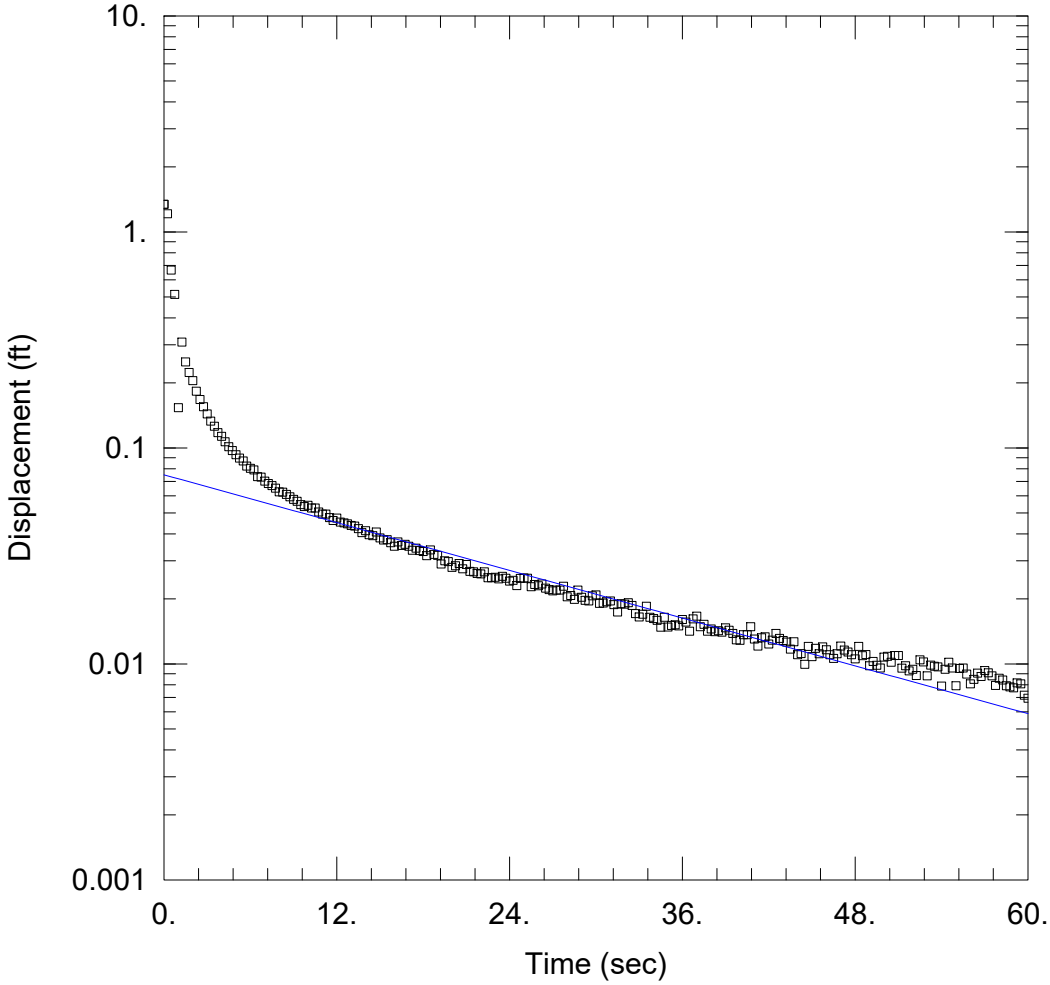
Appendix G

Single Well Hydraulic Conductivity Test Data and Results

Appendix G

Single Well Hydraulic Conductivity Test Data and Results



WELL TEST ANALYSIS

Data Set: \...\MW-1_Redo_Quarter Second.aqt
Date: 11/13/23 Time: 13:01:43

PROJECT INFORMATION

Company: SCS
Client: Dane County
Project: 25222268.00
Location: Yahara Hills
Test Well: MW-1
Test Date: 11/8/2023

AQUIFER DATA

Saturated Thickness: 13.5 ft
Anisotropy Ratio (Kz/Kr): 1.

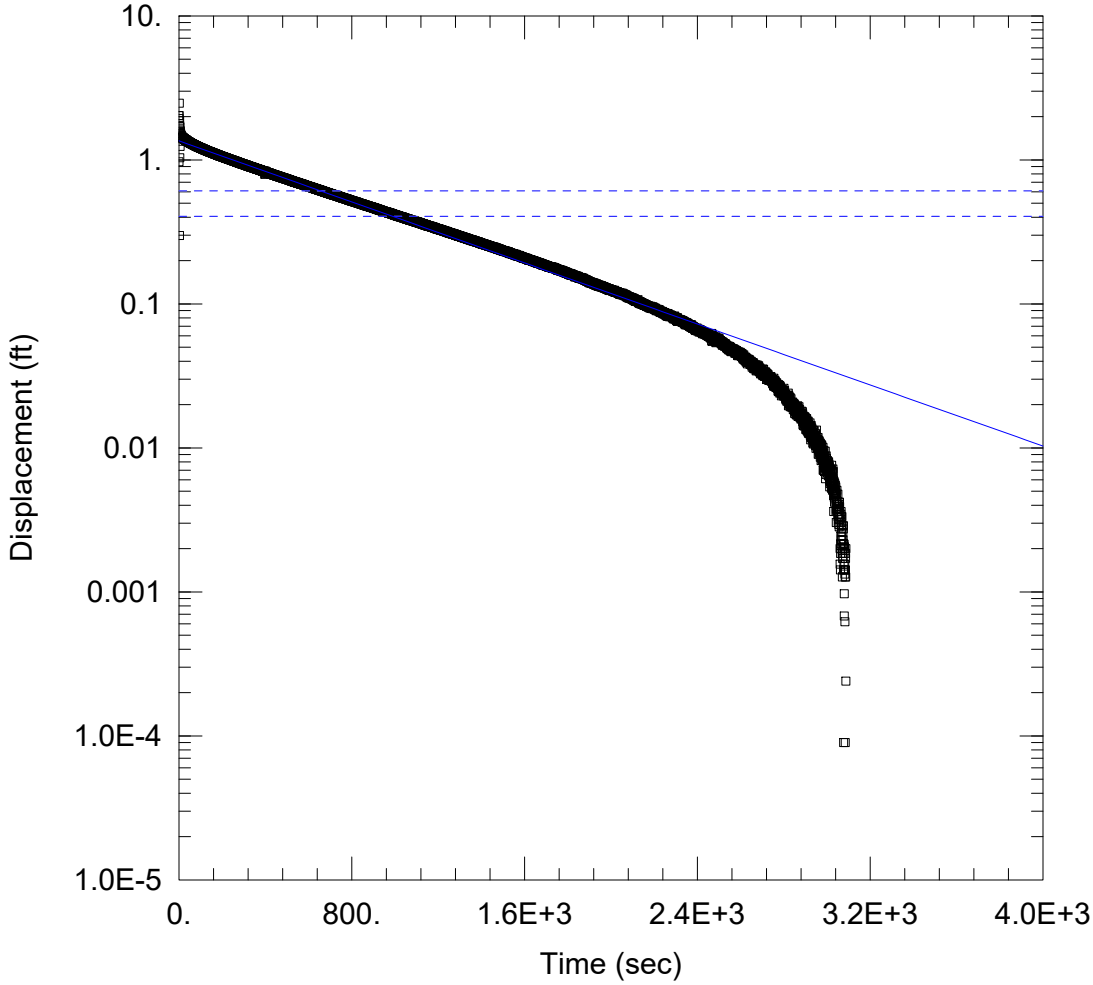
WELL DATA (MW-1)

Initial Displacement: 1.343 ft
Total Well Penetration Depth: 13. ft
Casing Radius: 0.083 ft
Static Water Column Height: 12.23 ft
Screen Length: 13. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.25

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.004495 cm/sec
y0 = 0.07507 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-2\MW-2_rev_230821_REL.aqt
Date: 08/21/23 Time: 10:09:41

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-2
Test Date: 4/3/2023

AQUIFER DATA

Saturated Thickness: 18.4 ft
Anisotropy Ratio (Kz/Kr): 1.

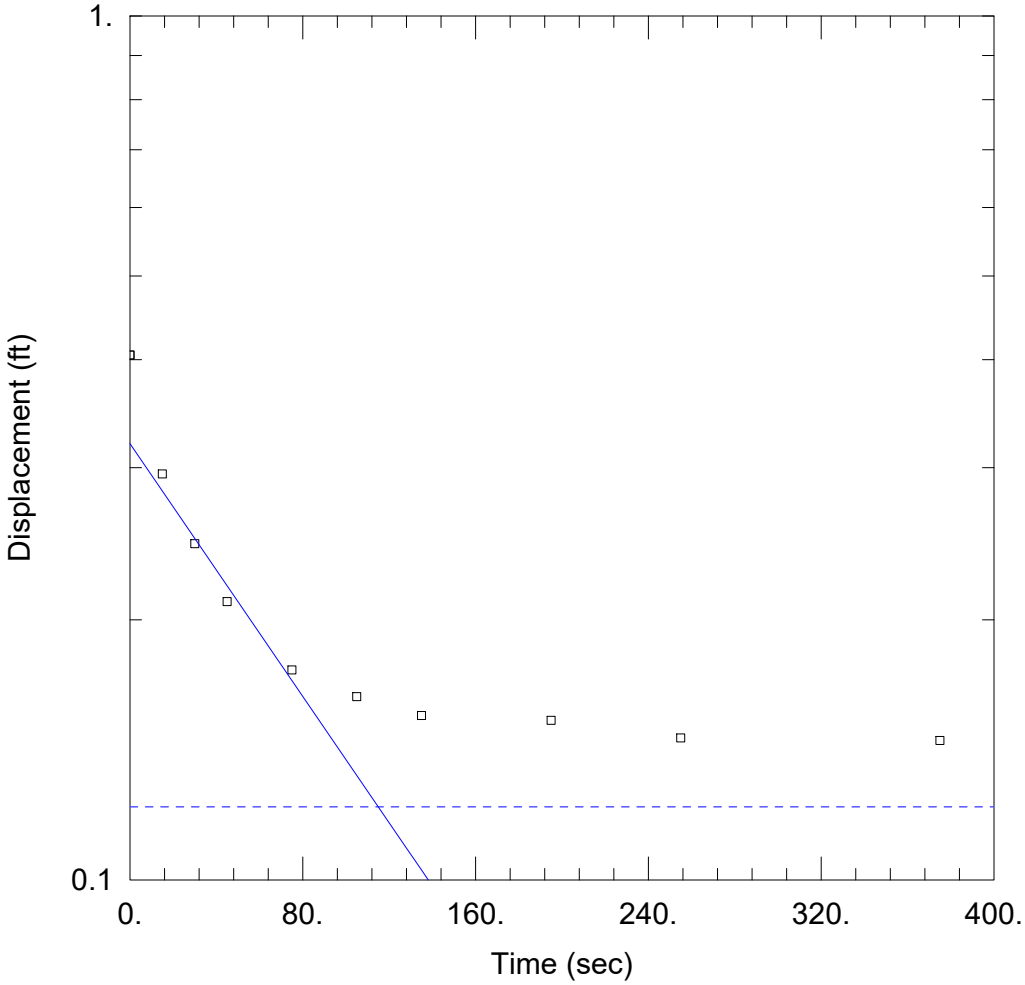
WELL DATA (MW-2)

Initial Displacement: 2.03 ft
Total Well Penetration Depth: 12.84 ft
Casing Radius: 0.083 ft
Static Water Column Height: 13.15 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0001737 cm/sec
y0 = 1.356 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-3\MW-3.aqt
Date: 06/30/23 Time: 11:10:10

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-3
Test Date: 4/10/2023

AQUIFER DATA

Saturated Thickness: 20.3 ft
Anisotropy Ratio (Kz/Kr): 1.

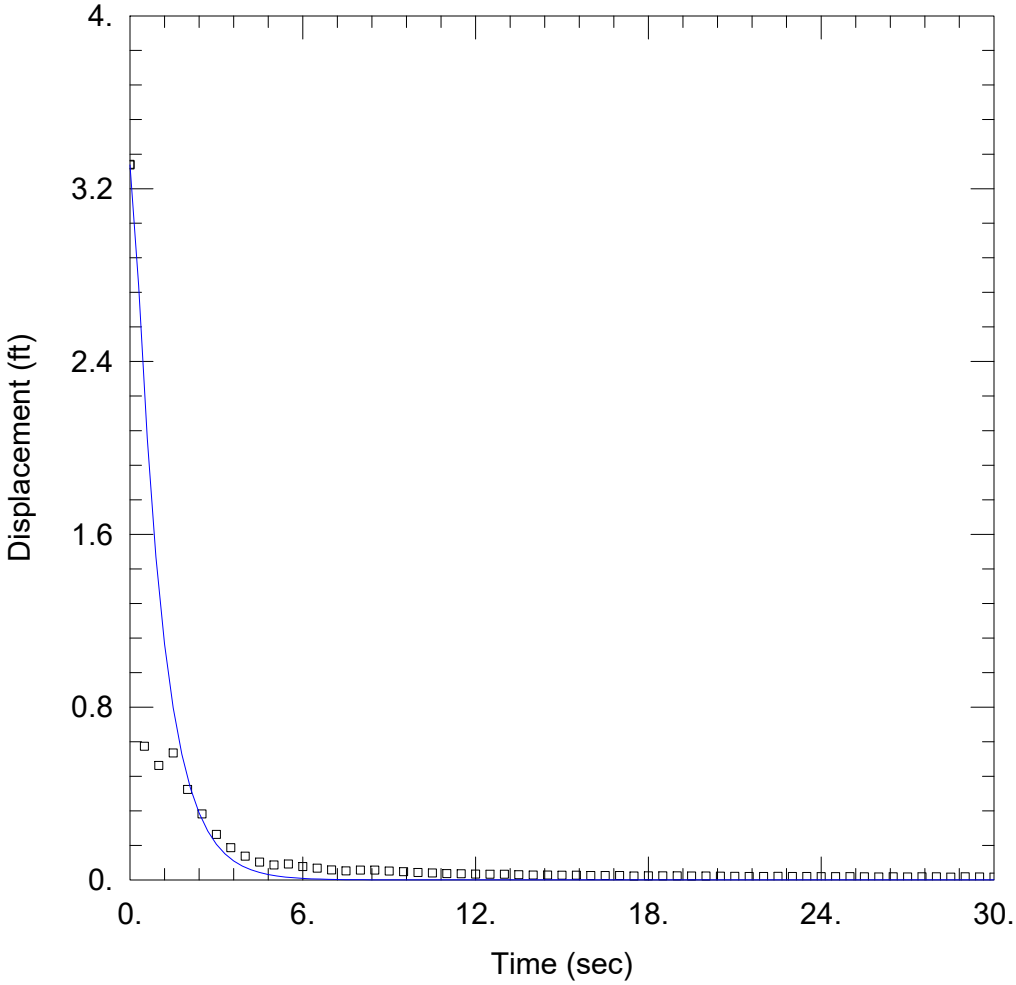
WELL DATA (MW-3)

Initial Displacement: 0.405 ft
Total Well Penetration Depth: 24.79 ft
Casing Radius: 0.083 ft
Static Water Column Height: 25.31 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.00157 cm/sec
y0 = 0.3198 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-4\MW-4.aqt
Date: 06/30/23 Time: 11:13:28

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-4
Test Date: 4/11/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

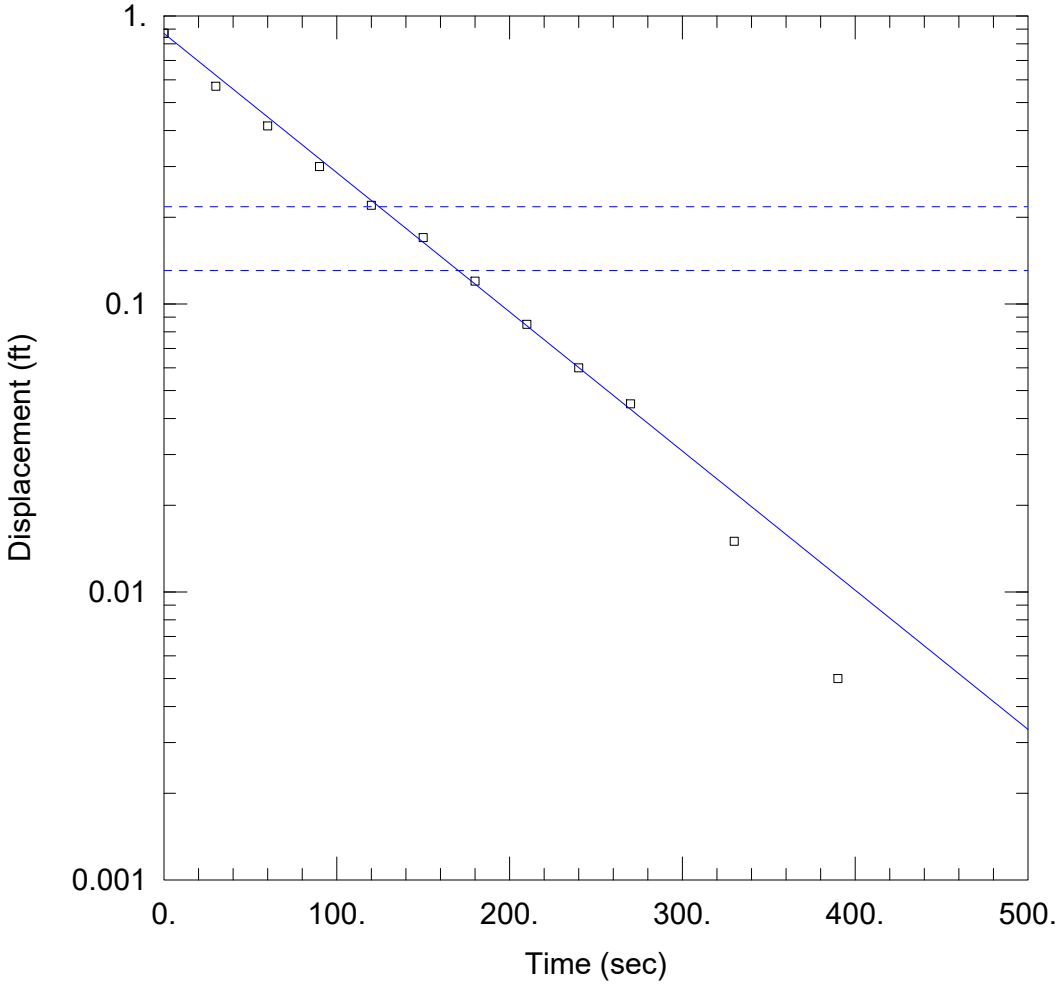
WELL DATA (MW-4)

Initial Displacement: 3.31 ft
Total Well Penetration Depth: 15. ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.77 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Butler

K = 0.04383 cm/sec
Le = 4.085 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-105\MW-105.aqt
Date: 06/30/23 Time: 11:07:40

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-105
Test Date: 4/10/2023

AQUIFER DATA

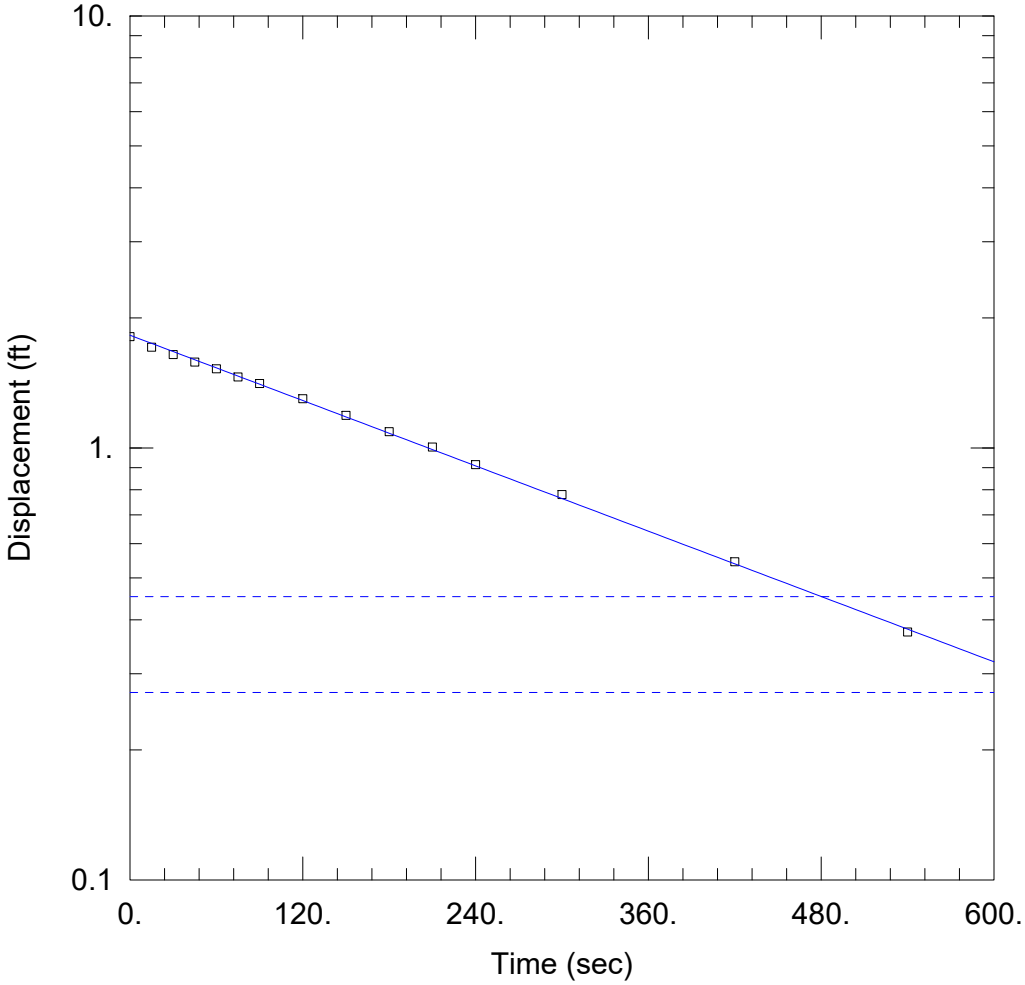
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-105)

Initial Displacement: 0.87 ft
Total Well Penetration Depth: 9. ft
Casing Radius: 0.083 ft
Static Water Column Height: 12.24 ft
Screen Length: 9. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.0005153 cm/sec
y0 = 0.8688 ft



WELL TEST ANALYSIS

Data Set: I:\...\MW-105A_rev_230821_REL.aqt
Date: 09/12/23 Time: 13:16:02

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-105A
Test Date: 4/10/2023

AQUIFER DATA

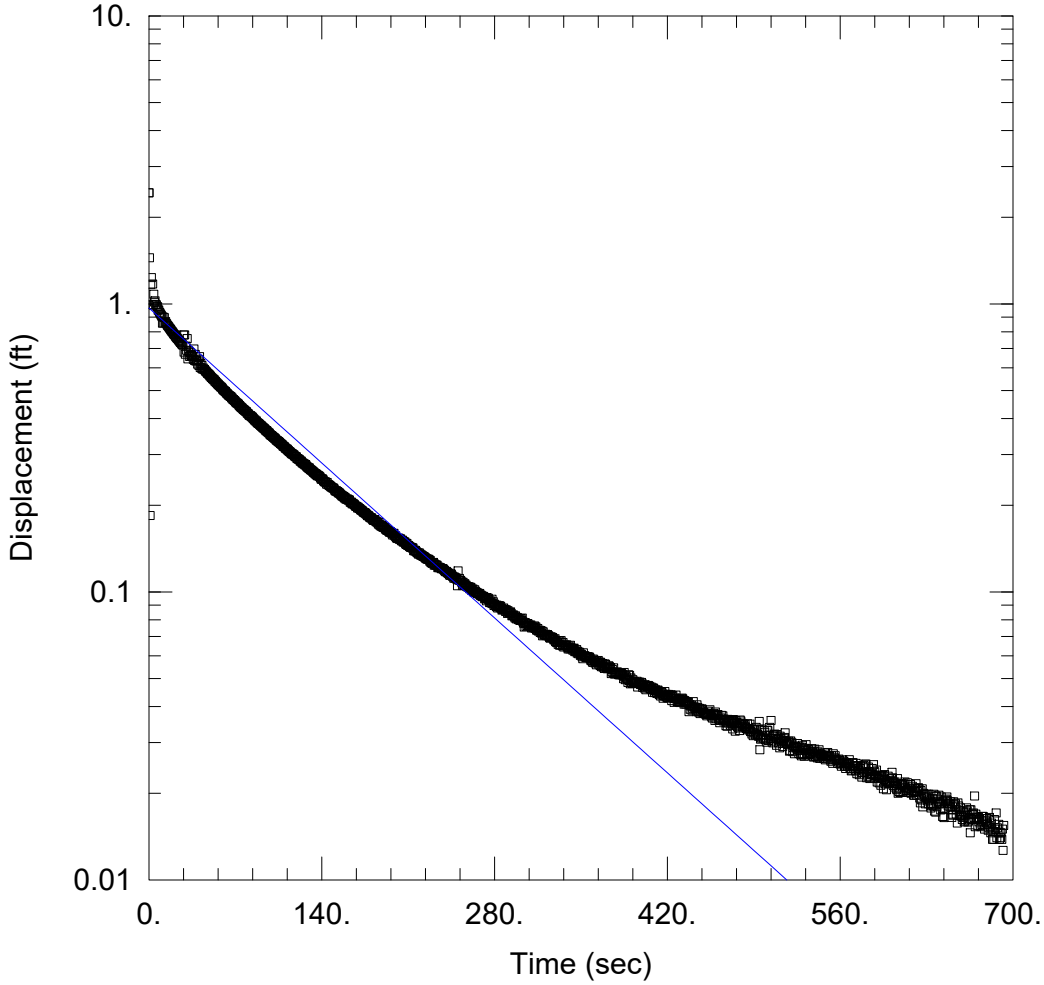
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-105A)

Initial Displacement: 1.81 ft
Total Well Penetration Depth: 12. ft
Casing Radius: 0.083 ft
Static Water Column Height: 43.75 ft
Screen Length: 5. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.0002339 cm/sec
y0 = 1.823 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-106\MW-106.aqt
Date: 06/30/23 Time: 11:28:43

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-106

AQUIFER DATA

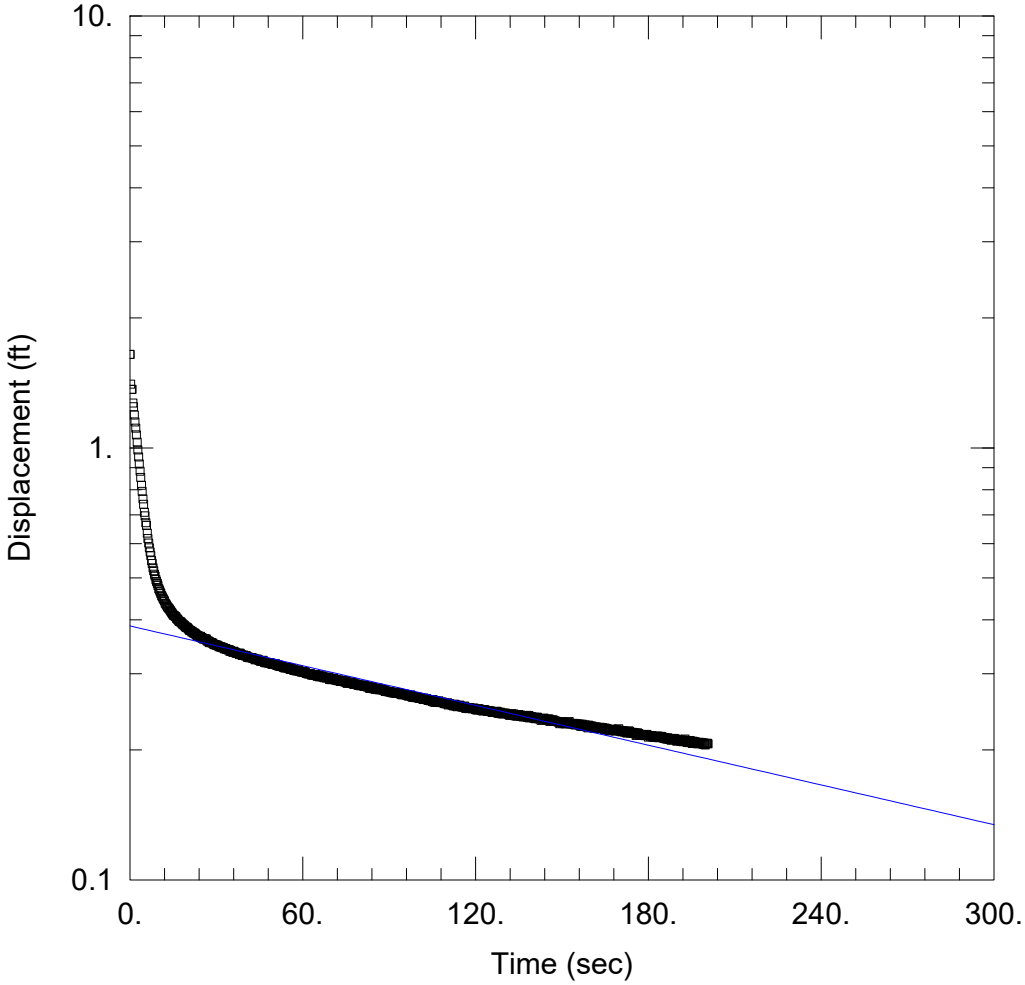
Saturated Thickness: 40. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-106)

Initial Displacement: 2.433 ft
Total Well Penetration Depth: 6.3 ft
Casing Radius: 0.083 ft
Static Water Column Height: 11.3 ft
Screen Length: 6.3 ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.0005328 cm/sec
y0 = 0.9675 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-107\MW-107_Updated.aqt
Date: 10/24/23 Time: 12:14:38

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-107

AQUIFER DATA

Saturated Thickness: 40. ft
Anisotropy Ratio (Kz/Kr): 1.

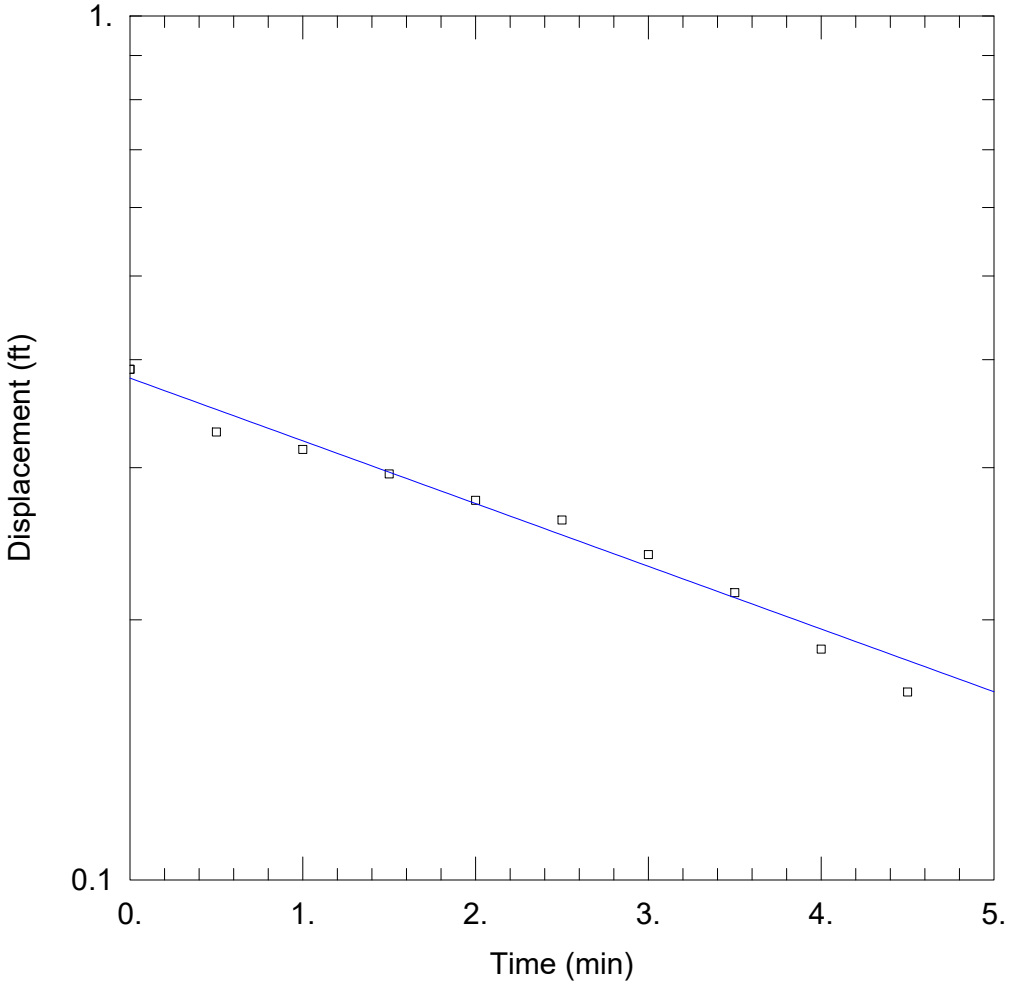
WELL DATA (MW-107)

Initial Displacement: 1.647 ft
Total Well Penetration Depth: 7.92 ft
Casing Radius: 0.083 ft
Static Water Column Height: 7.92 ft
Screen Length: 7.92 ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0005205 cm/sec
y0 = 0.3871 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-108\MW-108_Updated.aqt
Date: 10/23/23 Time: 14:20:16

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-108

AQUIFER DATA

Saturated Thickness: 40. ft
Anisotropy Ratio (Kz/Kr): 1.

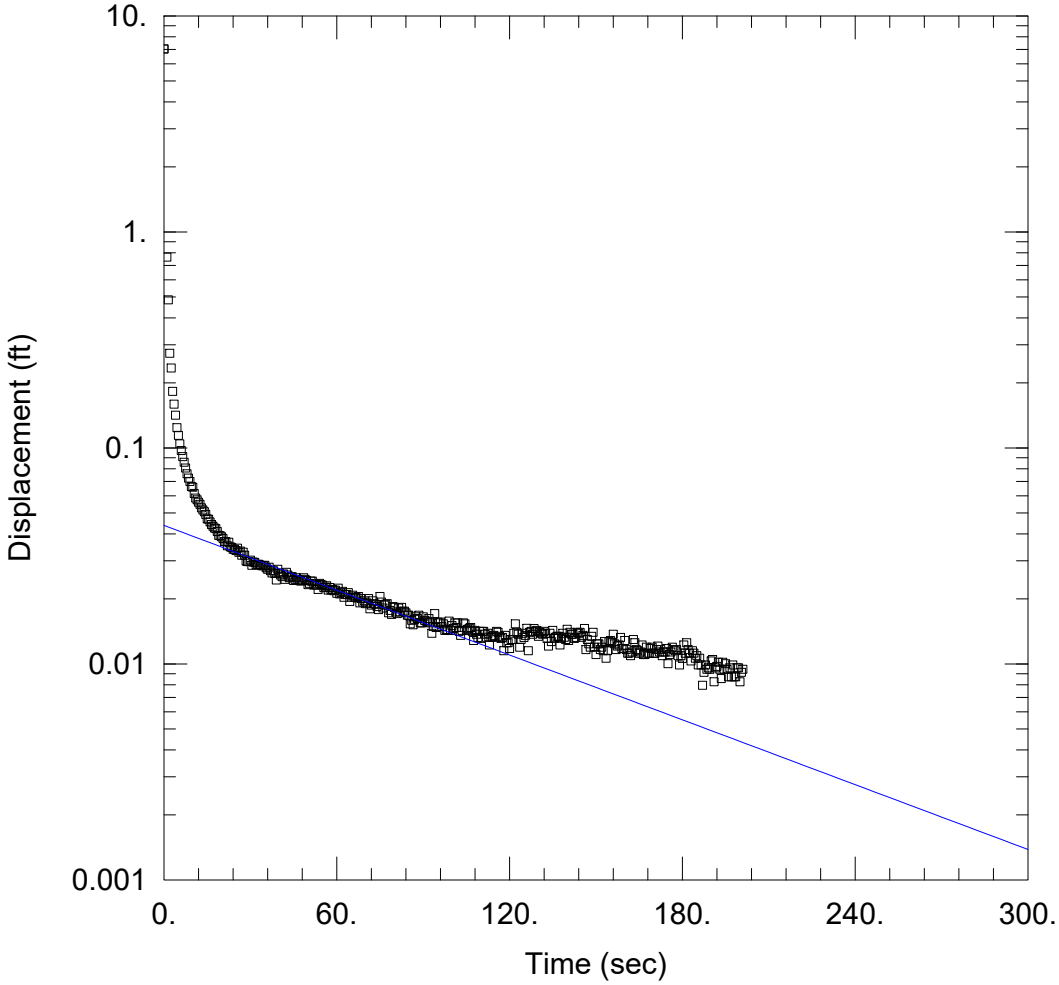
WELL DATA (MW-108)

Initial Displacement: 0.39 ft
Total Well Penetration Depth: 10.15 ft
Casing Radius: 0.083 ft
Static Water Column Height: 10.73 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0003597 cm/sec
y0 = 0.3809 ft



WELL TEST ANALYSIS

Data Set: \...\MW-109.aqt
Date: 09/12/23 Time: 12:41:11

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-109

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

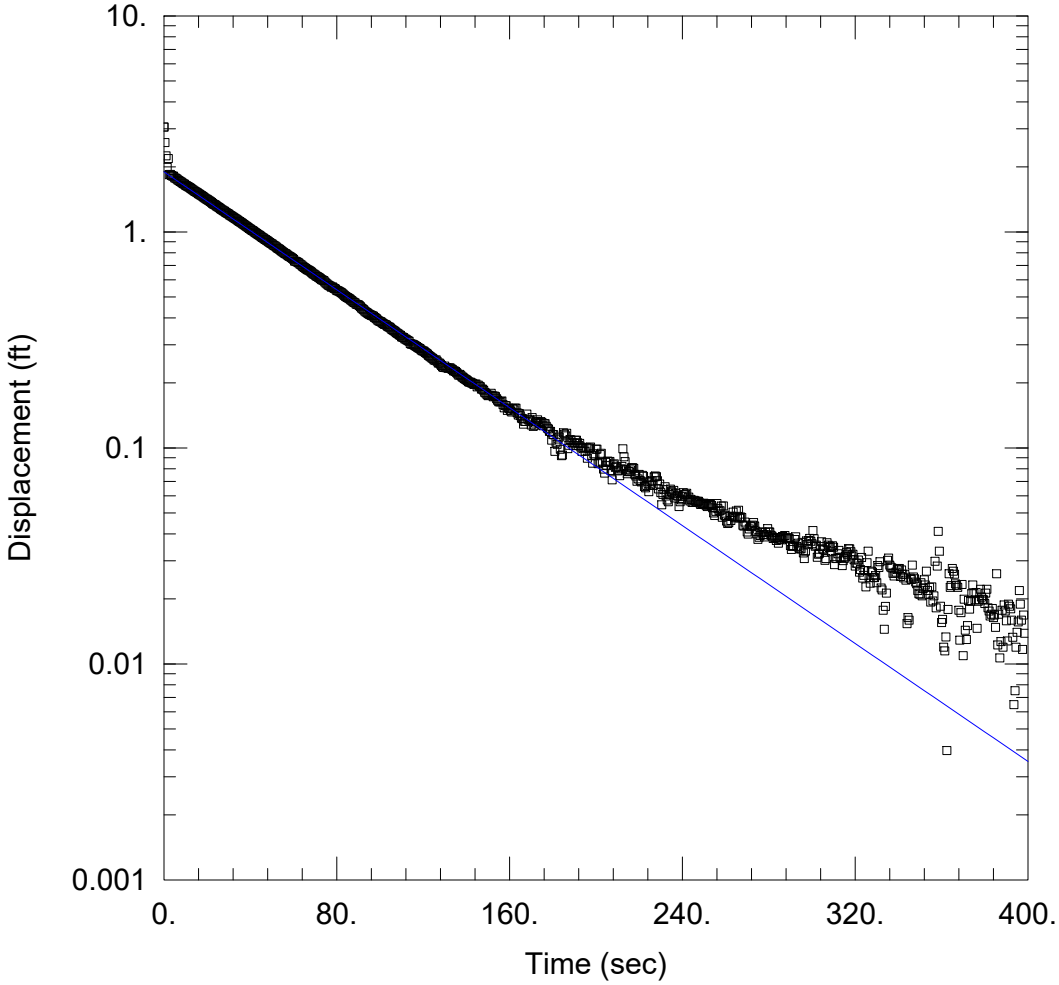
WELL DATA (MW-109)

Initial Displacement: 7.033 ft
Total Well Penetration Depth: 10.29 ft
Casing Radius: 0.083 ft
Static Water Column Height: 10.09 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.002093 cm/sec
y0 = 0.04378 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-109A\MW-109.aqt
Date: 09/15/23 Time: 12:52:56

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-109A
Test Date: 4/5/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

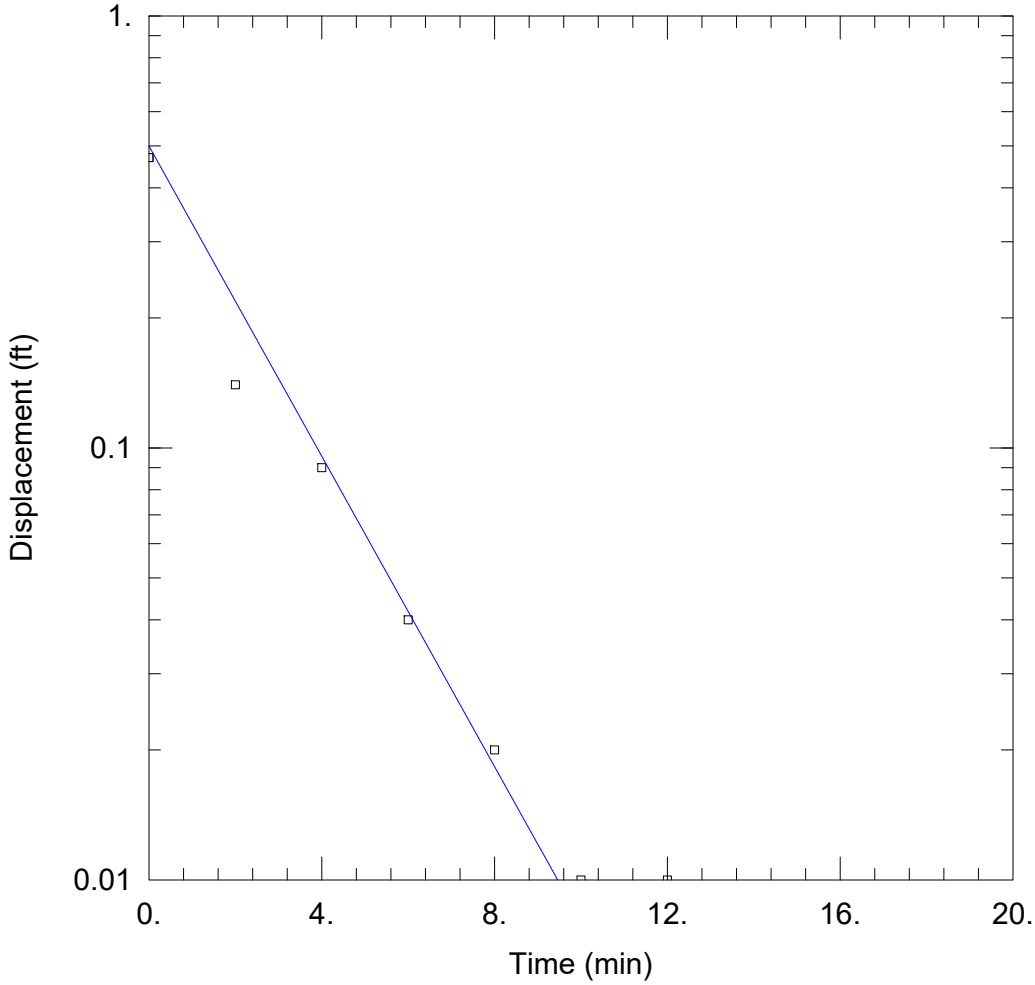
WELL DATA (MW-109A)

Initial Displacement: 3.058 ft
Total Well Penetration Depth: 45.3 ft
Casing Radius: 0.083 ft
Static Water Column Height: 45.75 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev

K = 0.001368 cm/sec
y0 = 1.898 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-110\MW-110.aqt
Date: 07/06/23 Time: 14:31:45

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-110
Test Date: 4/4/2023

AQUIFER DATA

Saturated Thickness: 15.2 ft
Anisotropy Ratio (Kz/Kr): 1.

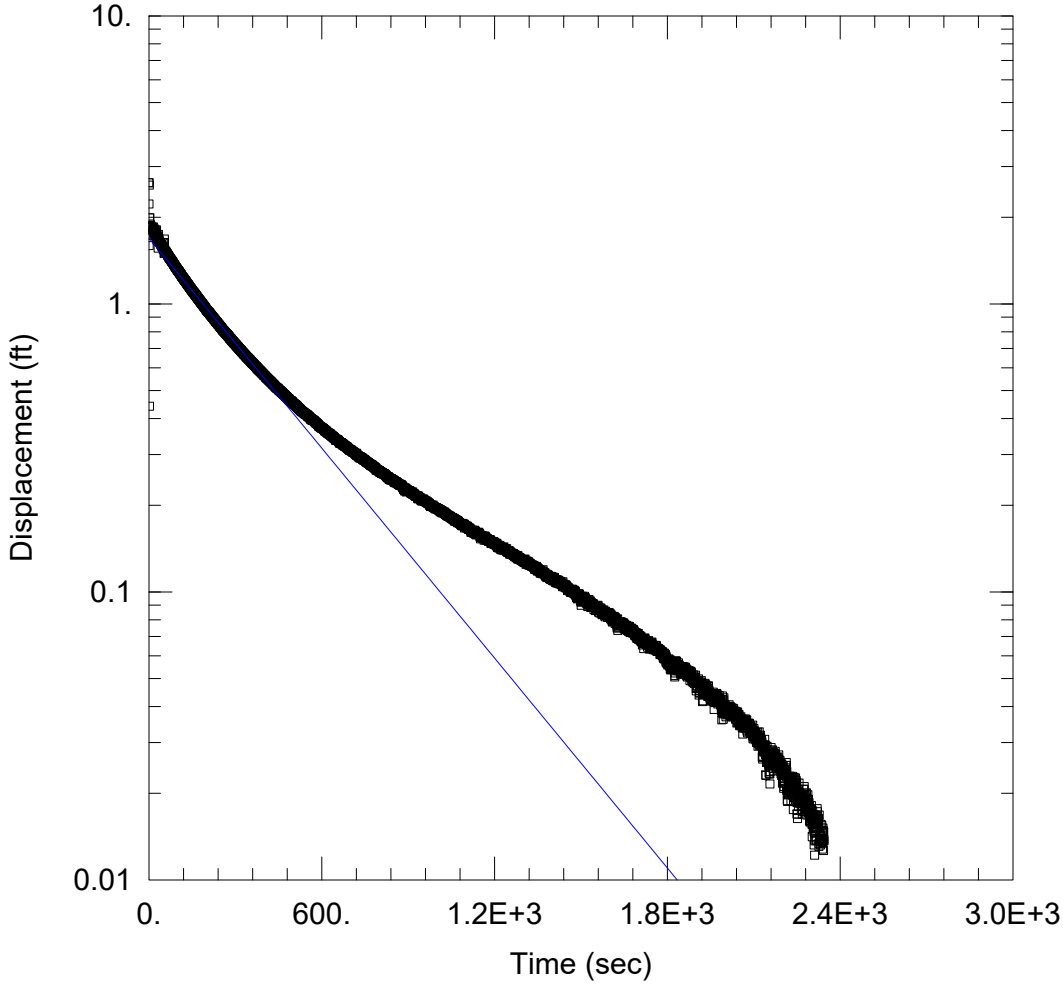
WELL DATA (MW-110)

Initial Displacement: 0.47 ft
Total Well Penetration Depth: 13.2 ft
Casing Radius: 0.083 ft
Static Water Column Height: 13.75 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.00102 cm/sec
y0 = 0.4997 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-110A\MW-110A.aqt
Date: 09/15/23 Time: 12:56:53

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-110A
Test Date: 4/4/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

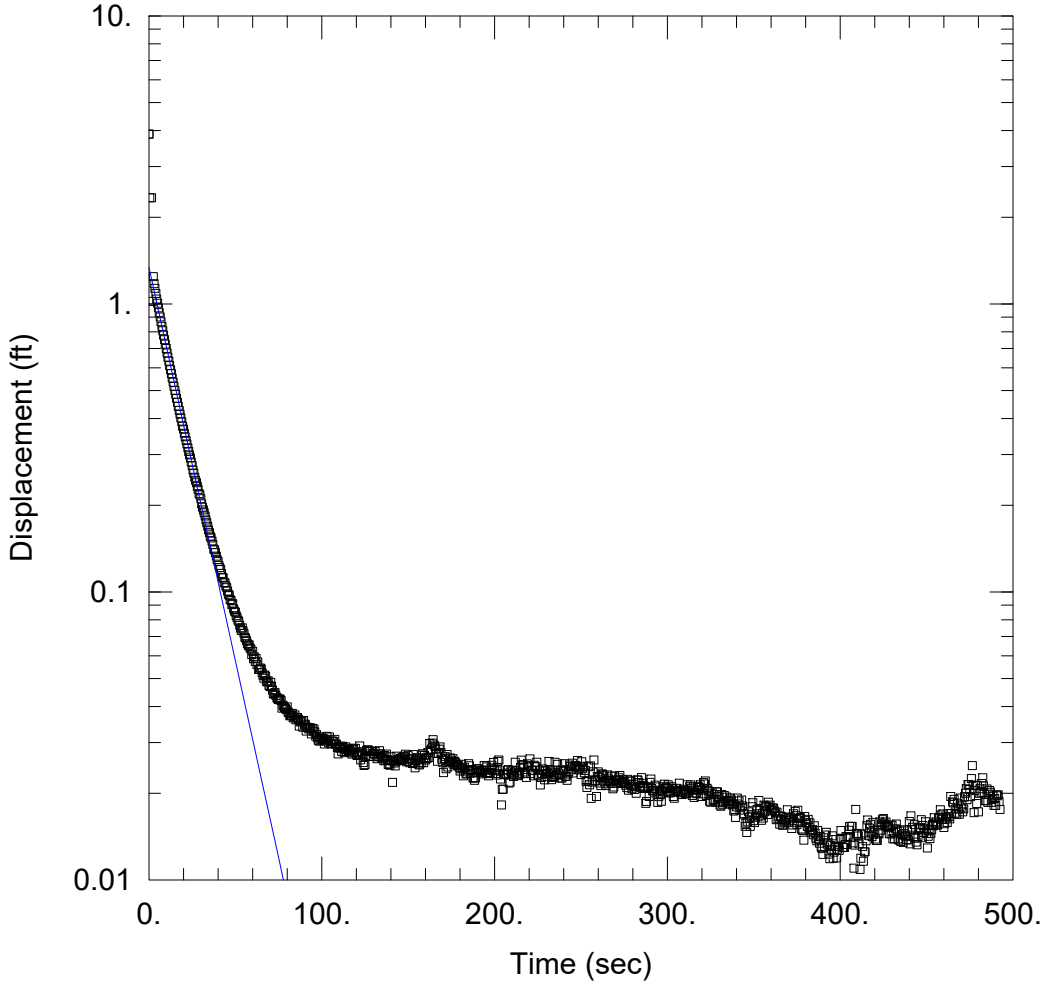
WELL DATA (MW-110A)

Initial Displacement: 2.637 ft
Total Well Penetration Depth: 9.5 ft
Casing Radius: 0.083 ft
Static Water Column Height: 45.07 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev

K = 0.0001761 cm/sec
y0 = 1.691 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-111\MW-111.aqt
Date: 09/12/23 Time: 13:54:11

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-111
Test Date: 4/11/2023

AQUIFER DATA

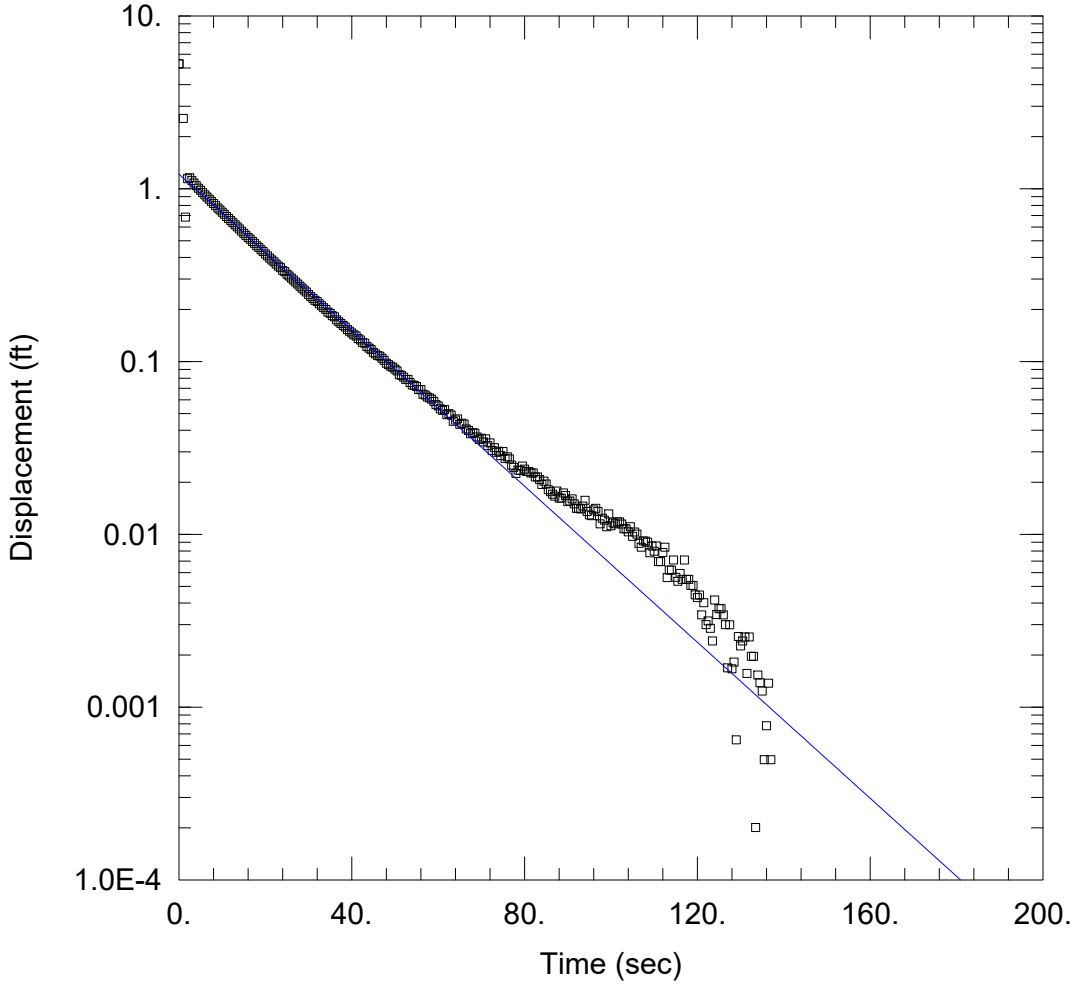
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-111)

Initial Displacement: 3.889 ft
Total Well Penetration Depth: 11.5 ft
Casing Radius: 0.083 ft
Static Water Column Height: 12.94 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.002234 cm/sec
y0 = 1.339 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-112\MW-112.aqt
Date: 09/12/23 Time: 14:14:09

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-112
Test Date: 4/11/2023

AQUIFER DATA

Saturated Thickness: 11.4 ft
Anisotropy Ratio (Kz/Kr): 1.

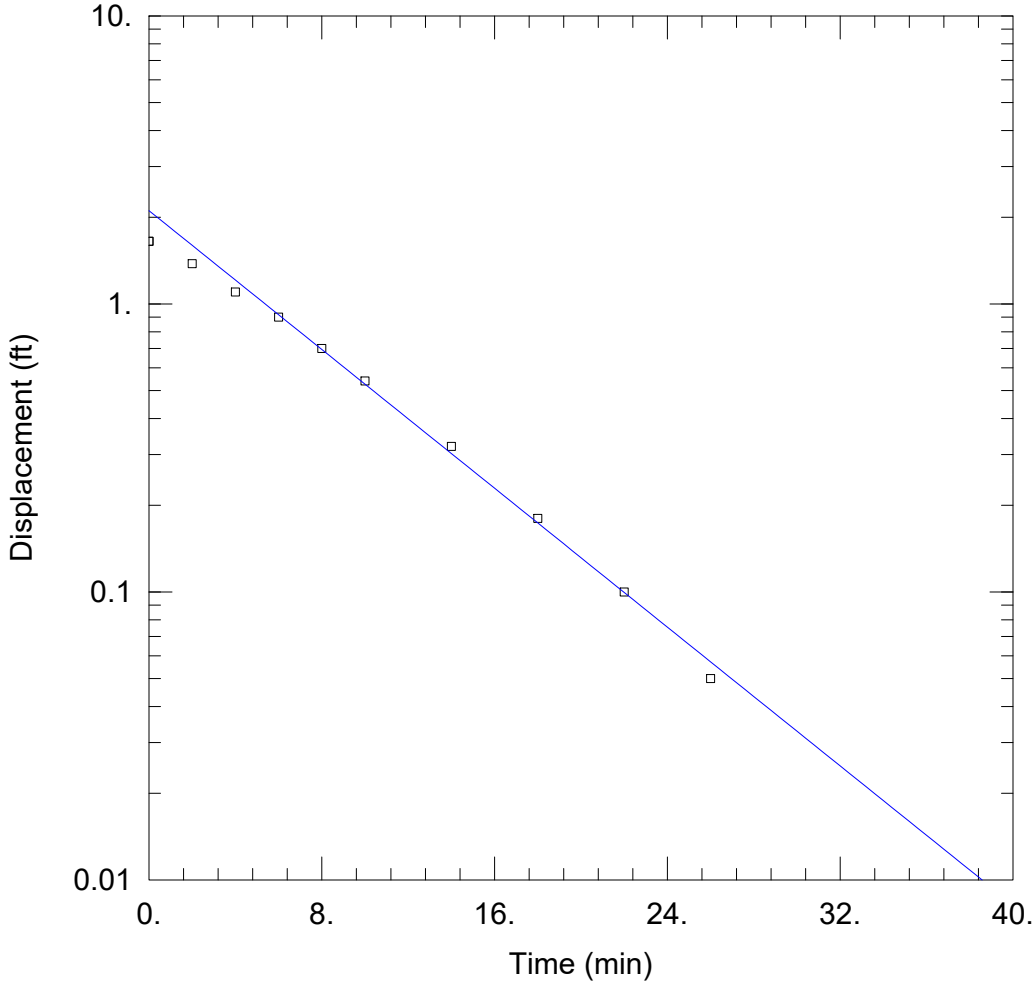
WELL DATA (MW-112)

Initial Displacement: 5.277 ft
Total Well Penetration Depth: 10.4 ft
Casing Radius: 0.083 ft
Static Water Column Height: 10.64 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.007476 cm/sec
y0 = 1.213 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-113\MW-113.aqt
Date: 09/15/23 Time: 13:00:42

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-113
Test Date: 4/06/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

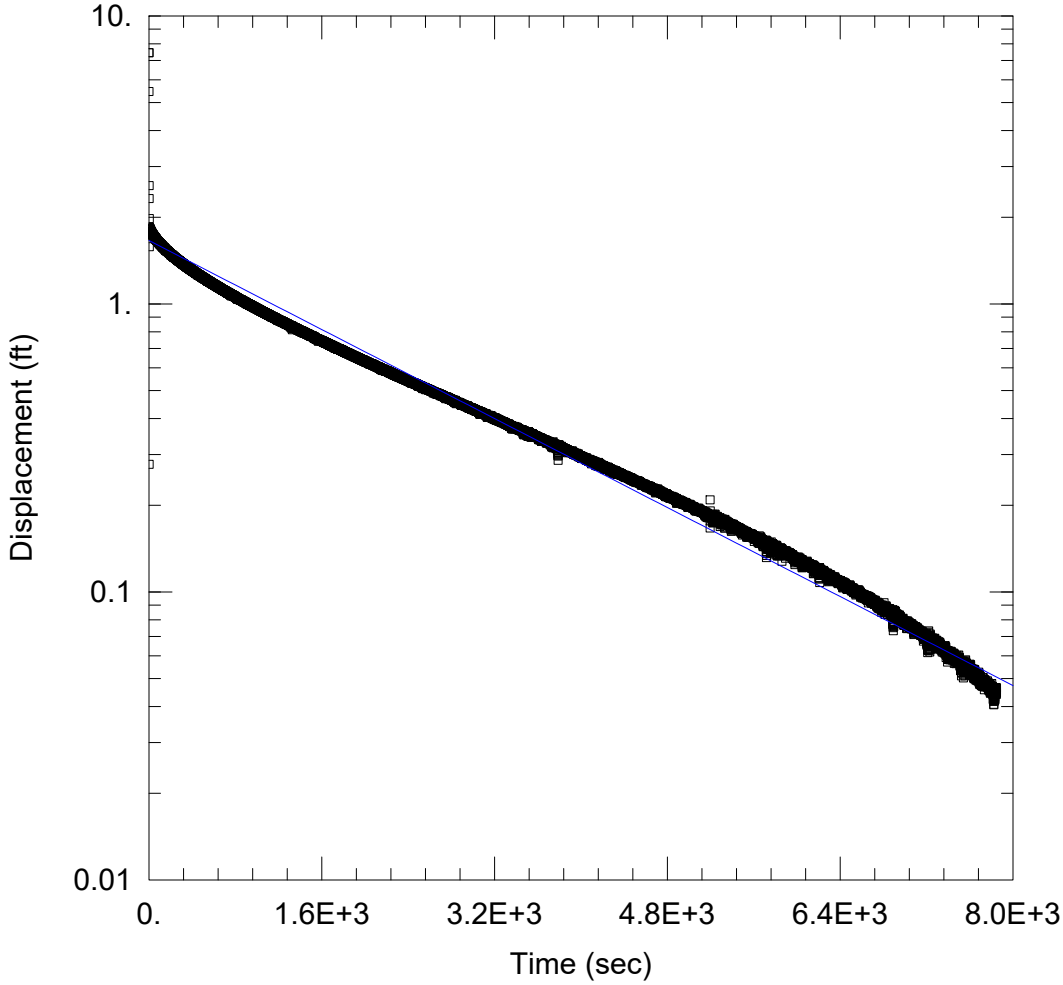
WELL DATA (MW-113)

Initial Displacement: 1.65 ft
Total Well Penetration Depth: 16.7 ft
Casing Radius: 0.083 ft
Static Water Column Height: 17.12 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0004517 cm/sec
y0 = 2.108 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-113A\MW-1113A.aqt
Date: 09/15/23 Time: 12:05:46

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-113A
Test Date: 4/06/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

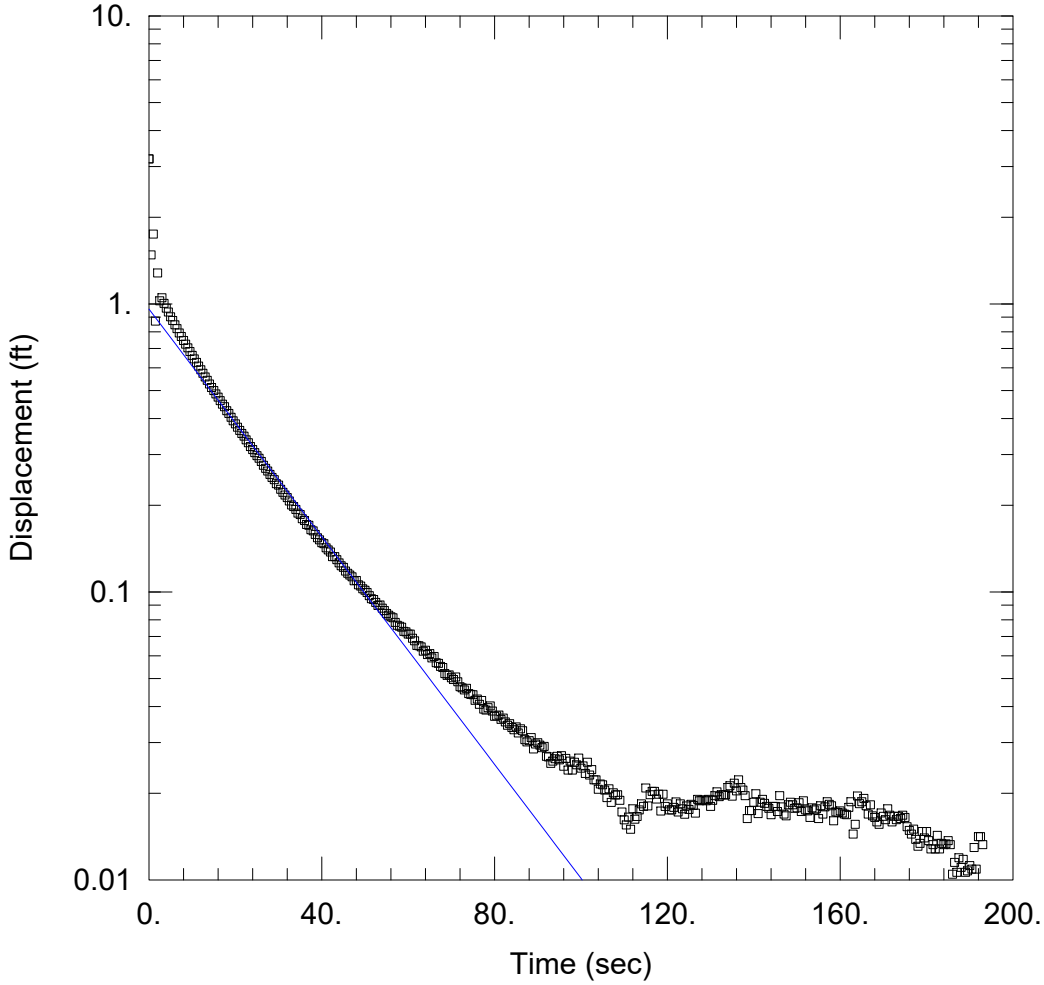
WELL DATA (MW-113A)

Initial Displacement: 7.45 ft
Total Well Penetration Depth: 46.3 ft
Casing Radius: 0.083 ft
Static Water Column Height: 46.35 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev

K = 3.873E-5 cm/sec
y0 = 1.66 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-114\MW-114.aqt
Date: 09/15/23 Time: 12:30:13

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-114
Test Date: 4/06/2023

AQUIFER DATA

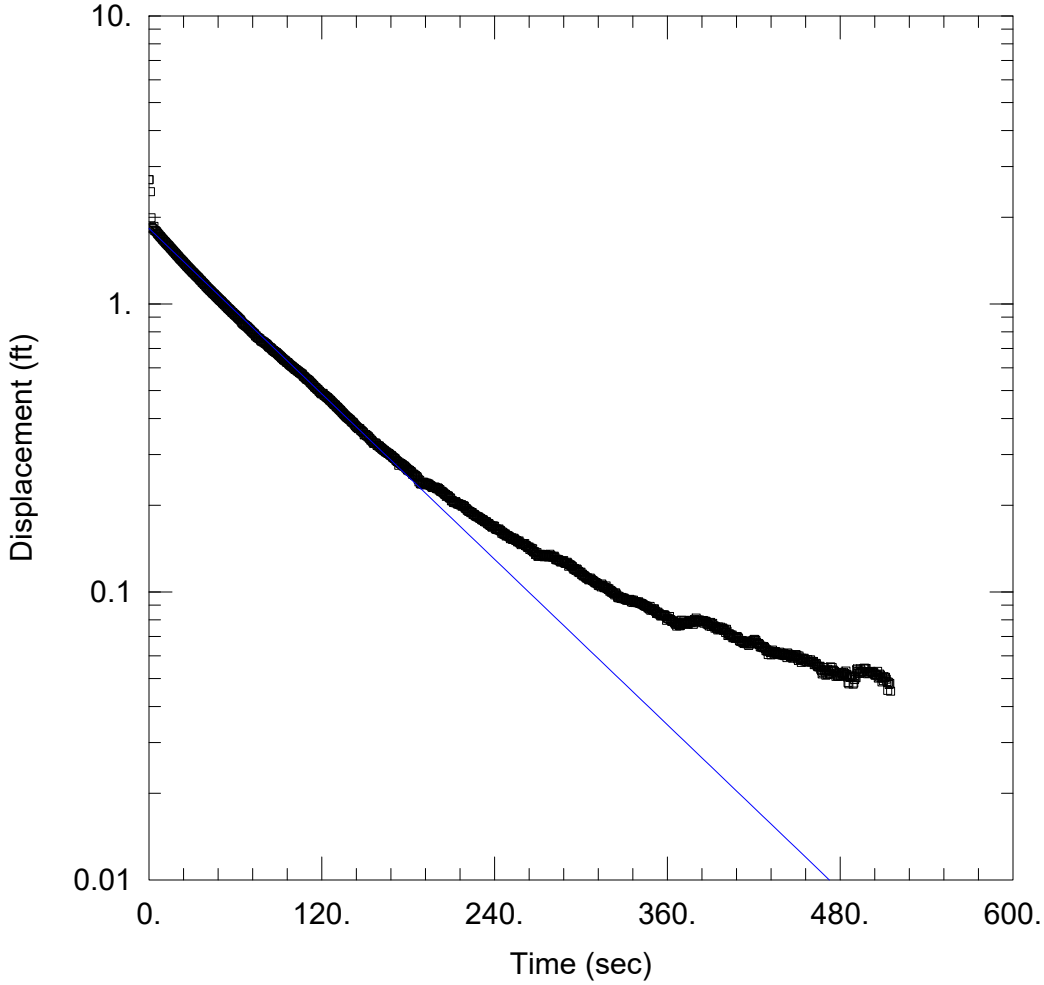
Saturated Thickness: 23. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-114)

Initial Displacement: 3.188 ft
Total Well Penetration Depth: 8. ft
Casing Radius: 0.083 ft
Static Water Column Height: 13.95 ft
Screen Length: 8. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.0023 cm/sec
y0 = 0.9594 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-114A_Redo\MW-114A.aqt
Date: 09/15/23 Time: 12:48:17

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-114A
Test Date: 4/06/2023

AQUIFER DATA

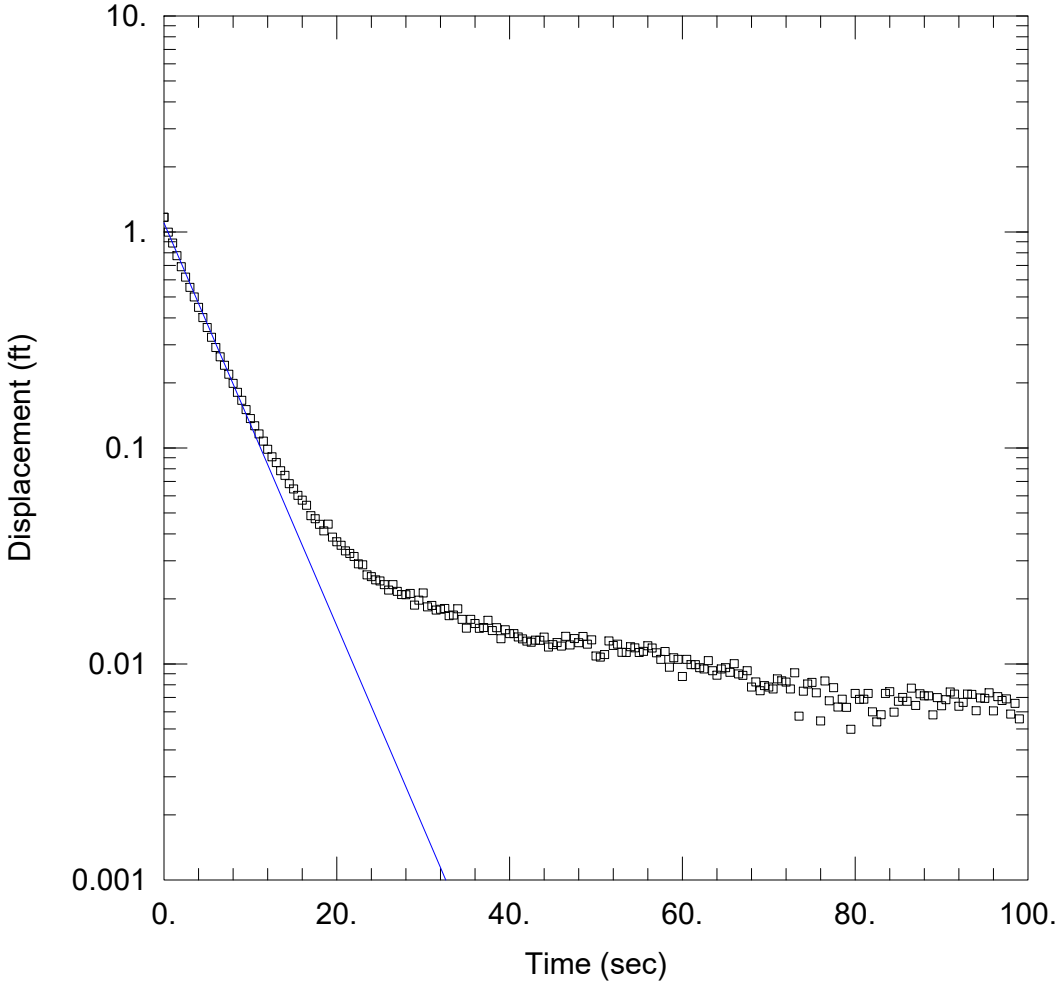
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-114A)

Initial Displacement: 2.699 ft
Total Well Penetration Depth: 9. ft
Casing Radius: 0.083 ft
Static Water Column Height: 46.26 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.00096 cm/sec
y0 = 1.829 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-115\MW-115.aqt
Date: 09/27/23 Time: 15:39:15

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-115
Test Date: 4/11/2023

AQUIFER DATA

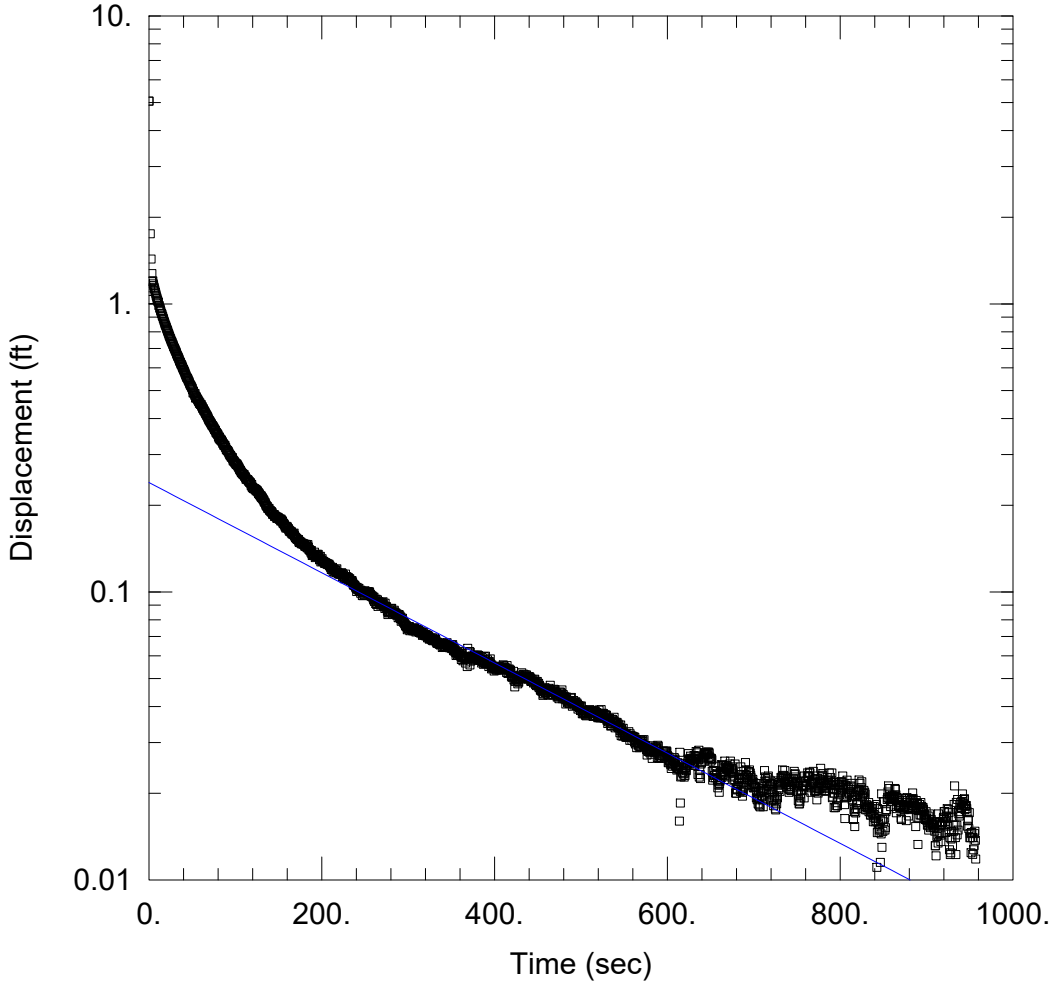
Saturated Thickness: 7. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-115)

Initial Displacement: 1.17 ft
Total Well Penetration Depth: 10. ft
Casing Radius: 0.083 ft
Static Water Column Height: 12.36 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.01706 cm/sec
y0 = 1.101 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-116\MW-116 Updated.aqt
Date: 10/31/23 Time: 13:40:39

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-116
Test Date: 4/5/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

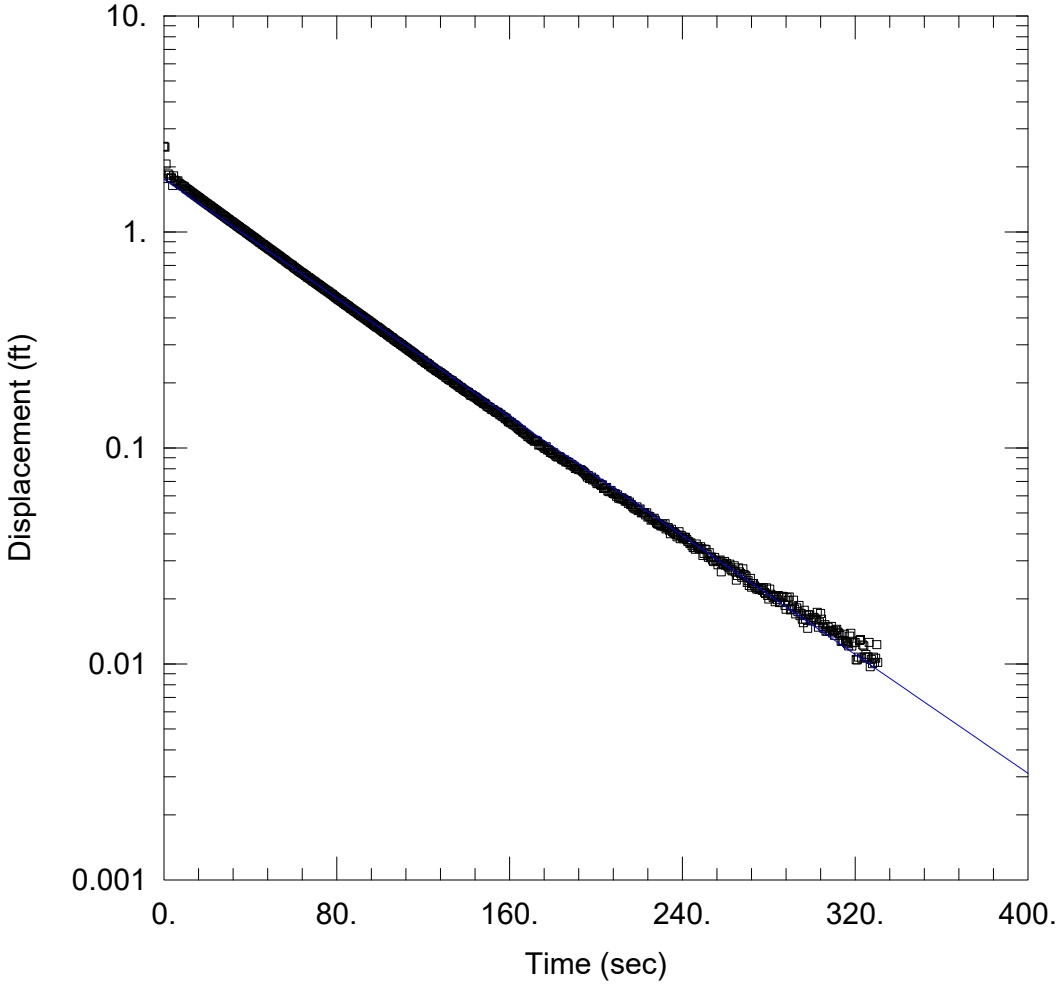
WELL DATA (MW-116)

Initial Displacement: 5.061 ft
Total Well Penetration Depth: 10. ft
Casing Radius: 0.083 ft
Static Water Column Height: 10.66 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0004499 cm/sec
y0 = 0.2397 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-116A\MW-116A Updated.aqt
Date: 10/31/23 Time: 16:13:35

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268
Location: Madison, WI
Test Well: MW-116A
Test Date: 4/5/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

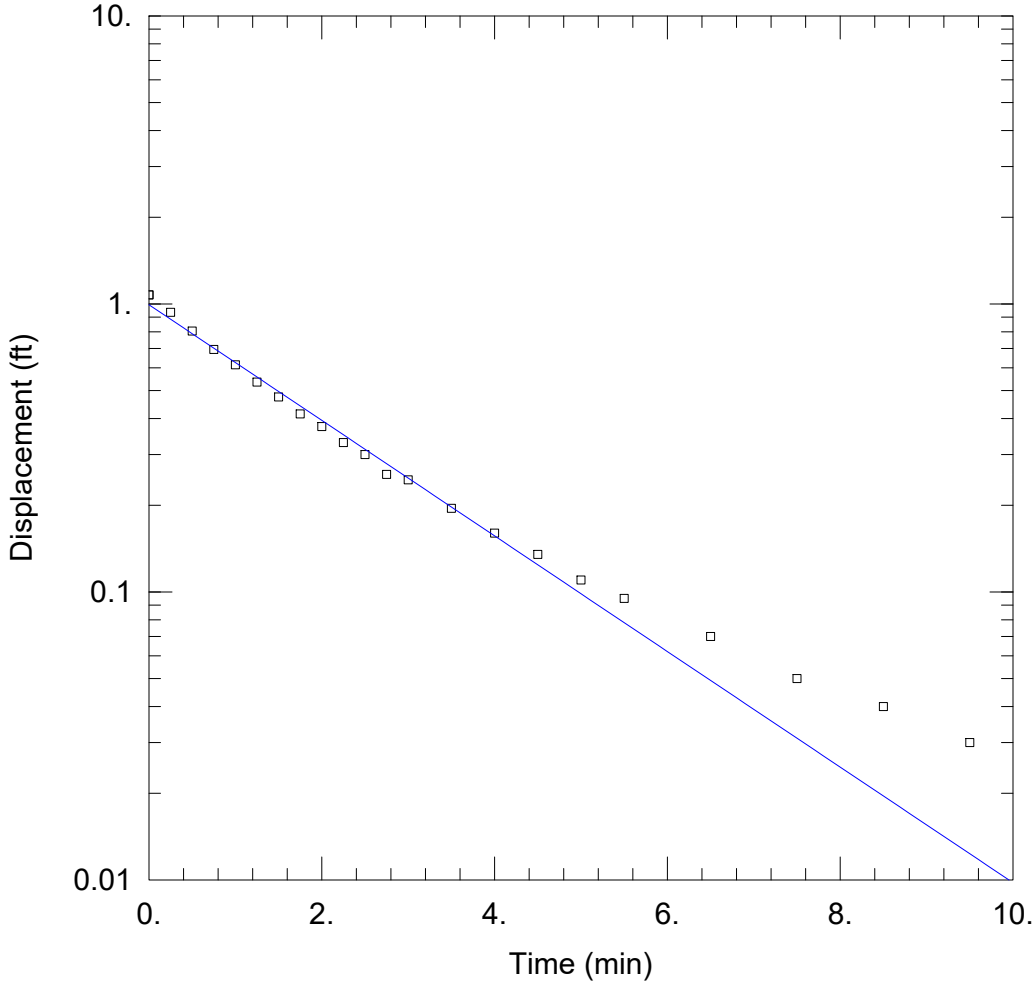
WELL DATA (MW-116A)

Initial Displacement: 2.491 ft
Total Well Penetration Depth: 45.4 ft
Casing Radius: 0.08 ft
Static Water Column Height: 44.89 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.003996 cm/sec
y0 = 1.754 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-117\MW-117 Updated.aqt
Date: 10/31/23 Time: 14:17:32

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268
Location: Madison, WI
Test Well: MW-117
Test Date: 4/10/2023

AQUIFER DATA

Saturated Thickness: 20.5 ft
Anisotropy Ratio (Kz/Kr): 1.

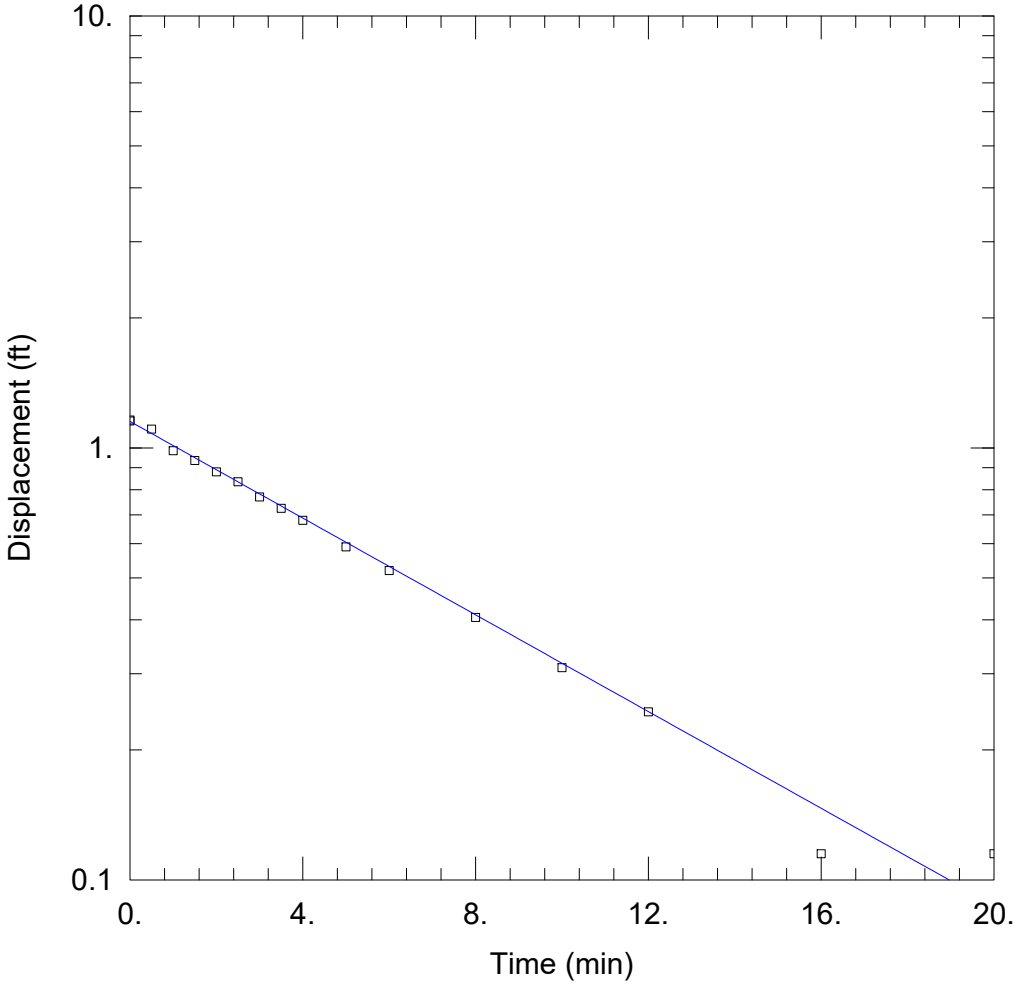
WELL DATA (MW-117)

Initial Displacement: 1.075 ft
Total Well Penetration Depth: 8.5 ft
Casing Radius: 0.083 ft
Static Water Column Height: 14.73 ft
Screen Length: 8.5 ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev

K = 0.000372 cm/sec
y0 = 0.993 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-117A\MW-117A Updated.aqt
Date: 10/31/23 Time: 15:01:53

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268
Location: Madison, WI
Test Well: MW-117A
Test Date: 4/10/2023

AQUIFER DATA

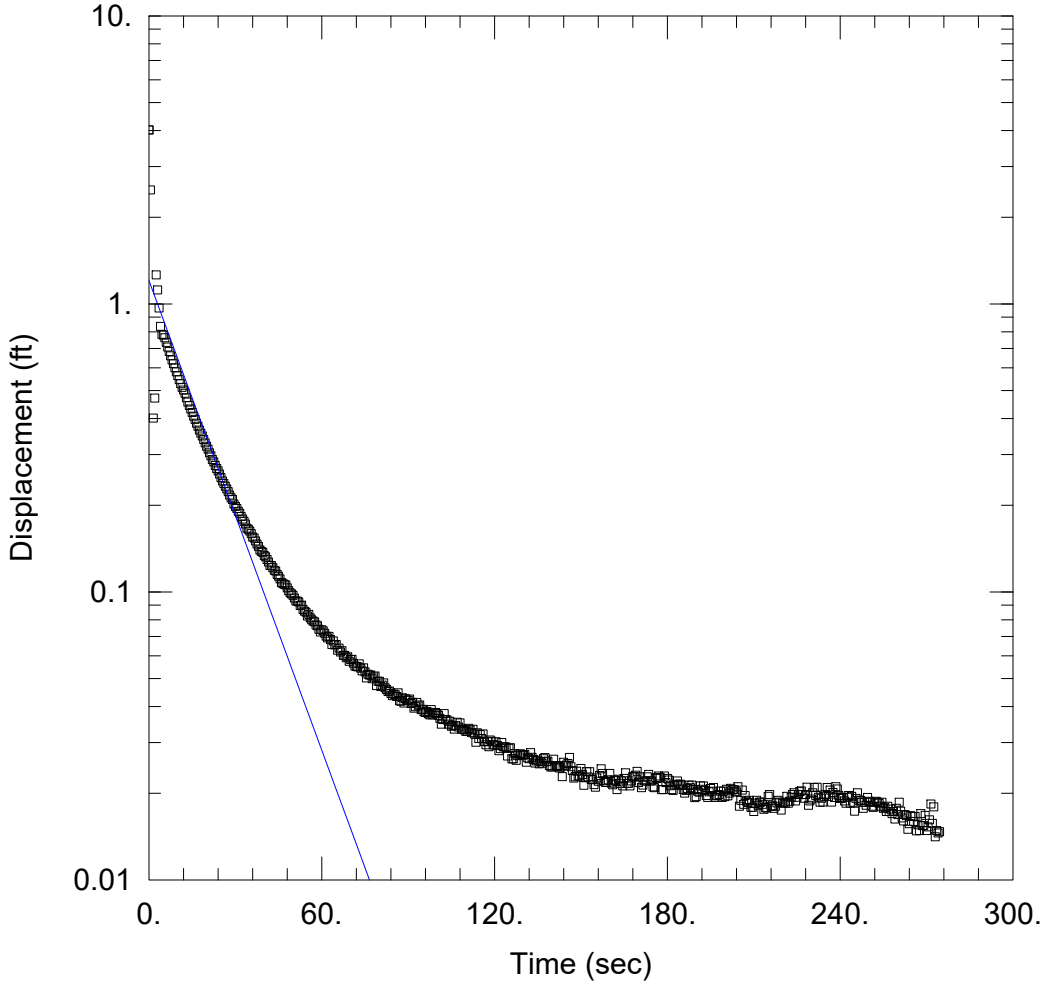
Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-117A)

Initial Displacement: 1.16 ft
Total Well Penetration Depth: 43.5 ft
Casing Radius: 0.083 ft
Static Water Column Height: 51.15 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.000187 cm/sec
y0 = 1.152 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-118\MW-118.aqt
Date: 10/31/23 Time: 15:06:03

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268
Location: Madison, WI
Test Well: MW-118
Test Date: 4/7/2023

AQUIFER DATA

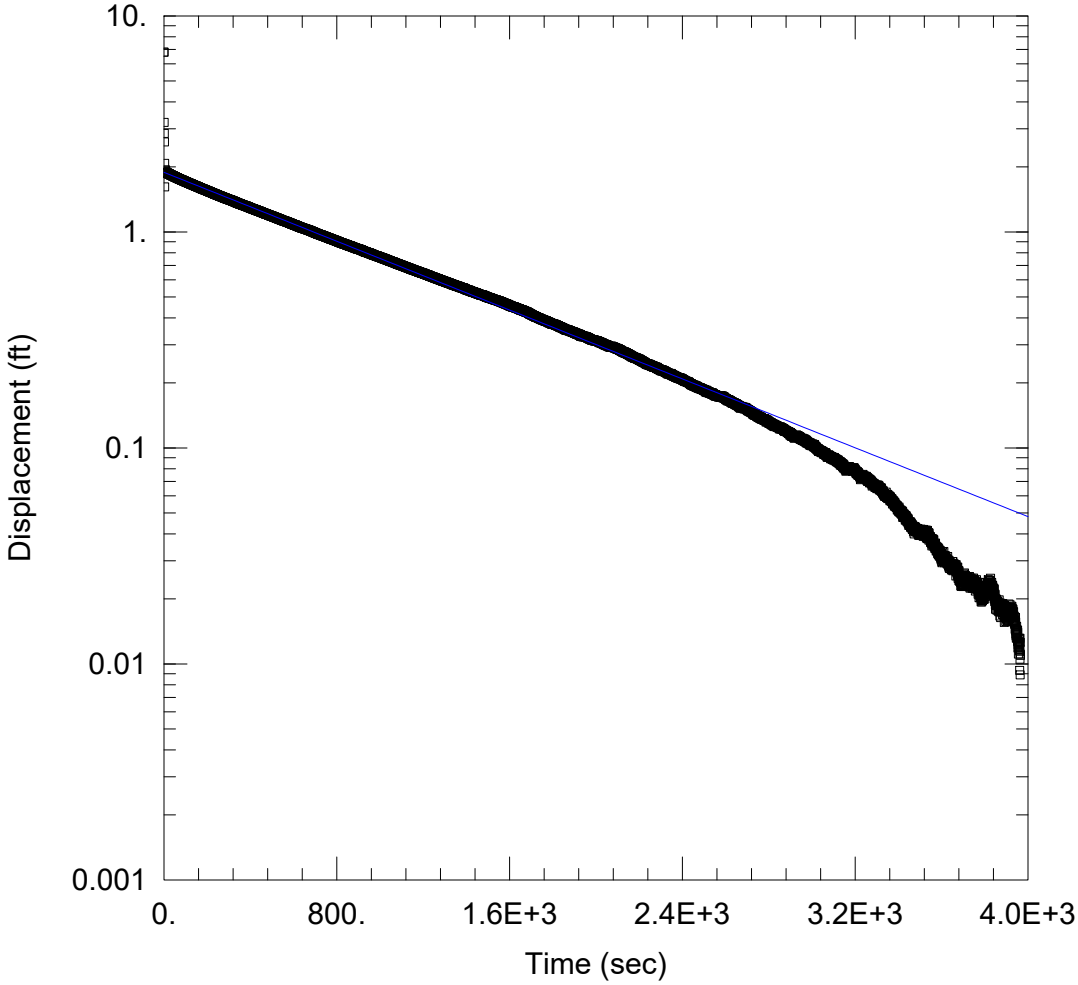
Saturated Thickness: 42.75 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-118)

Initial Displacement: 4.021 ft
Static Water Column Height: 13.66 ft
Total Well Penetration Depth: 10.78 ft
Screen Length: 10. ft
Casing Radius: 0.083 ft
Well Radius: 0.34 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.002222 cm/sec
y0 = 1.204 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-118A\MW-118A Updated.aqt
Date: 10/31/23 Time: 15:11:05

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268
Location: Madison, WI
Test Well: MW-118A
Test Date: 4/7/2023

AQUIFER DATA

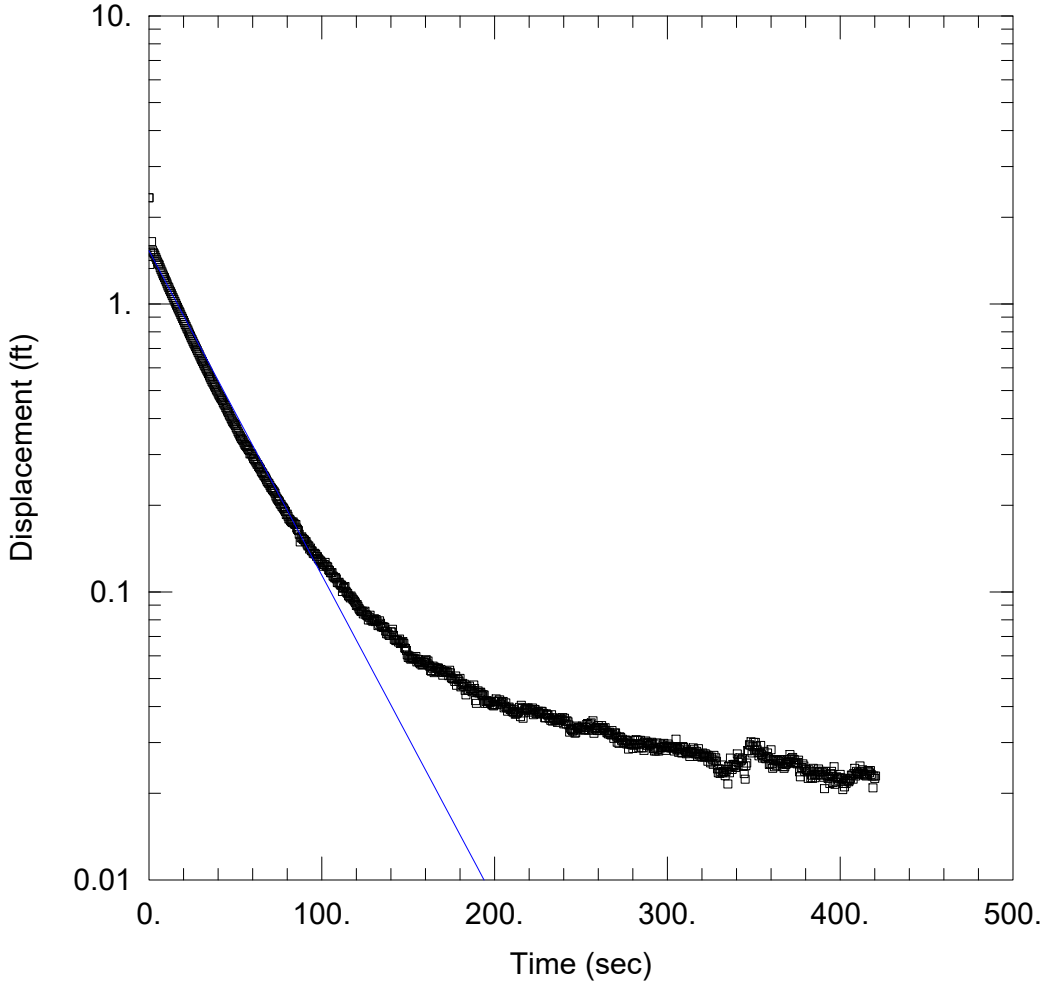
Saturated Thickness: 42.47 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-118A)

Initial Displacement: 6.79 ft
Total Well Penetration Depth: 41.7 ft
Casing Radius: 0.083 ft
Static Water Column Height: 43.51 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 7.99E-5 cm/sec
y0 = 1.887 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-119\Mw-119 Updated.aqt
Date: 10/31/23 Time: 15:14:07

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268
Location: Madison, WI
Test Well: MW-119
Test Date: 4/5/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

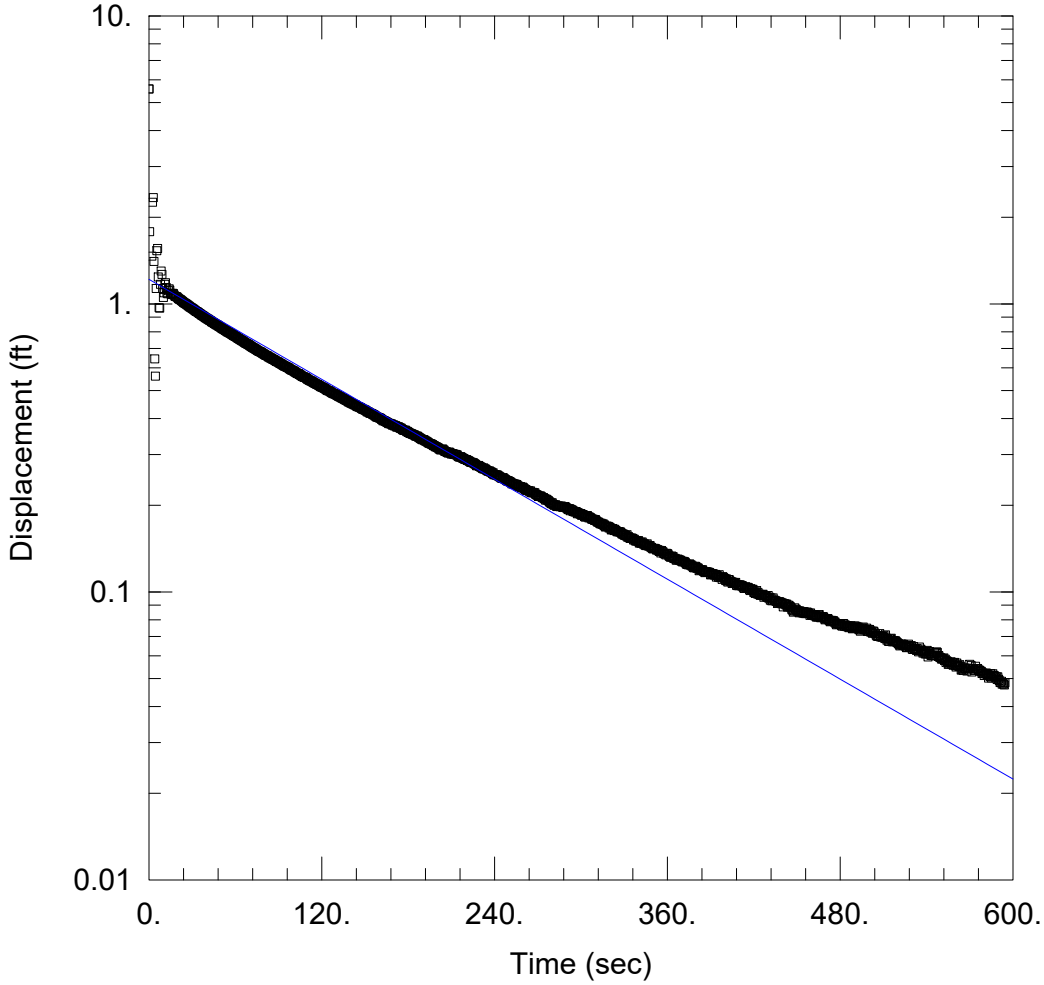
WELL DATA (MW-119)

Initial Displacement: 2.337 ft
Total Well Penetration Depth: 13.1 ft
Casing Radius: 0.083 ft
Static Water Column Height: 13.71 ft
Screen Length: 10. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.003167 cm/sec
y0 = 1.53 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-120\MW-120 Updated.aqt
Date: 10/31/23 Time: 15:16:47

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268
Location: Madison, WI
Test Well: MW-120
Test Date: 4/6/2023

AQUIFER DATA

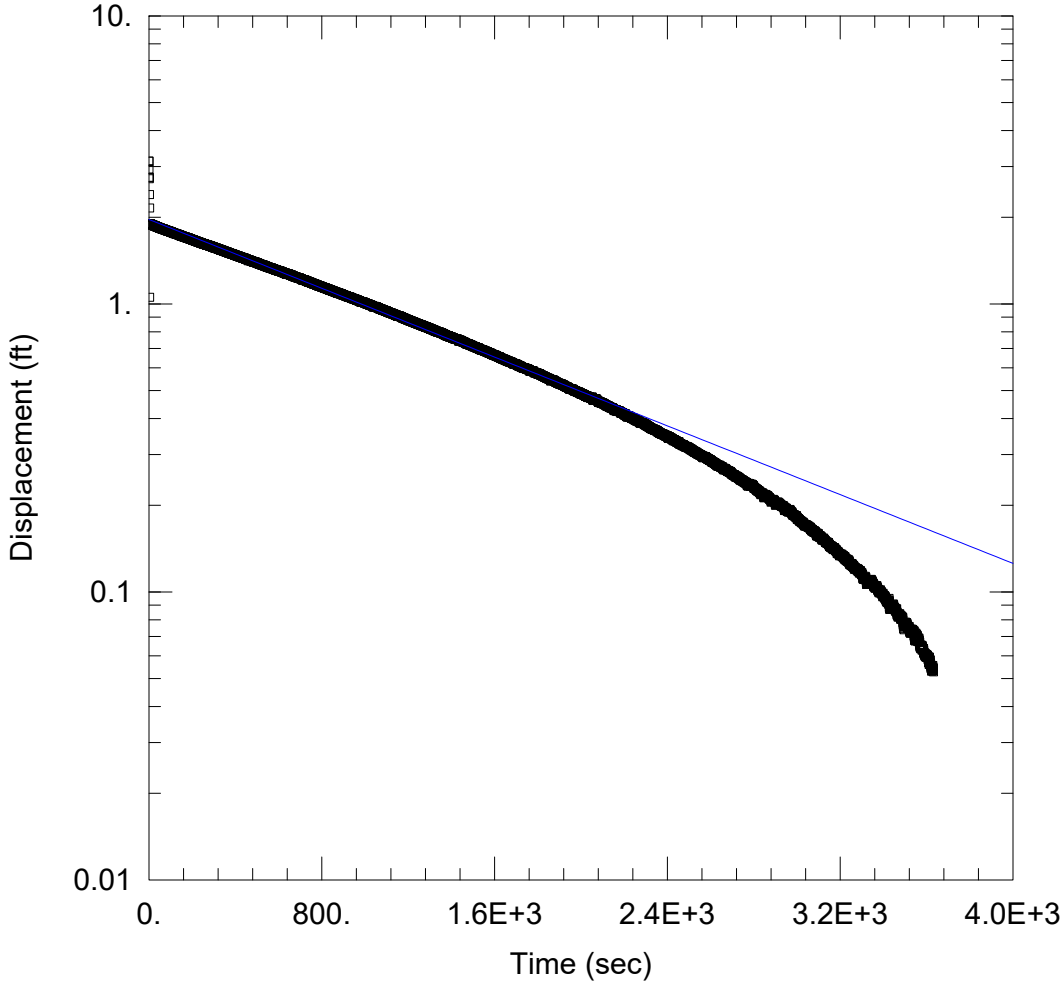
Saturated Thickness: 18. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-120)

Initial Displacement: 5.576 ft
Total Well Penetration Depth: 13.5 ft
Casing Radius: 0.083 ft
Static Water Column Height: 14.32 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.0002365 cm/sec
y0 = 1.217 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-120A\MW-120A Updated.aqt
Date: 10/31/23 Time: 15:18:58

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268
Location: Madison, WI
Test Well: MW-120A
Test Date: 4/6/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

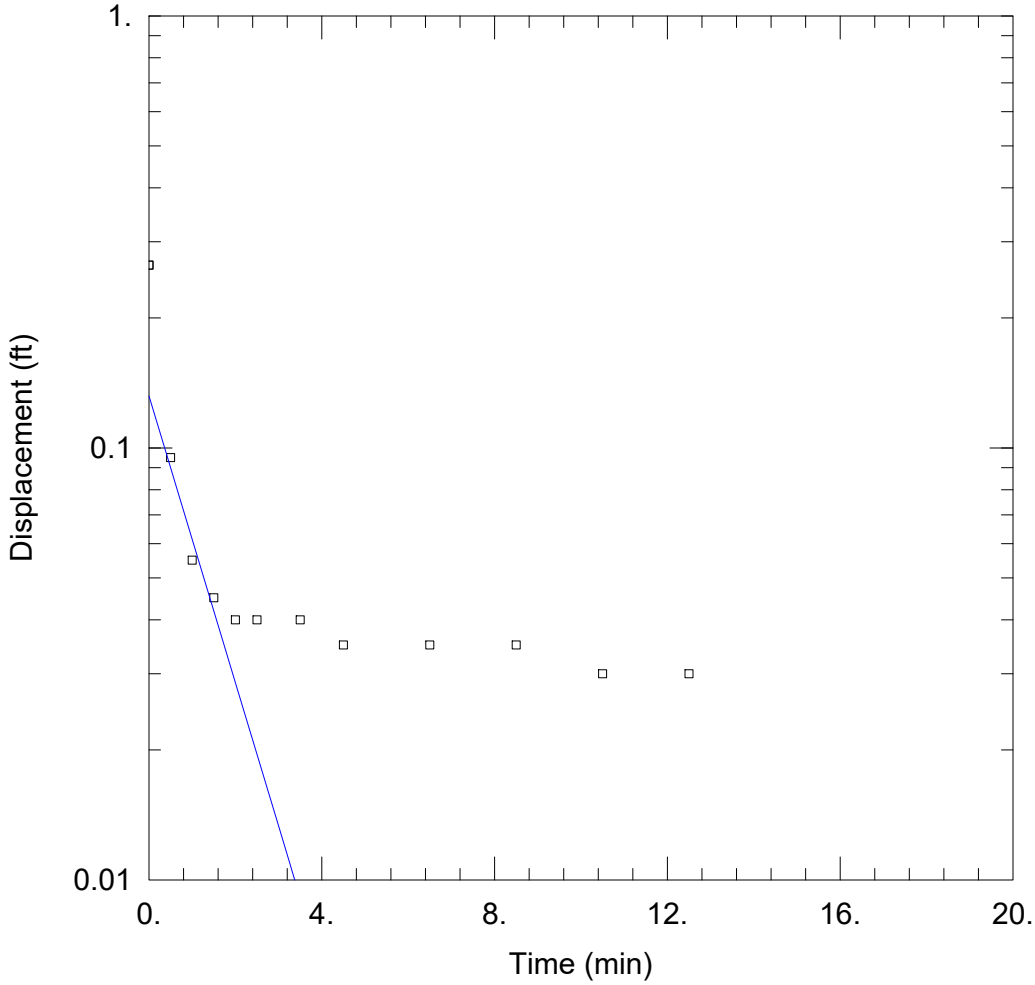
WELL DATA (MW-120A)

Initial Displacement: 3.13 ft
Total Well Penetration Depth: 47.2 ft
Casing Radius: 0.083 ft
Static Water Column Height: 47.92 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0001767 cm/sec
y0 = 1.964 ft



WELL TEST ANALYSIS

Data Set: \...\MW-121 Updated.aqt
Date: 11/13/23 Time: 12:51:48

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268
Location: Madison, WI
Test Well: MW-121
Test Date: 4/10/2023

AQUIFER DATA

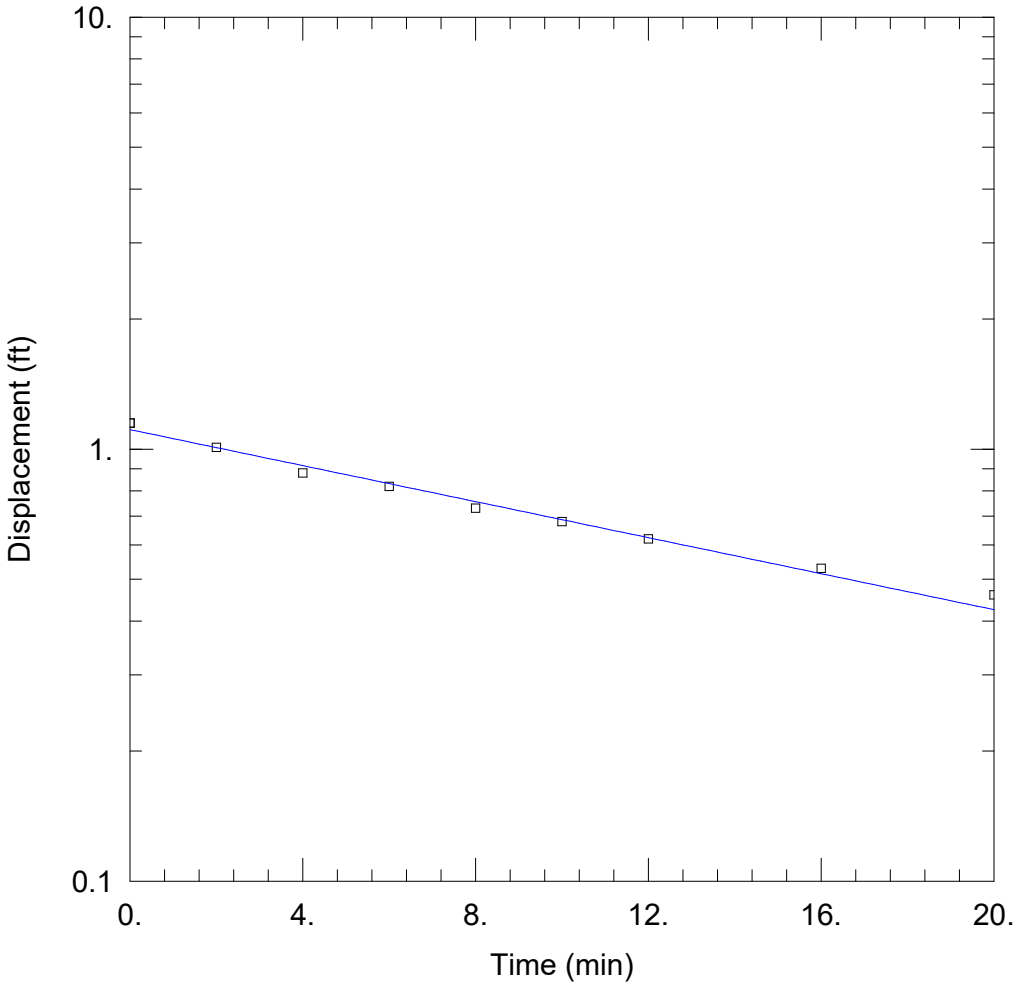
Saturated Thickness: 17. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-121)

Initial Displacement: 0.265 ft
Total Well Penetration Depth: 11.8 ft
Casing Radius: 0.083 ft
Static Water Column Height: 15.3 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.0004522 cm/sec
y0 = 0.1319 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-122\MW-122.aqt
Date: 09/20/23 Time: 13:57:03

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-122
Test Date: 4/7/2023

AQUIFER DATA

Saturated Thickness: 15.8 ft
Anisotropy Ratio (Kz/Kr): 1.

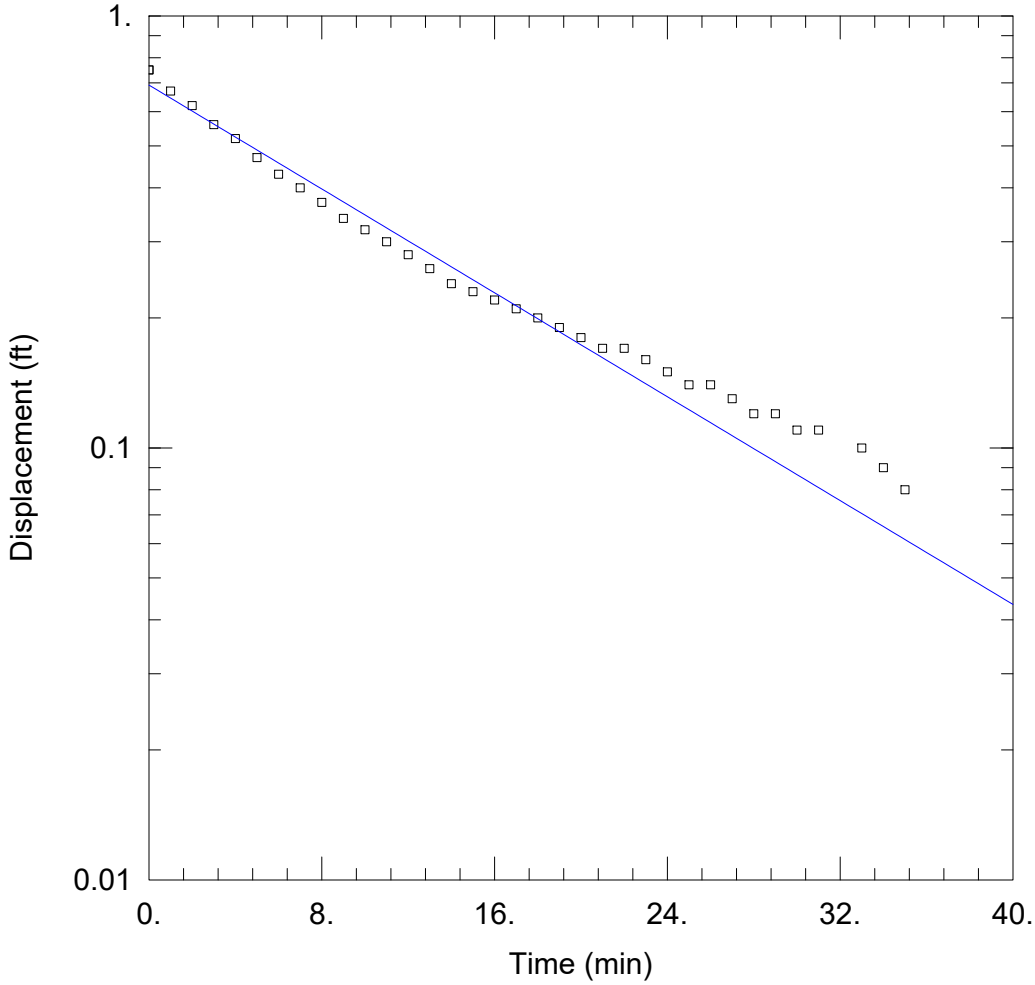
WELL DATA (MW-122)

Initial Displacement: 1.15 ft
Total Well Penetration Depth: 10.8 ft
Casing Radius: 0.083 ft
Static Water Column Height: 11.48 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0001103 cm/sec
y0 = 1.11 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-123\MW-123.aqt
Date: 09/27/23 Time: 08:28:47

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-123
Test Date: 5/31/2023

AQUIFER DATA

Saturated Thickness: 18.8 ft
Anisotropy Ratio (Kz/Kr): 0.1

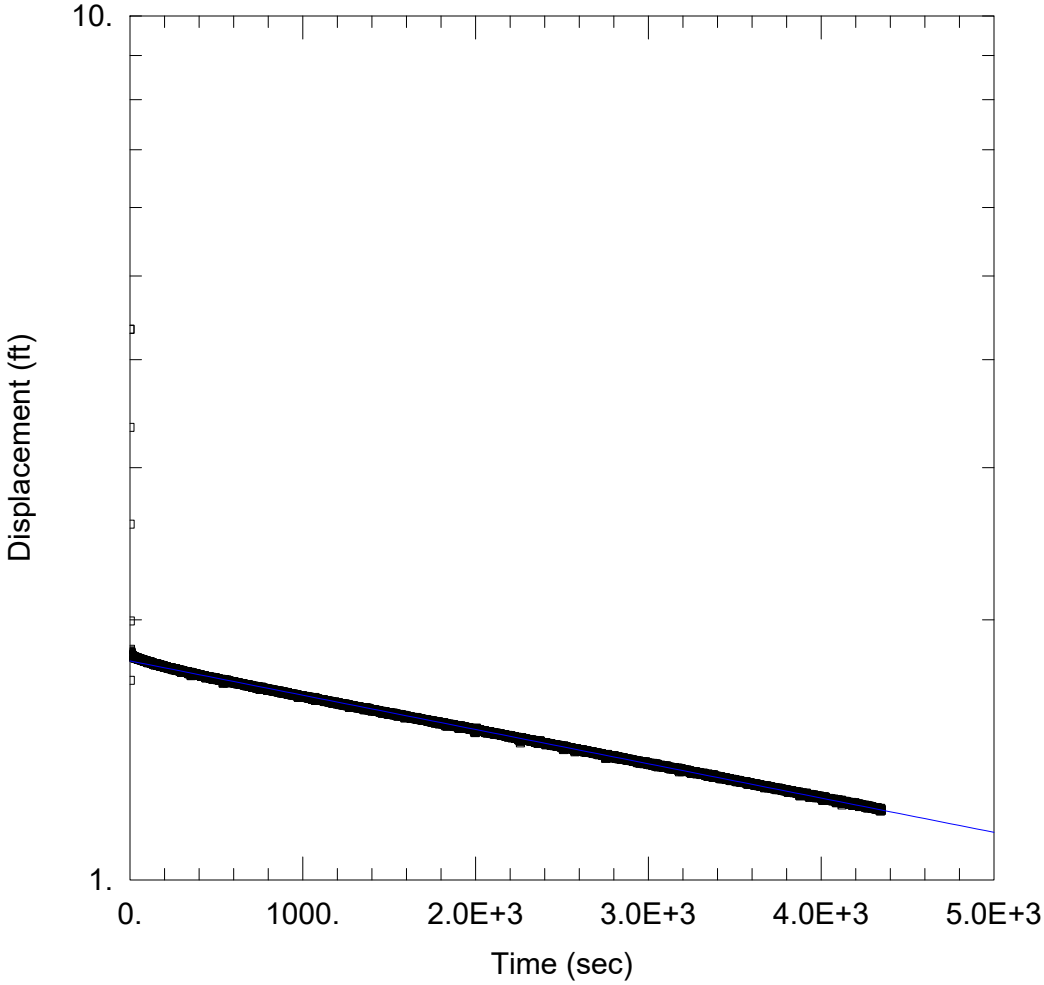
WELL DATA (MW-123)

Initial Displacement: 0.75 ft
Total Well Penetration Depth: 4.71 ft
Casing Radius: 0.083 ft
Static Water Column Height: 4.71 ft
Screen Length: 4.71 ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0002362 cm/sec
y0 = 0.6915 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-123A\MW-123A.aqt
Date: 09/27/23 Time: 08:47:10

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-123A
Test Date: 4/5/2023

AQUIFER DATA

Saturated Thickness: 17.5 ft
Anisotropy Ratio (Kz/Kr): 0.1

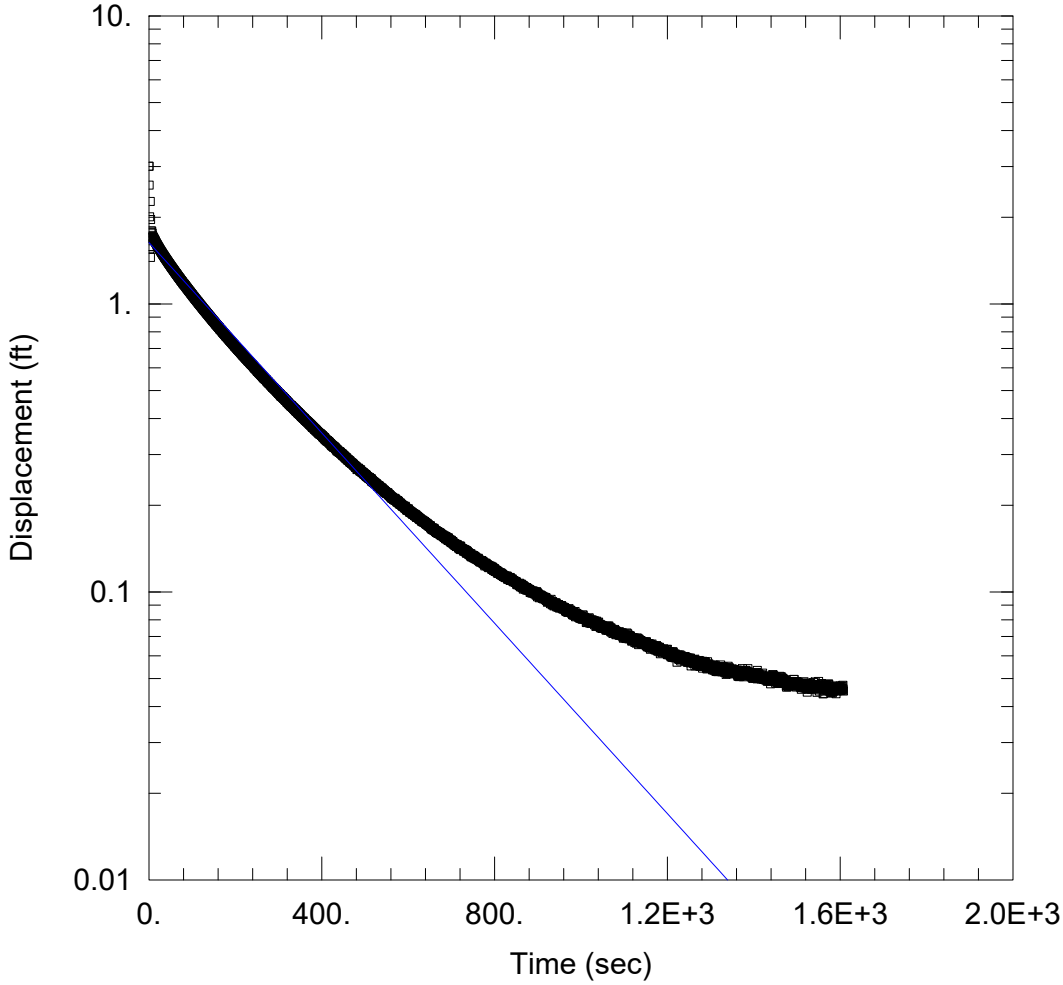
WELL DATA (MW-123A)

Initial Displacement: 4.34 ft
Total Well Penetration Depth: 12.5 ft
Casing Radius: 0.083 ft
Static Water Column Height: 24.41 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev

K = 7.956E-6 cm/sec
y0 = 1.792 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-123B\MW-123B.aqt
Date: 09/27/23 Time: 16:42:05

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-123B
Test Date: 5/31/2023

AQUIFER DATA

Saturated Thickness: 18.4 ft
Anisotropy Ratio (Kz/Kr): 0.1

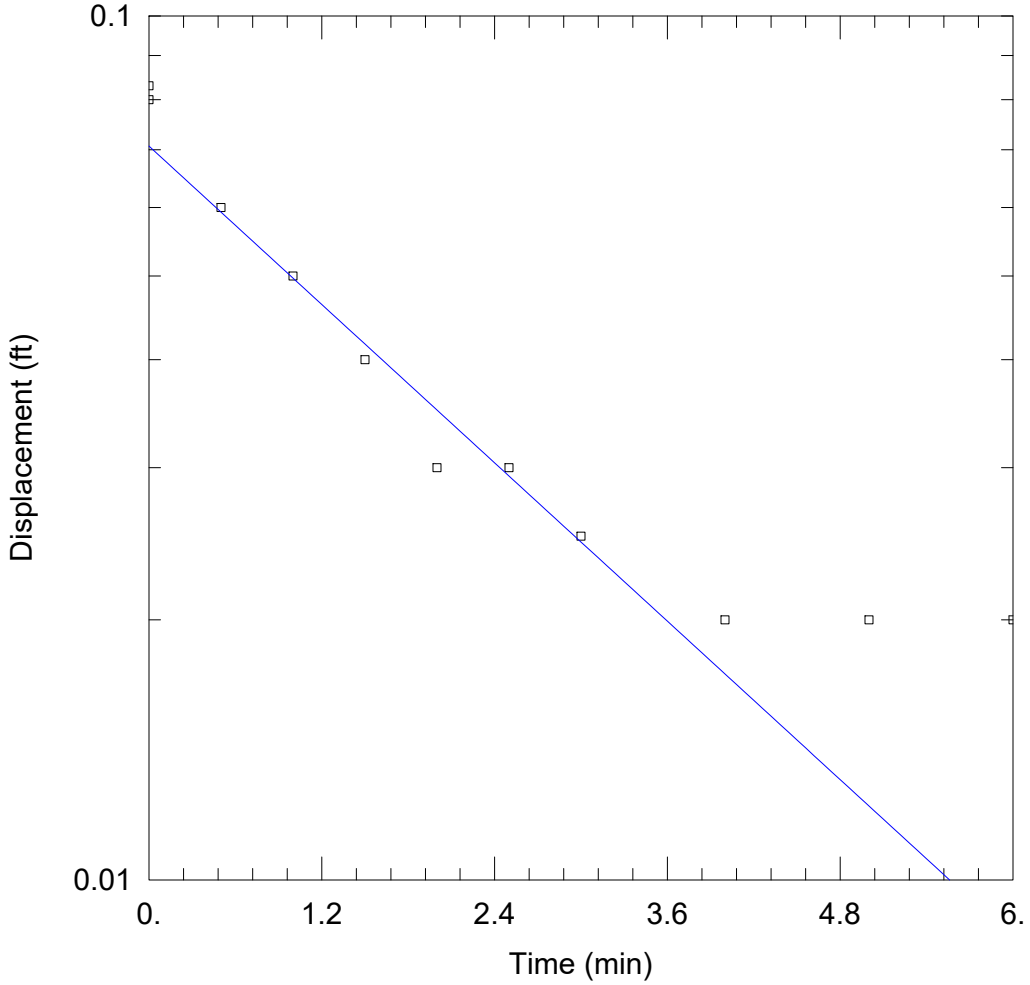
WELL DATA (MW-123B)

Initial Displacement: 3.008 ft
Total Well Penetration Depth: 17.9 ft
Casing Radius: 0.083 ft
Static Water Column Height: 18.42 ft
Screen Length: 10. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0005372 cm/sec
y0 = 1.633 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-124\MW-124 Update.aqt
Date: 10/31/23 Time: 15:40:43

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-124
Test Date: 4/10/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

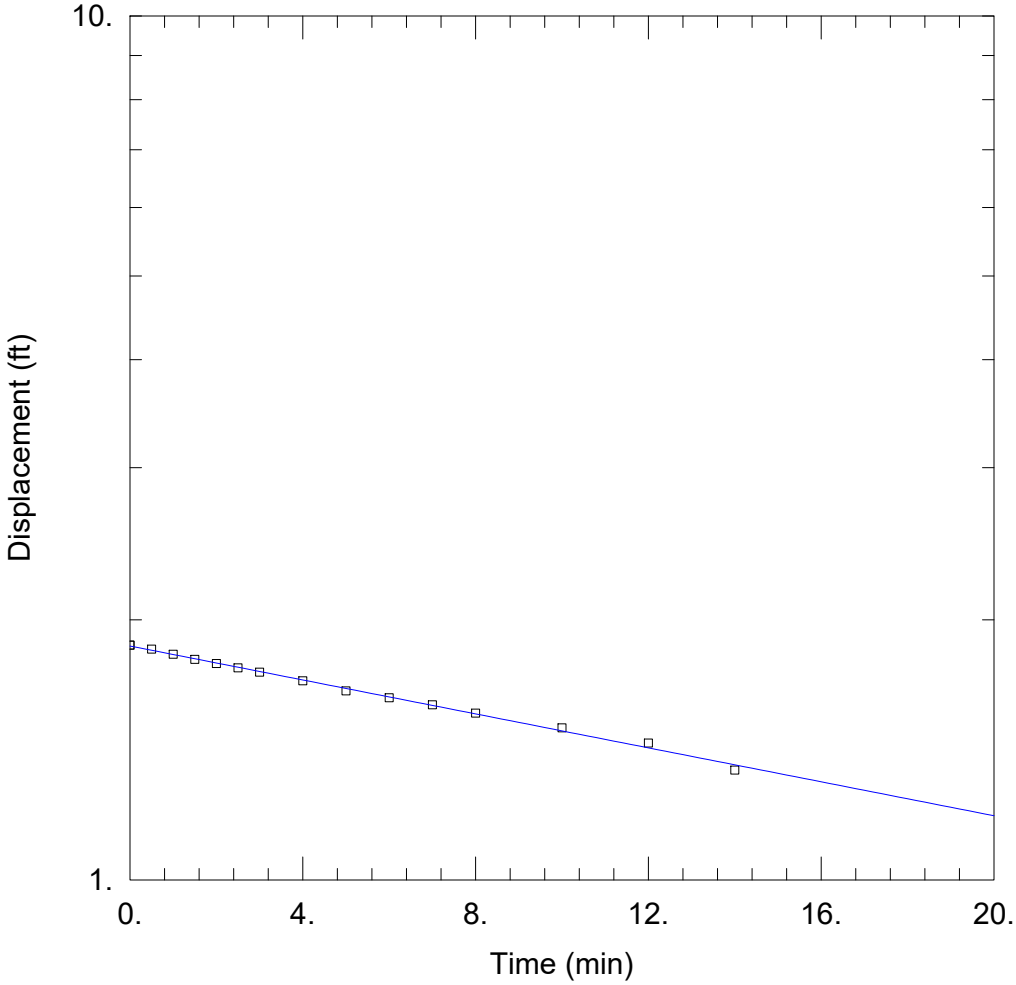
WELL DATA (MW-124)

Initial Displacement: 0.083 ft
Total Well Penetration Depth: 11.2 ft
Casing Radius: 0.083 ft
Static Water Column Height: 11.22 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.001079 cm/sec
y0 = 0.07068 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-124A\MW-124A Updated.aqt
Date: 10/31/23 Time: 16:07:06

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-124A
Test Date: 4/10/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

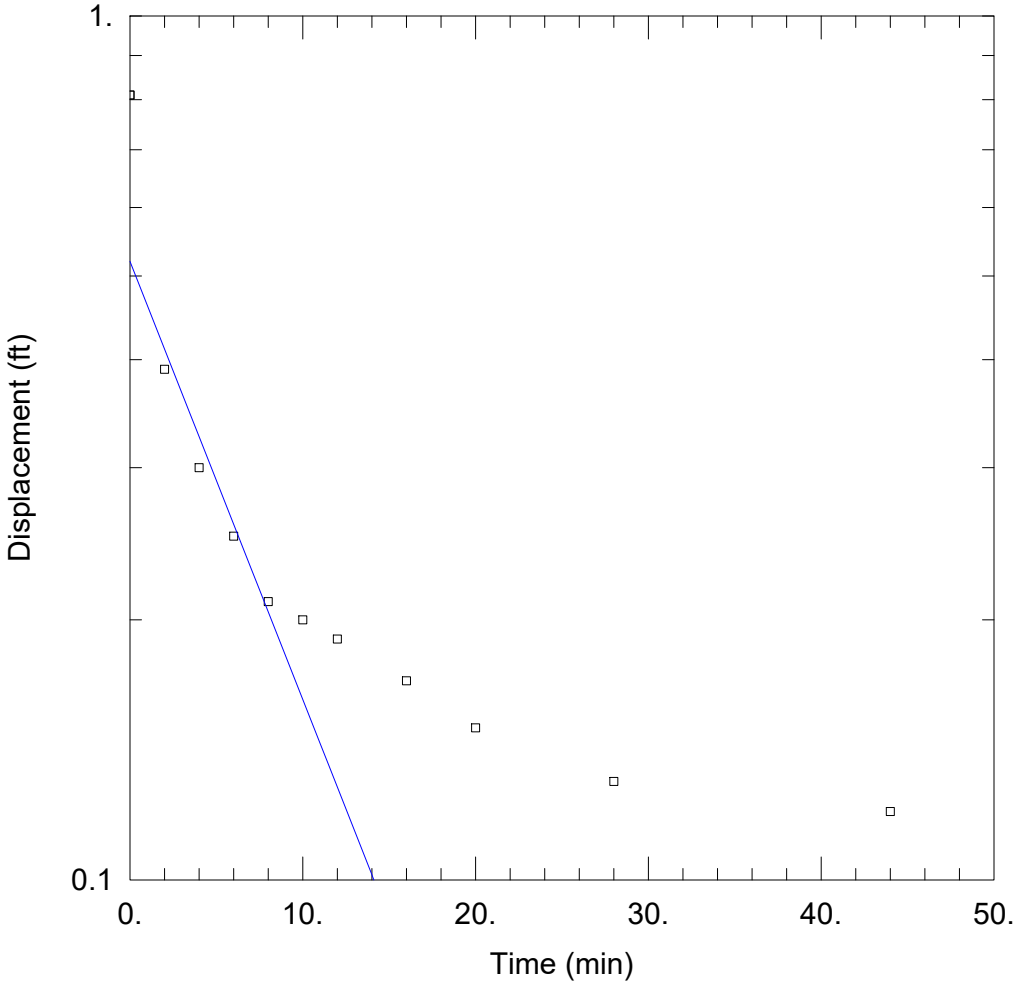
WELL DATA (MW-124A)

Initial Displacement: 1.87 ft
Total Well Penetration Depth: 43.9 ft
Casing Radius: 0.083 ft
Static Water Column Height: 43.9 ft
Screen Length: 5. ft
Well Radius: 0.25 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 9.619E-5 cm/sec
y0 = 1.865 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-125\MW-125.aqt
Date: 07/14/23 Time: 14:47:08

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-125
Test Date: 4/7/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 1.

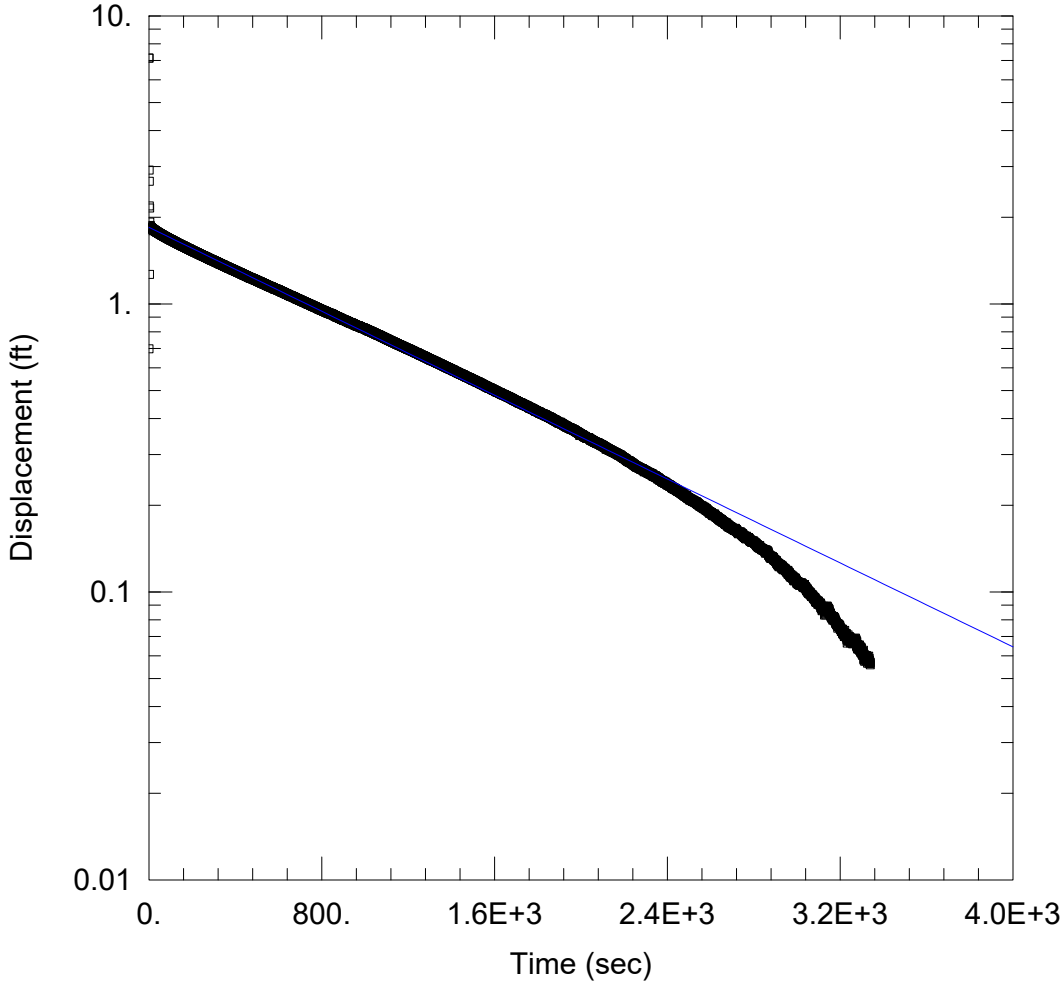
WELL DATA (MW-125)

Initial Displacement: 0.81 ft
Total Well Penetration Depth: 13.2 ft
Casing Radius: 0.083 ft
Static Water Column Height: 13.25 ft
Screen Length: 10. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0002561 cm/sec
y0 = 0.5197 ft



WELL TEST ANALYSIS

Data Set: I:\25222268.00\Data and Calculations\Conductivity Tests\MW-125A\MW-125A.aqt
Date: 09/27/23 Time: 17:23:59

PROJECT INFORMATION

Company: SCS Engineers
Client: Dane County
Project: 25222268.00
Location: Madison, WI
Test Well: MW-125A
Test Date: 4/7/2023

AQUIFER DATA

Saturated Thickness: 100. ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-125A)

Initial Displacement: 7.136 ft
Total Well Penetration Depth: 39.1 ft
Casing Radius: 0.083 ft
Static Water Column Height: 39.14 ft
Screen Length: 5. ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0003235 cm/sec
y0 = 1.844 ft