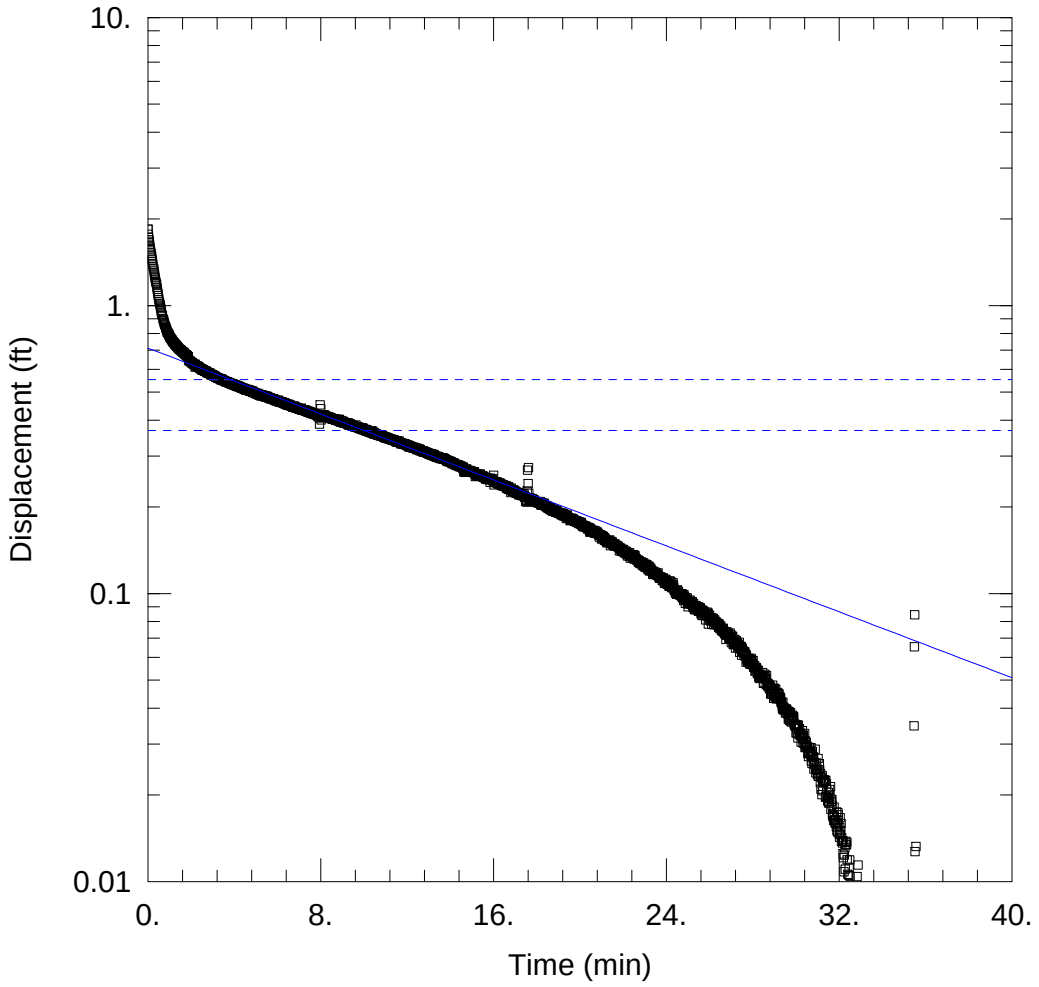
Appendix E

Slug Testing Data Analysis



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Metropolitan\Slug tests\1S Rising.aqt
Date: 10/12/10 Time: 17:57:19

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-1S Rising
Test Date: 10/7/2010

AQUIFER DATA

Saturated Thickness: 10.31 ft Anisotropy Ratio (Kz/Kr): 0.1

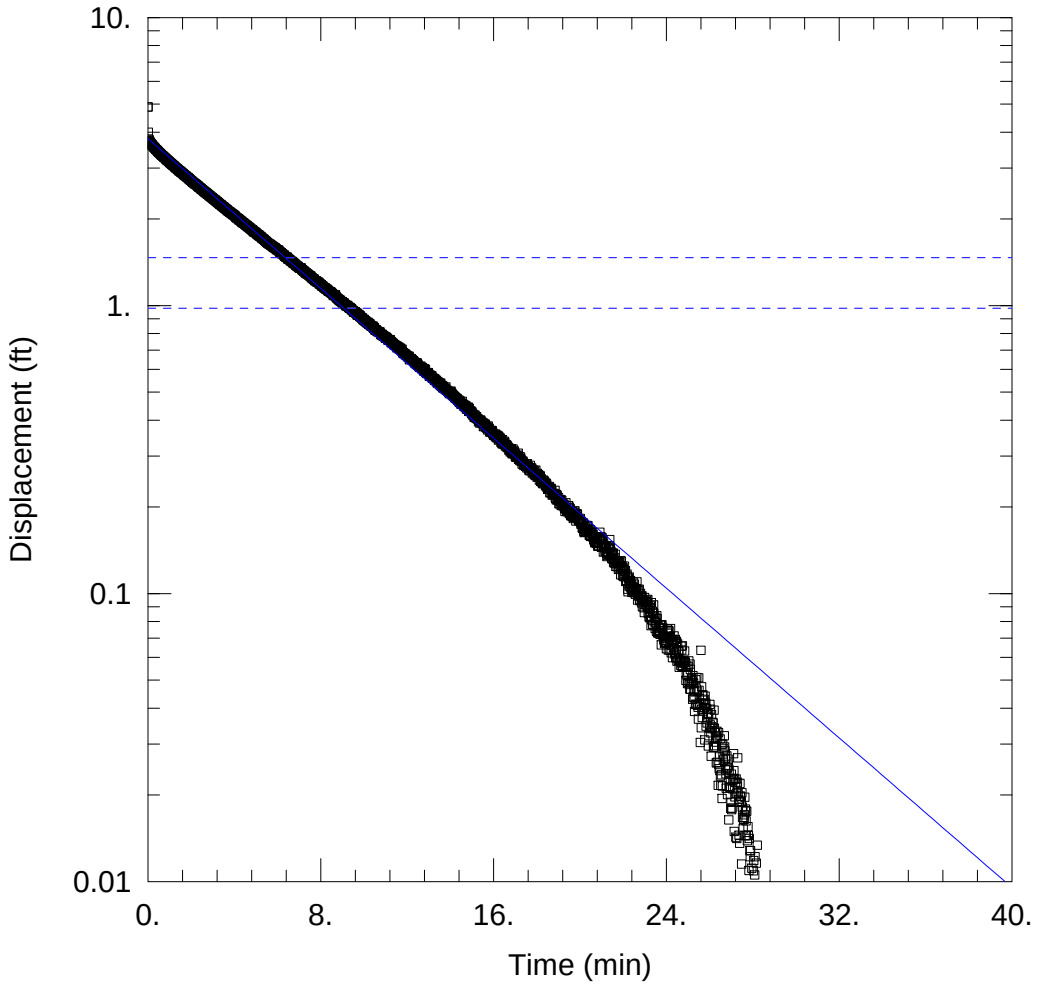
WELL DATA (MW-1S Rising)

Initial Displacement: 1.842 ft
Total Well Penetration Depth: 12.71 ft
Casing Radius: 0.208 ft
Static Water Column Height: 8.89 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.8301 ft/day
y0 = 0.7114 ft



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Metropolitan\Slug tests\1I.aqt
Date: 10/12/10 Time: 17:56:34

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-1I
Test Date: 10/7/2010

AQUIFER DATA

Saturated Thickness: 73.03 ft Anisotropy Ratio (Kz/Kr): 0.1

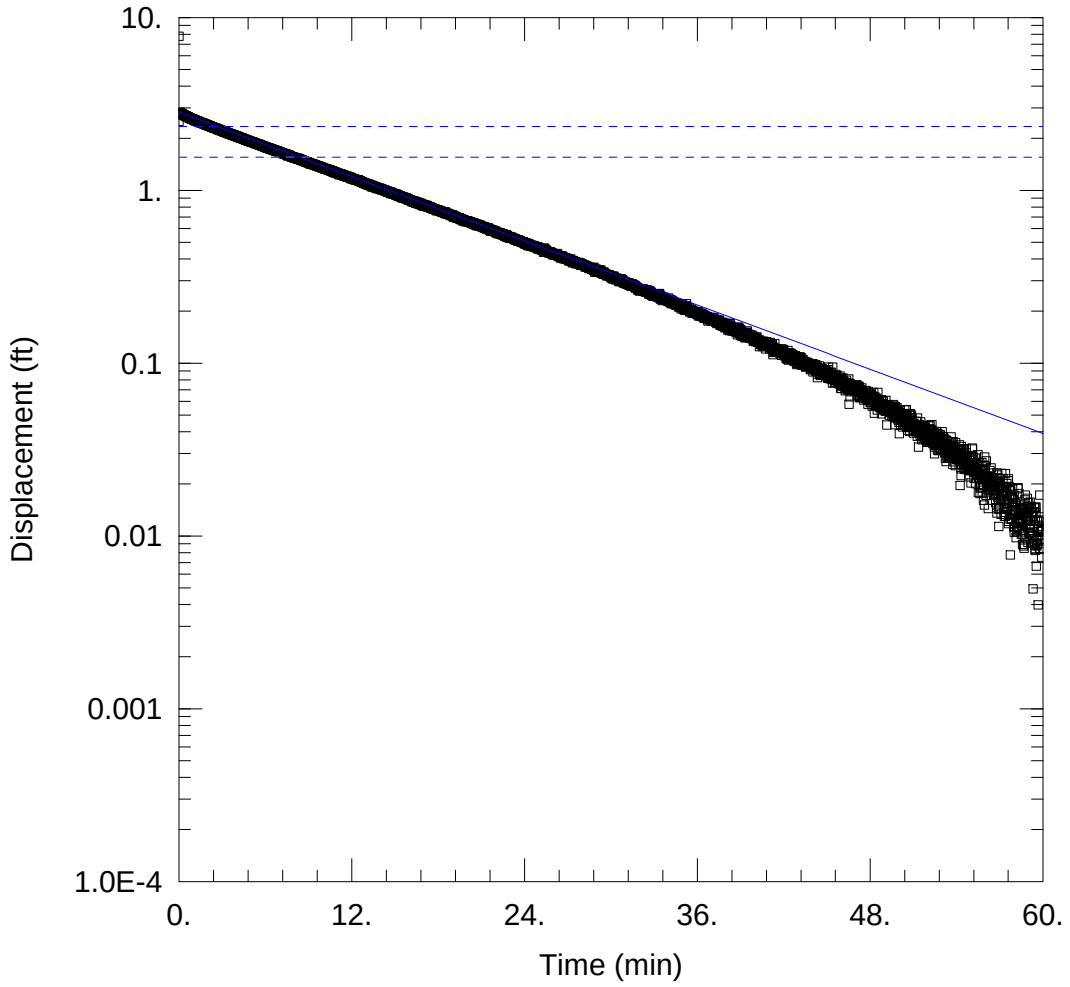
WELL DATA (MW-1I)

Initial Displacement: 4.891 ft
Total Well Penetration Depth: 40.25 ft
Casing Radius: 0.208 ft
Static Water Column Height: 33.79 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 1.905 ft/day
y0 = 3.793 ft



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Metropolitan\Slug tests\1D.aqt
Date: 10/12/10 Time: 17:56:14

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-1D
Test Date: 10/7/2010

AQUIFER DATA

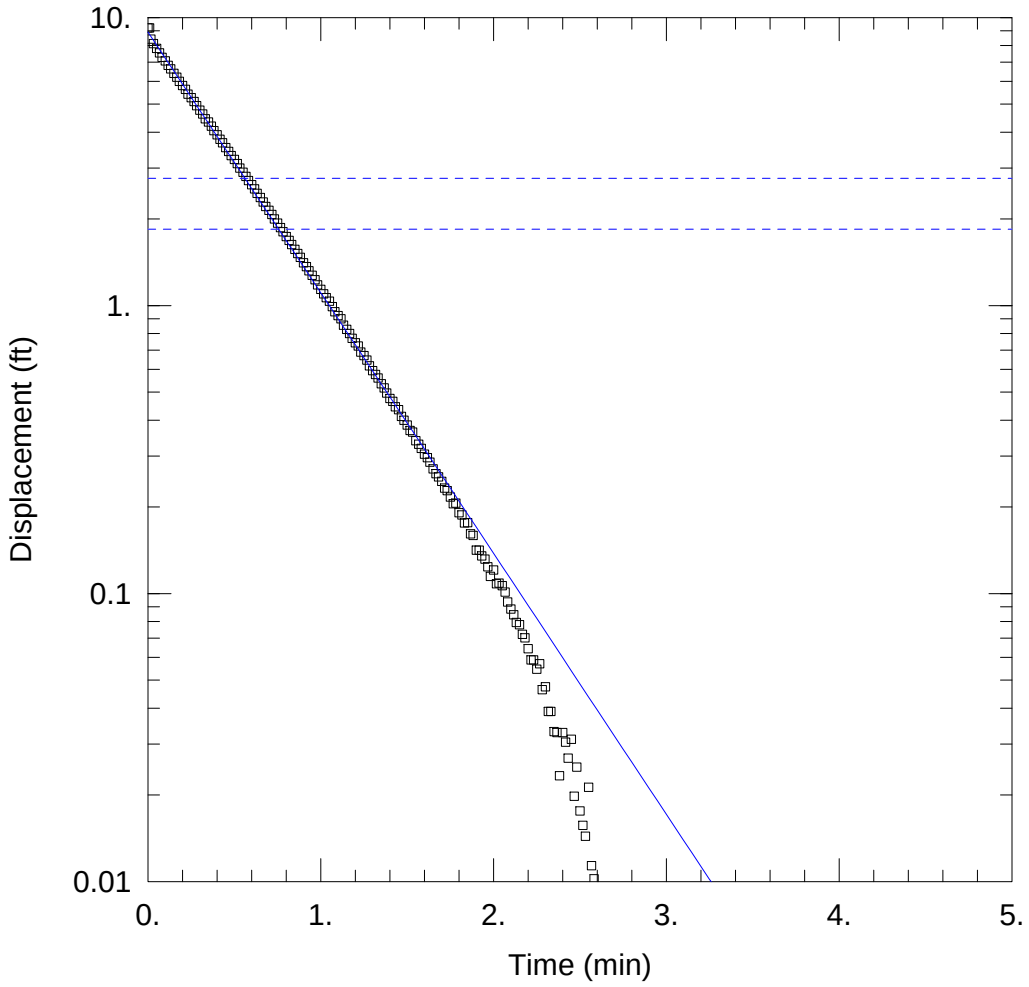
Saturated Thickness: 71.72 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (1D)

Initial Displacement: 7.788 ft
Total Well Penetration Depth: 70.11 ft
Casing Radius: 0.208 ft
Static Water Column Height: 62.46 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 1.041 ft/day
y0 = 2.832 ft



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Metropolitan\Slug tests\2D.aqt
Date: 10/12/10 Time: 17:59:00

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-2D
Test Date: 10/7/2010

AQUIFER DATA

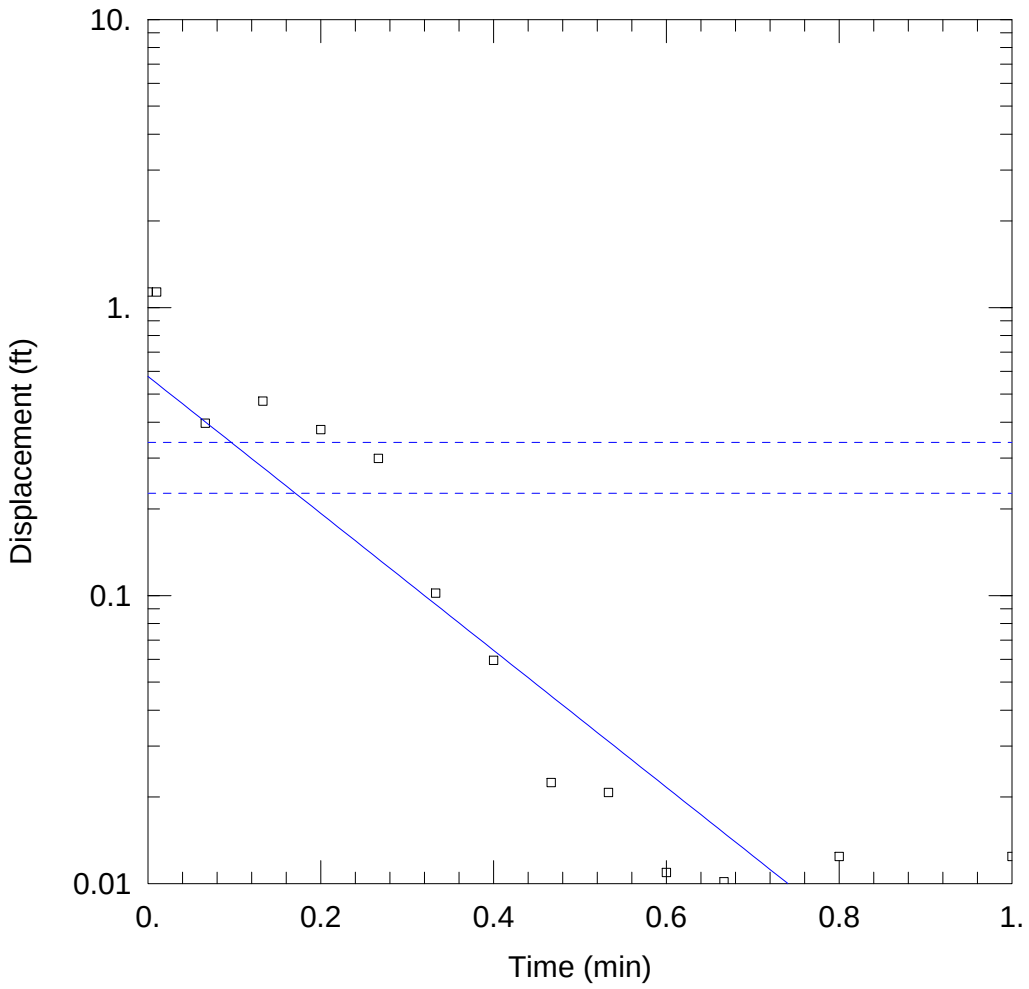
Saturated Thickness: 72.68 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-2D)

Initial Displacement: 9.21 ft
Total Well Penetration Depth: 69.39 ft
Casing Radius: 0.208 ft
Static Water Column Height: 62.36 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 29.74 ft/day
y0 = 8.895 ft



WELL TEST ANALYSIS

Data Set: C:\...\3S redo Rising.aqt
Date: 10/16/10 Time: 00:11:04

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-3S redo Rising
Test Date: 10/15/2010

AQUIFER DATA

Saturated Thickness: 78.13 ft Anisotropy Ratio (Kz/Kr): 0.1

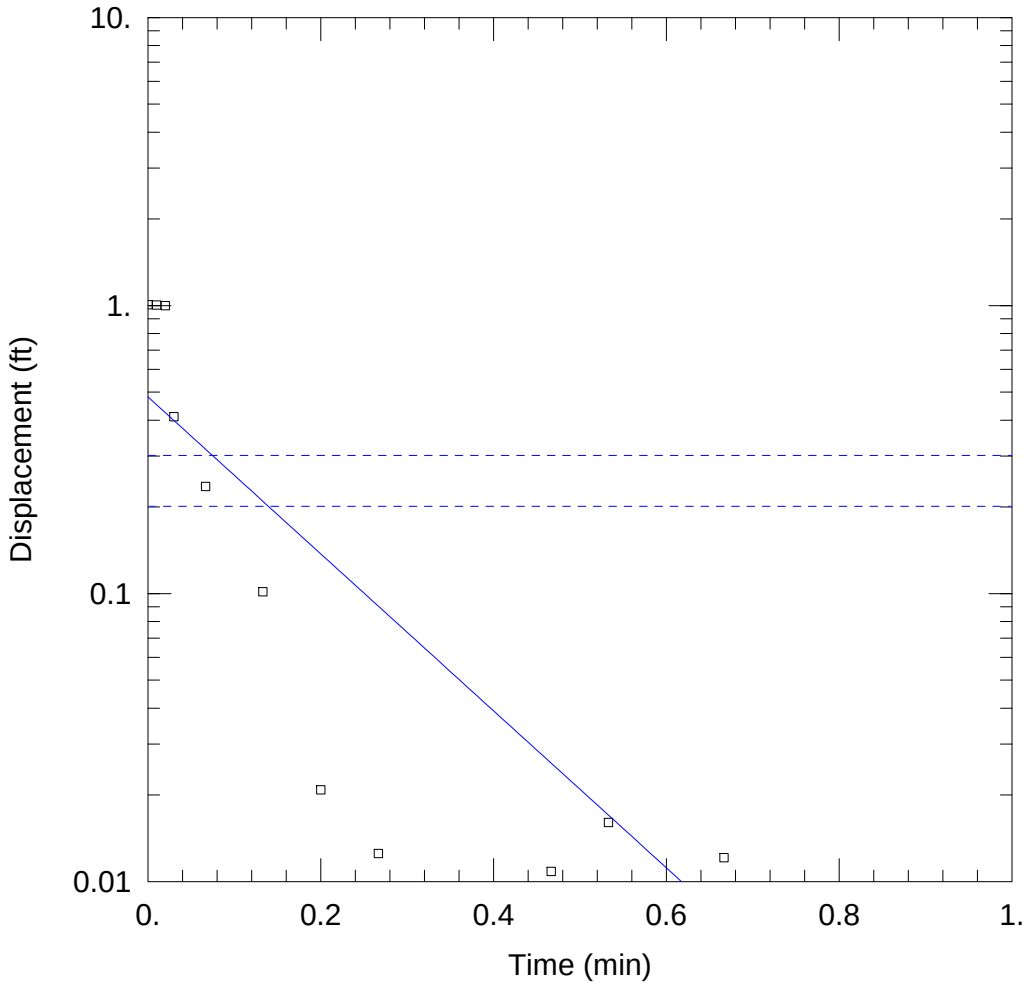
WELL DATA (MW-3S redo Rising)

Initial Displacement: 1.133 ft
Total Well Penetration Depth: 12.36 ft
Casing Radius: 0.208 ft
Static Water Column Height: 10.49 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 60.2 ft/day y0 = 0.5764 ft



WELL TEST ANALYSIS

Data Set: C:\...\3S redo Falling.aqt
Date: 10/16/10 Time: 00:09:48

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-3S redo Falling
Test Date: 10/15/2010

AQUIFER DATA

Saturated Thickness: 78.13 ft Anisotropy Ratio (Kz/Kr): 0.1

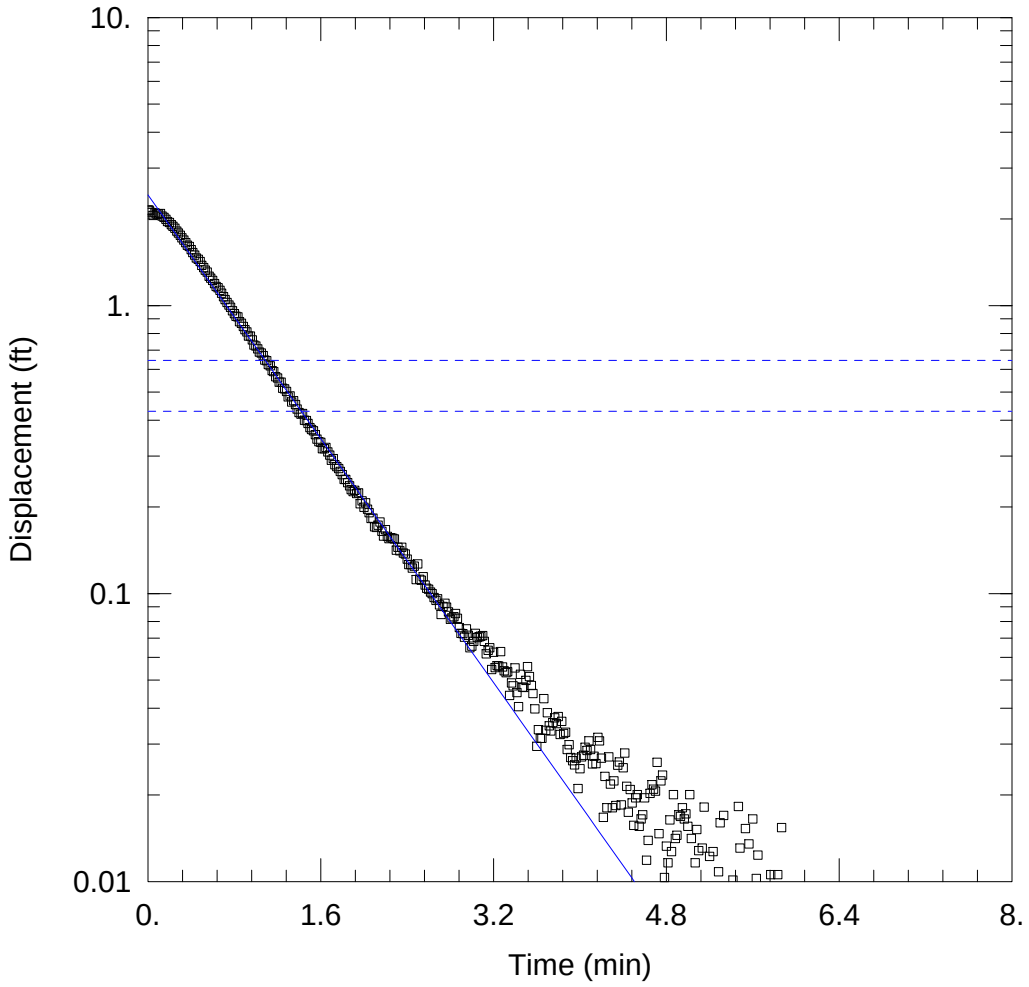
WELL DATA (MW-3S redo Falling)

Initial Displacement: 1.005 ft
Total Well Penetration Depth: 12.36 ft
Casing Radius: 0.208 ft
Static Water Column Height: 10.49 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 68.98 ft/day
y0 = 0.4814 ft



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Metropolitan\Slug tests\3I.aqt
Date: 10/12/10 Time: 17:59:58

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-3I
Test Date: 10/8/2010

AQUIFER DATA

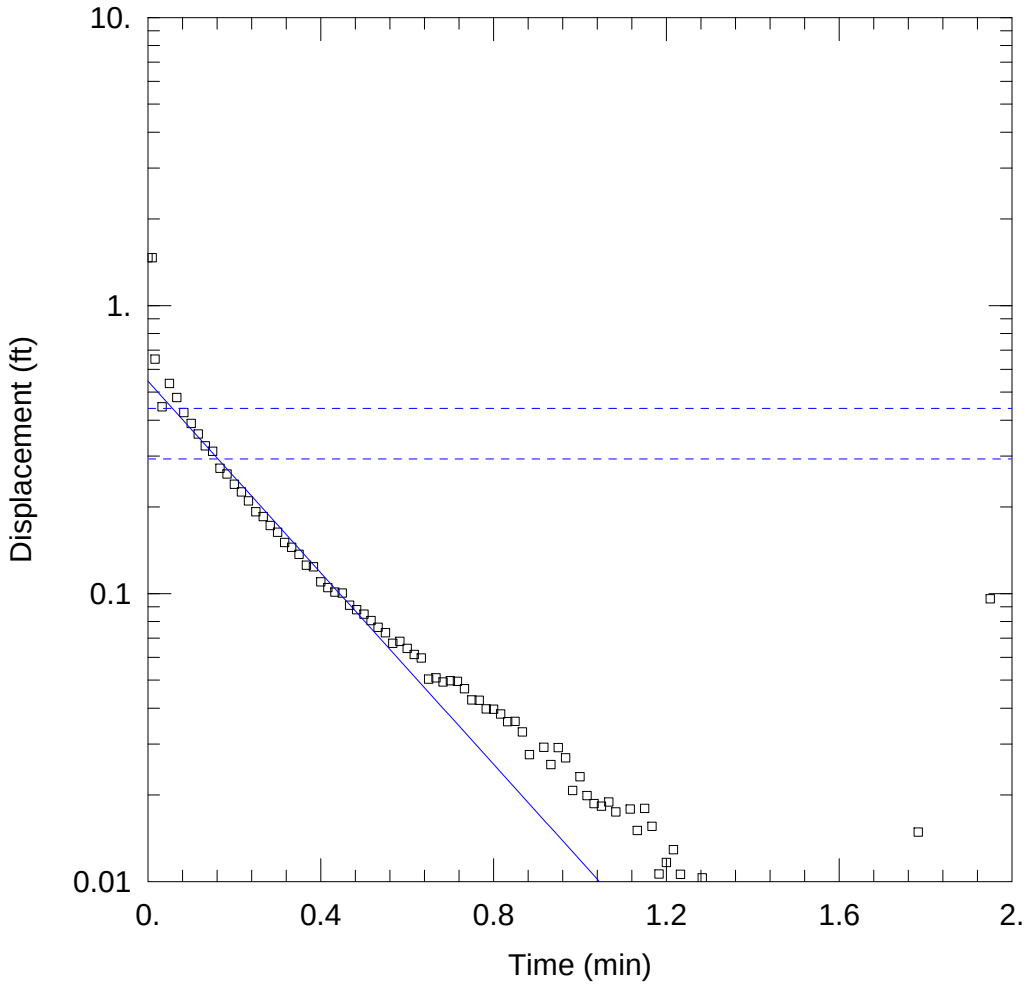
Saturated Thickness: 75.24 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-3I)

Initial Displacement: 2.148 ft
Total Well Penetration Depth: 48.68 ft
Casing Radius: 0.208 ft
Static Water Column Height: 44.46 ft
Screen Length: 25. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 7.072 ft/day
y0 = 2.421 ft



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Metropolitan\Slug tests\5S Falling.aqt
Date: 10/12/10 Time: 18:01:46

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-5S Falling
Test Date: 10/7/2010

AQUIFER DATA

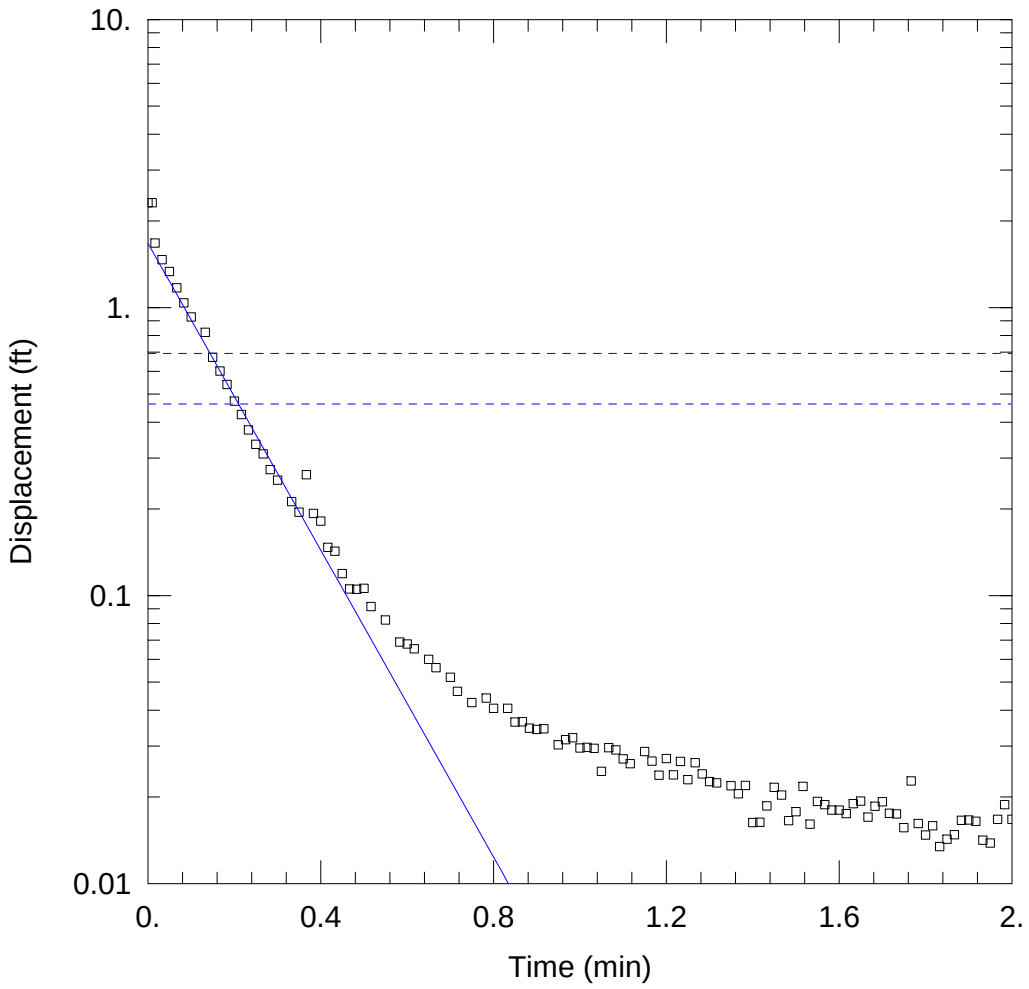
Saturated Thickness: 72.52 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-5S Falling)

Initial Displacement: 1.466 ft
Total Well Penetration Depth: 13.5 ft
Casing Radius: 0.208 ft
Static Water Column Height: 6.37 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 42.6 ft/day
y0 = 0.5456 ft



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Metropolitan\Slug tests\5S Rising.aqt
Date: 10/12/10 Time: 18:02:00

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-5S Rising
Test Date: 10/7/2010

AQUIFER DATA

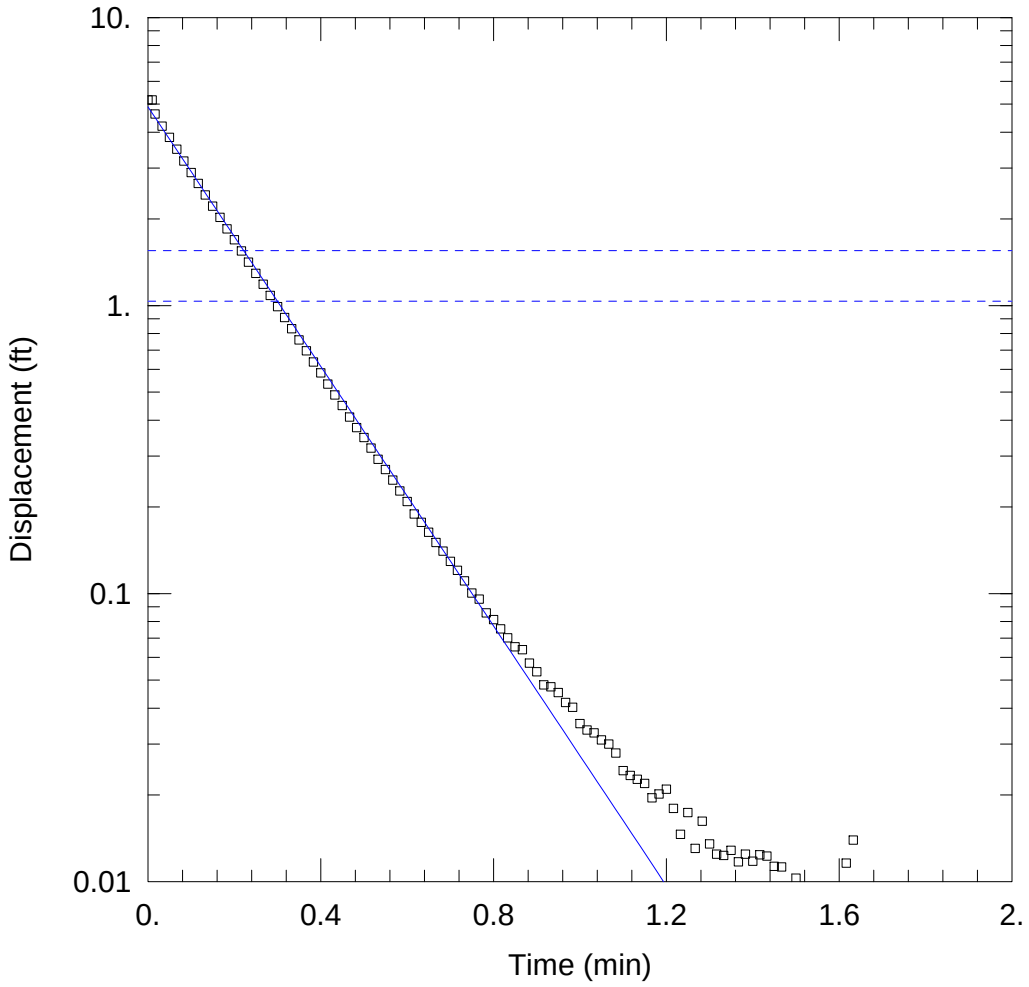
Saturated Thickness: 72.52 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-5S Rising)

Initial Displacement: 2.31 ft
Total Well Penetration Depth: 13.5 ft
Casing Radius: 0.208 ft
Static Water Column Height: 6.37 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 68.28 ft/day
y0 = 1.672 ft



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Metropolitan\Slug tests\5I.aqt
Date: 10/12/10 Time: 18:01:26

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-5I
Test Date: 10/7/2010

AQUIFER DATA

Saturated Thickness: 71.97 ft Anisotropy Ratio (Kz/Kr): 0.1

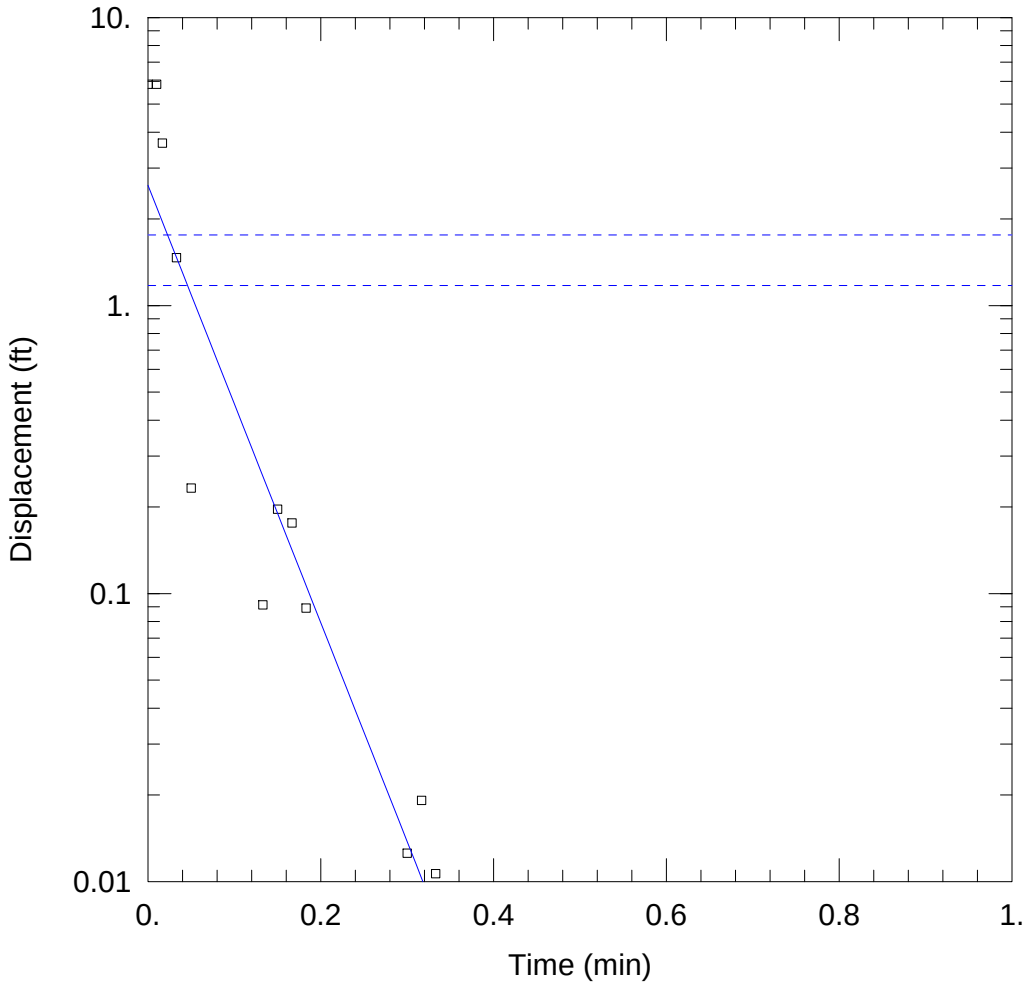
WELL DATA (MW-5I)

Initial Displacement: 5.169 ft
Total Well Penetration Depth: 69.52 ft
Casing Radius: 0.208 ft
Static Water Column Height: 39.26 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 74.72 ft/day y0 = 4.896 ft



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Metropolitan\Slug tests\5D.aqt
Date: 10/12/10 Time: 18:01:09

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-5D
Test Date: 10/7/2010

AQUIFER DATA

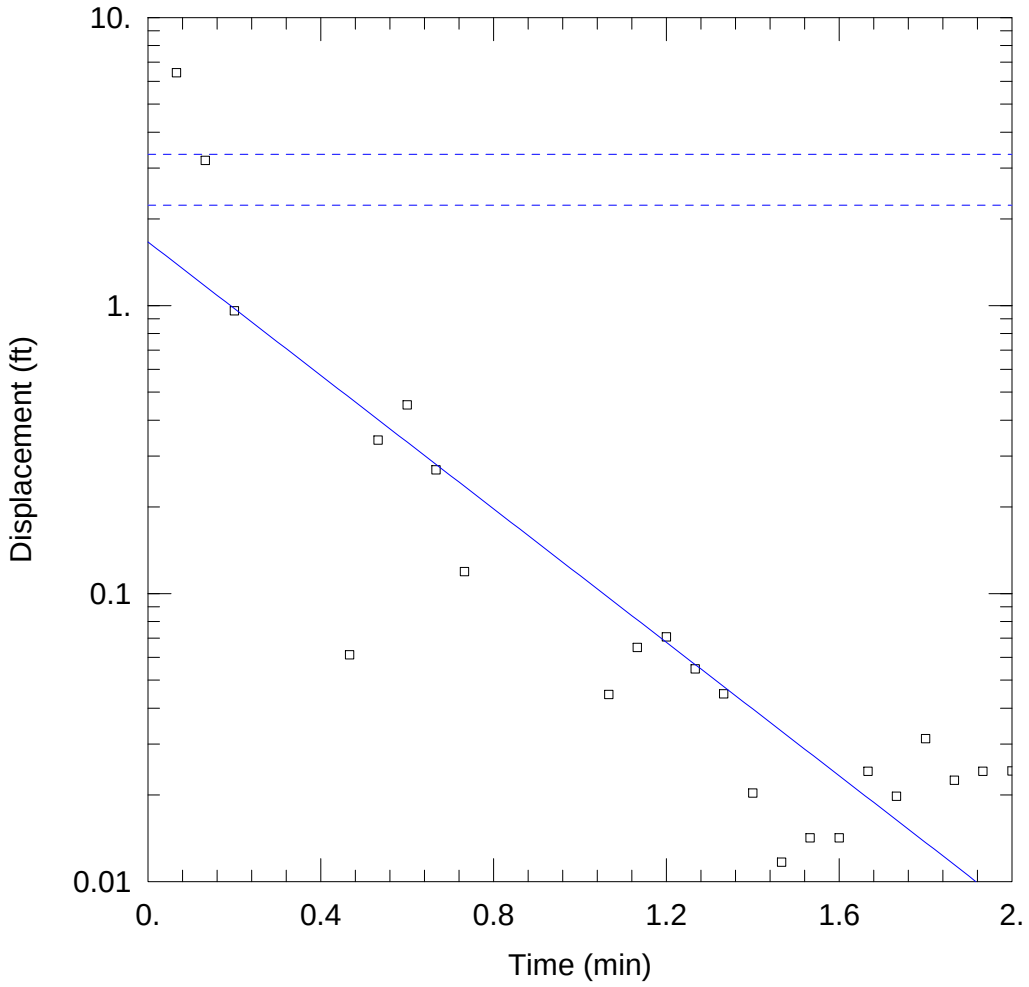
Saturated Thickness: 71.98 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-5D)

Initial Displacement: 5.864 ft
Total Well Penetration Depth: 69.52 ft
Casing Radius: 0.208 ft
Static Water Column Height: 61.87 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 251.8 ft/day
y0 = 2.615 ft



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\EhlenJ\My Documents\Jobs\Metropolitan\Slug tests\5D redo.aqt
Date: 10/16/10 Time: 00:09:32

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-5D redo
Test Date: 10/15/2010

AQUIFER DATA

Saturated Thickness: 72.98 ft Anisotropy Ratio (Kz/Kr): 0.1

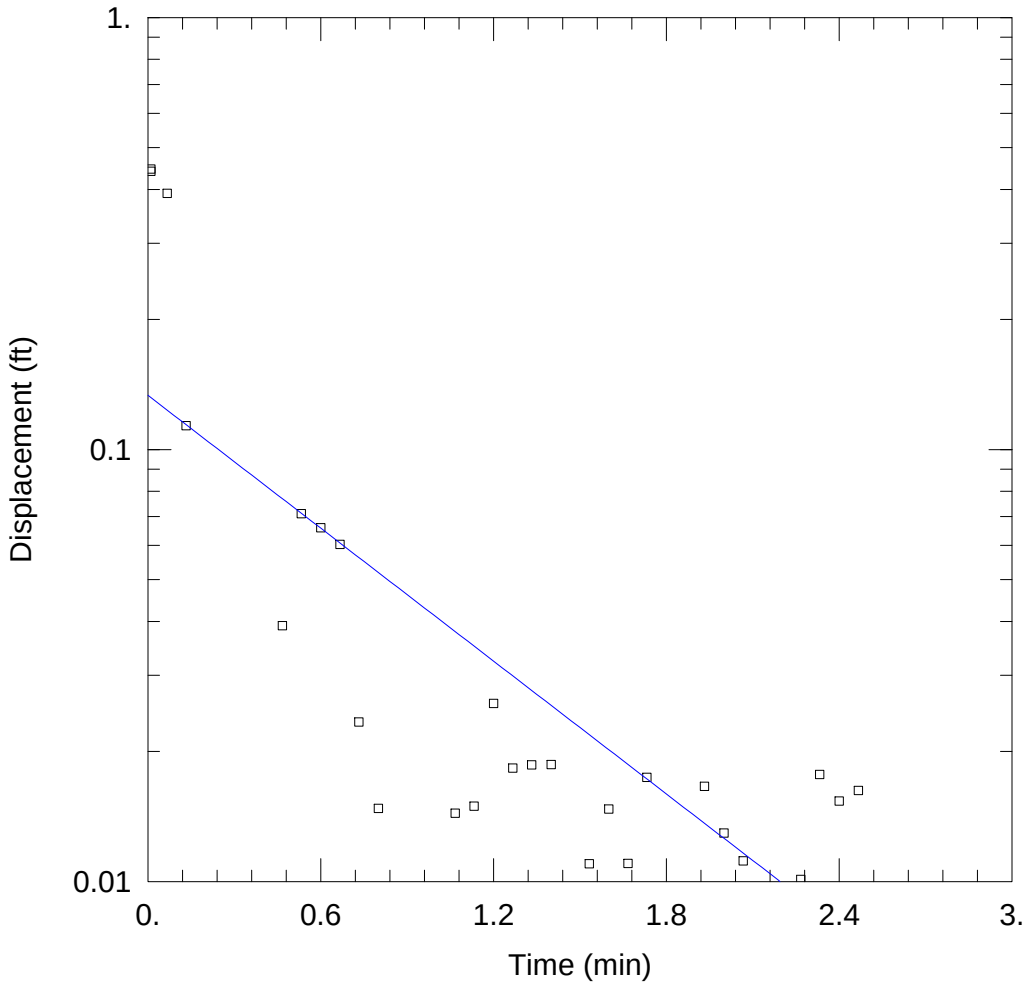
WELL DATA (MW-5D redo)

Initial Displacement: 11.15 ft
Total Well Penetration Depth: 69.52 ft
Casing Radius: 0.208 ft
Static Water Column Height: 62.5 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 38.04 ft/day
y0 = 1.663 ft



WELL TEST ANALYSIS

Data Set: C:\...\5D redo - 2.aqt
Date: 10/16/10 Time: 00:09:16

PROJECT INFORMATION

Company: AECOM
Client: National Grid
Project: 60137361
Location: Brooklyn, NY
Test Well: MW-5D redo - 2
Test Date: 10/15/2010

AQUIFER DATA

Saturated Thickness: 72.98 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (MW-5D redo - 2)

Initial Displacement: 11.15 ft
Total Well Penetration Depth: 69.52 ft
Casing Radius: 0.208 ft
Static Water Column Height: 62.5 ft
Screen Length: 10. ft
Well Radius: 0.208 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 16.83 ft/day
y0 = 0.1335 ft