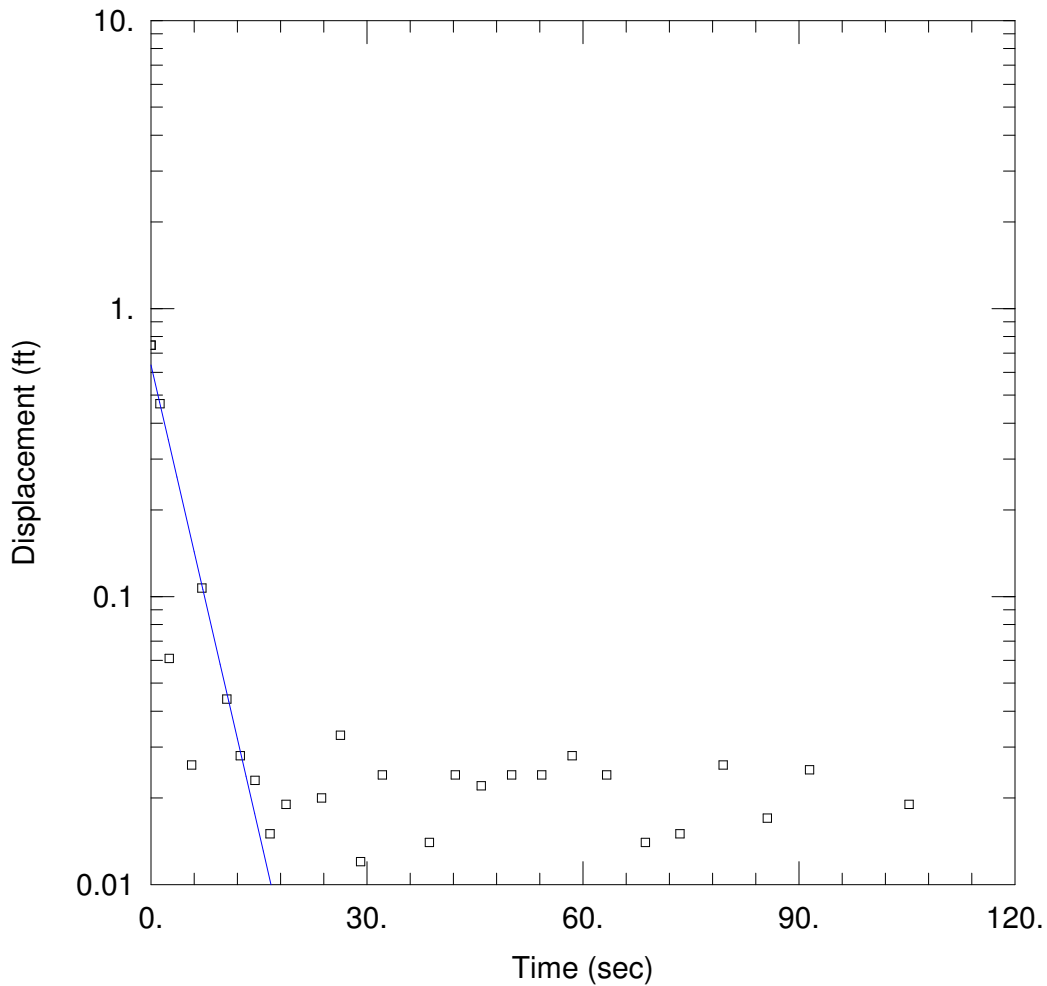
Initial Displacement: 0.933 ft
 Total Well Penetration Depth: 11. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 20.2 ft
 Screen Length: 11. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 18.41 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.8913 ft



WELL TEST ANALYSIS

Data Set: \...\MW-228B rising 2.aqt
 Date: 01/18/11

Time: 13:26:54

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-228B
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 11. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-228B)

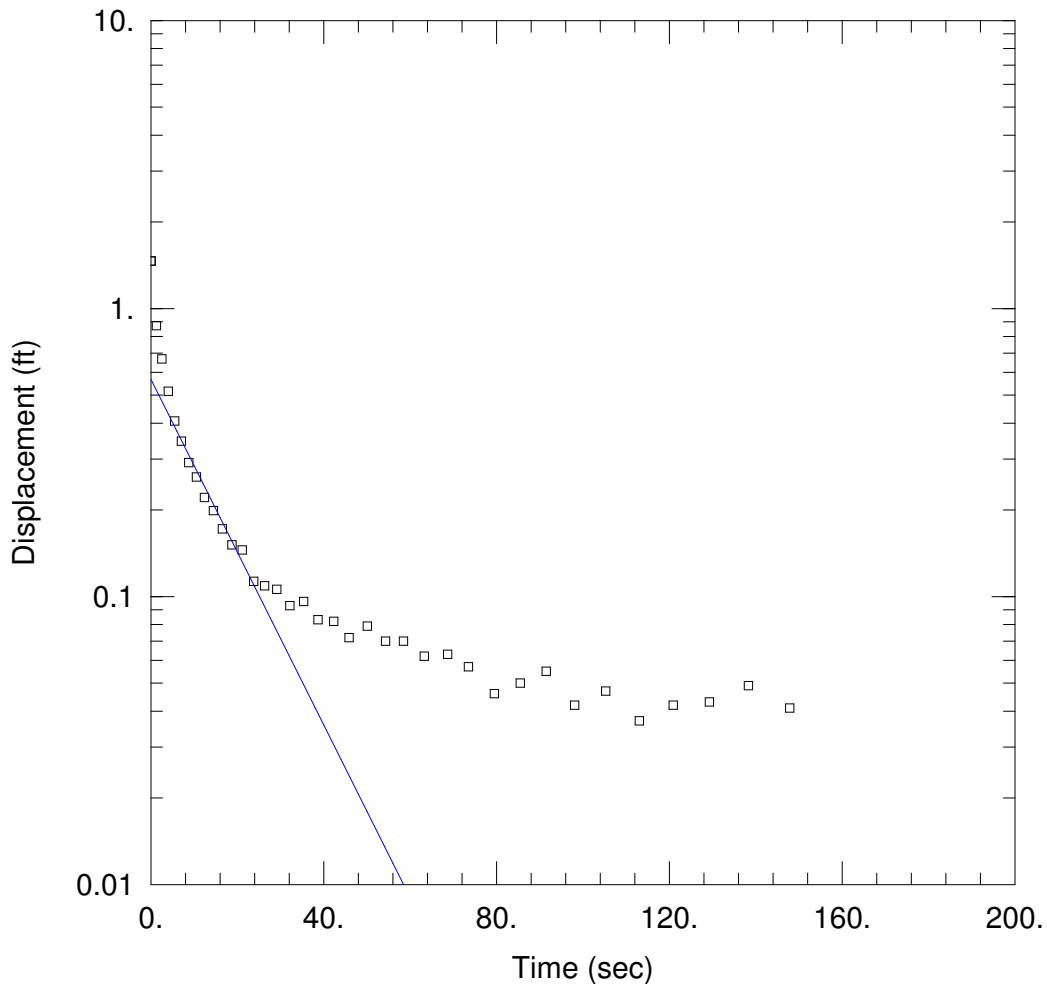
Initial Displacement: 0.746 ft
 Total Well Penetration Depth: 11. ft
 Casing Radius: 0.083 ft

Static Water Column Height: 20.2 ft
 Screen Length: 11. ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
 K = 19.48 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.637 ft



WELL TEST ANALYSIS

Data Set: J:\...\MW-236A rising 1.aqt
 Date: 03/09/11

Time: 16:14:56

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-236A
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 2.5 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-236A)

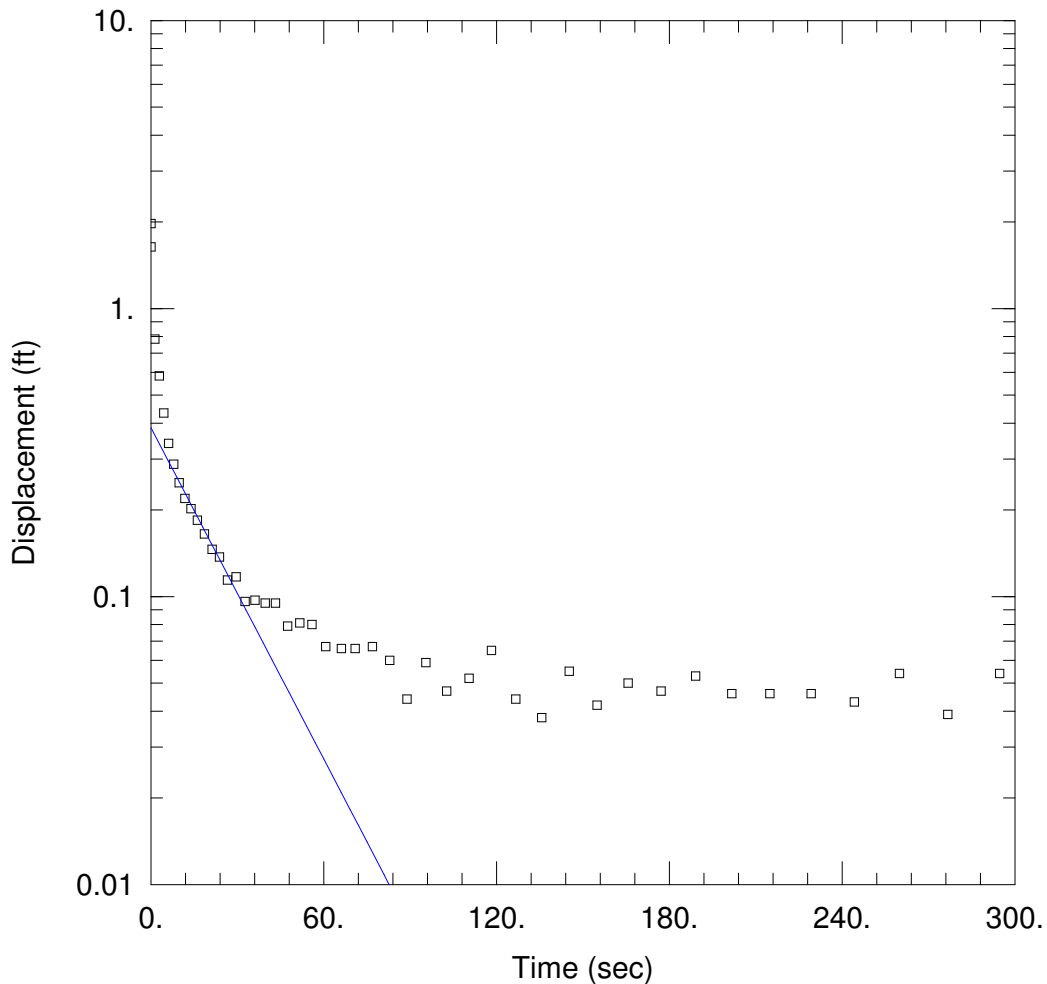
Initial Displacement: 1.462 ft
 Total Well Penetration Depth: 2.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 7.5 ft
 Screen Length: 2.5 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 40.96 ft/day

Solution Method: Bouwer-Rice
 y0 = 0.568 ft



WELL TEST ANALYSIS

Data Set: J:\...MW-236A rising 2.aqt
 Date: 03/09/11

Time: 16:15:10

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-236A
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 2.5 ft

Anisotropy Ratio (K_z/K_r): 0.1

WELL DATA (MW-236A)

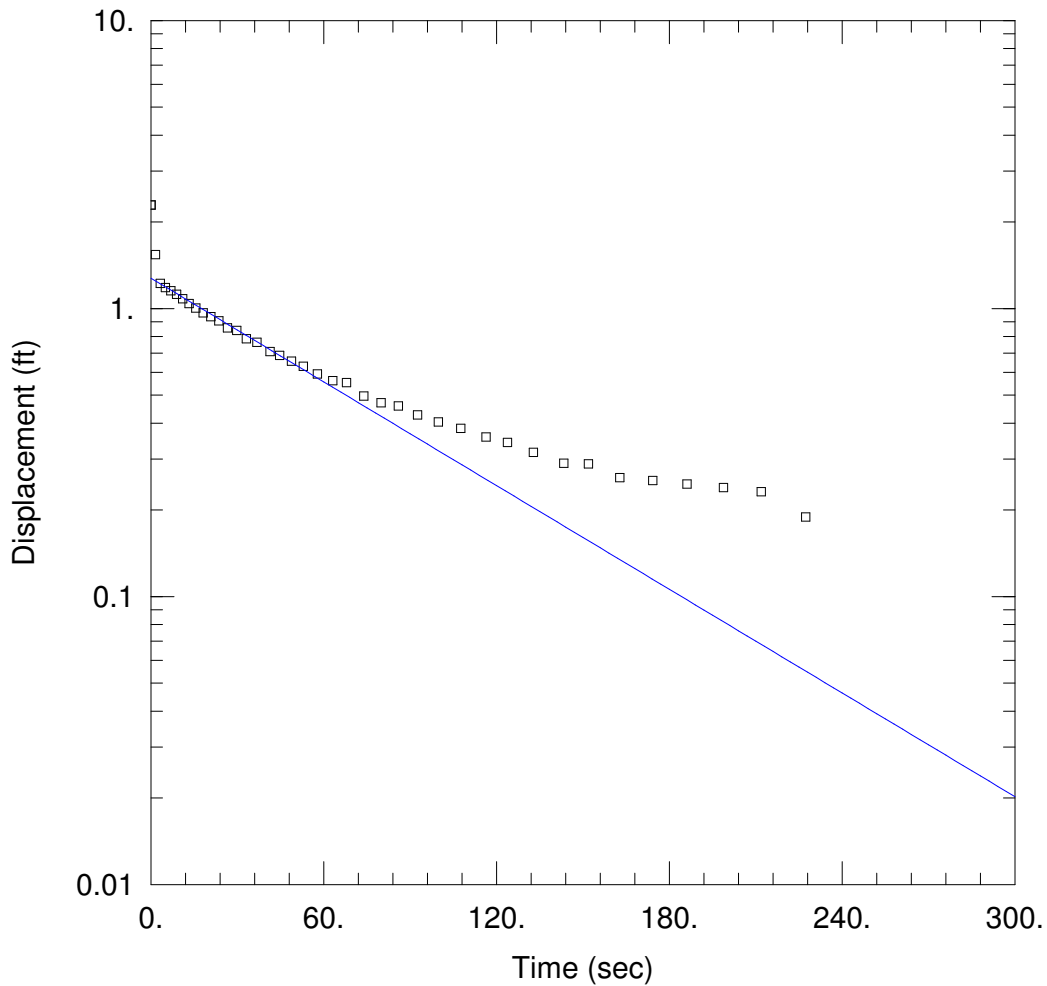
Initial Displacement: 1.97 ft
 Total Well Penetration Depth: 2.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 7.5 ft
 Screen Length: 2.5 ft
 Wellbore Radius: 0.25 ft
 Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
 K = 26.17 ft/day

Solution Method: Bouwer-Rice
 y_0 = 0.3854 ft



WELL TEST ANALYSIS

Data Set: \...\MW-236B rising 1.aqt
 Date: 01/18/11

Time: 10:36:18

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-236B
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 22.5 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-236B)

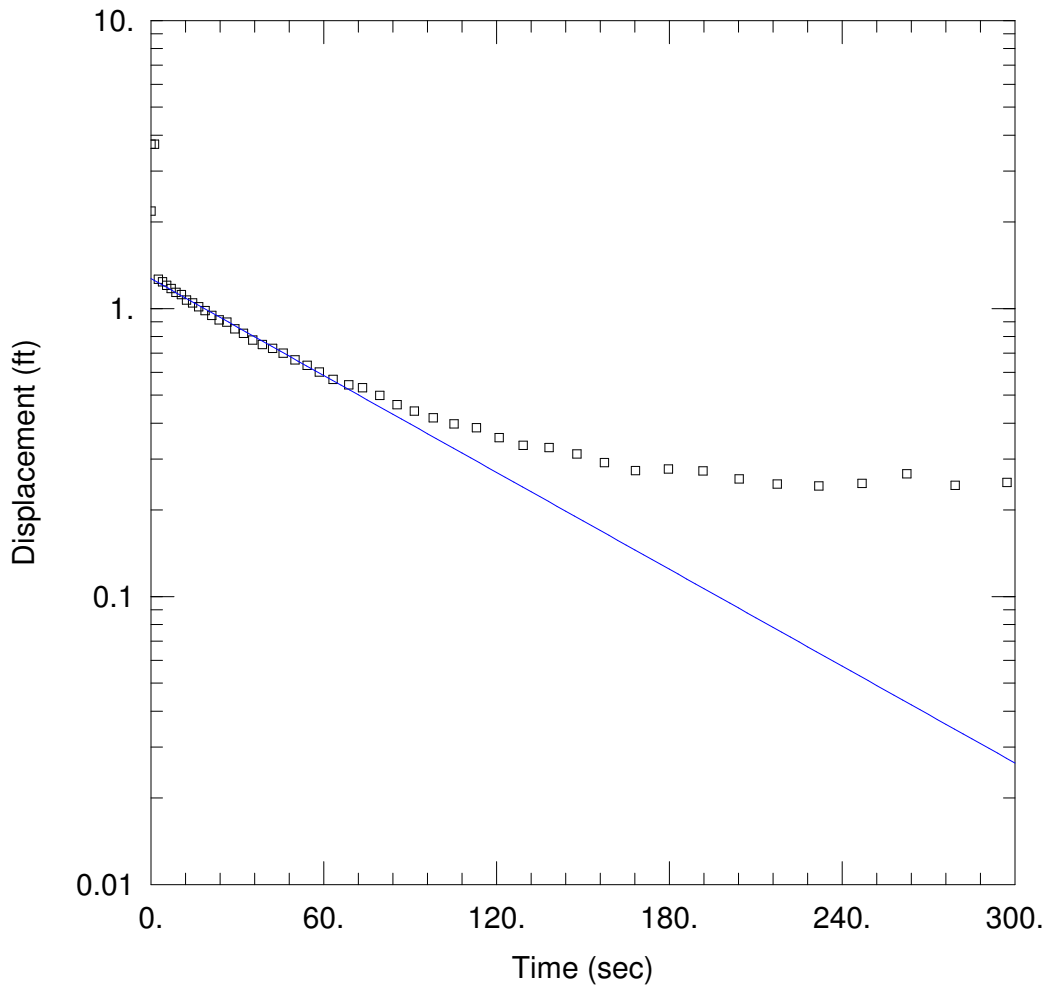
Initial Displacement: 2.286 ft
 Total Well Penetration Depth: 20.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 20.5 ft
 Screen Length: 7.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
 K = 2.054 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.274 ft



WELL TEST ANALYSIS

Data Set: \...\MW-236B rising 2.aqt
 Date: 01/18/11

Time: 10:37:31

PROJECT INFORMATION

Company: GZA
 Client: National Grid
 Project: 09.0025623.00
 Location: Gloucester, MA
 Test Well: MW-236B
 Test Date: 9/7/10

AQUIFER DATA

Saturated Thickness: 22.5 ft

Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-236B)

Initial Displacement: 3.723 ft
 Total Well Penetration Depth: 20.5 ft
 Casing Radius: 0.083 ft

Static Water Column Height: 20.5 ft
 Screen Length: 7.5 ft
 Wellbore Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
 K = 1.919 ft/day

Solution Method: Bouwer-Rice
 y0 = 1.27 ft