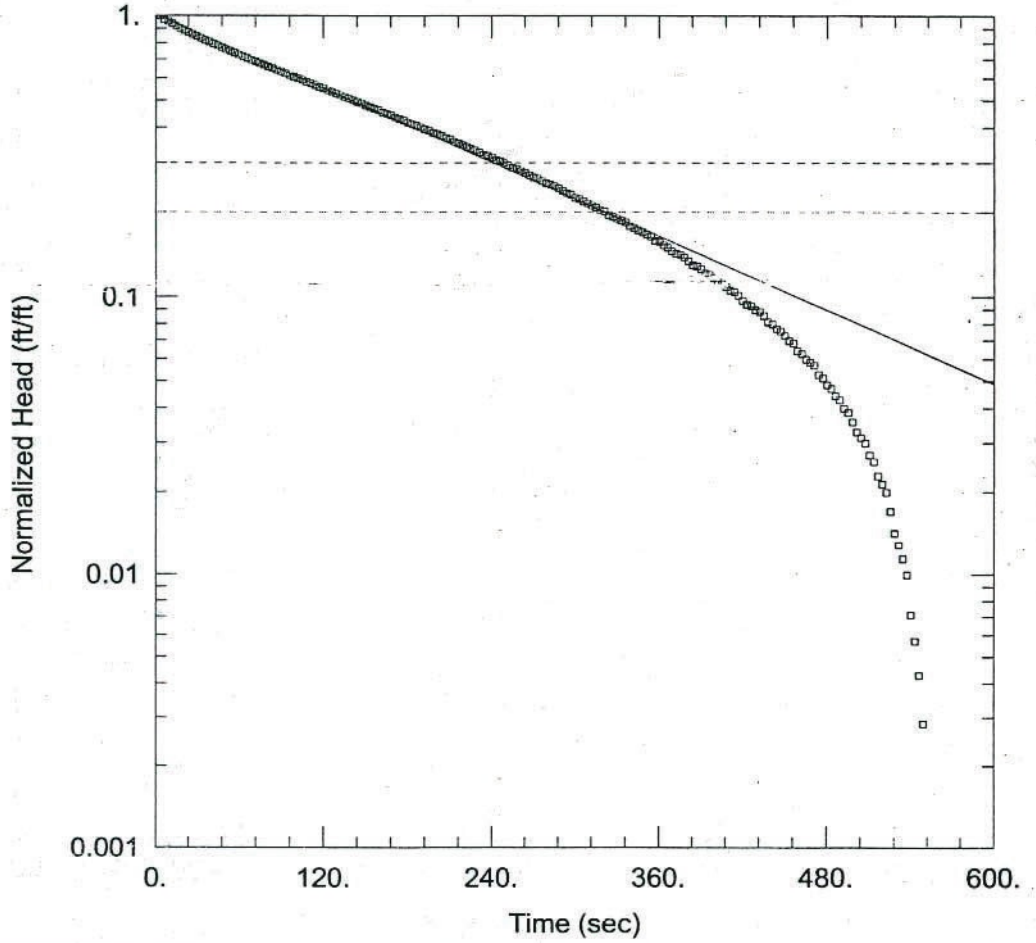
APPENDIX I

Slug Test Results



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS3in.aqt
Date: 12/07/06 Time: 13:00:08

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

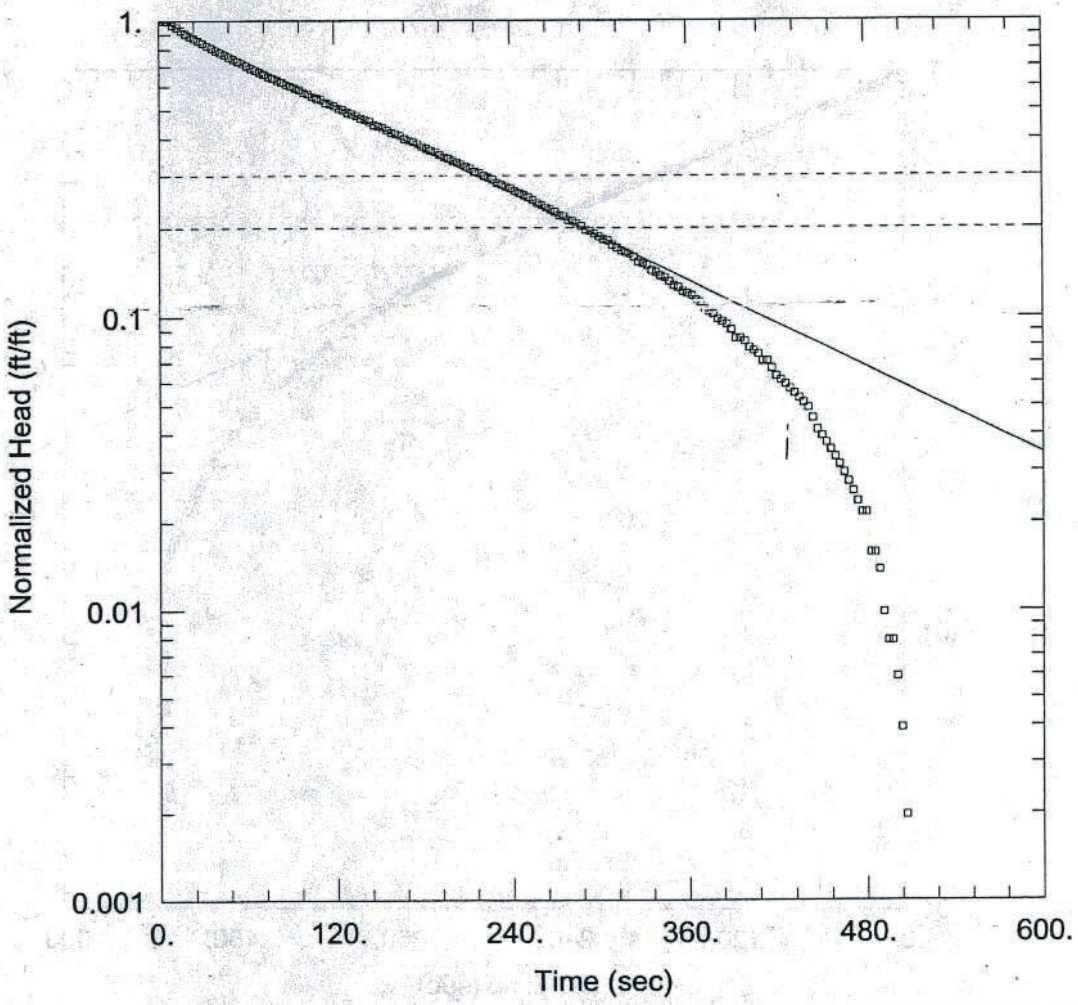
Saturated Thickness: 23.2 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS3in)

Initial Displacement: 1.622 ft
Total Well Penetration Depth: 22.7 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 23.2 ft
Screen Length: 9. ft
Wellbore Radius: 0.3333 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001681 cm/sec
y0 = 1.644 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS3out.aqt
Date: 12/07/06 Time: 13:02:30

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

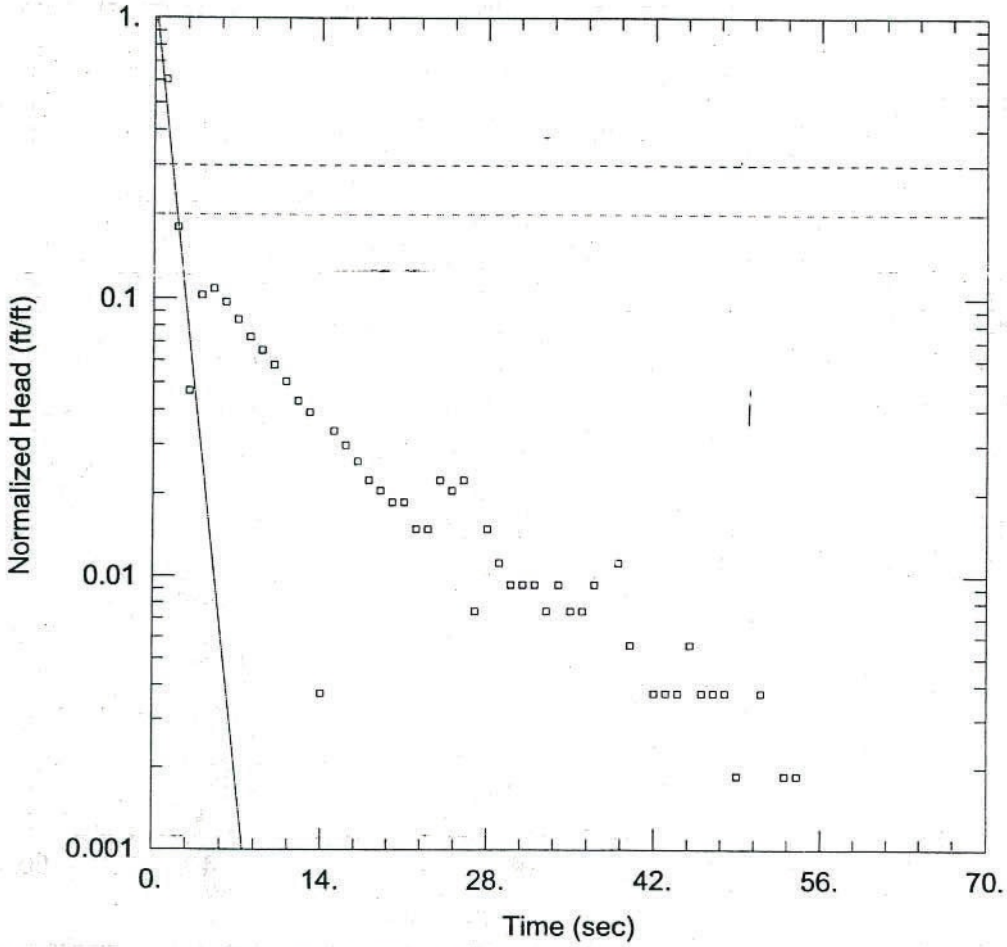
Saturated Thickness: 23.2 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS3out)

Initial Displacement: 1.173 ft
Total Well Penetration Depth: 22.7 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 23.2 ft
Screen Length: 9. ft
Wellbore Radius: 0.333 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001879 cm/sec
y0 = 1.199 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS4in.aqt
Date: 12/08/06 Time: 10:12:47

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

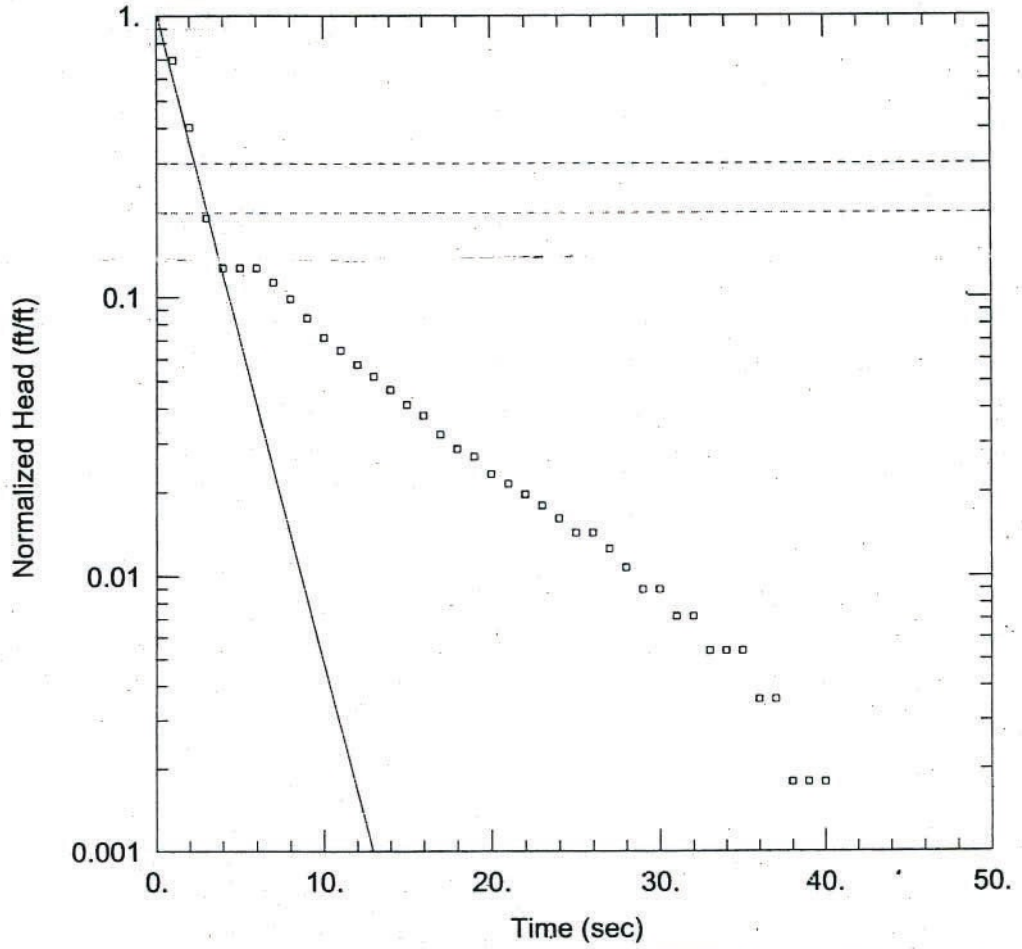
Saturated Thickness: 11.99 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS4in)

Initial Displacement: 0.535 ft
Total Well Penetration Depth: 11.49 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 11.99 ft
Screen Length: 9. ft
Wellbore Radius: 0.125 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.03621 cm/sec
y0 = 0.6561 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS4out.aqt
Date: 12/05/06 Time: 14:22:20

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

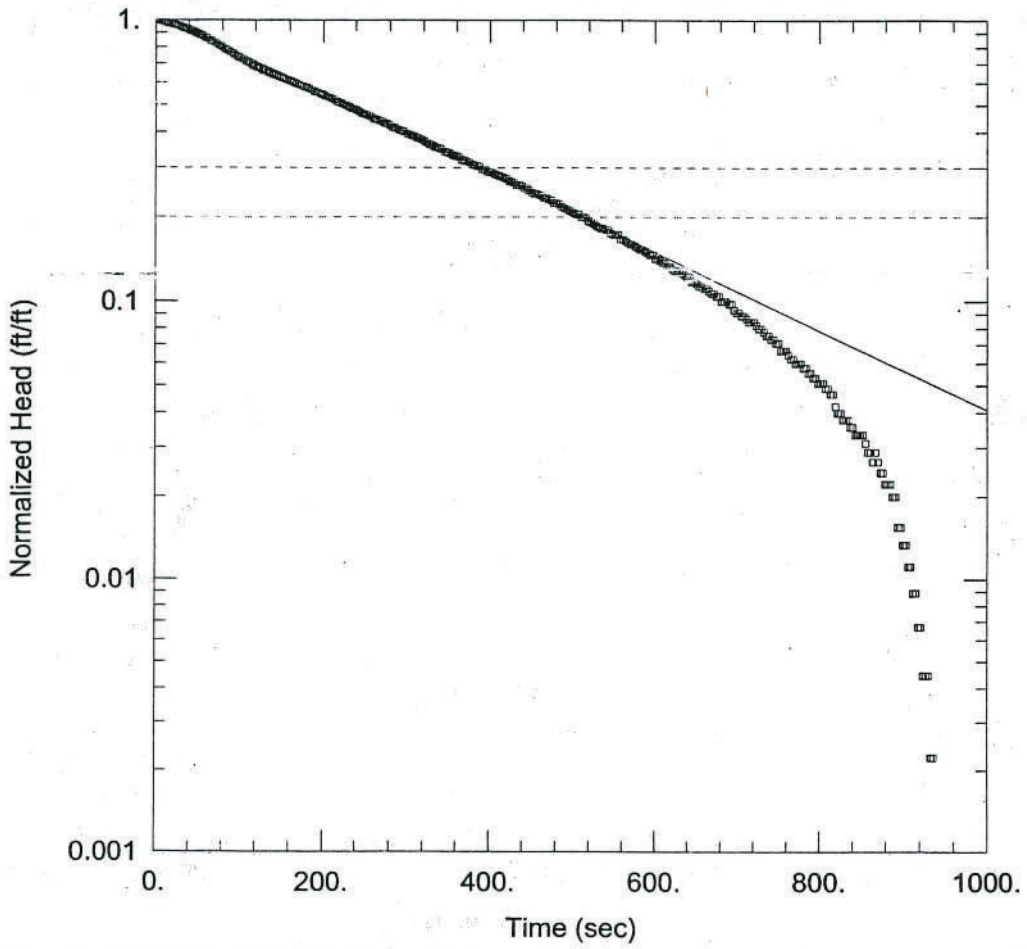
Saturated Thickness: 11.99 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS4out)

Initial Displacement: 0.558 ft
Total Well Penetration Depth: 11.49 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 11.99 ft
Screen Length: 9. ft
Wellbore Radius: 0.125 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.02057 cm/sec
y0 = 0.5764 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS18in.aqt
Date: 12/07/06 Time: 12:52:58

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

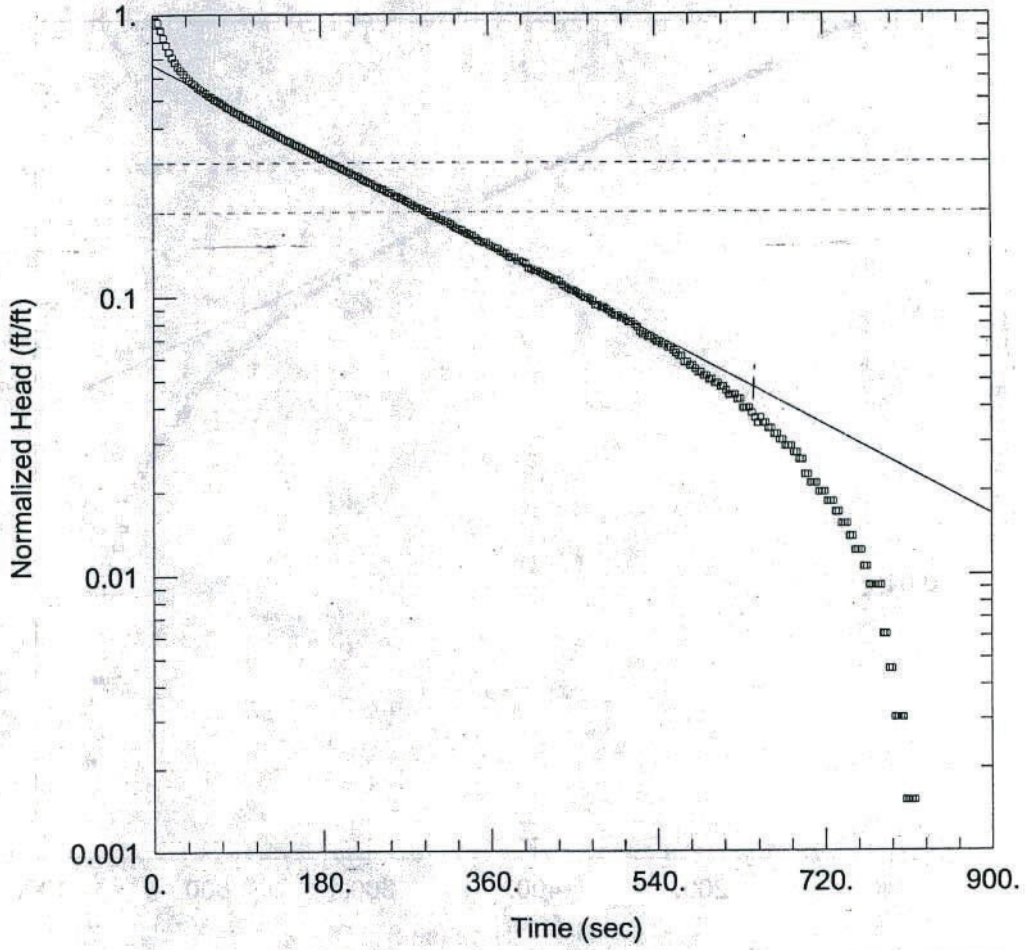
Saturated Thickness: 3.1 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS18in)

Initial Displacement: 1.04 ft
Total Well Penetration Depth: 3.1 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 3.1 ft
Screen Length: 3.1 ft
Wellbore Radius: 0.125 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0002672 cm/sec
y0 = 1.099 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS18out.aqt
Date: 12/07/06 Time: 09:44:02

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

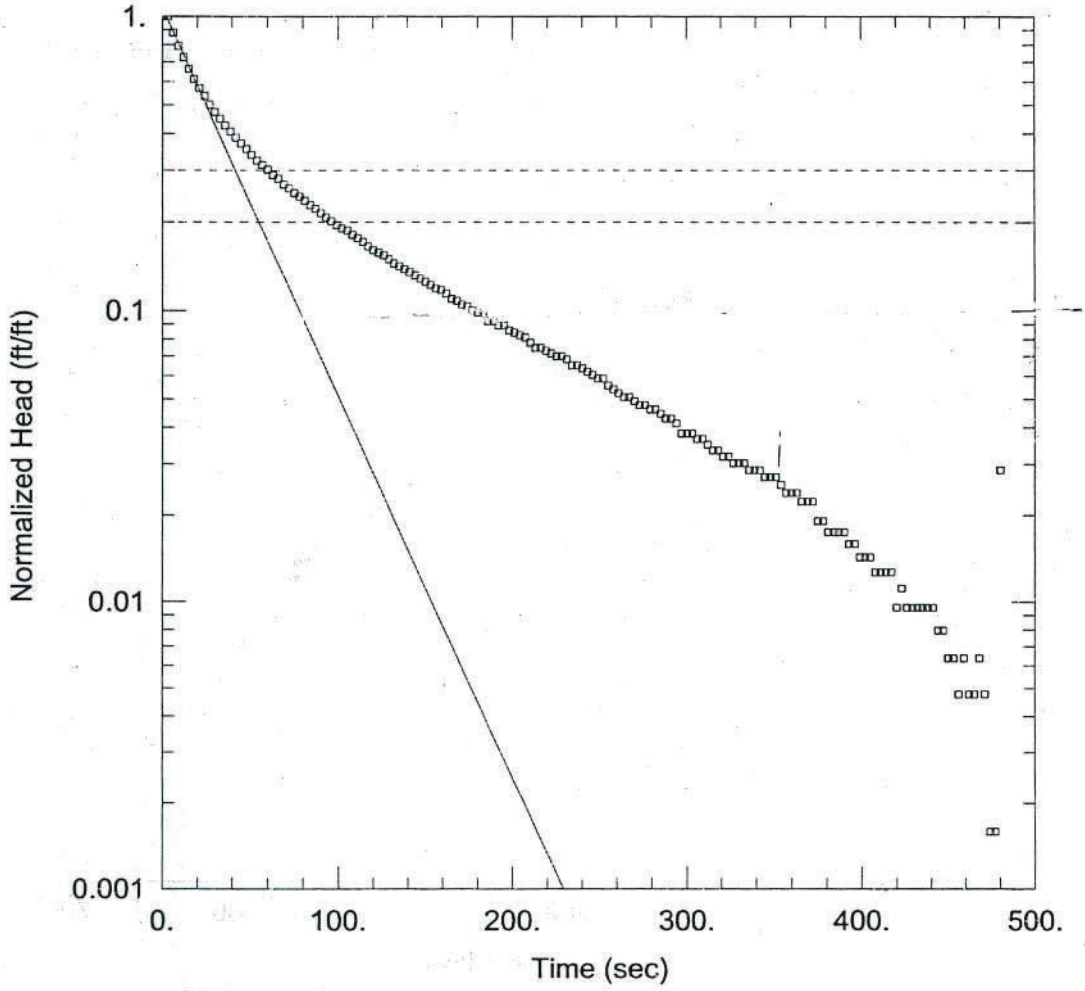
Saturated Thickness: 3.1 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS3out)

Initial Displacement: 1.515 ft
Total Well Penetration Depth: 3.1 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 18.73 ft
Screen Length: 3.1 ft
Wellbore Radius: 0.125 ft

SOLUTION

Aquifer Model: Unconfined
K = 0.0003378 cm/sec
Solution Method: Bouwer-Rice
y0 = 1.012 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS21in.aqt
Date: 12/07/06 Time: 12:55:33

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

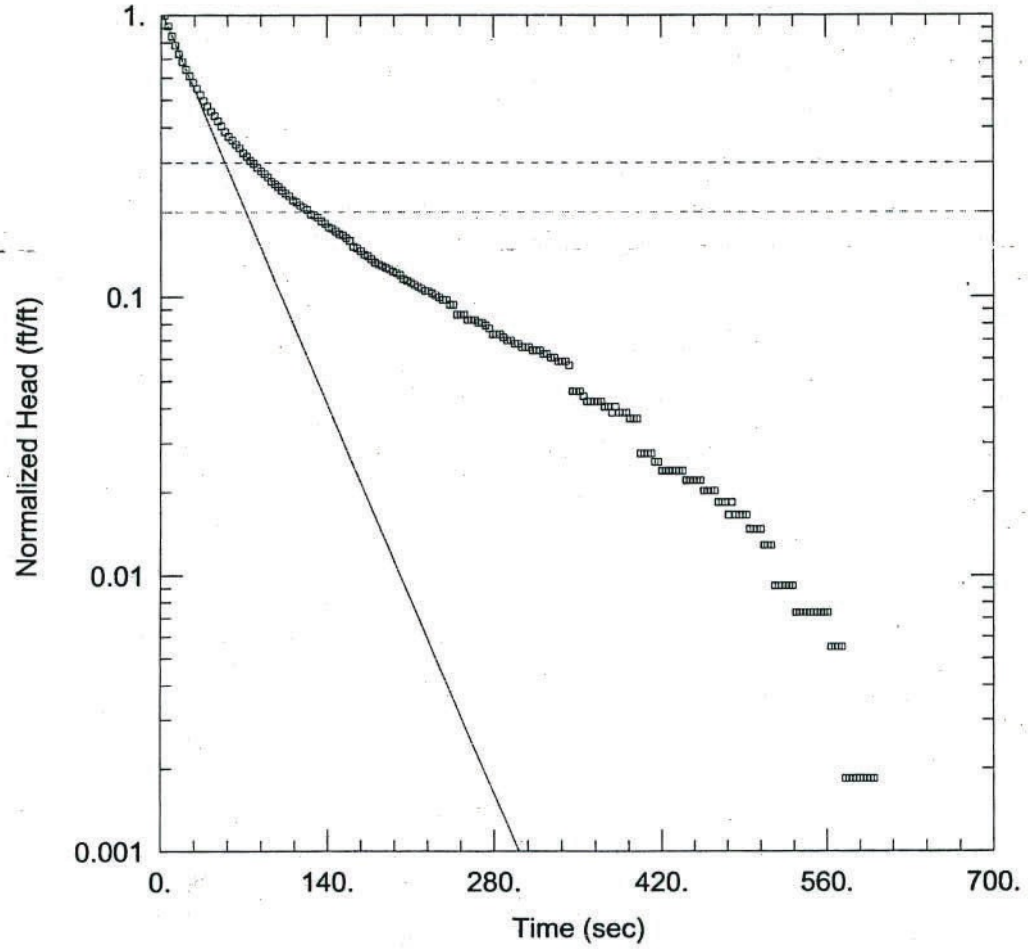
Saturated Thickness: 40.49 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS21in)

Initial Displacement: 1.453 ft
Total Well Penetration Depth: 39.99 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 40.49 ft
Screen Length: 9. ft
Wellbore Radius: 0.333 ft

SOLUTION

Aquifer Model: Unconfined
K = 0.001108 cm/sec
Solution Method: Bouwer-Rice
y0 = 1.547 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS21out.aqt
Date: 12/07/06 Time: 12:56:39

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

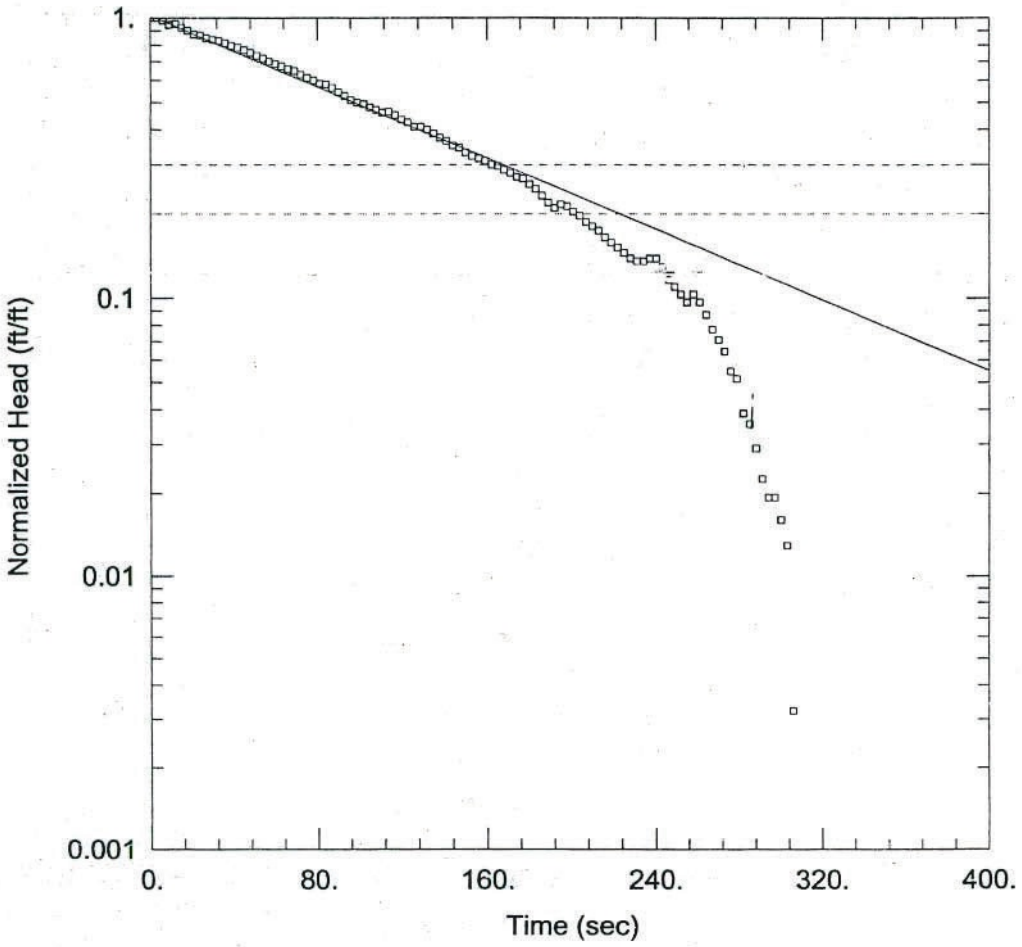
Saturated Thickness: 40.49 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS21out)

Initial Displacement: 1.257 ft
Total Well Penetration Depth: 39.99 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 40.49 ft
Screen Length: 9. ft
Wellbore Radius: 0.333 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0008414 cm/sec
y0 = 1.31 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS25in.aqt
Date: 12/07/06 Time: 12:57:51

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

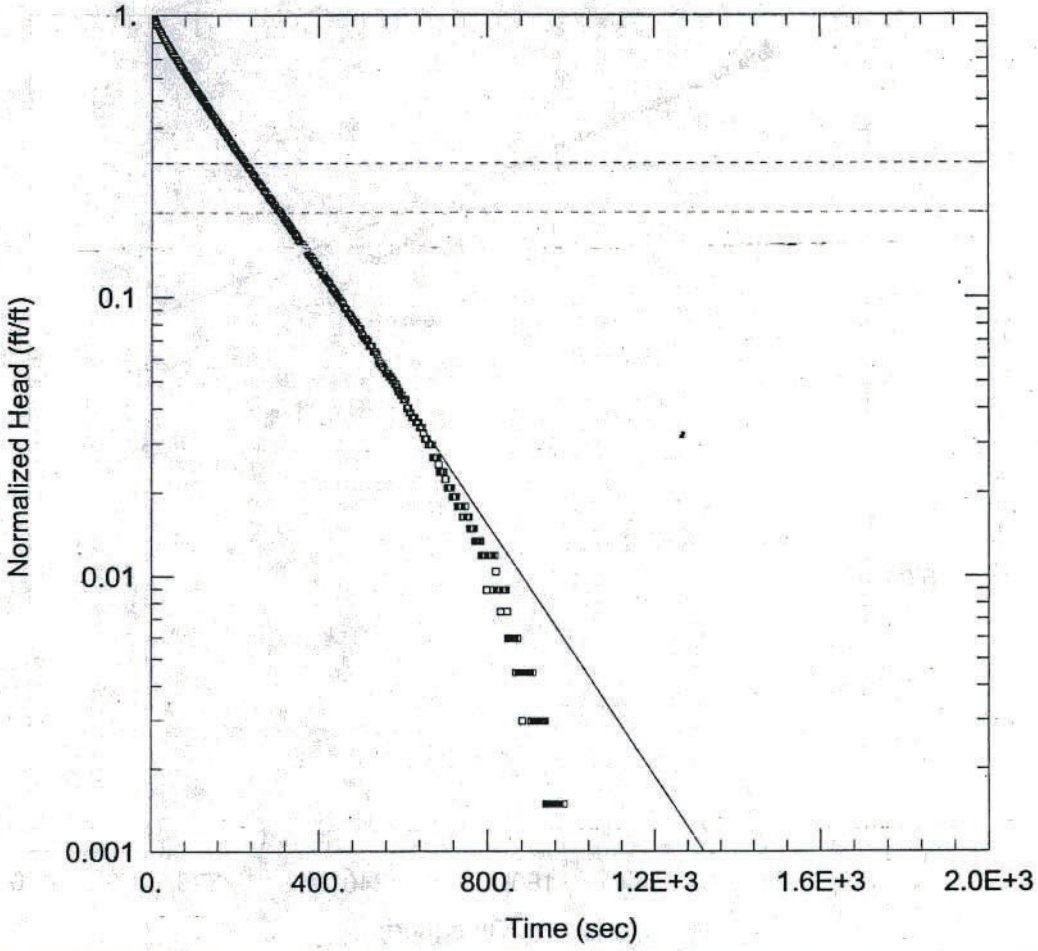
Saturated Thickness: 24.67 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS25in)

Initial Displacement: 0.7161 ft
Total Well Penetration Depth: 24.17 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 24.67 ft
Screen Length: 9. ft
Wellbore Radius: 0.333 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0002454 cm/sec
y0 = 0.7298 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS25out.aqt
Date: 12/07/06 Time: 12:58:36

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

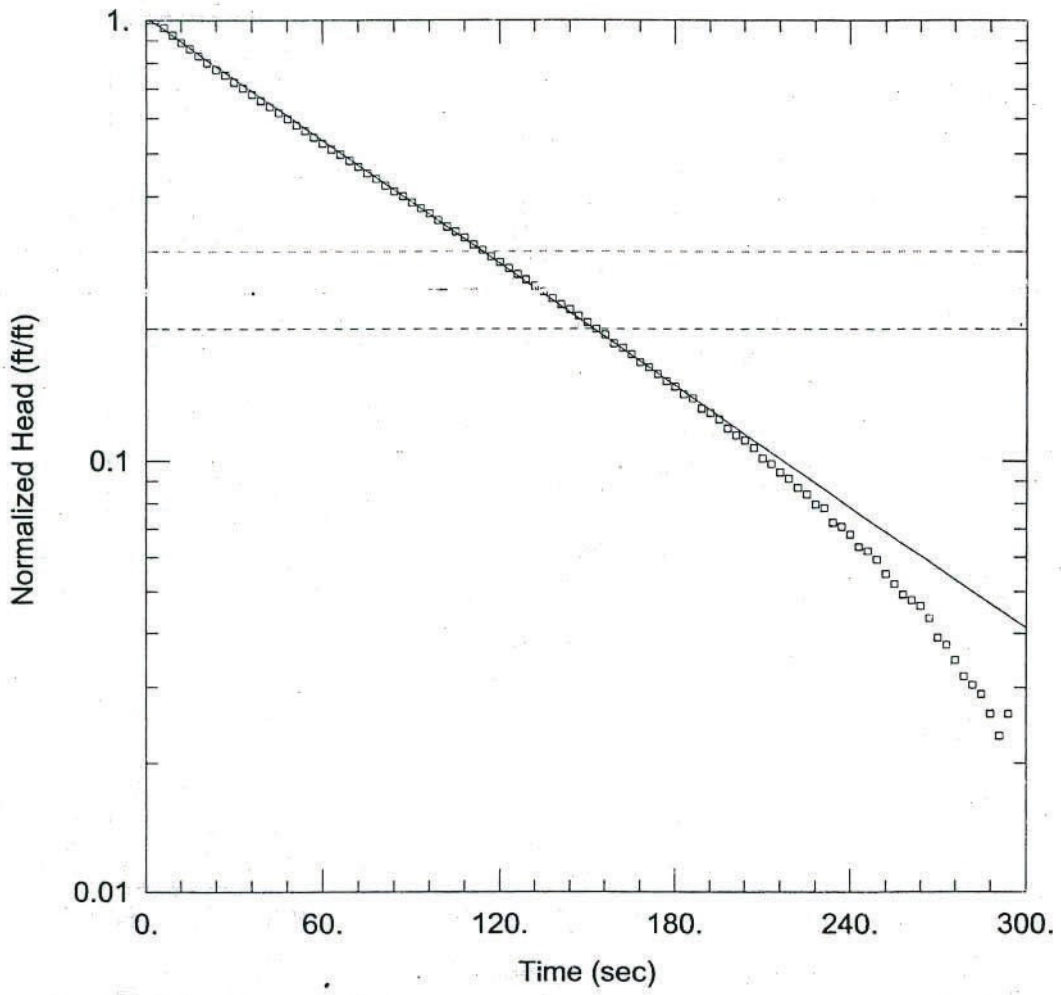
Saturated Thickness: 24.67 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS25out)

Initial Displacement: 1.557 ft
Total Well Penetration Depth: 24.17 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 24.67 ft
Screen Length: 9. ft
Wellbore Radius: 0.333 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001764 cm/sec
y0 = 1.584 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS27in.aqt
Date: 12/07/06 Time: 13:06:13

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

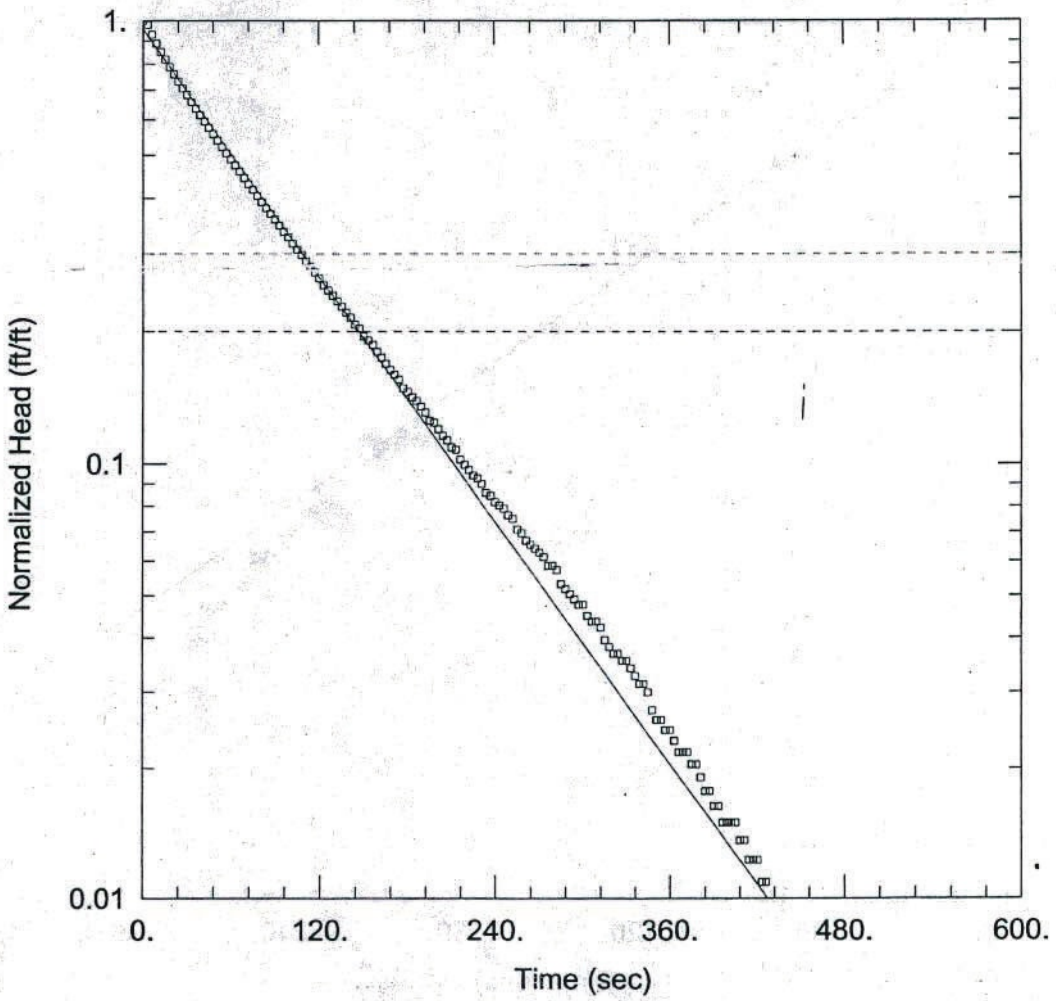
Saturated Thickness: 28.7 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS27in)

Initial Displacement: 1.596 ft
Total Well Penetration Depth: 23.2 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 23.7 ft
Screen Length: 9. ft
Wellbore Radius: 0.3333 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0003252 cm/sec
y0 = 1.621 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS27out.aqt
Date: 12/08/06 Time: 10:42:28

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

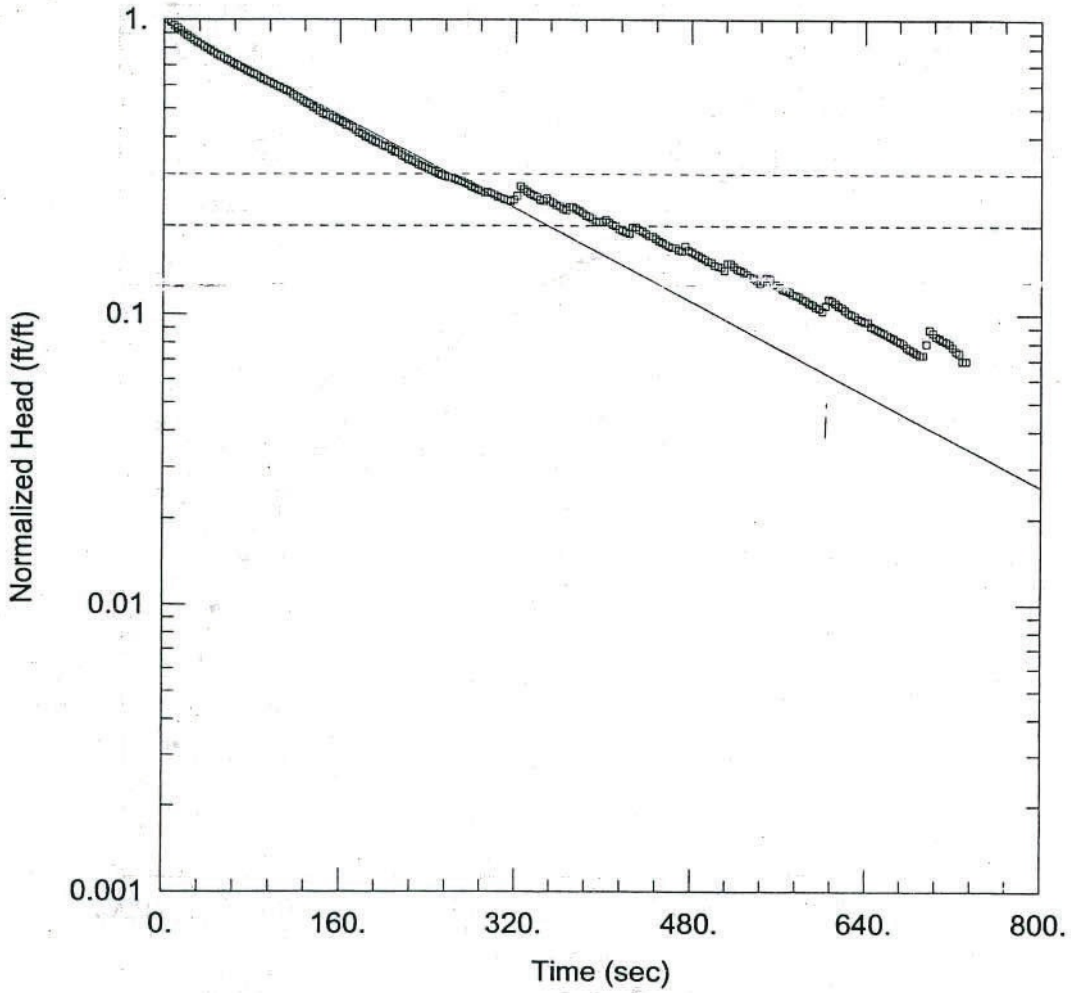
Saturated Thickness: 28.7 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS27out)

Initial Displacement: 1.696 ft
Total Well Penetration Depth: 23.2 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 23.7 ft
Screen Length: 9. ft
Wellbore Radius: 0.3333 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0003252 cm/sec
y0 = 1.621 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS29in.aqt
Date: 12/08/06 Time: 10:56:04

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

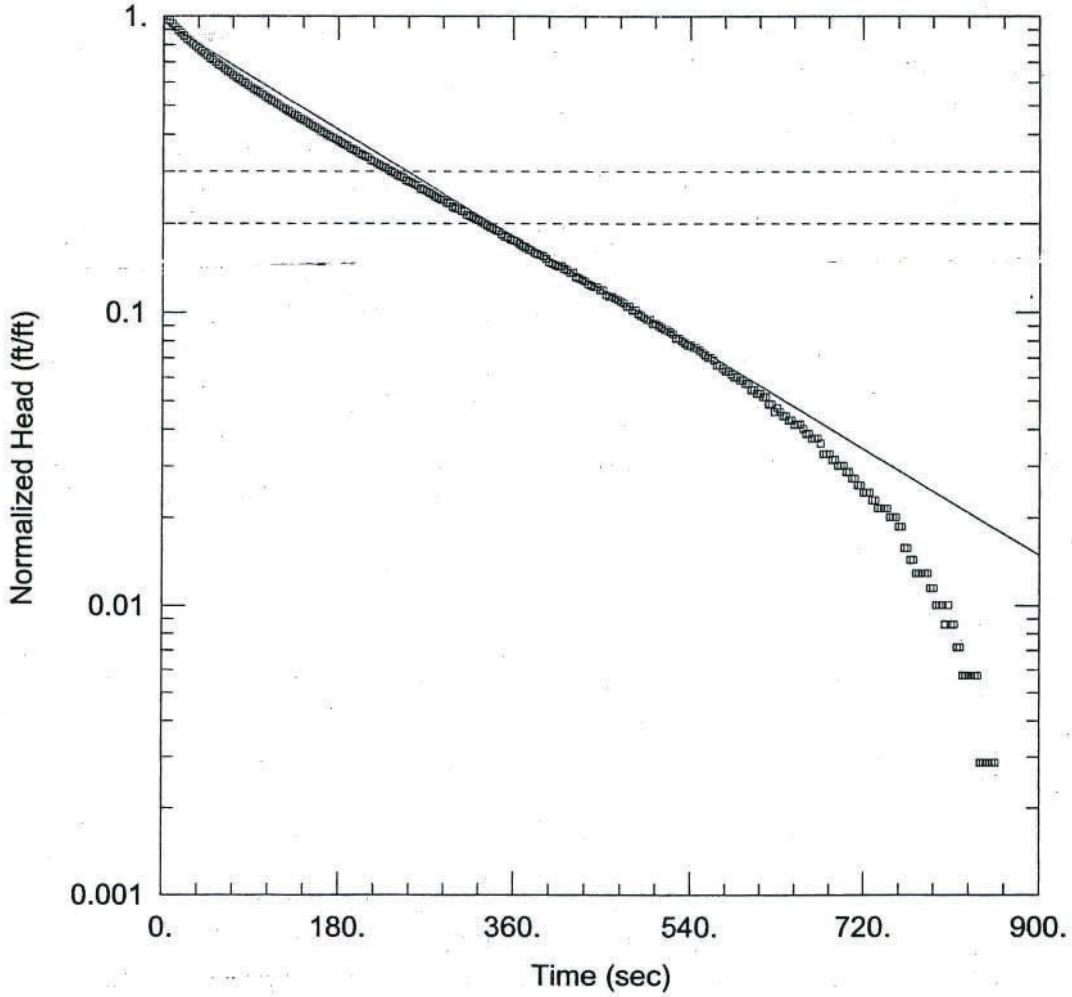
Saturated Thickness: 30.6 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS29in)

Initial Displacement: 2.026 ft
Total Well Penetration Depth: 30.1 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 30.6 ft
Screen Length: 9. ft
Wellbore Radius: 0.333 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001586 cm/sec
y0 = 1.983 ft



WELL TEST ANALYSIS

Data Set: T:\ESEE MAJOR PROJECTS\PROJECTS\WANSLEY\2006\slugtests\GS29out.aqt
Date: 12/08/06 Time: 10:57:25

PROJECT INFORMATION

Company: SCS
Client: GPC
Project: 3186DE
Location: Plant Wansley
Test Well: GS27in
Test Date: 11/8/2006

AQUIFER DATA

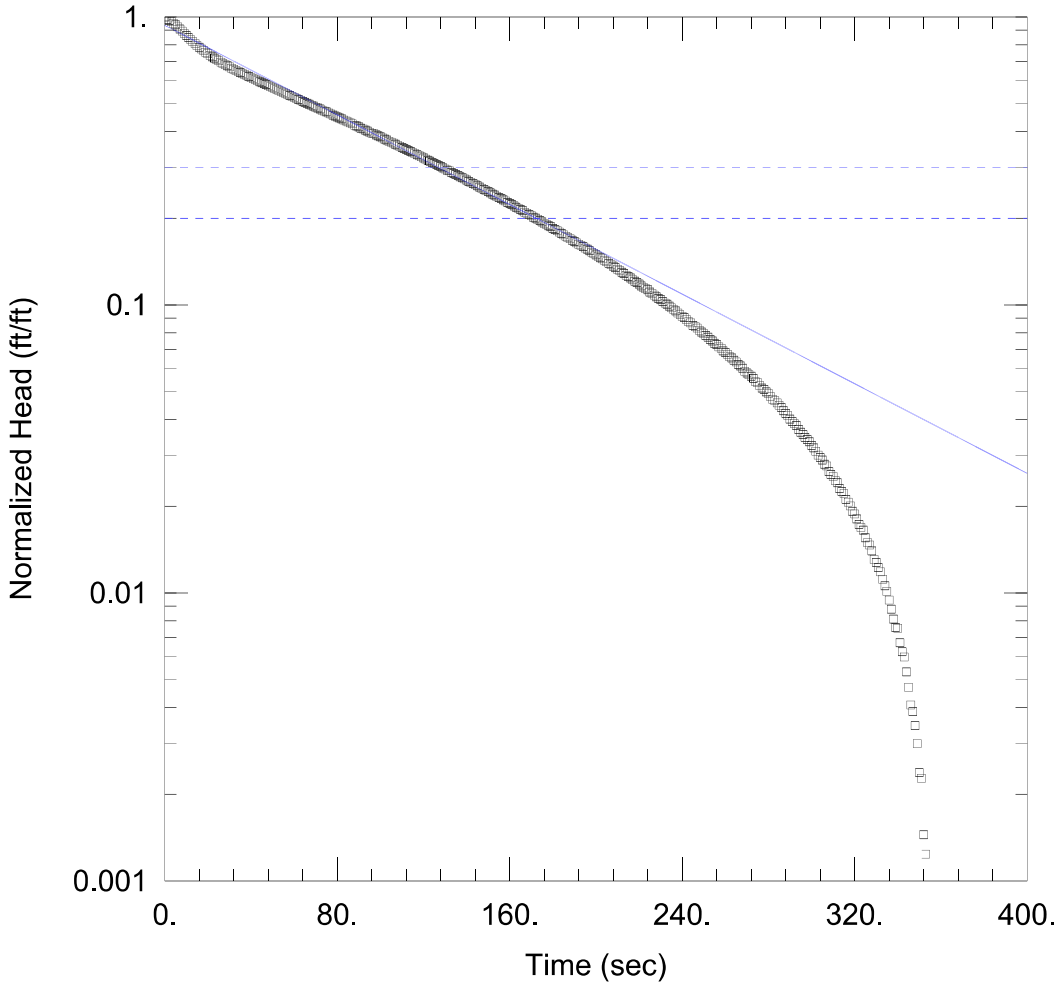
Saturated Thickness: 30.6 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GS29out)

Initial Displacement: 1.61 ft
Total Well Penetration Depth: 30.1 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 30.6 ft
Screen Length: 9. ft
Wellbore Radius: 0.333 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001612 cm/sec
y0 = 1.536 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-101 - Test 1.aqt
Date: 02/16/22 Time: 17:13:11

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-101 - Test 1
Test Date: 2/15/2022

AQUIFER DATA

Saturated Thickness: 32.73 ft Anisotropy Ratio (Kz/Kr): 0.1

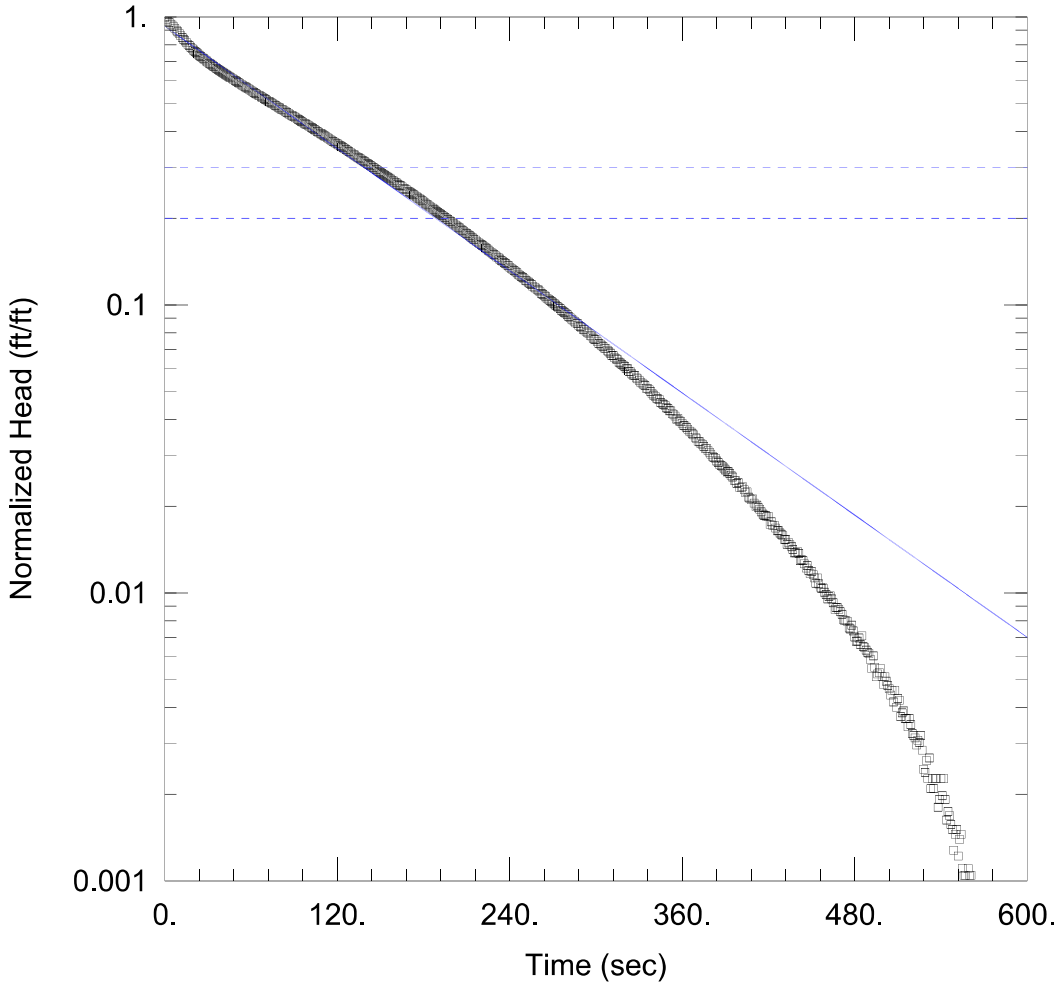
WELL DATA (GS-101 - Test 1)

Initial Displacement: 19.36 ft
Total Well Penetration Depth: 32.33 ft
Casing Radius: 0.083 ft
Static Water Column Height: 32.73 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 1.03 ft/day y0 = 18.09 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-101 - Test 2 Bouwer-Rice.aqt
Date: 02/17/22 Time: 09:40:29

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-101 - Test 2
Test Date: 2/15/2022

AQUIFER DATA

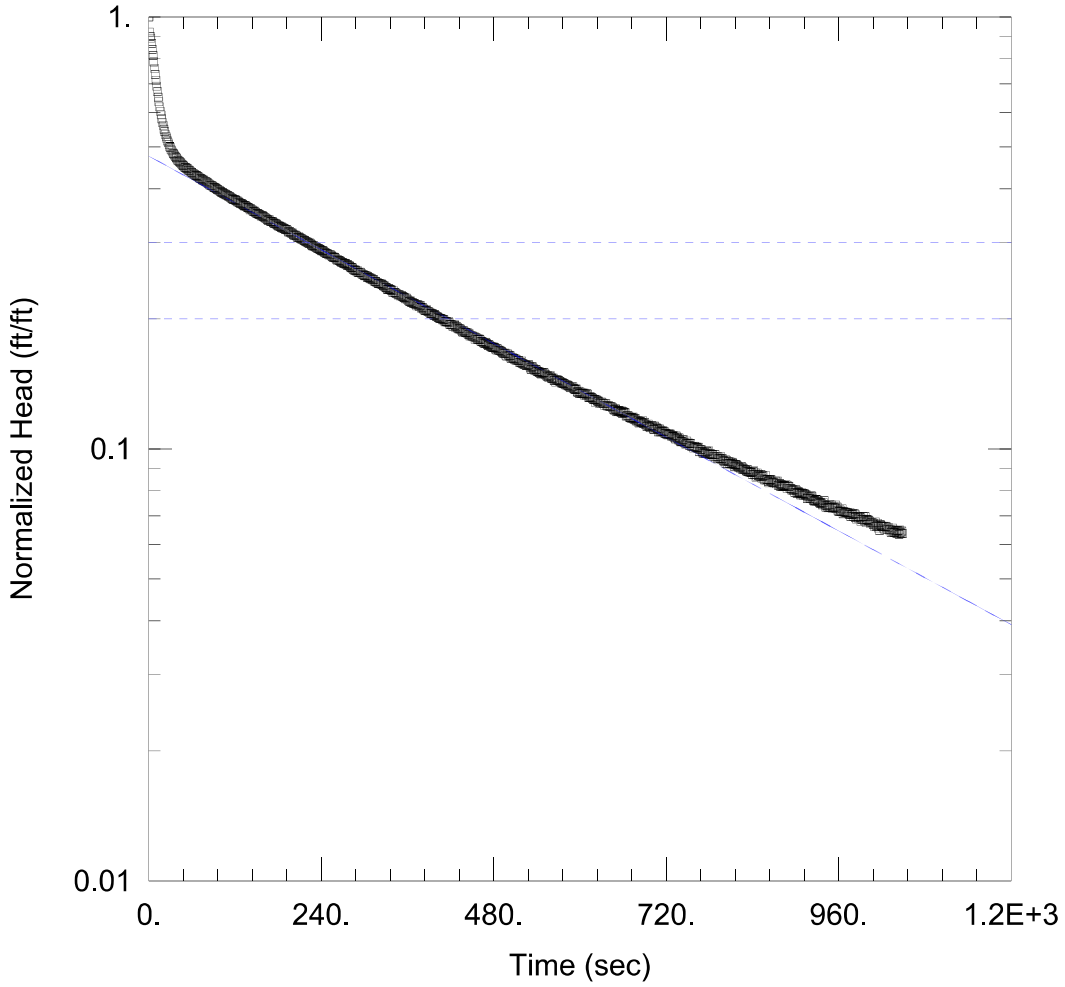
Saturated Thickness: 32.73 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GS-101 - Test 2)

Initial Displacement: 17.21 ft
Total Well Penetration Depth: 32.33 ft
Casing Radius: 0.083 ft
Static Water Column Height: 32.73 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.9365 ft/day
y0 = 15.96 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-102 - Test 1 Bouwer-Rice.aqt
Date: 02/17/22 Time: 16:18:38

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-102 - Test 1
Test Date: 2/15/2022

AQUIFER DATA

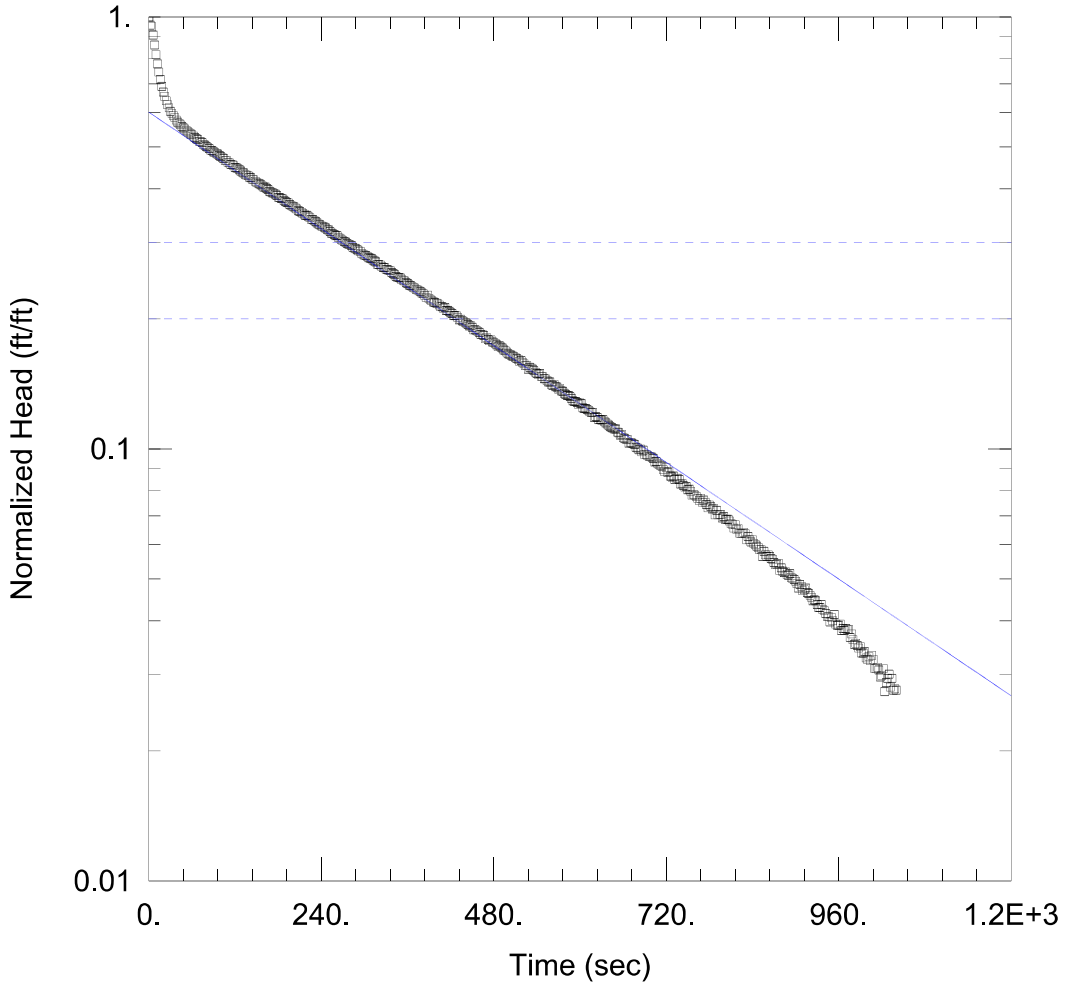
Saturated Thickness: 18.76 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GS-102 - Test 1)

Initial Displacement: 4.65 ft
Total Well Penetration Depth: 18.36 ft
Casing Radius: 0.083 ft
Static Water Column Height: 18.76 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.2217 ft/day
y0 = 2.214 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-102 - Test 2 Bouwer-Rice.aqt
Date: 02/17/22 Time: 16:20:52

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-102 - Test 2
Test Date: 2/15/2022

AQUIFER DATA

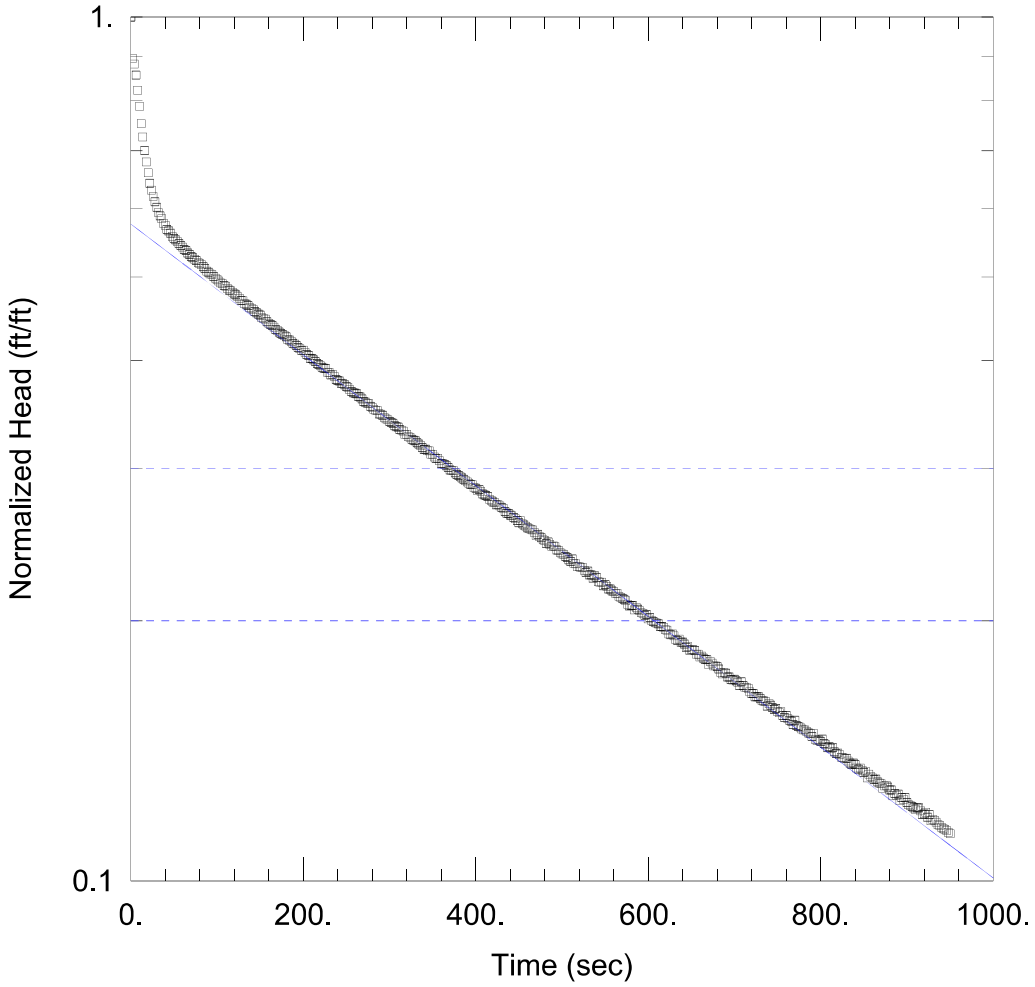
Saturated Thickness: 18.76 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GS-102 - Test 2)

Initial Displacement: 4.45 ft
Total Well Penetration Depth: 18.36 ft
Casing Radius: 0.083 ft
Static Water Column Height: 18.76 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.2762 ft/day
y0 = 2.679 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-103 - Test 1 Bouwer-Rice.aqt
Date: 02/17/22 Time: 11:10:00

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-103 - Test 1
Test Date: 2/15/2022

AQUIFER DATA

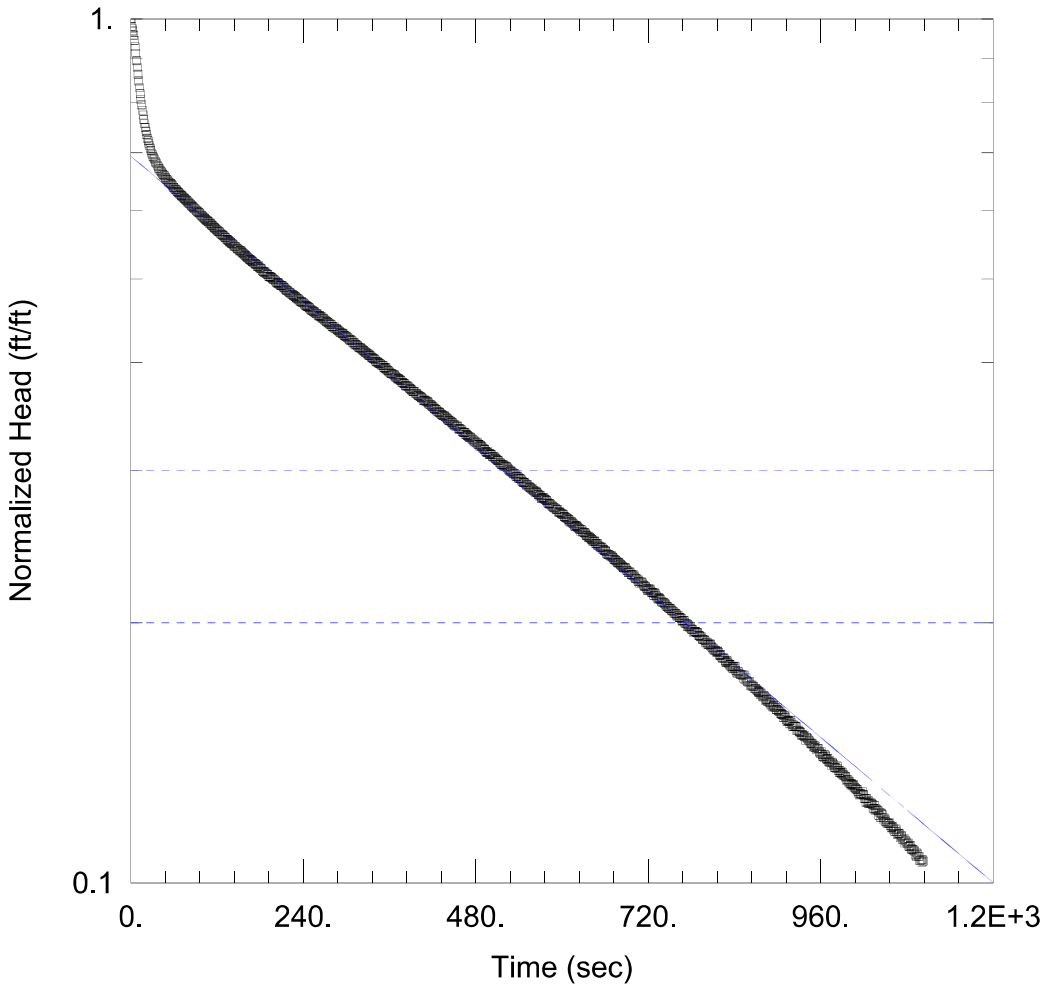
Saturated Thickness: 21.37 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GS-103 - Test 1)

Initial Displacement: 5.07 ft
Total Well Penetration Depth: 20.97 ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.37 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.1892 ft/day
y0 = 2.919 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-103 - Test 2 Bouwer-Rice.aqt
Date: 02/17/22 Time: 16:22:53

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-103 - Test 2
Test Date: 2/15/2022

AQUIFER DATA

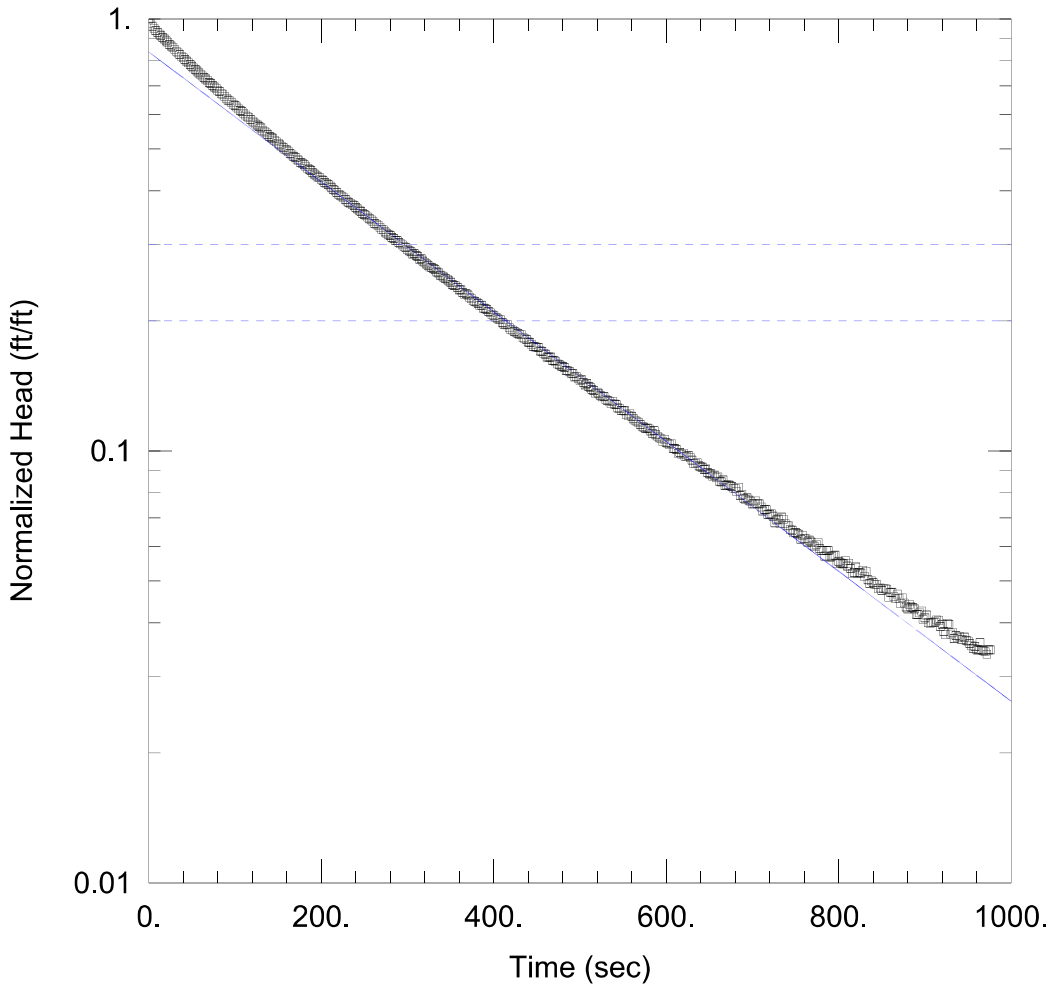
Saturated Thickness: 21.37 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GS-103 - Test 2)

Initial Displacement: 6.832 ft
Total Well Penetration Depth: 20.97 ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.37 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.1752 ft/day
y0 = 4.739 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-104 - Test 1 Bouwer-Rice.aqt
Date: 02/17/22 Time: 14:03:55

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-104 - Test 1
Test Date: 2/15/2022

AQUIFER DATA

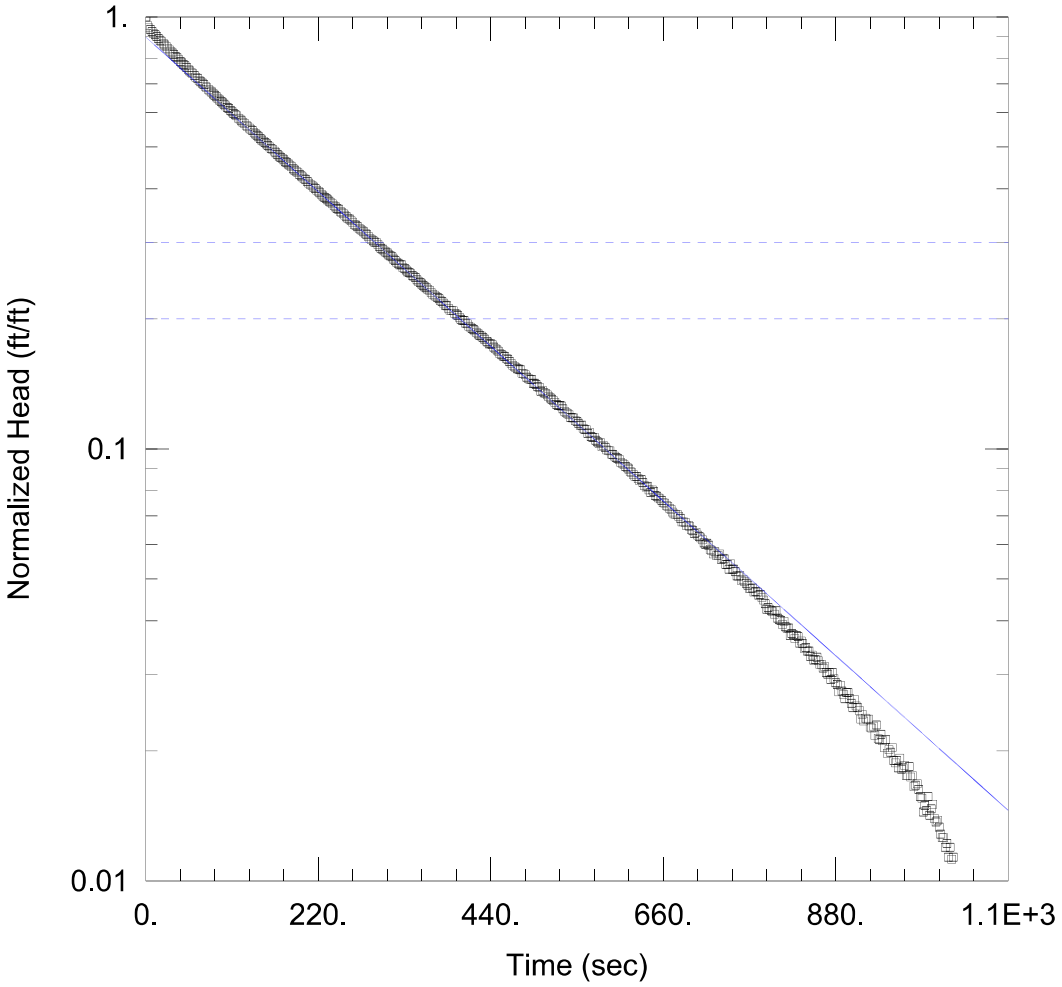
Saturated Thickness: 22.55 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GS-104 - Test 1)

Initial Displacement: 6.5 ft
Total Well Penetration Depth: 22.15 ft
Casing Radius: 0.083 ft
Static Water Column Height: 22.55 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.3786 ft/day
y0 = 5.45 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-104 - Test 2 Bouwer-Rice.aqt
Date: 02/17/22 Time: 14:26:23

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-104 - Test 2
Test Date: 2/15/2022

AQUIFER DATA

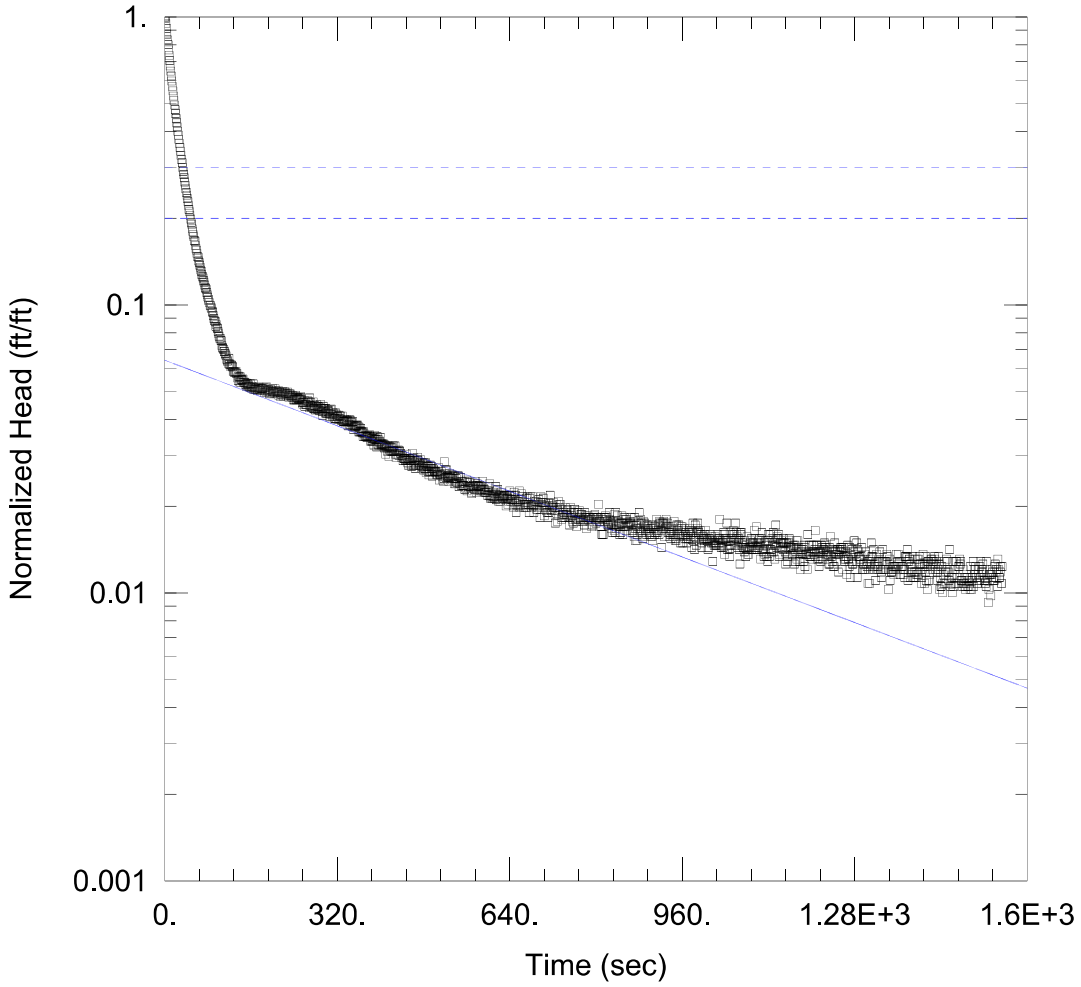
Saturated Thickness: 22.55 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GS-104 - Test 2)

Initial Displacement: 8.104 ft
Total Well Penetration Depth: 22.15 ft
Casing Radius: 0.083 ft
Static Water Column Height: 22.55 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.4099 ft/day
y0 = 7.277 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-105 - Test 1 Bouwer-Rice.aqt
Date: 02/17/22 Time: 16:05:26

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-105 - Test 1
Test Date: 2/15/2022

AQUIFER DATA

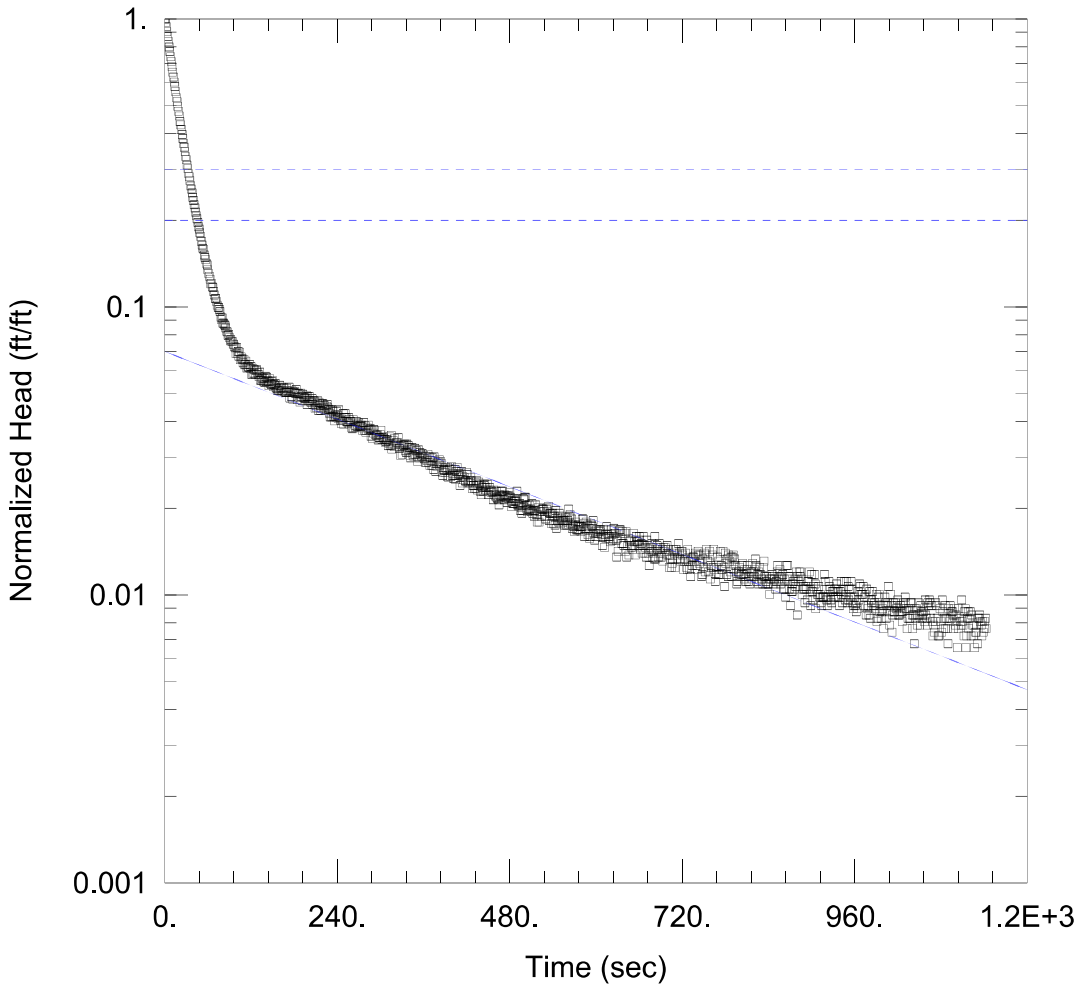
Saturated Thickness: 3.891 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GS-105 - Test 1)

Initial Displacement: 3.891 ft
Total Well Penetration Depth: 10. ft
Casing Radius: 0.083 ft
Static Water Column Height: 1.04 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.293 ft/day
y0 = 0.2501 ft



WELL TEST ANALYSIS

Data Set: N:\...\GS-105 - Test 2 Bouwer-Rice.aqt
Date: 02/17/22 Time: 16:01:14

PROJECT INFORMATION

Company: Geosyntec Consultants
Client: Southern Company Services
Project: GW7535
Location: Plant Wansley, Carrollton, GA
Test Well: GS-105 - Test 2
Test Date: 2/15/2022

AQUIFER DATA

Saturated Thickness: 4.58 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (GS-105 - Test 2)

Initial Displacement: 4.58 ft
Total Well Penetration Depth: 10. ft
Casing Radius: 0.083 ft
Static Water Column Height: 1.04 ft
Screen Length: 10. ft
Well Radius: 0.21 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.3502 ft/day
y0 = 0.3206 ft