MACTEC

Checked by: CHB Date: 4-4-08

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-08U
Client: **Bechtel**	Contractor: **MACTEC**		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 1/21/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	46.56 feet
Total Well Depth	103.03 feet 1.8' of sediment in bottom
Static Water Column Height (H)	56.47 feet

	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~3.5	~3'

Saturated Thickness (b)	feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	90 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	103078
Slug Data	Slug #1
Length	5.5'
weight	
Diameter	1.625 inches

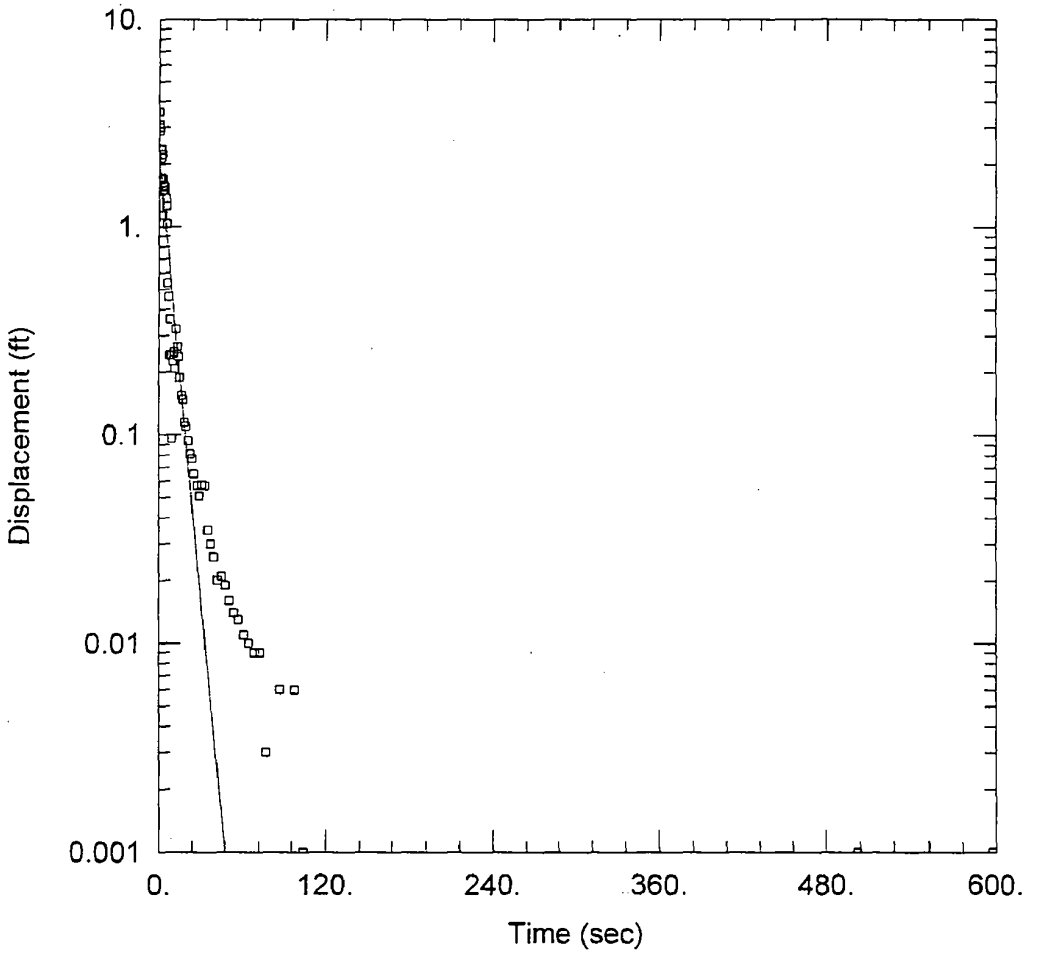
Slug Test File	Background	Falling	Rising
File Name	OW-08U Background	OW-08U Falling Head	OW-08U Rising Head
Start Time	8:57:59	9:16:04	9:27:29
End Time	9:12:59	9:26:04	9:31:28

Notes: mislabeled 09 in data file

Rev 0

Prepared by: CHG Date: 4-4-08

Checked by: BLU Date: 4/4/08



OW-08 U FALLING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-08 U
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-08 U)

Initial Displacement: 3.574 ft
Total Well Penetration Depth: 100. ft
Casing Radius: 0.083 ft

Static Water Column Height: 56.47 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

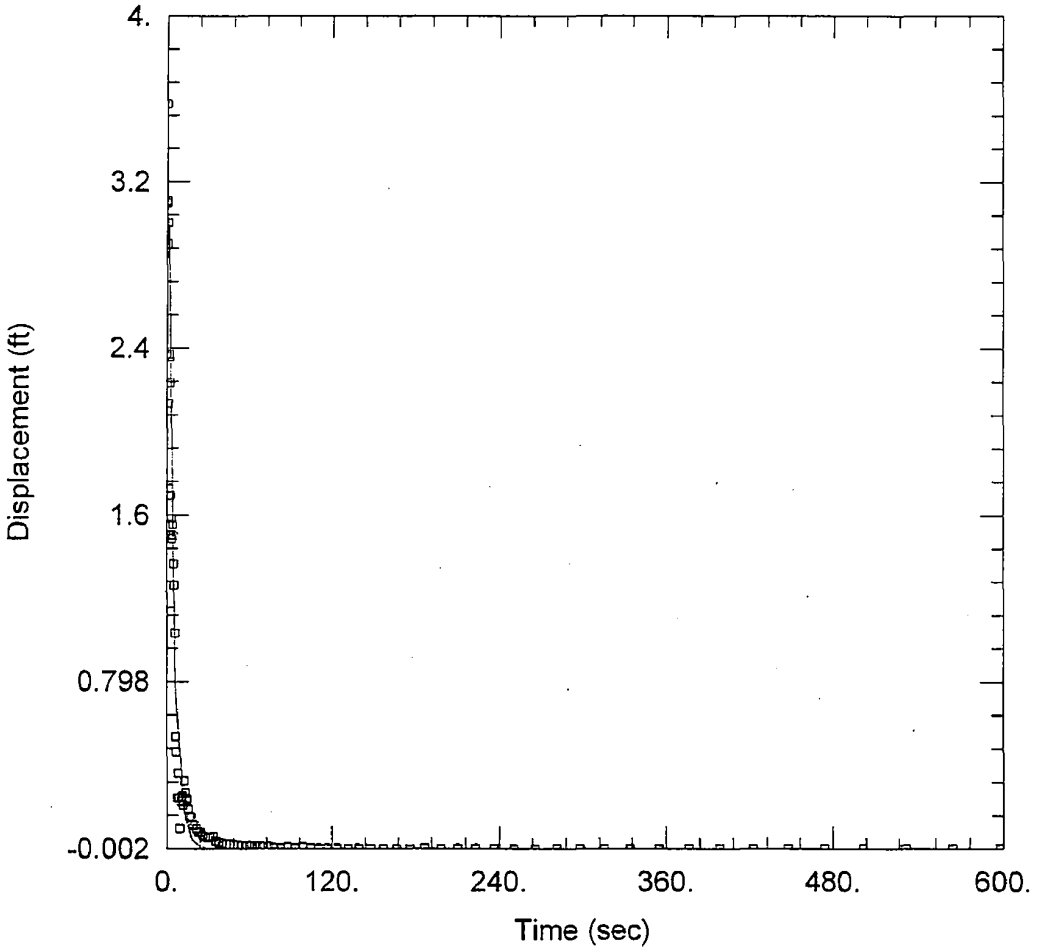
Solution Method: Bouwer-Rice

K = 24.67 ft/day

y0 = 2.285 ft

Prepared by: CKB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-08 U FALLING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-08 U
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-08 U)

Initial Displacement: 3.574 ft
Total Well Penetration Depth: 100. ft
Casing Radius: 0.083 ft

Static Water Column Height: 56.47 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

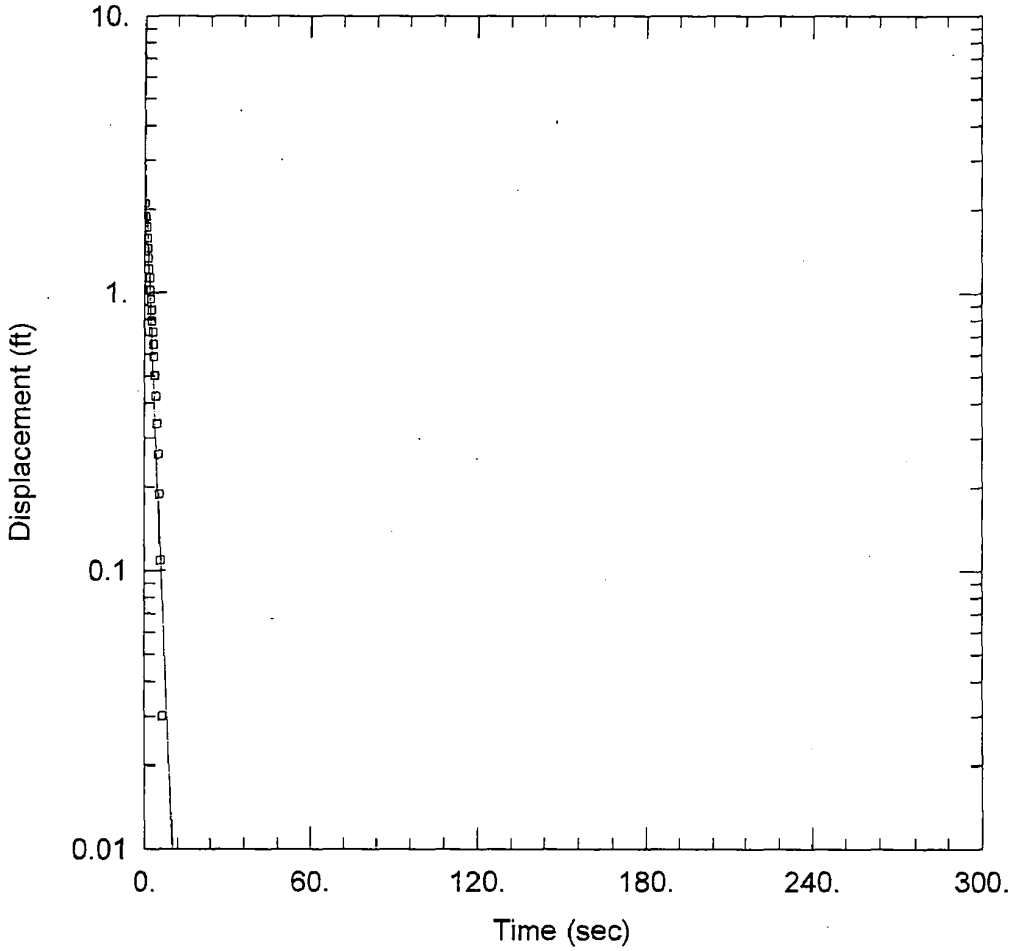
Solution Method: Butler

K = 39.35 ft/day

Le = 0.1 ft

Prepared by: CHB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-08 U RISING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-08 U
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-08 U)

Initial Displacement: 2.096 ft
Total Well Penetration Depth: 100. ft
Casing Radius: 0.083 ft

Static Water Column Height: 56.47 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

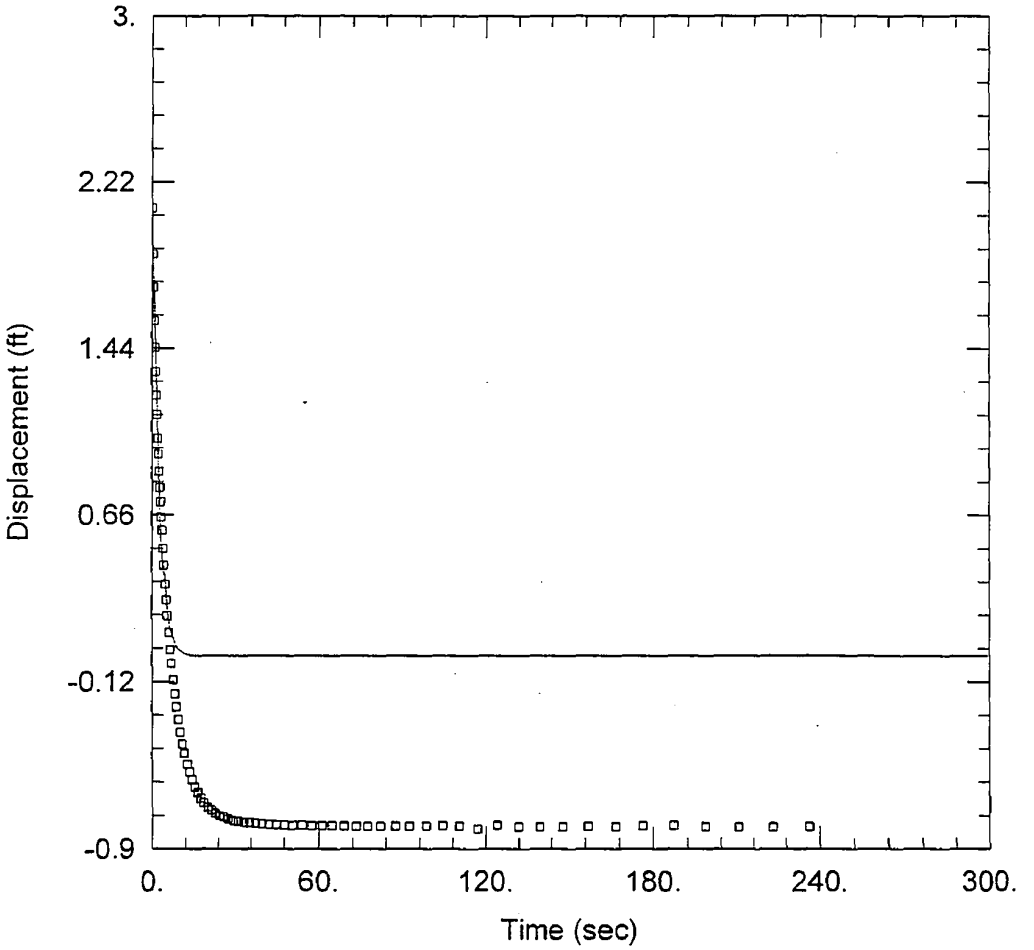
Solution Method: Bouwer-Rice

K = 82.12 ft/day

y0 = 2.746 ft

Prepared by: CHB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-08 U RISING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-08 U
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-08 U)

Initial Displacement: 2.096 ft
Total Well Penetration Depth: 100. ft
Casing Radius: 0.083 ft

Static Water Column Height: 56.47 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 69.06 ft/day

Le = 10.47 ft

MACTEC

Checked by: CHB Date: 4-4-08

SLUG TEST REPORT

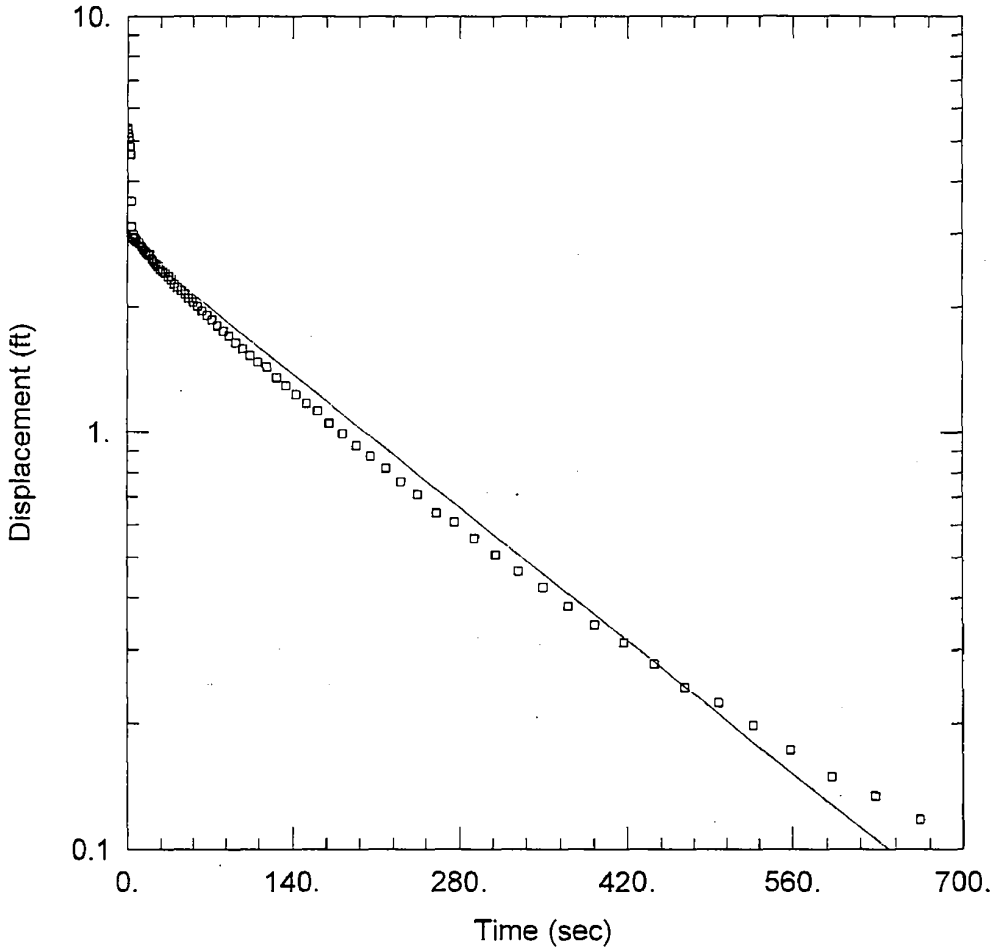
Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-09L
Client: **Bechtel**	Contractor: **MACTEC**		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 1/20/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	52.12 feet 52.11 after test		
Total Well Depth	122.43 feet		
Static Water Column Height (H)	70.31 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~5'	~5'
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	110 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	106721		
Slug Data	Slug #2		
Length	5.5'		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-09L Background	OW-09L Falling Head	OW-09L Rising Head
Start Time	1:32:27	2:08:57	2:22:08
End Time	1:47:27	2:20:09	2:26:36
Notes			

Rev 0

Prepared by: CHB Date: 4-4-08

Checked by: BKM Date: 4/4/08



OW-09 L FALLING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 L
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 9. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-09 L)

Initial Displacement: 5.322 ft
Total Well Penetration Depth: 120. ft
Casing Radius: 0.083 ft

Static Water Column Height: 70.31 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

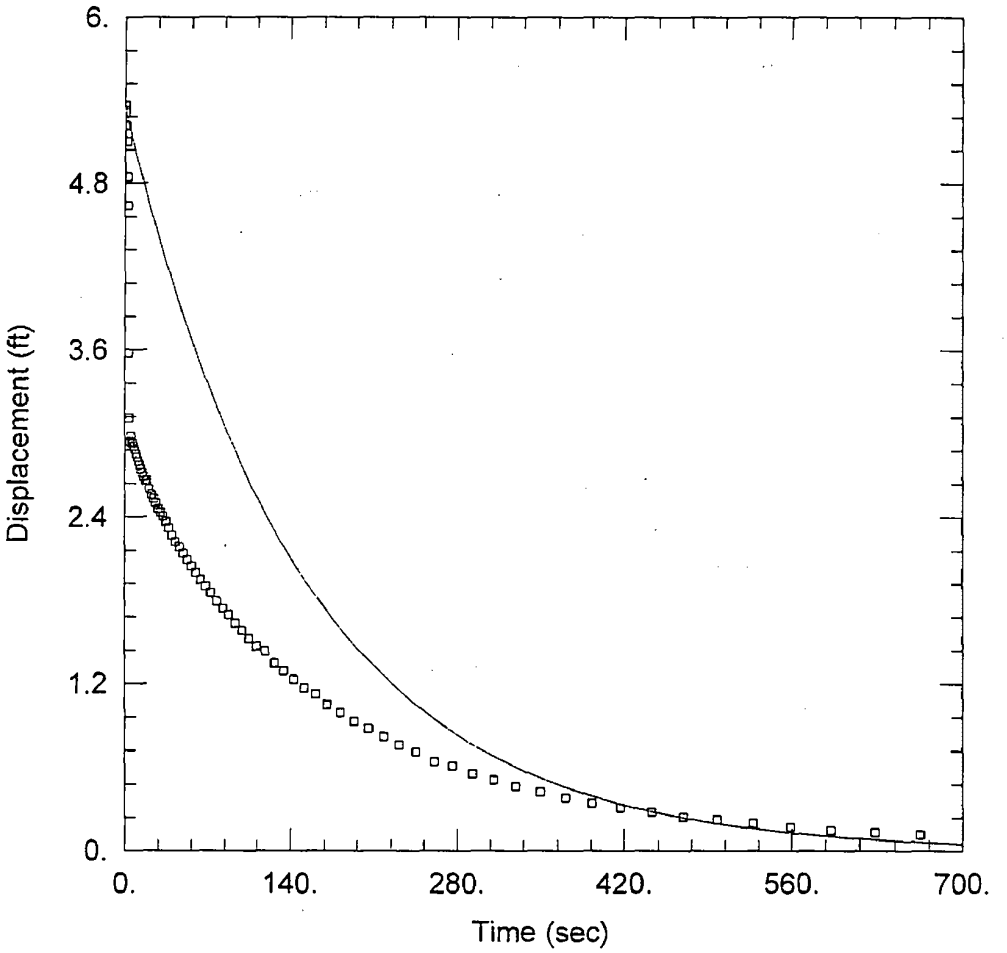
Solution Method: Bouwer-Rice

K = 0.8984 ft/day

y0 = 2.876 ft

Prepared by: CHB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-09 L FALLING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 L
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 9. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-09 L)

Initial Displacement: 5.322 ft
Total Well Penetration Depth: 120. ft
Casing Radius: 0.083 ft

Static Water Column Height: 70.31 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

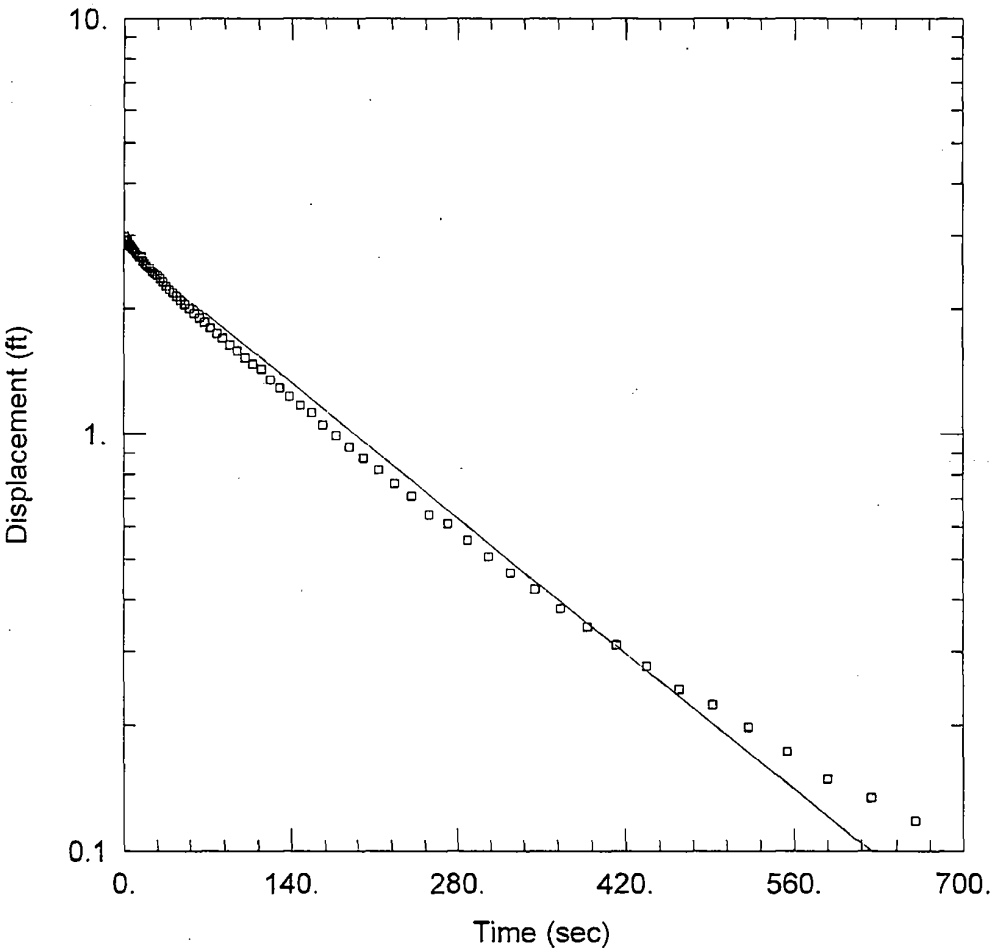
Aquifer Model: Confined

Solution Method: Butler

K = 1.16 ft/day

Le = 0.1 ft

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



OW-09 L FALLING HEAD TEST (B)

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 L
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 9. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-09 L)

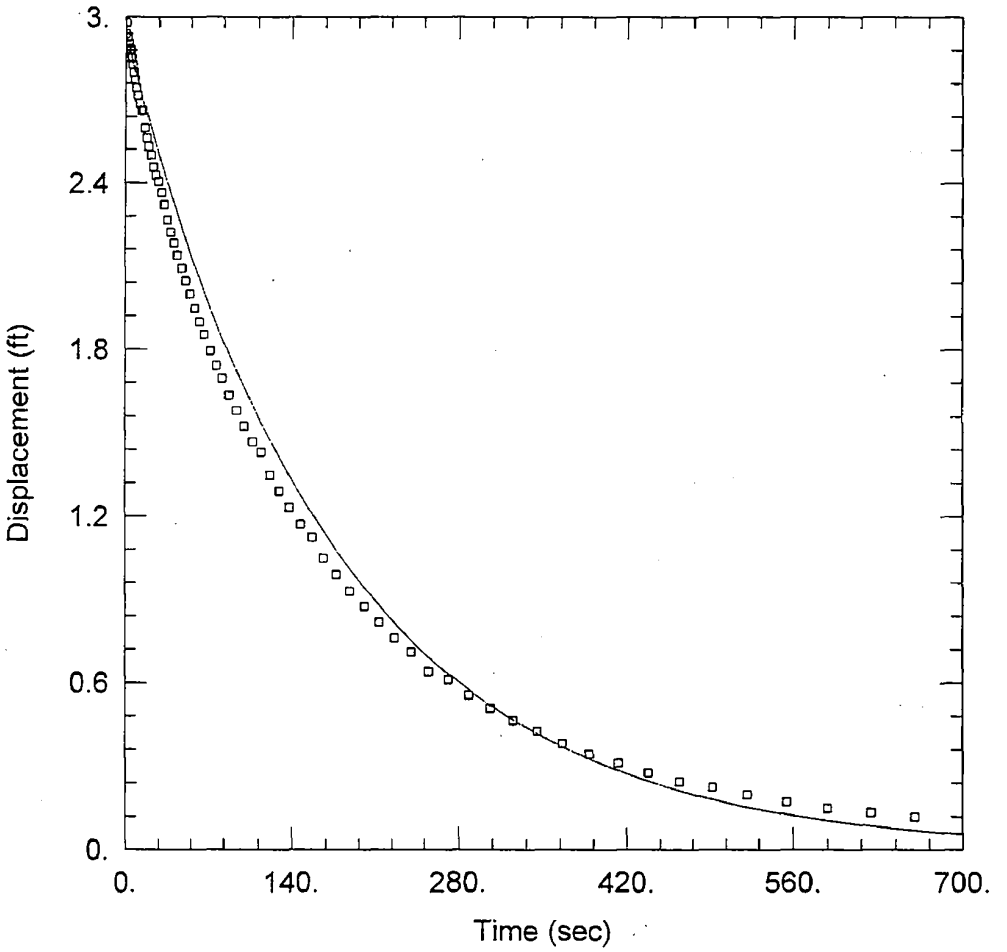
Initial Displacement: 2.939 ft
Total Well Penetration Depth: 120. ft
Casing Radius: 0.083 ft
Static Water Column Height: 70.31 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 0.9127 ft/day
y0 = 2.803 ft

Prepared by: CKB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-09 L FALLING HEAD TEST (B)

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 L
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 9. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-09 L)

Initial Displacement: 2.939 ft
Total Well Penetration Depth: 120. ft
Casing Radius: 0.083 ft

Static Water Column Height: 70.31 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

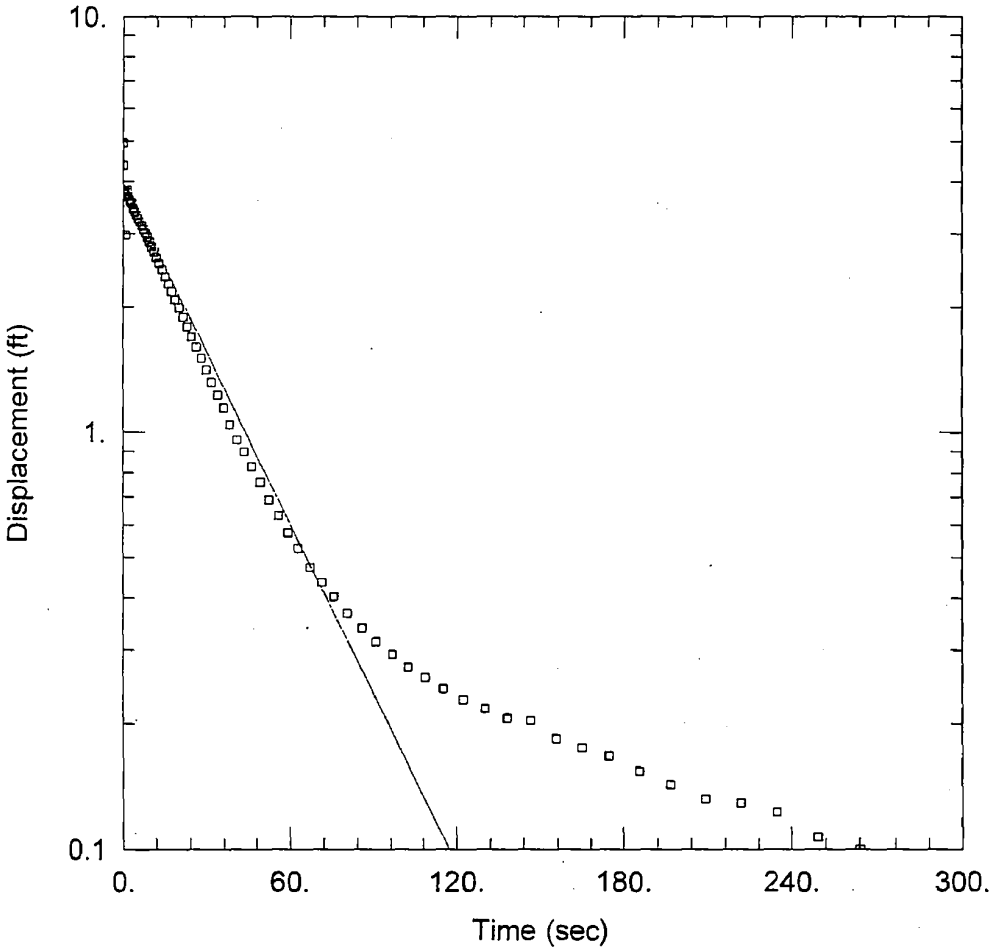
Solution Method: Butler

K = 0.9906 ft/day

Le = 0.1 ft

Prepared by: CHB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-09 L RISING HEAD HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 L
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 9. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-09 L)

Initial Displacement: 4.949 ft
Total Well Penetration Depth: 120. ft
Casing Radius: 0.083 ft

Static Water Column Height: 70.31 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

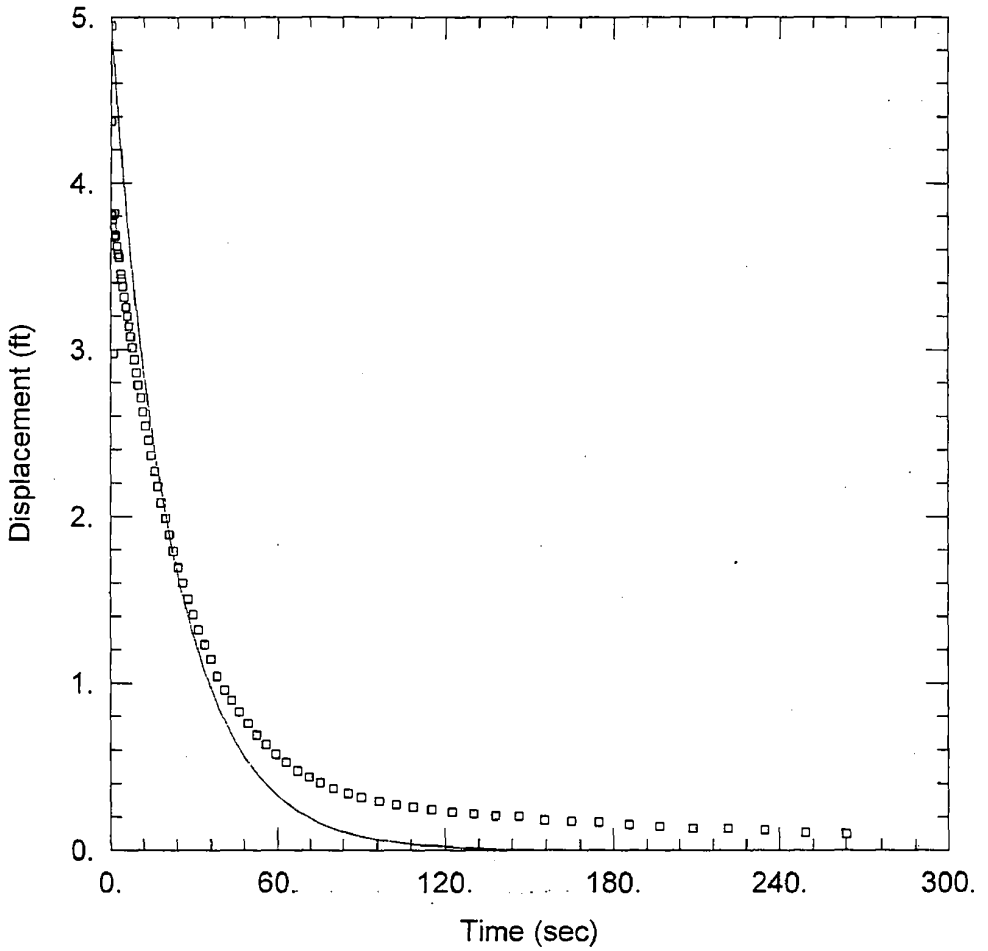
Solution Method: Bouwer-Rice

K = 5.357 ft/day

y0 = 3.967 ft

Prepared by: CAB Date: 4-4-08

Checked by: BJJ Date: 4/4/08



OW-09 L RISING HEAD HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 L
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 9. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-09 L)

Initial Displacement: 4.949 ft
Total Well Penetration Depth: 120. ft
Casing Radius: 0.083 ft

Static Water Column Height: 70.31 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 7.935 ft/day

Le = 0.1 ft

MACTEC

Checked by: CHB Date: 4-4-08

SLUG TEST REPORT

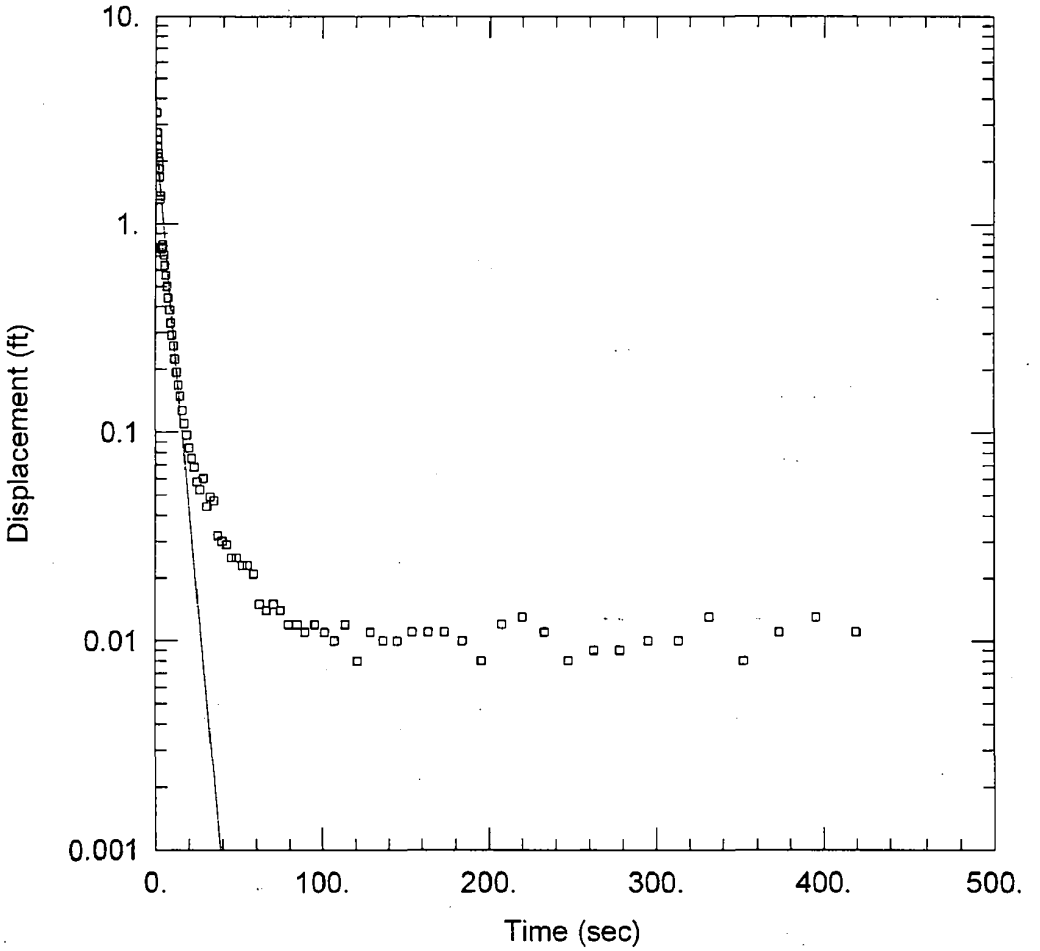
Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-09U
Client: **Bechtel**	Contractor: **MACTEC**		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 1/20/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	51.45 feet 51.43 After test		
Total Well Depth	62.85 feet		
Static Water Column Height (H)	11.4 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~3.4	~3.4
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	50 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	112335		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-09U Background	OW-09U Falling Head	OW-09U Rising Head
Start Time	1:22:54	1:42:00	1:51:26
End Time	1:37:54	1:49:05	1:55:39
Notes			

Rev 0

Prepared by: CHB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-09 U FALLING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 U
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-09 U)

Initial Displacement: 3.439 ft
Total Well Penetration Depth: 60. ft
Casing Radius: 0.083 ft

Static Water Column Height: 11.4 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

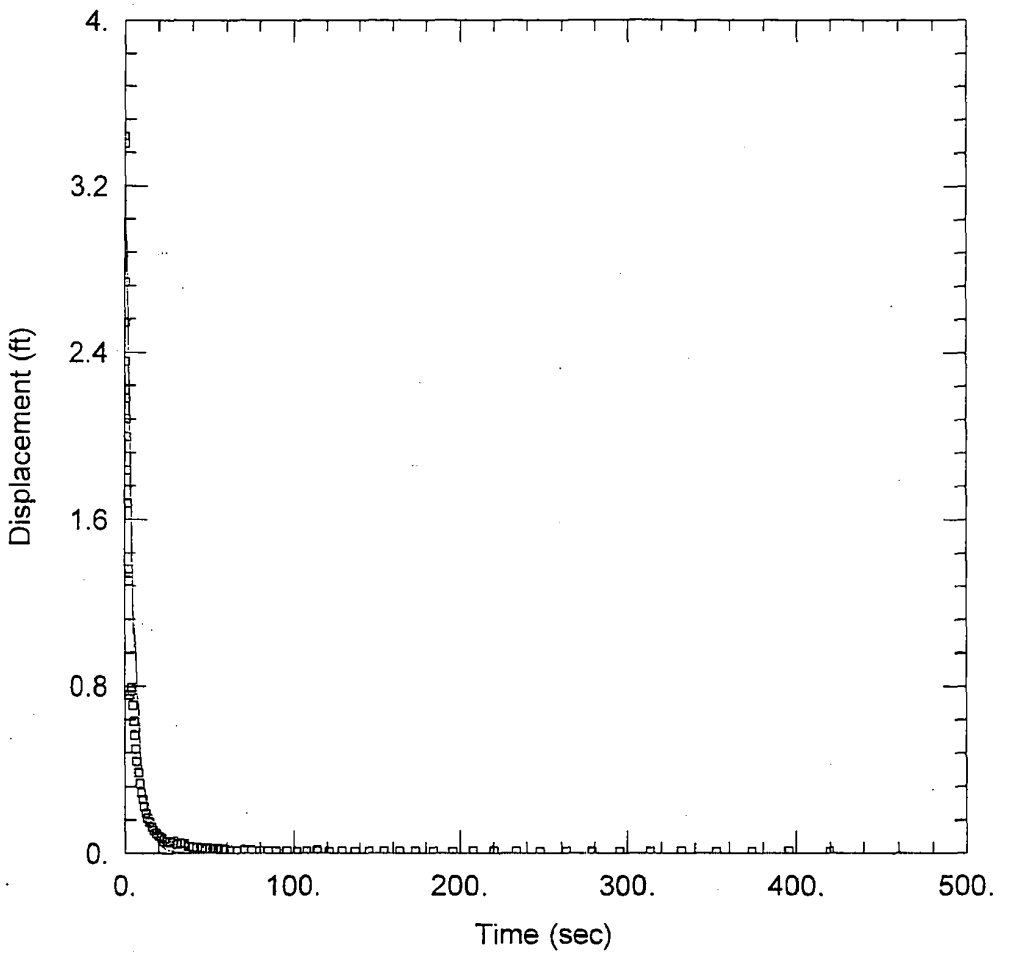
Aquifer Model: Confined

Solution Method: Bouwer-Rice

K = 28.71 ft/day

y0 = 2.441 ft

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



OW-09 U FALLING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 U
Test Date: 1/20/07

AQUIFER DATA

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

WELL DATA (OW-09 U)

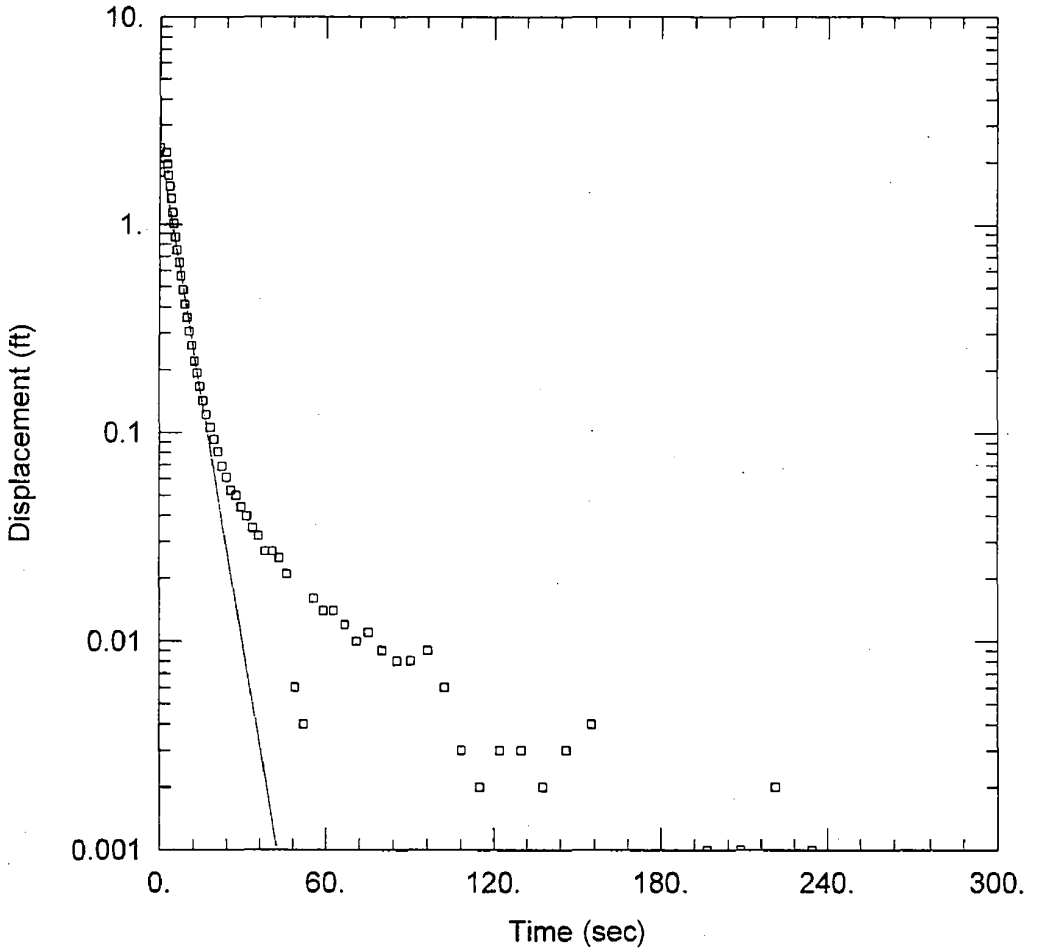
Initial Displacement: 3.439 ft
Total Well Penetration Depth: 60. ft
Casing Radius: 0.083 ft
Static Water Column Height: 11.4 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined
K = 33.84 ft/day
Solution Method: Butler
Le = 0.1 ft

Prepared by: CHB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-09 U RISING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 U
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-09 U)

Initial Displacement: 1.778 ft
Total Well Penetration Depth: 60. ft
Casing Radius: 0.083 ft

Static Water Column Height: 11.4 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

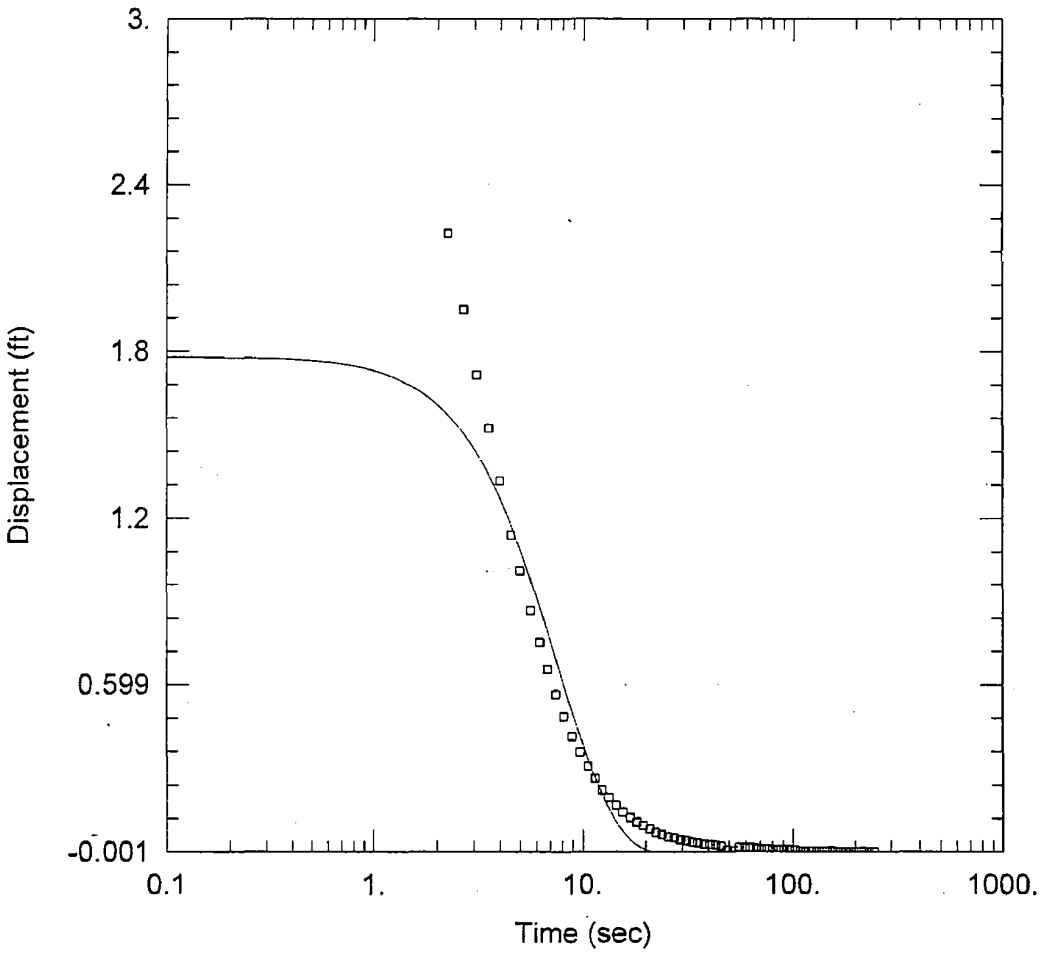
Solution Method: Bouwer-Rice

K = 26.18 ft/day

y0 = 2.292 ft

Prepared by: CHB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-09 U RISING HEAD TEST

PROJECT INFORMATION

Company: EXELON
Client: BECHTEL
Project: 6468-07-1777
Location: VICTORIA SITE
Test Well: OW-09 U
Test Date: 1/20/07

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-09 U)

Initial Displacement: 1.778 ft
Total Well Penetration Depth: 60. ft
Casing Radius: 0.083 ft

Static Water Column Height: 11.4 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 23.02 ft/day

Le = 500.8 ft

MACTEC

Checked by: CHB Date: 4-4-08

SLUG TEST REPORT

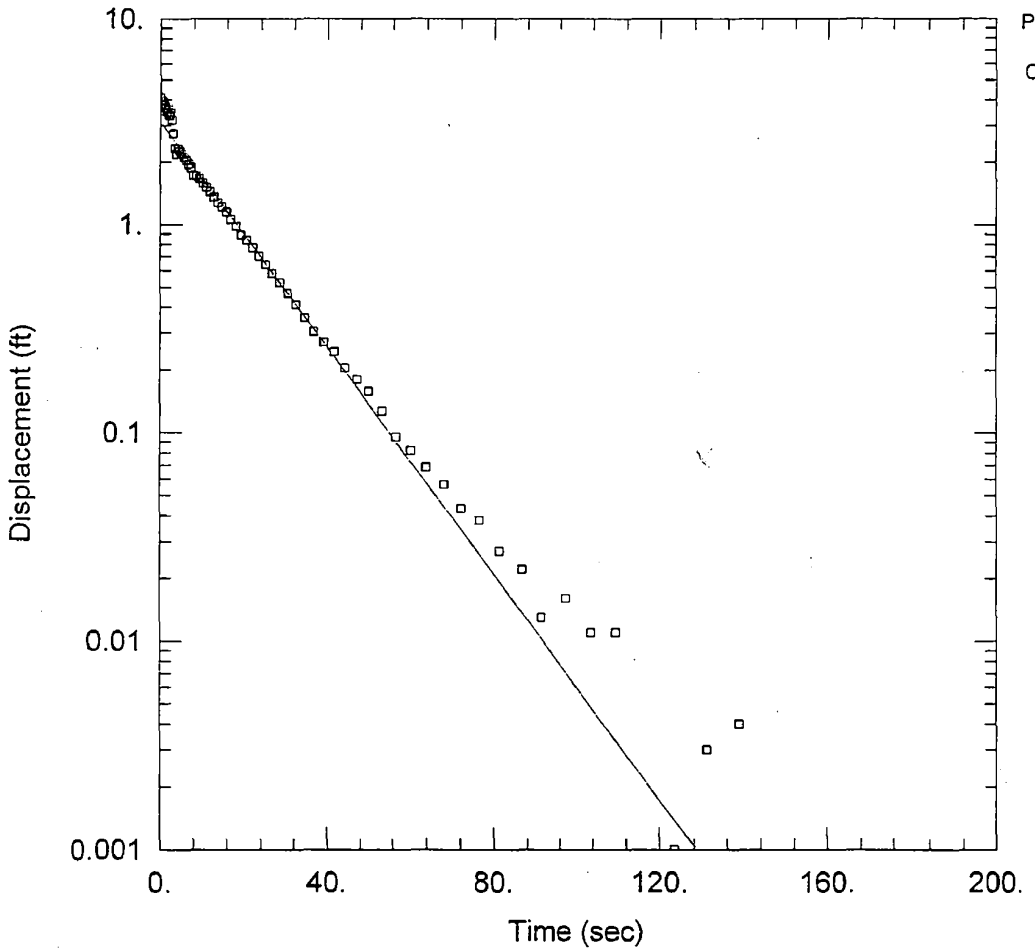
Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-10L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 1/21/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	54.87 feet		
Total Well Depth	140.66 feet		
Static Water Column Height (H)	85.79 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4'	~3.4'
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	127 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	119305		
Slug Data	JBM 1-21-08 ~~Slug #2~~ Slug #1		
Length	5.5'		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-10L Background	OW-10L Falling Head	OW-10L Rising Head
Start Time	10:24:48	10:43:33	10:47:09
End Time	10:39:48	10:45:55	10:50:30

Notes
Need to add a static level Data point at start of Rising Head. Slug pulled a little early.

Rev 0

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



OW-10 L FALLING HEAD TEST

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: OW-10 L
Test Date: 2/28/08

AQUIFER DATA

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

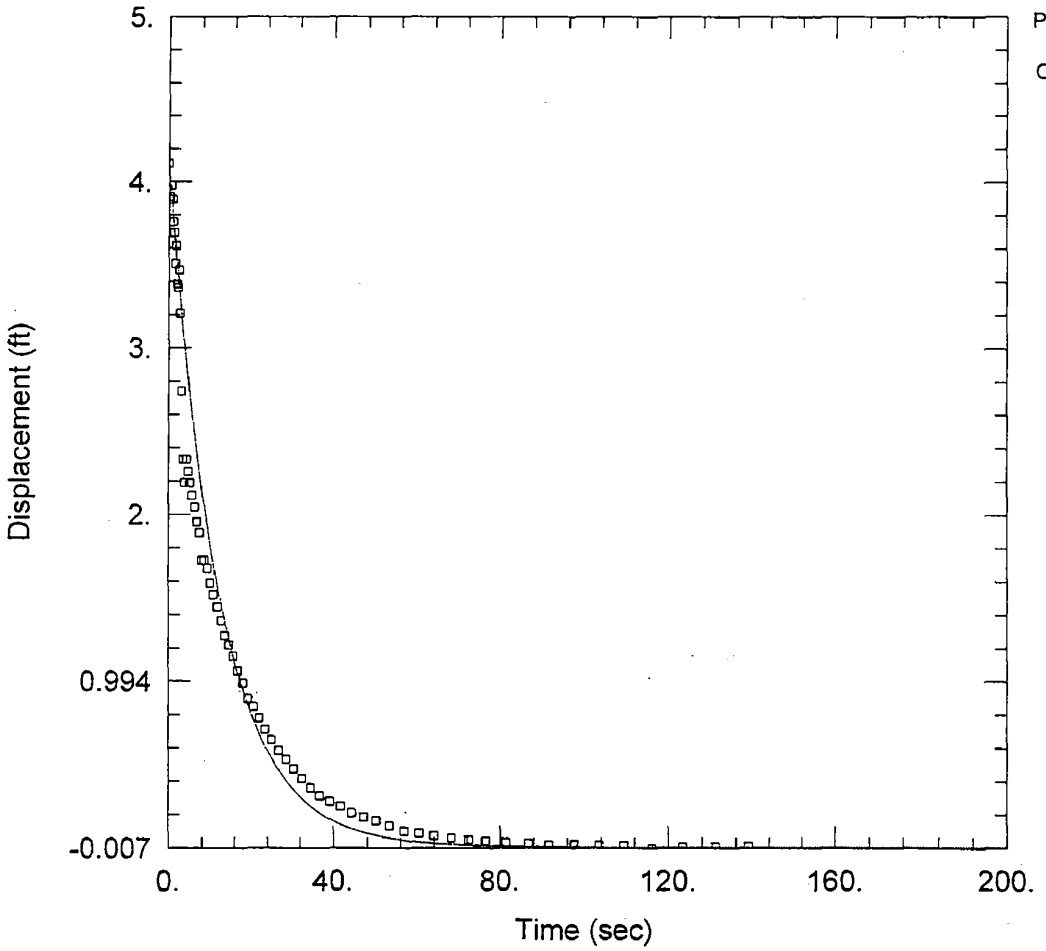
WELL DATA (OW-10 L)

Initial Displacement: 4.108 ft
Total Well Penetration Depth: 137. ft
Casing Radius: 0.083 ft
Static Water Column Height: 85.79 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 9.825 ft/day
y0 = 3.134 ft

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



OW-10 L FALLING HEAD TEST

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: OW-10 L
Test Date: 2/28/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-10 L)

Initial Displacement: 4.108 ft
Total Well Penetration Depth: 137. ft
Casing Radius: 0.083 ft

Static Water Column Height: 85.79 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

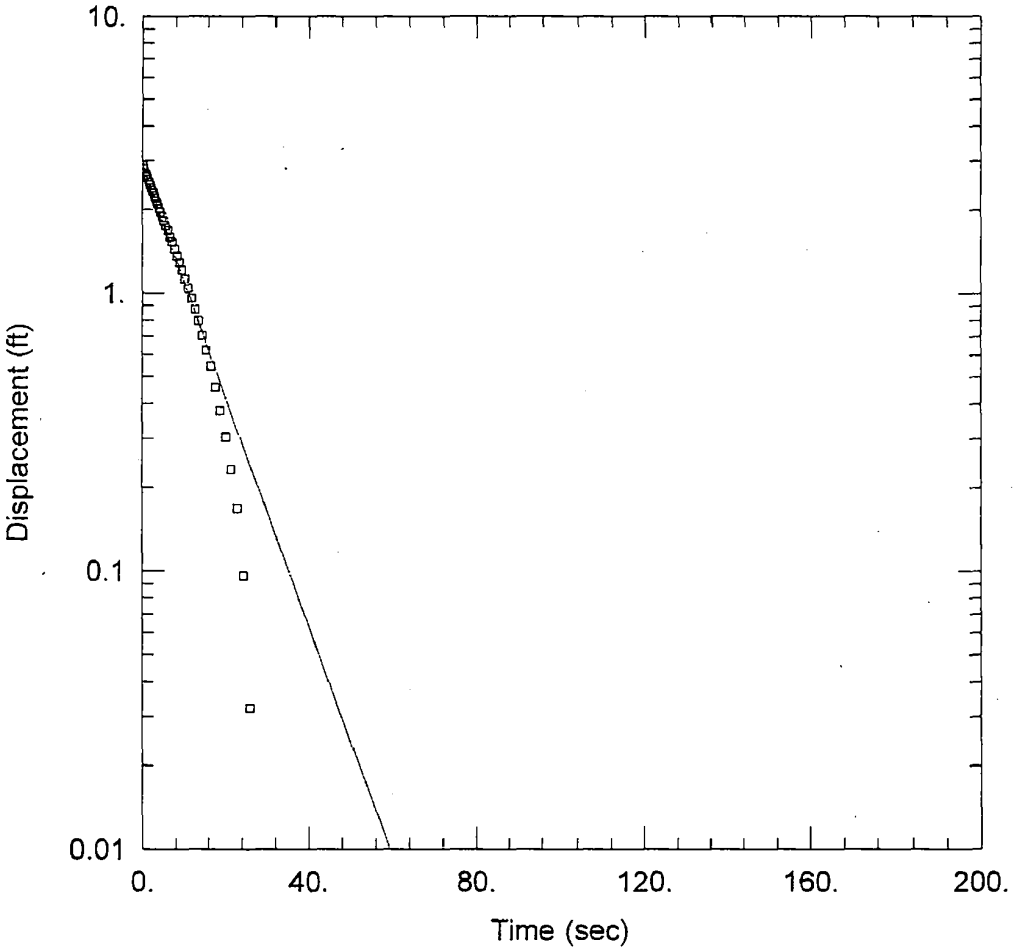
Solution Method: Butler

K = 12.9 ft/day

Le = 10. ft

Prepared by: CHB Date: 4-4-08

Checked by: BWA Date: 4/4/08



OW-10 L RISING HEAD

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: OW-10 L
Test Date: 2/28/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-10 L)

Initial Displacement: 2.896 ft
Total Well Penetration Depth: 137. ft
Casing Radius: 0.083 ft

Static Water Column Height: 85.79 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

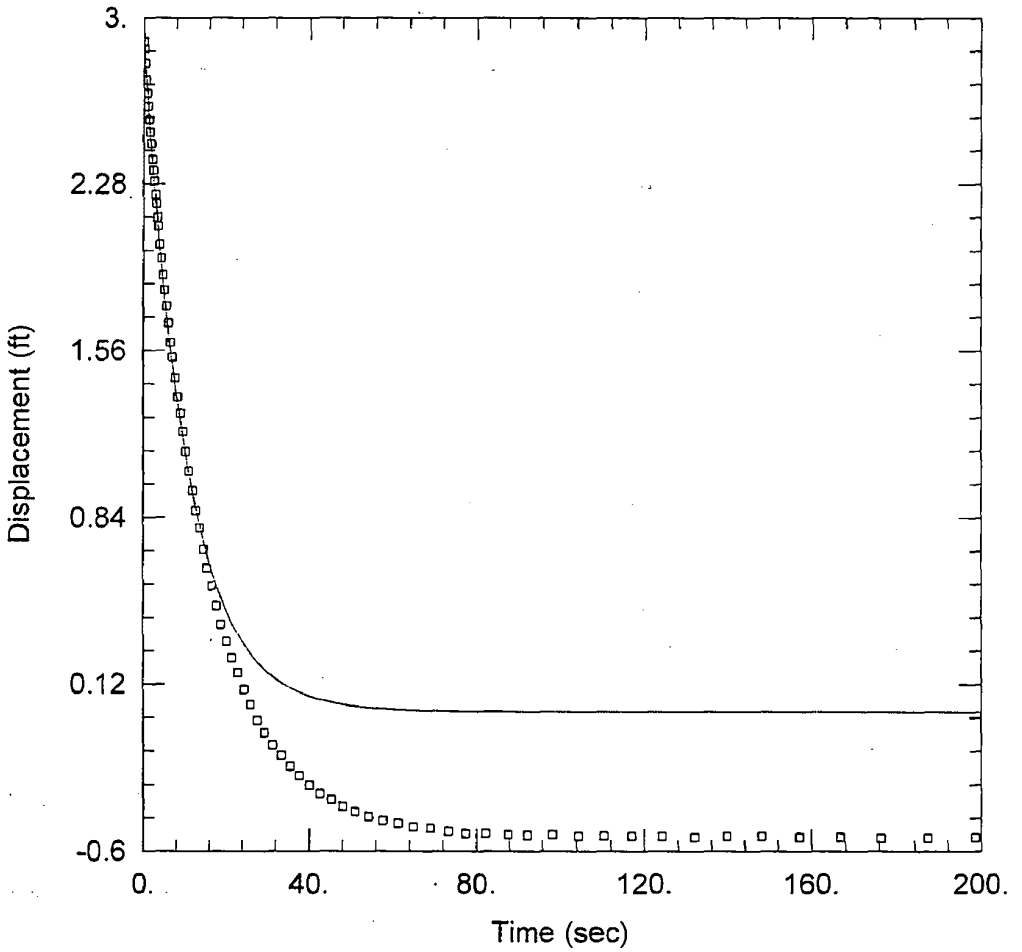
Aquifer Model: Confined

Solution Method: Bouwer-Rice

K = 14.94 ft/day

y0 = 2.861 ft

Prepared by: CAB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



OW-10 L RISING HEAD

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: OW-10 L
Test Date: 2/28/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-10 L)

Initial Displacement: 2.896 ft
Total Well Penetration Depth: 137. ft
Casing Radius: 0.083 ft

Static Water Column Height: 85.79 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 14.89 ft/day

Le = 1. ft

MACTEC

Checked by: CHB Date: 4-4-08

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-10U
Client: **Bechtel**	Contractor: **MACTEC**		
Location: Victoria	MACTEC Rep: Jeff moore	Date: 1/21/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	56.96 feet		
Total Well Depth	60.10 feet		
Static Water Column Height (H)	3.14 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	NA	NA
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	48 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	103078		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-10U Background	OW-10U Falling Head	OW-10U Rising Head
Start Time	NO TESTING DUE TO LACK OF Sufficient water		
End Time			
Notes			

Rev 0

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2301 L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/6/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	44.81 feet		
Total Well Depth	143.15 feet		
Static Water Column Height (H)	98.34 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~3.7	~3.7 but maybe 6'
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	130 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	JAm 2-6-08 ~~109626~~ 109262		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-2301 L Background	OW-2301 L Falling Head	OW-2301 L Rising Head
Start Time	11:42:33	12:11:34	12:15:52
End Time	12:07:23	12:14:33	12:19:25

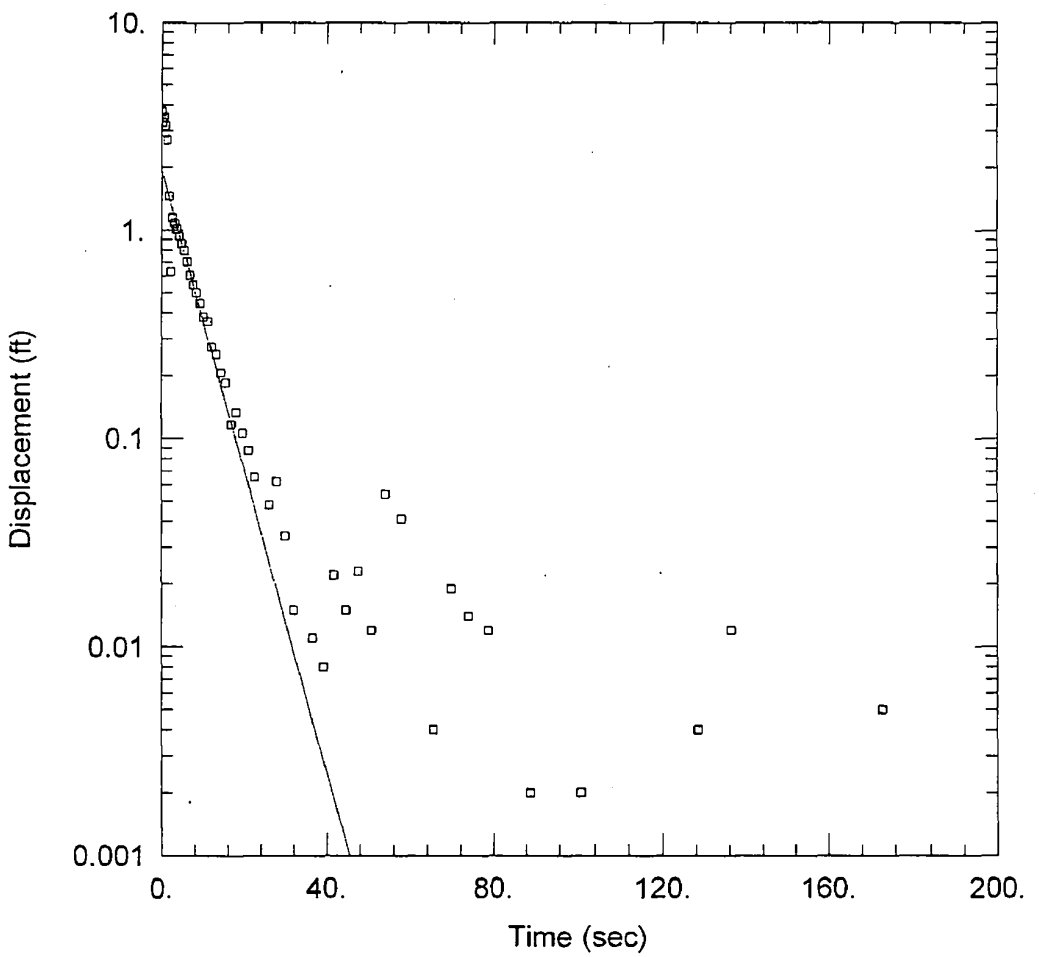
Notes

Rising Head Data shows a displacement of 6', but look closely it might be erroneous, more likely 3.7'

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: [illegible] Date: 11/4/08



OW-2301L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2301L
Test Date: 2-6-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2301L)

Initial Displacement: 3.713 ft
Total Well Penetration Depth: 140. ft
Casing Radius: 0.083 ft

Static Water Column Height: 98.34 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

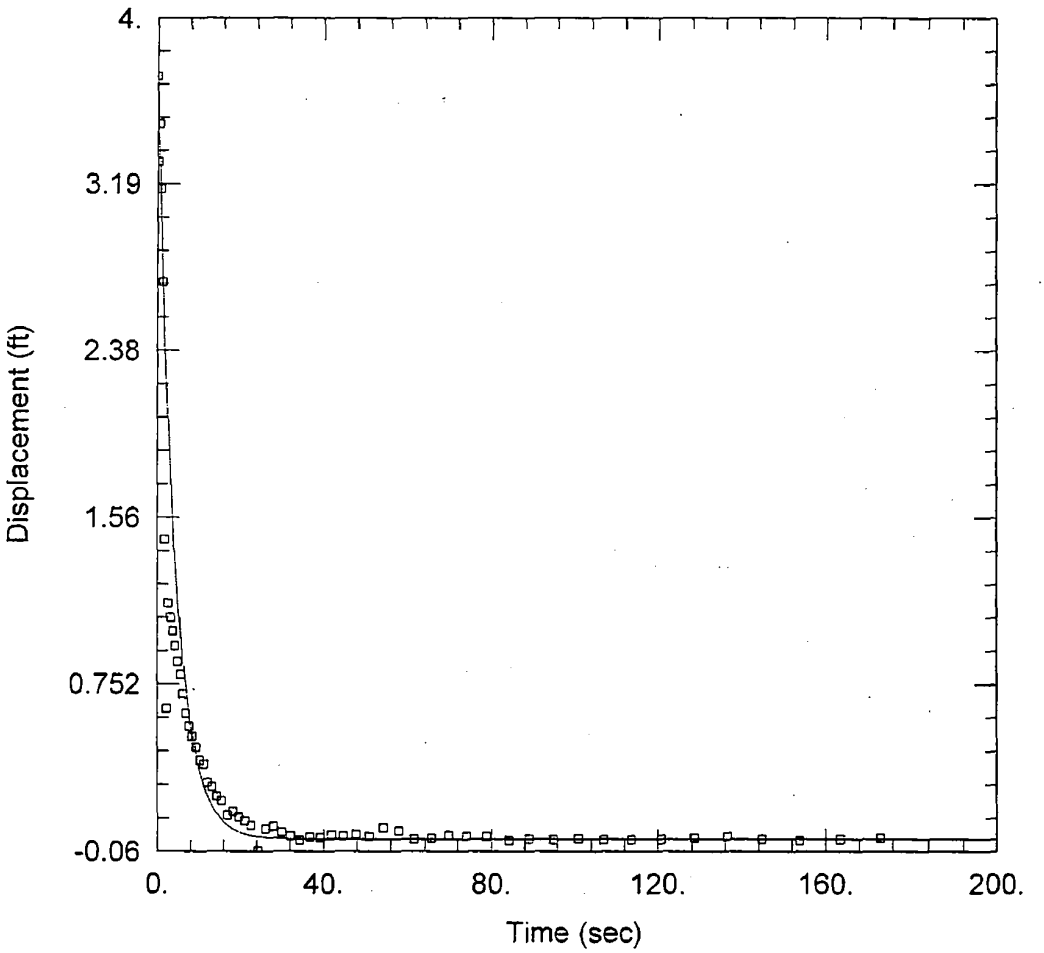
Solution Method: Bouwer-Rice

K = 26.18 ft/day

y0 = 1.954 ft

Prepared by: LWSi Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2301L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2301L
Test Date: 2-6-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2301L)

Initial Displacement: 3.713 ft
Total Well Penetration Depth: 140. ft
Casing Radius: 0.083 ft

Static Water Column Height: 98.34 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

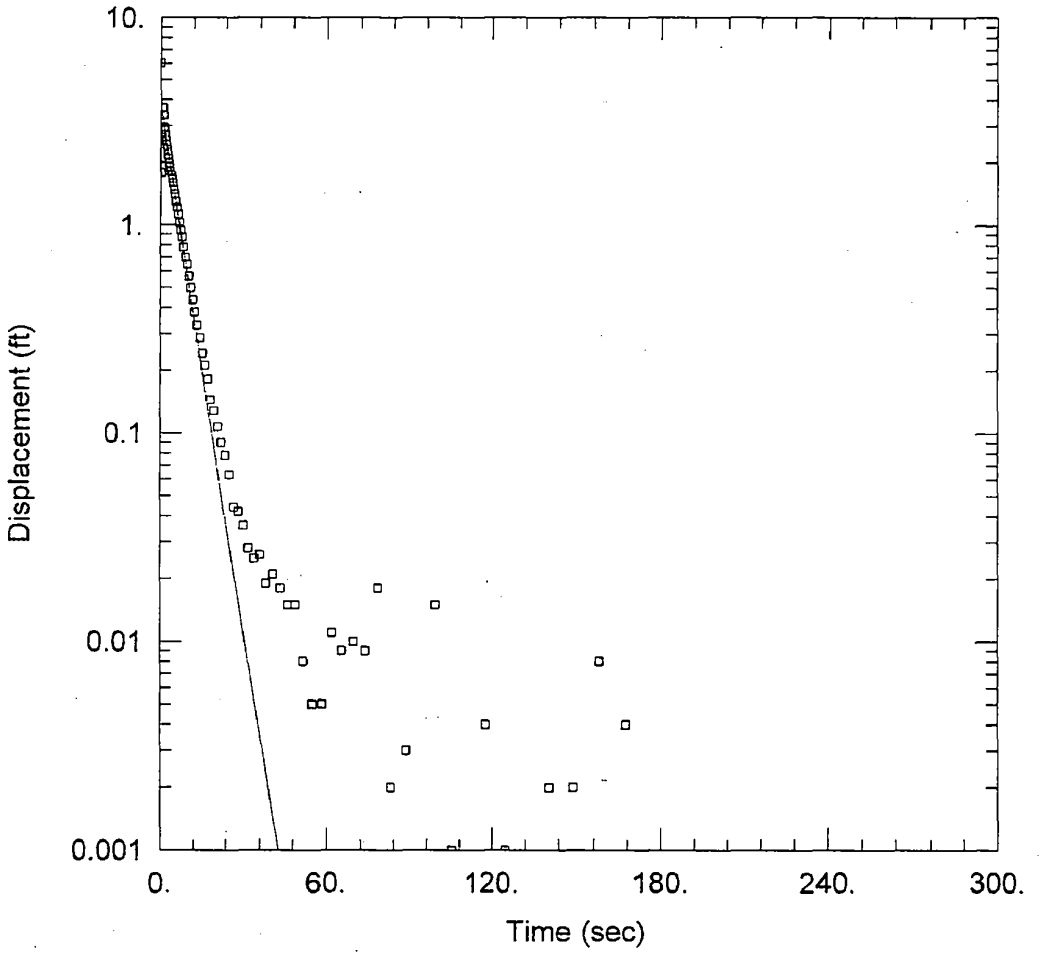
Solution Method: Butler

K = 38.14 ft/day

Le = 1.42 ft

Prepared by: WSL Date: 4-4-08

Checked by: BLJ Date: 4/4/08



OW-2301L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2301L
Test Date: 2-6-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2301L)

Initial Displacement: 6.021 ft
Total Well Penetration Depth: 140. ft
Casing Radius: 0.083 ft

Static Water Column Height: 98.34 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

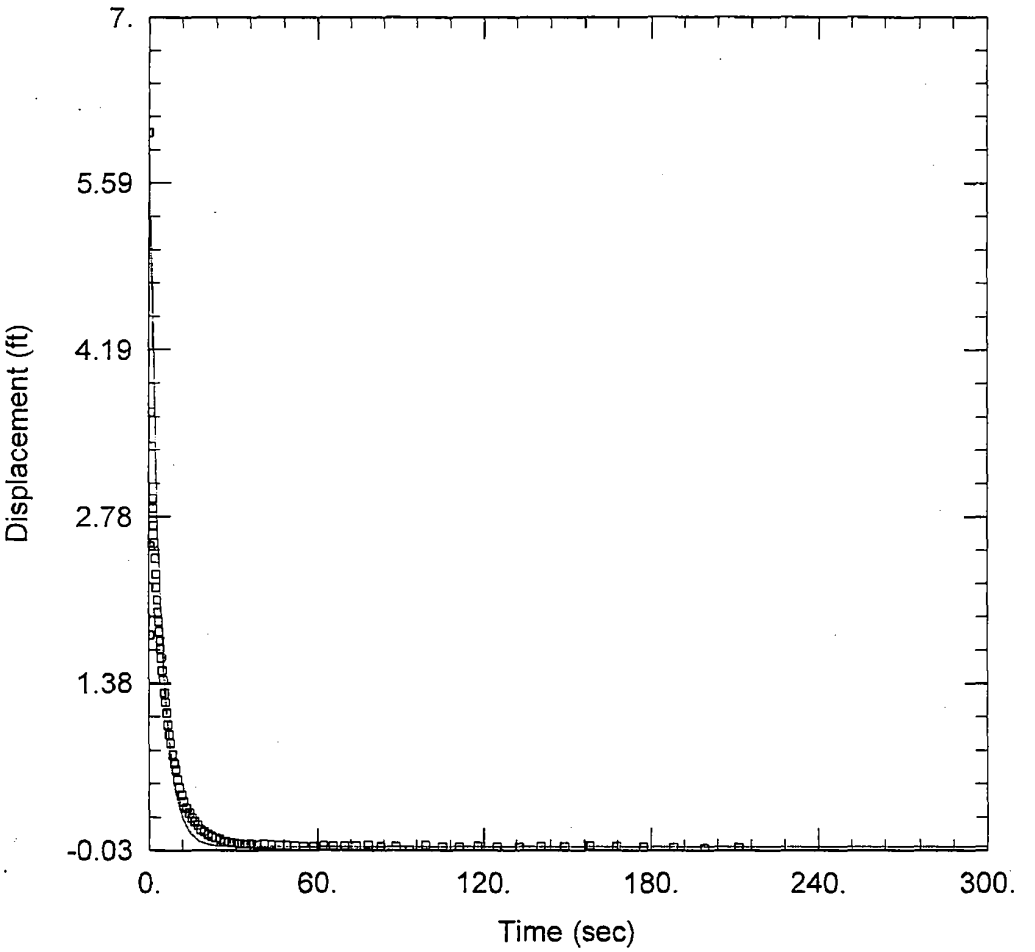
Solution Method: Bouwer-Rice

K = 30.29 ft/day

y0 = 3.8 ft

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2301L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2301L
Test Date: 2-6-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2301L)

Initial Displacement: 6.021 ft
Total Well Penetration Depth: 140. ft
Casing Radius: 0.083 ft

Static Water Column Height: 98.34 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 42.9 ft/day

Le = 0.1 ft

Checked by: CAB Date: 4-4-08

MACTEC

SLUG TEST REPORT

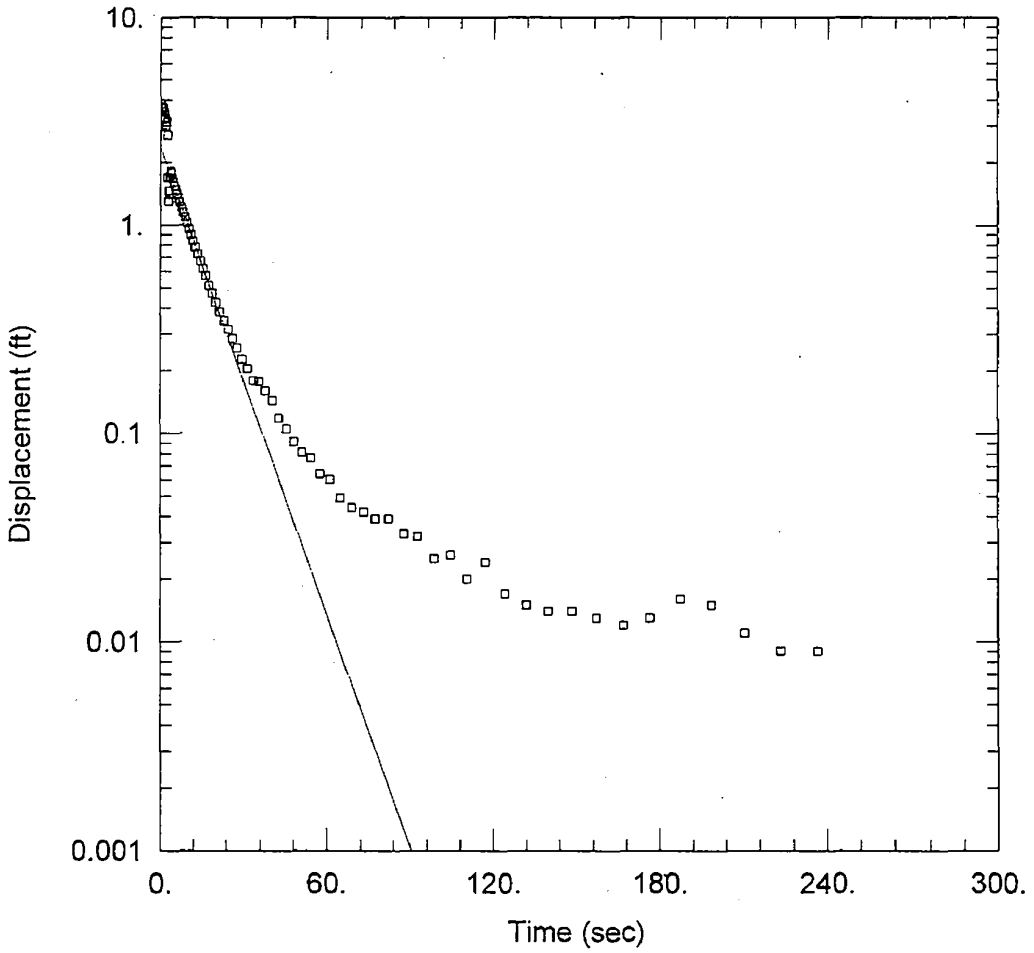
Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2301 U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/6/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	33.02 feet		
Total Well Depth	63.0 feet		
Static Water Column Height (H)	30.02 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4'	~4'
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	50 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	106721		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-2301 U Background	OW-2301 U Falling Head	OW-2301 U Rising Head
Start Time	11:35:16	11:53:54	12:03:35
End Time	11:51:16	11:57:53	12:06:34
Notes			

Rev 0

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2301U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2301U
Test Date: 2-6-08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2301U)

Initial Displacement: 3.849 ft
Total Well Penetration Depth: 60. ft
Casing Radius: 0.083 ft

Static Water Column Height: 30.02 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

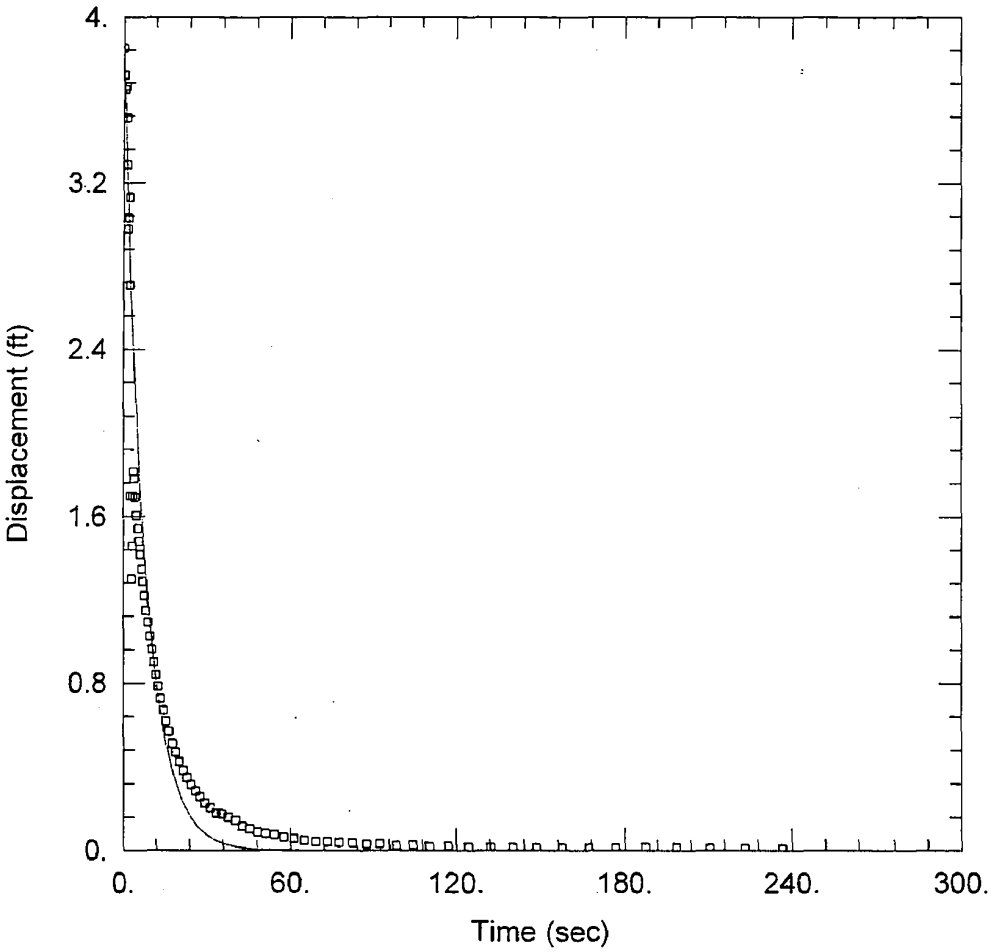
Solution Method: Bouwer-Rice

K = 12.29 ft/day

y0 = 2.375 ft

Prepared by: CWSi Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2301U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2301U
Test Date: 2-6-08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2301U)

Initial Displacement: 3.849 ft
Total Well Penetration Depth: 60. ft
Casing Radius: 0.083 ft

Static Water Column Height: 30.02 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

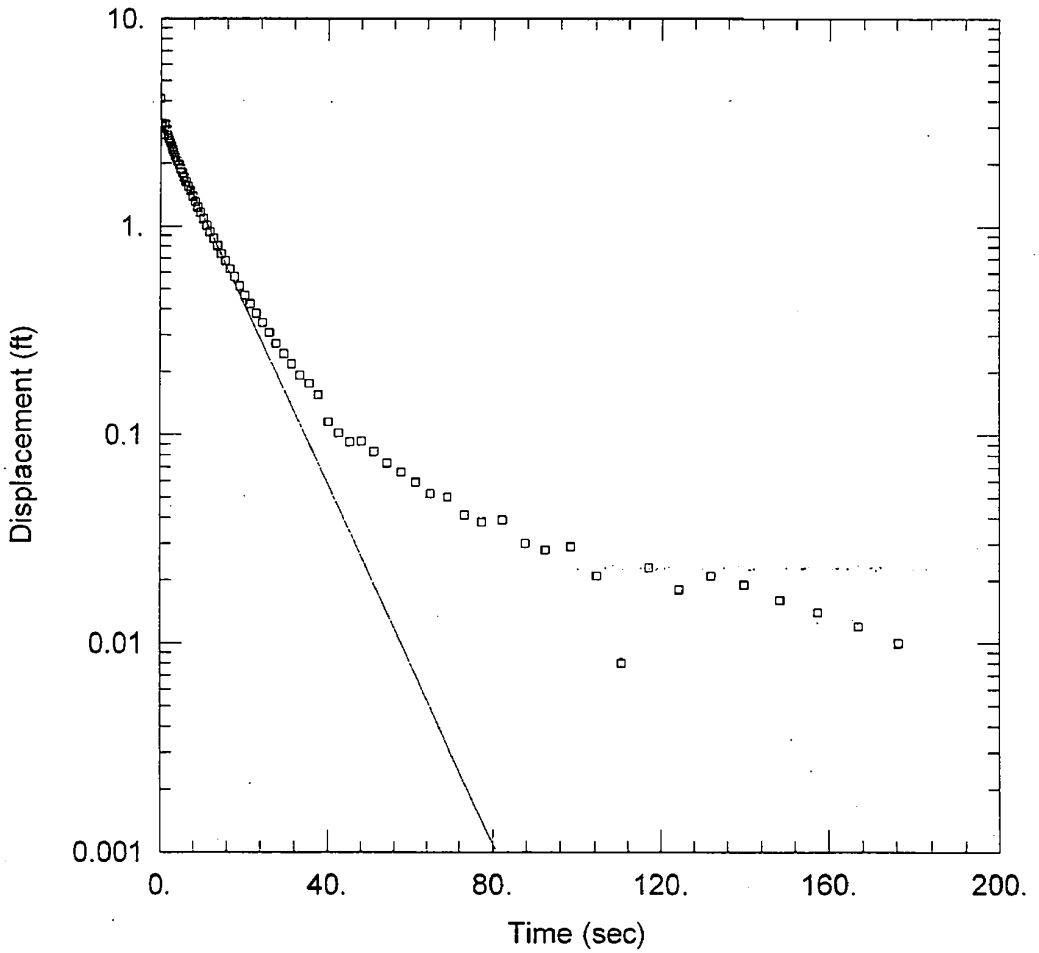
K = 20.62 ft/day

Solution Method: Butler

Le = 0.1 ft

Prepared by: WSC Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2301U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2301U
Test Date: 2-6-08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2301U)

Initial Displacement: 4.11 ft
Total Well Penetration Depth: 60. ft
Casing Radius: 0.083 ft

Static Water Column Height: 30.02 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

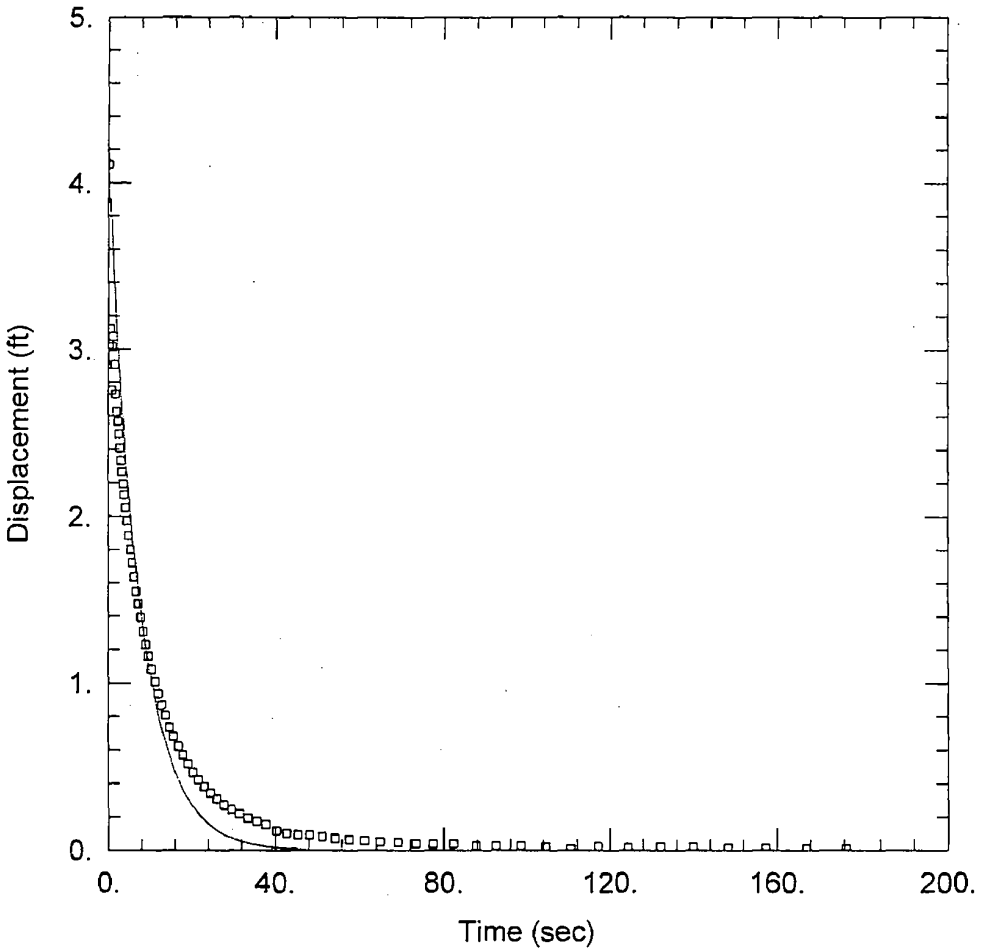
Solution Method: Bouwer-Rice

K = 14.24 ft/day

y0 = 3.141 ft

Prepared by: WSL Date: 4-4-08

Checked by: BAA Date: 4/4/08



OW-2301U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2301U
Test Date: 2-6-08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2301U)

Initial Displacement: 4.11 ft
Total Well Penetration Depth: 60. ft
Casing Radius: 0.083 ft

Static Water Column Height: 30.02 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 21.46 ft/day

Le = 0.1 ft

Checked by: CKB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2302
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: J. Moore	Date: 1/19/08	
UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	44.86 feet		
Total Well Depth	153.50 feet		
Static Water Column Height (H)	108.64 feet		

	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4 Feet	~4 Feet

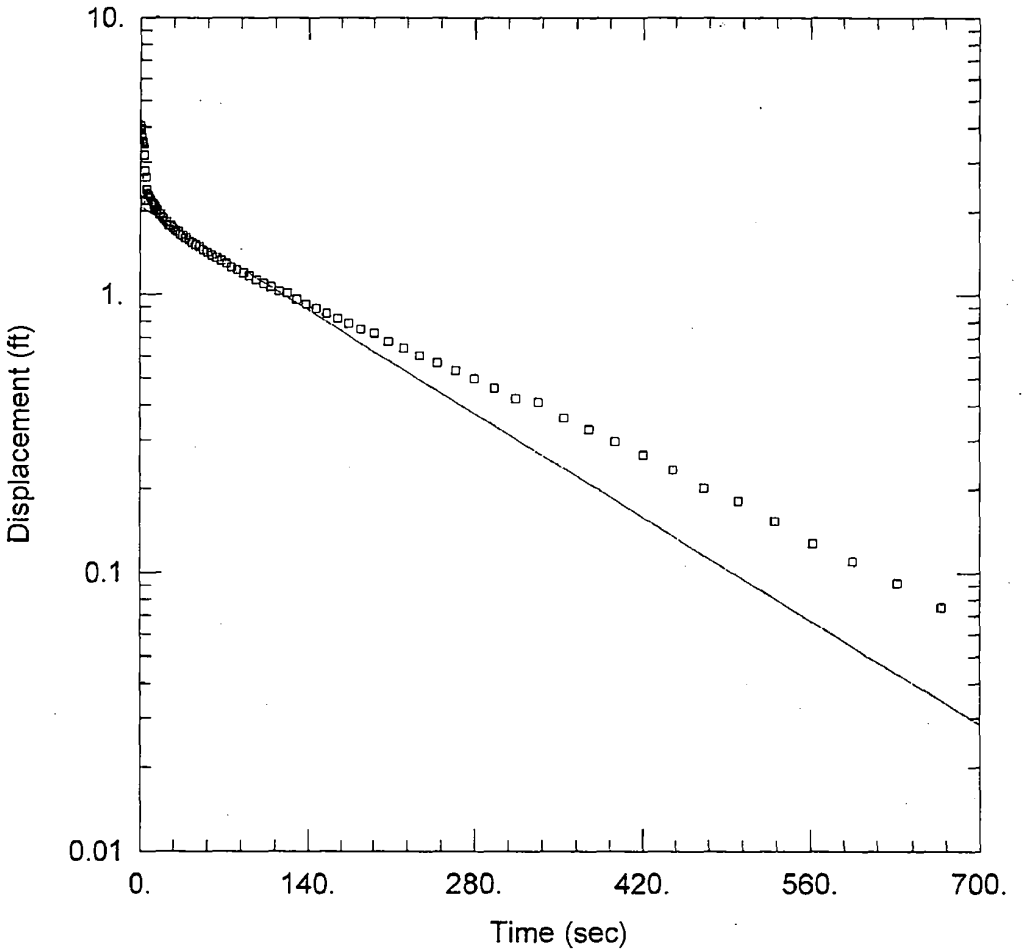
Saturated Thickness (b)	feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	140 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	103078
Slug Data	Small
Length	5.5 feet
weight	
Diameter	1.625 inches

Slug Test File	Background	Falling	Rising
File Name	OW-2302 Background	OW-2302 Falling Head	OW-2302 Rising Head
Start Time	10:46:21 Am	11:27:33 Am	11:21:31 Am
End Time	11:01:21 Am	11:13:45 Am	11:26:32 Am
Notes	Inadvertently Logged Falling Head		

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2302L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302L
Test Date: 1-19-08

AQUIFER DATA

Saturated Thickness: 3. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302L)

Initial Displacement: 4.065 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 108.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

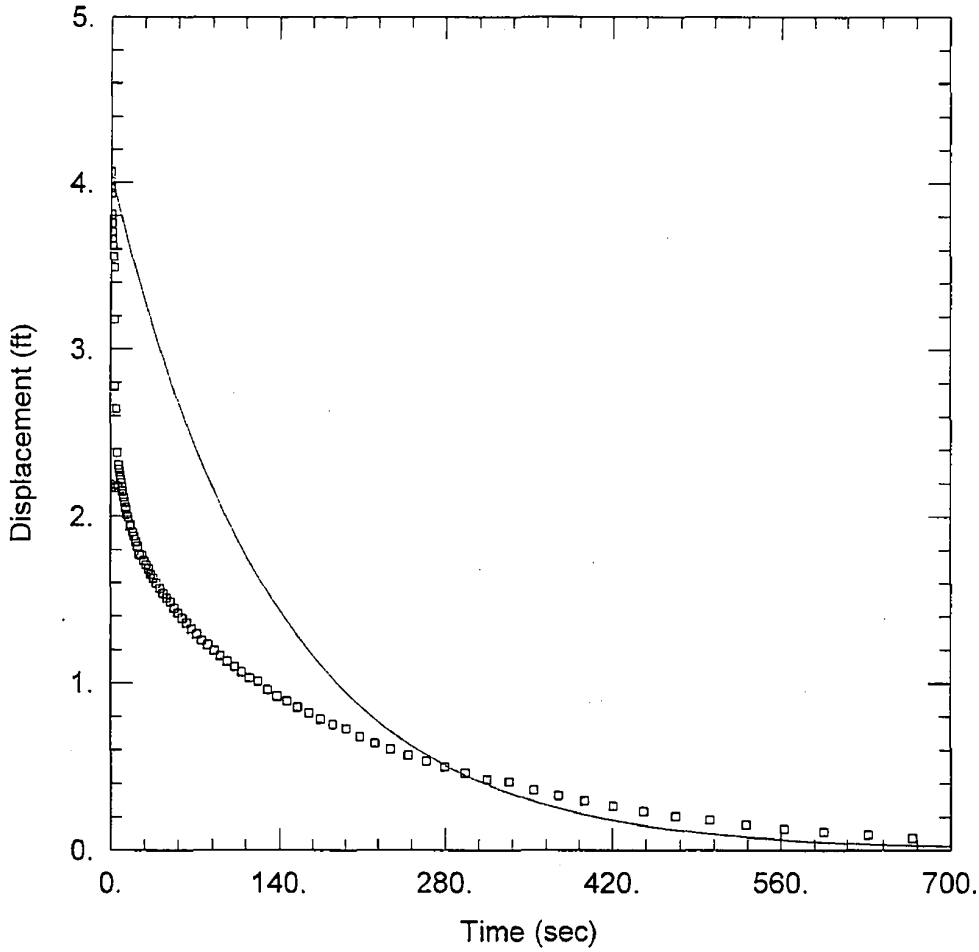
Solution Method: Bouwer-Rice

K = 0.9704 ft/day

y0 = 2.073 ft

Prepared by: WSC Date: 4-4-08

Checked by: BWH Date: 4/4/08



OW-2302L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302L
Test Date: 1-19-08

AQUIFER DATA

Saturated Thickness: 3. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302L)

Initial Displacement: 4.065 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 108.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

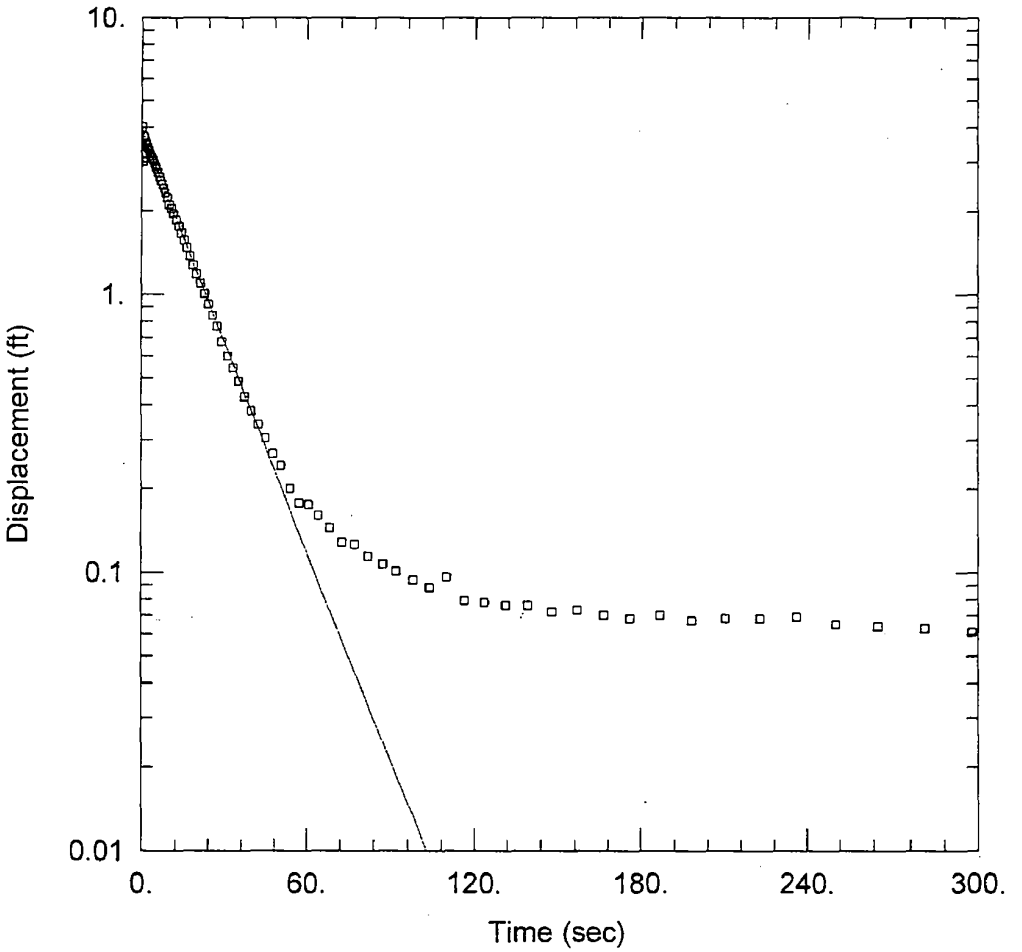
Solution Method: Butler

K = 1.171 ft/day

Le = 1. ft

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2302L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302L
Test Date: 1-19-08

AQUIFER DATA

Saturated Thickness: 3. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302L)

Initial Displacement: 4.019 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 108.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

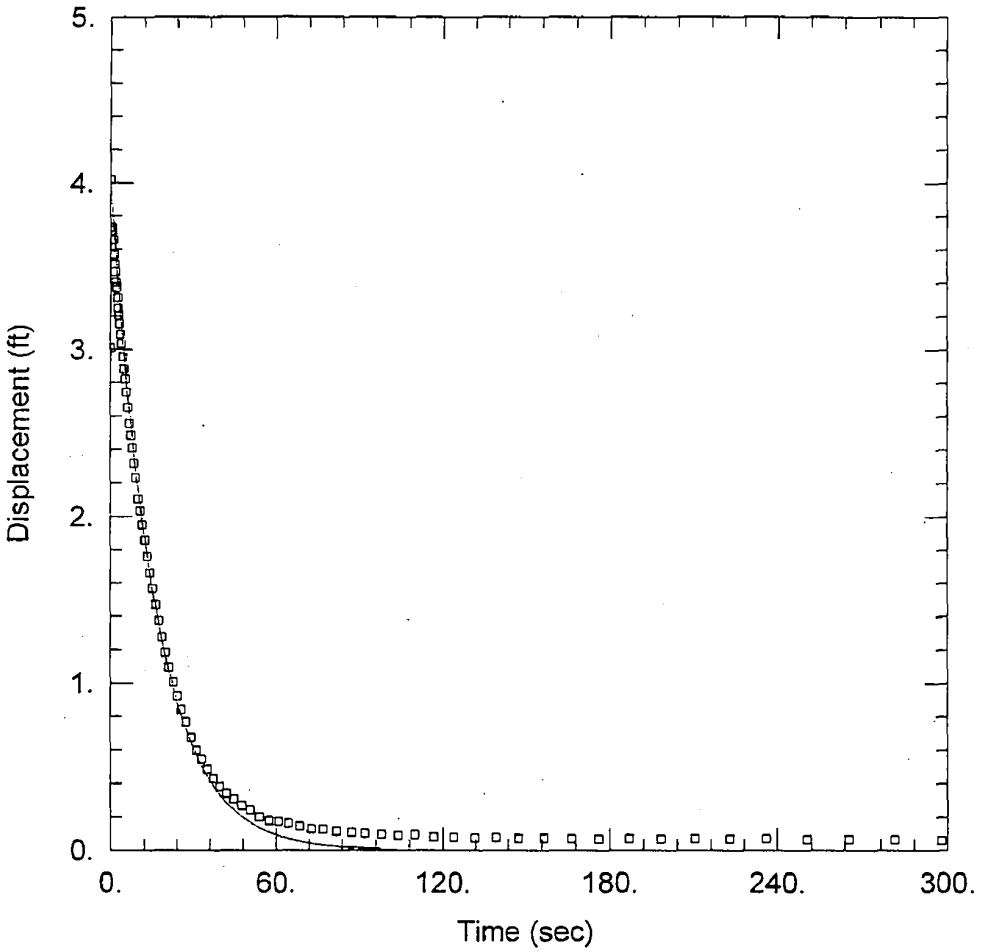
Solution Method: Bouwer-Rice

K = 9.157 ft/day

y0 = 3.787 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: BLM Date: 4/4/08



OW-2302L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302L
Test Date: 1-19-08

AQUIFER DATA

Saturated Thickness: 3. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302L)

Initial Displacement: 4.019 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 108.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 9.962 ft/day

Le = 0.1 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2302U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 1/18/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	43.04 feet
Total Well Depth	98.18 feet
Static Water Column Height (H)	55.14 feet

	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~ 3 feet	~ 2.4

Saturated Thickness (b)	feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	85 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	112299
Slug Data	Slug #1
Length	5.5 ft
weight	
Diameter	1.625 inches

Slug Test File	Background	Falling	Rising
File Name	OW-2302U Background	OW-2302U Falling Head	OW-2302U Rising Head
Start Time	4:38:19 Pm	4:38:29 Pm	5:33:36 Pm (Rising)
End Time	4:53:19 Pm	5:01:30 pm	5:07:35 Pm (Rising)

Notes

[illegible] Rising Head

OW-2302U Rising Head 13

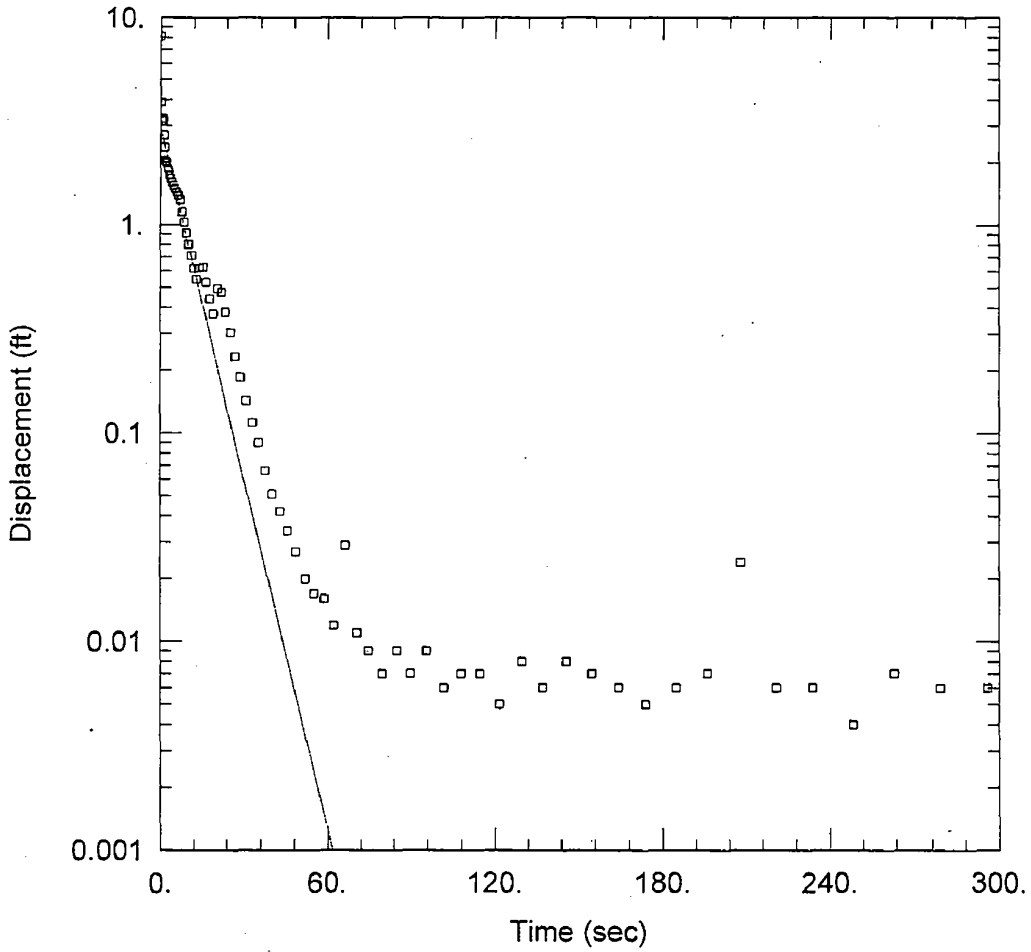
Start 5:13:37

End 5:17:37

Rev 0

Prepared by: WSW Date: 4-4-08

Checked by: BWA Date: 4/4/08



OW-2302U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302U)

Initial Displacement: 8.104 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 55.14 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

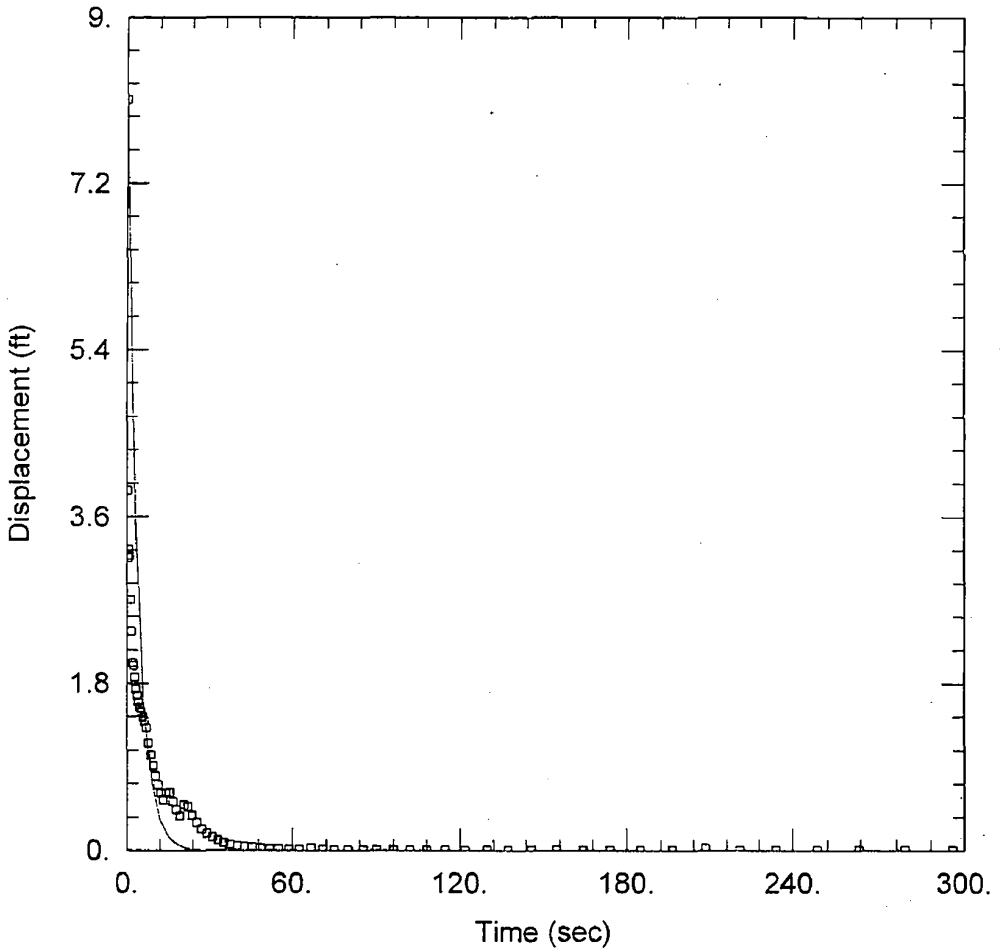
Solution Method: Bouwer-Rice

K = 19.49 ft/day

y0 = 2.961 ft

Prepared by: WSL Date: 4-4-08

Checked by: BWA Date: 4/4/08



OW-2302U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302U)

Initial Displacement: 8.104 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 55.14 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

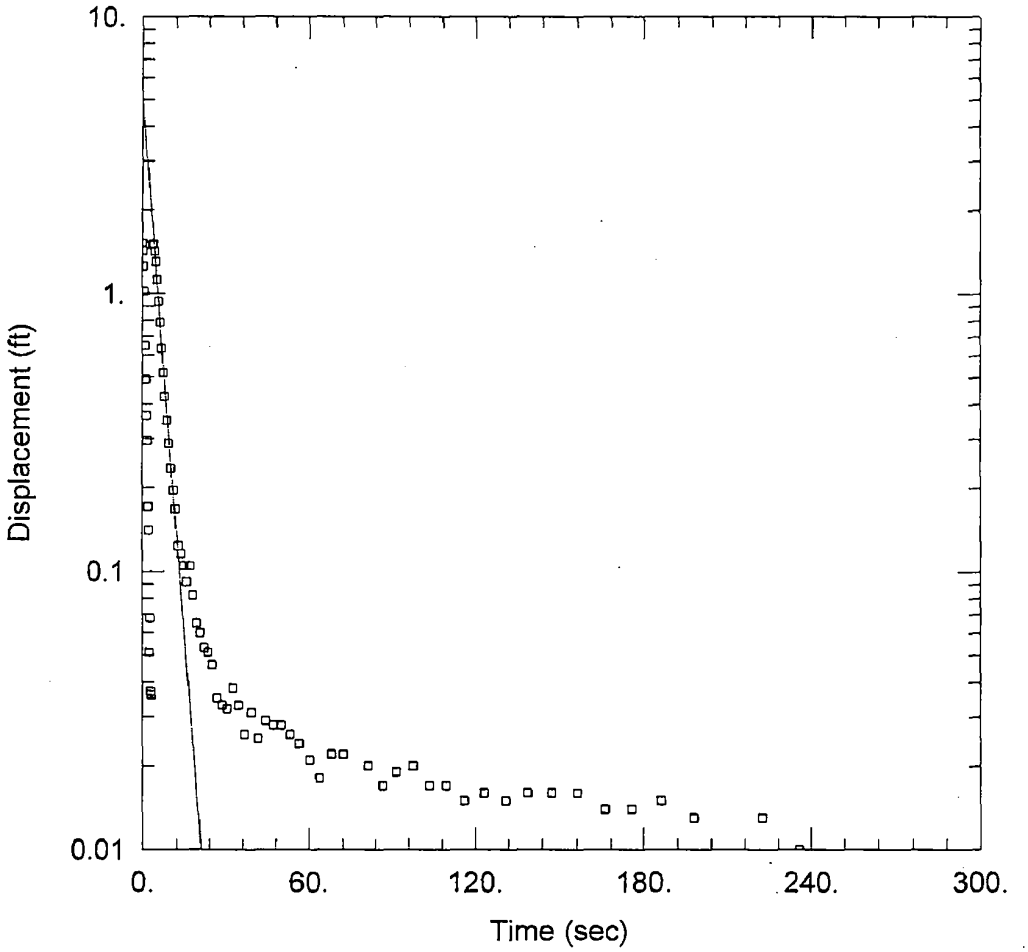
Solution Method: Butler

K = 42.45 ft/day

Le = 0.1 ft

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2302U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302)

Initial Displacement: 1.518 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 55.14 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

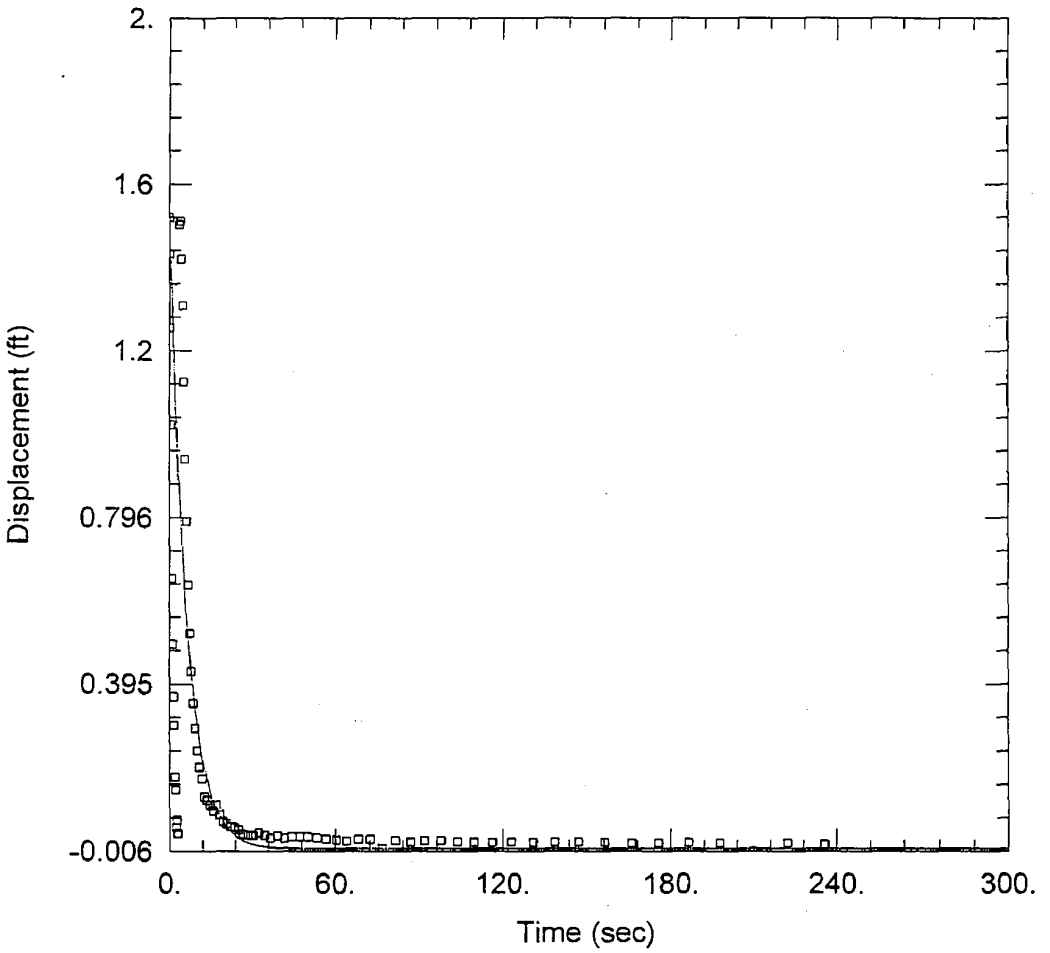
Solution Method: Bouwer-Rice

K = 45.01 ft/day

y0 = 5.067 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2302U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302)

Initial Displacement: 1.518 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 55.14 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

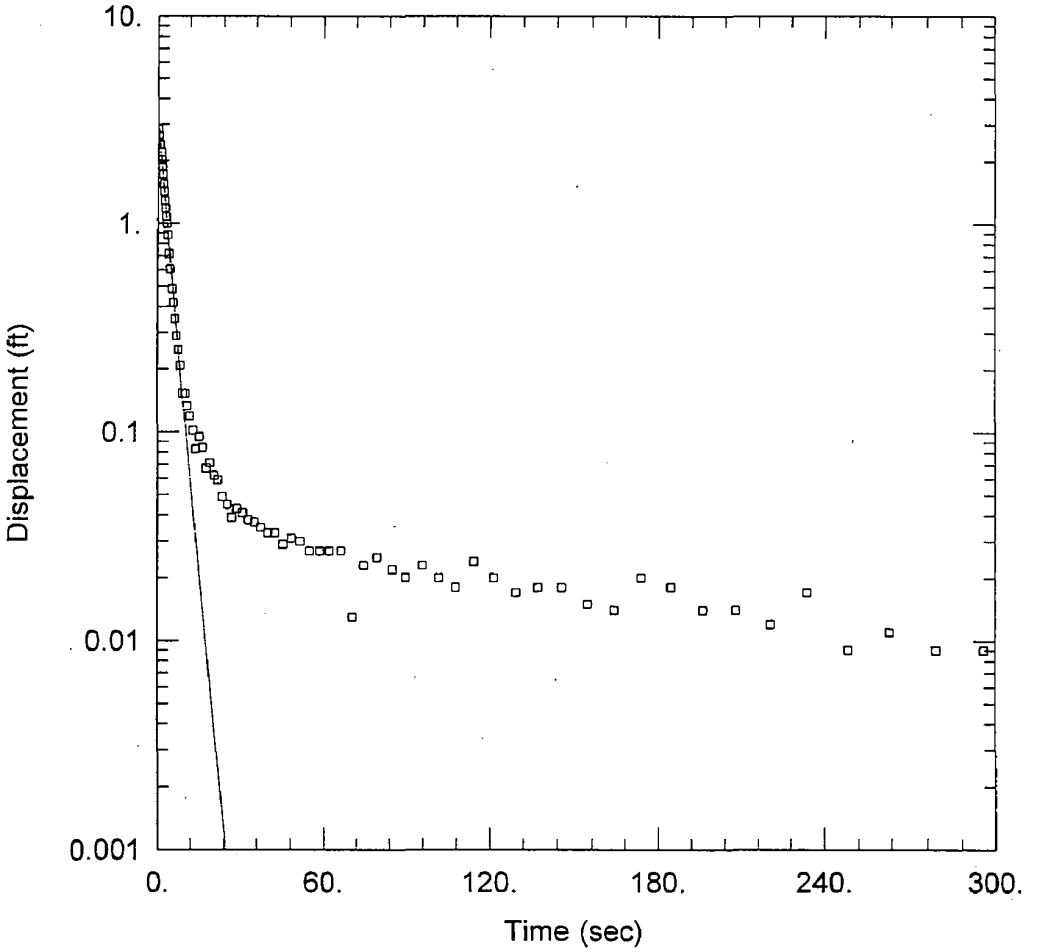
Solution Method: Butler

K = 25.94 ft/day

Le = 0.1 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: [illegible] Date: 4/4/08



OW-2302U RISING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302U)

Initial Displacement: 2.858 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 55.14 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

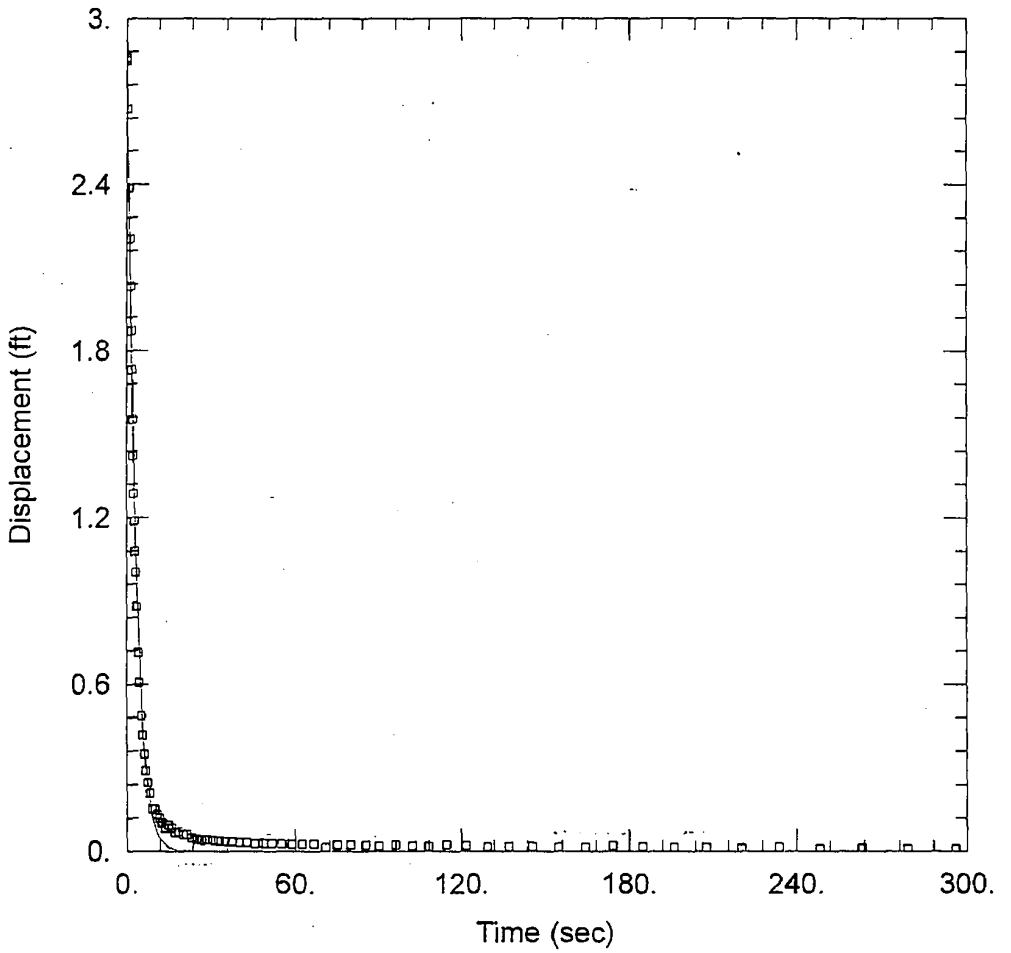
Solution Method: Bouwer-Rice

K = 48.96 ft/day

y0 = 3.019 ft

Prepared by: WSU Date: 4-4-08

Checked by: BLH Date: 4/9/08



OW-2302U RISING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2302U)

Initial Displacement: 2.858 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 55.14 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 50.07 ft/day

Le = 33.17 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2304L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	42.21 feet
Total Well Depth	98.44 feet
Static Water Column Height (H)	56.23 feet

	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4'	~3'

Saturated Thickness (b)	feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	85 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	102426
Slug Data	Slug #1
Length	5.5'
weight	
Diameter	1.625"

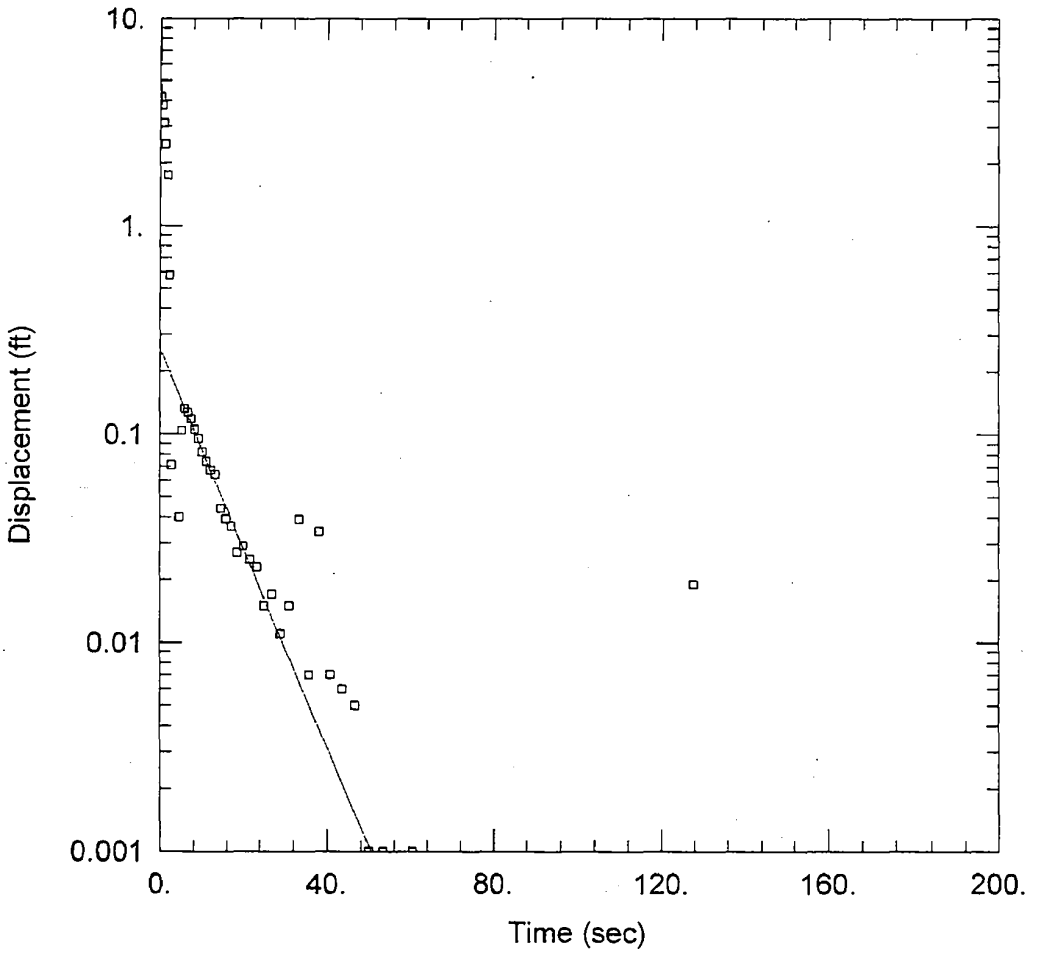
Slug Test File	Background	Falling	Rising
File Name	OW-2304L Background	OW-2304L Falling Head	OW-2304L Rising Head
Start Time	11:08:39	11:34:50	11:39:05
End Time	11:29:39	11:37:04	11:40:58

Notes

Rev 0

Prepared by: WSV Date: 4-4-08

Checked by: BHJ Date: 4/4/08



OW-2304L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2304U
Test Date: 2-07-08

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2304L)

Initial Displacement: 4.169 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 56.23 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

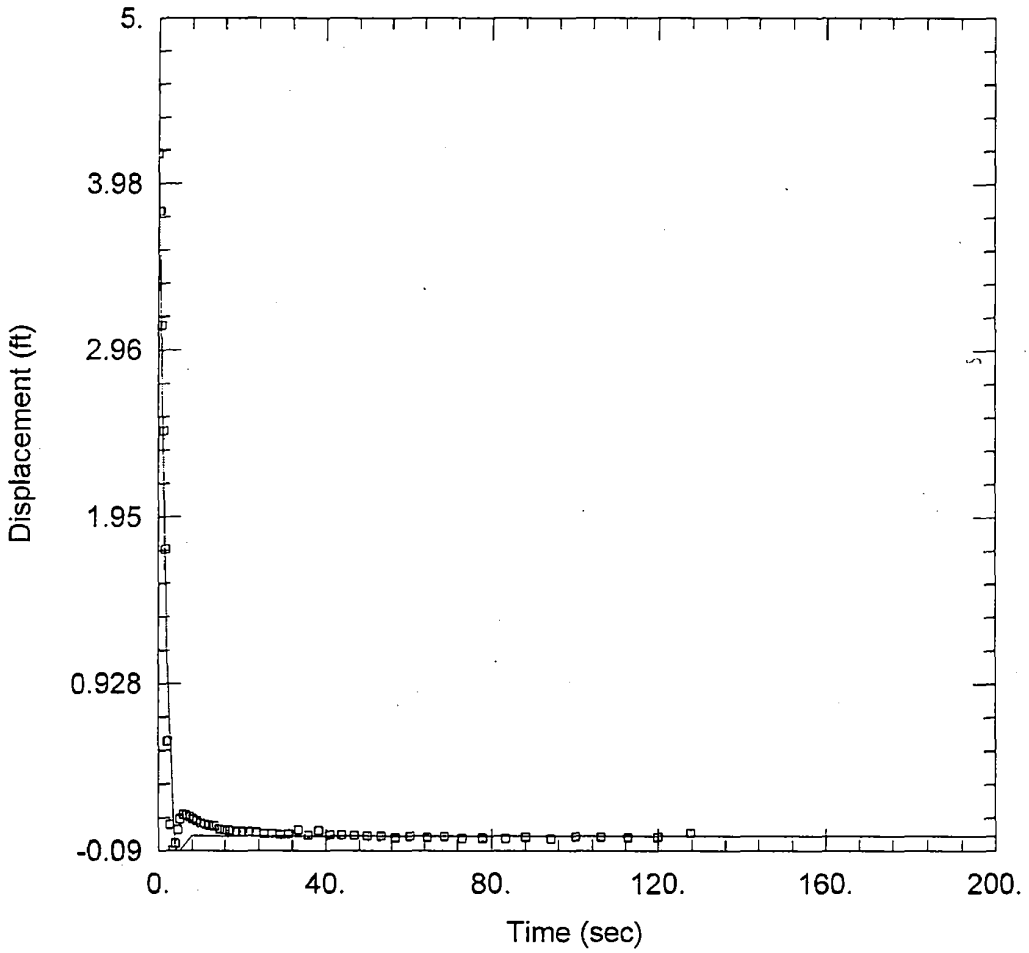
Solution Method: Bouwer-Rice

K = 16.58 ft/day

y0 = 0.2564 ft

Prepared by: WJ Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2304L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2304U
Test Date: 2-07-08

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2304L)

Initial Displacement: 4.169 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 56.23 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

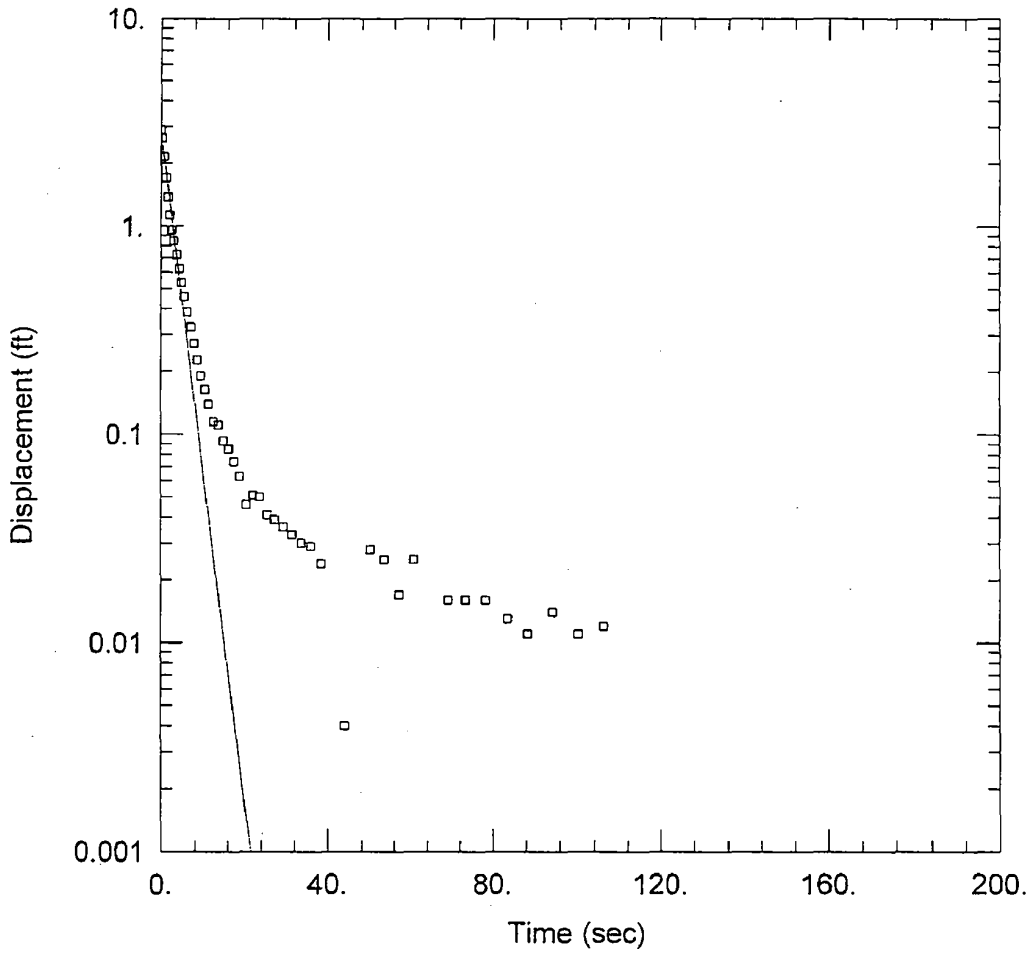
Solution Method: Butler

K = 115.2 ft/day

Le = 29.29 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2304L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2304U
Test Date: 2-07-08

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2304L)

Initial Displacement: 2.906 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 56.23 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

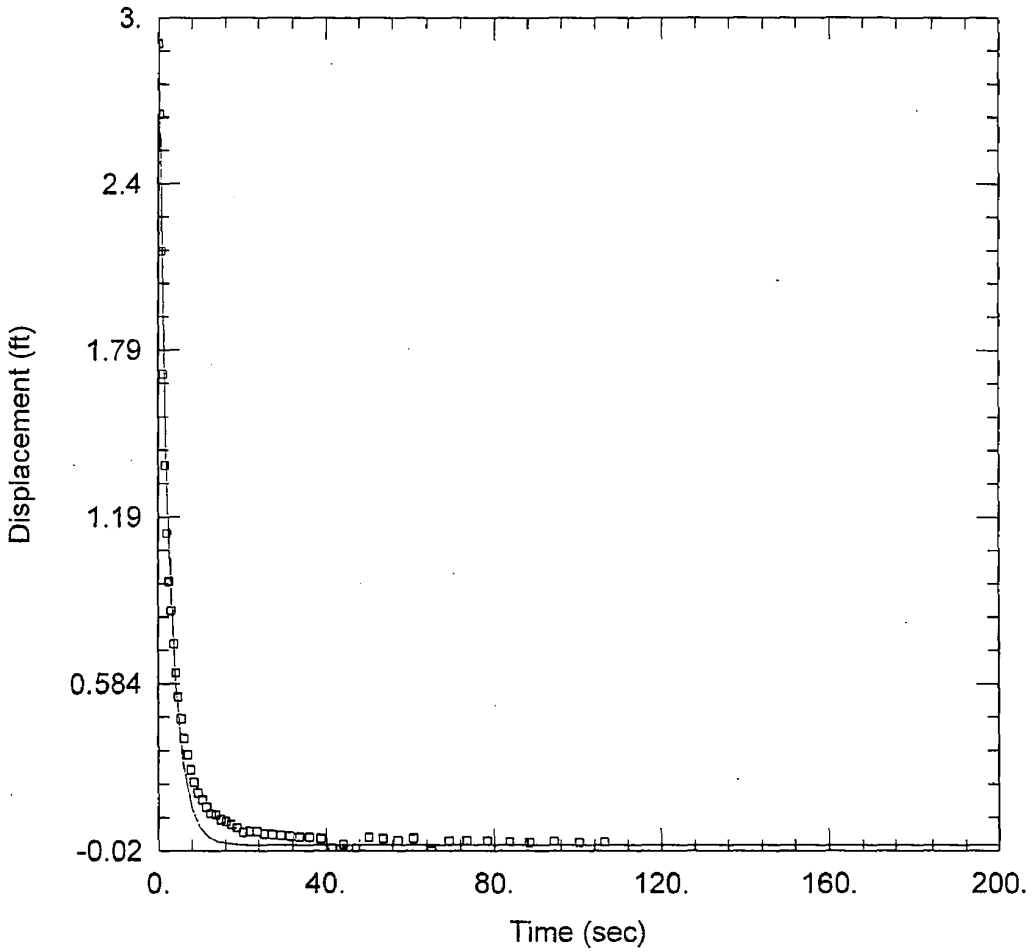
Solution Method: Bouwer-Rice

K = 55.97 ft/day

y0 = 2.838 ft

Prepared by: WSS Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2304L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2304U
Test Date: 2-07-08

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2304L)

Initial Displacement: 2.906 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 56.23 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 60.49 ft/day

Le = 0.1 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

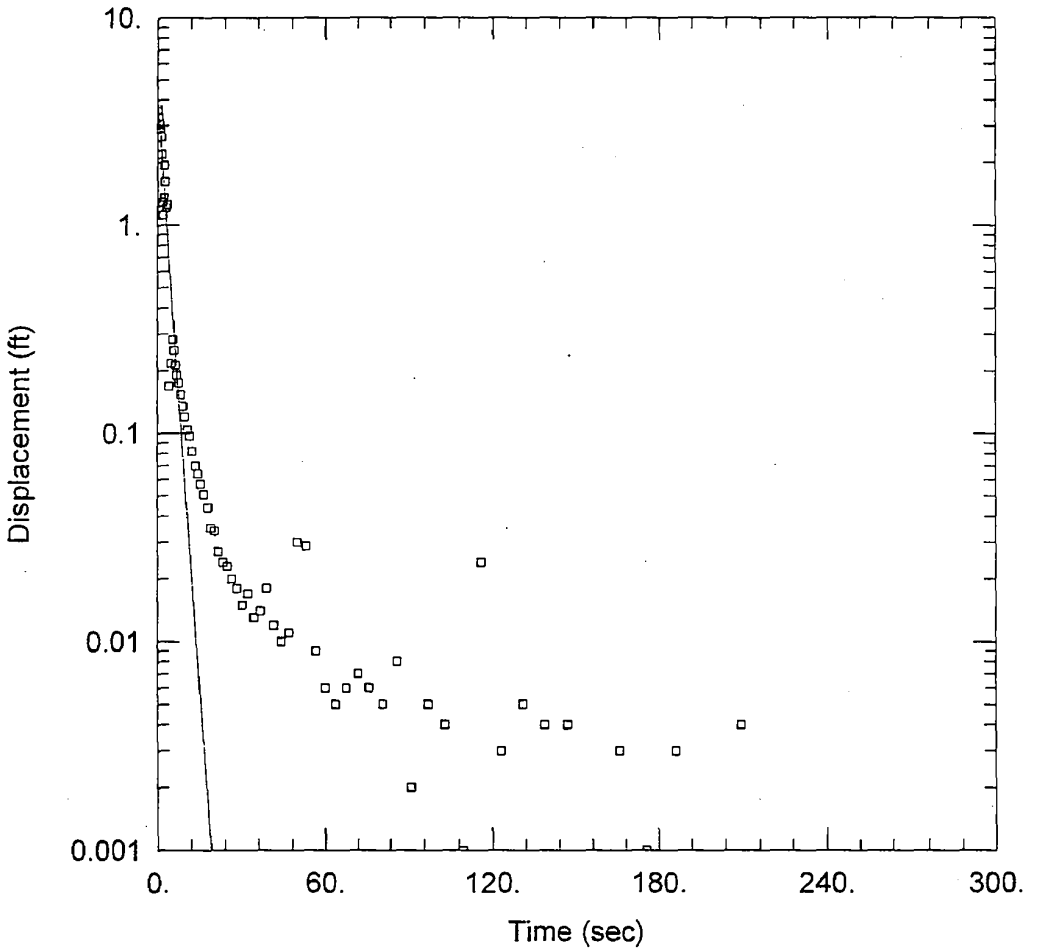
Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2304U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/7/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	33.86 feet		
Total Well Depth	54.33 feet		
Static Water Column Height (H)	20.47 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_o)	NA	~4.6	~2.6
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	40 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	109262		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625"		
Slug Test File	Background	Falling	Rising
File Name	OW-2304U Background	OW-2304U Falling Head	OW-2304U Rising Head
Start Time	11:01:16	11:21:22	11:26:38
End Time	11:16:16	11:24:55	11:29:17
Notes			

Rev 0

Prepared by: WJW Date: 4-4-08

Checked by: BMJ Date: 4/4/08



OW-2304U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302L
Test Date: 1-19-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2304U)

Initial Displacement: 3.6 ft
Total Well Penetration Depth: 50. ft
Casing Radius: 0.083 ft

Static Water Column Height: 20.47 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

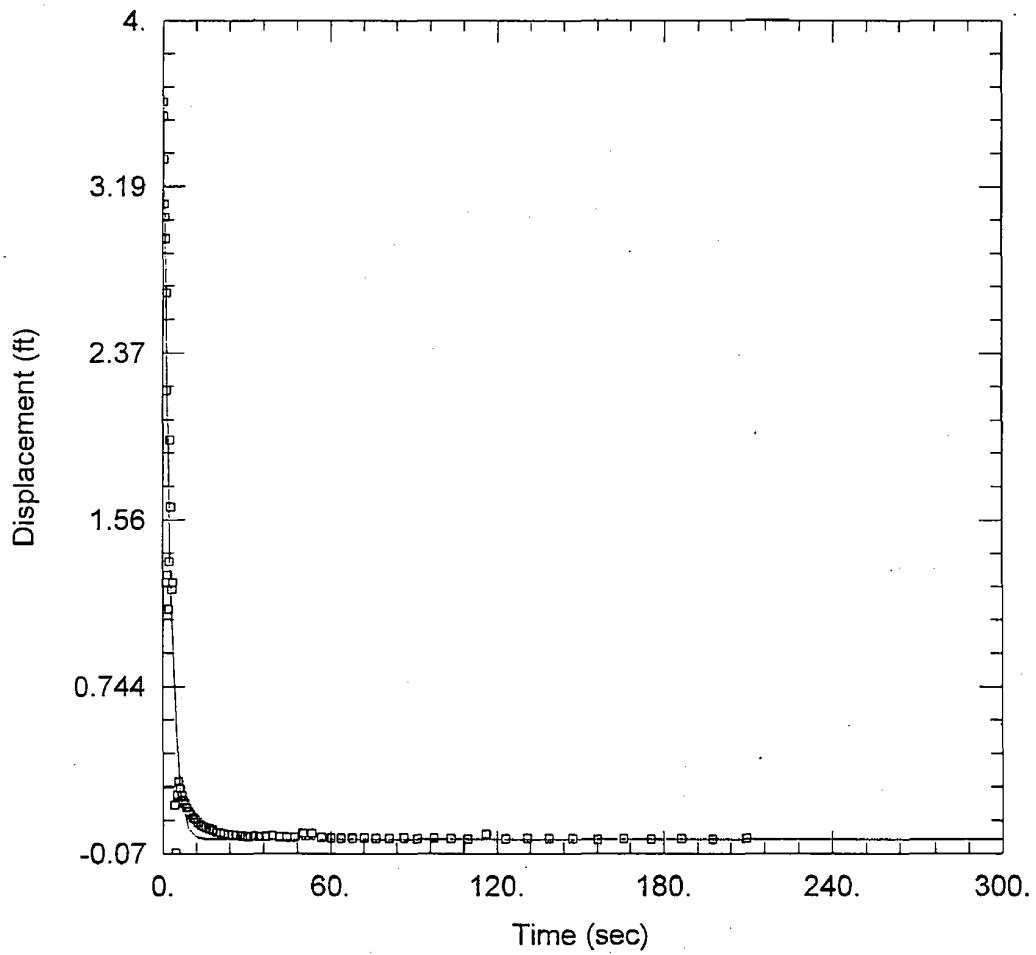
Solution Method: Bouwer-Rice

K = 60.44 ft/day

y0 = 4.154 ft

Prepared by: WB Date: 4-4-08

Checked by: BLJ Date: 4/4/08



OW-2304U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2302L
Test Date: 1-19-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2304U)

Initial Displacement: 3.6 ft
Total Well Penetration Depth: 50. ft
Casing Radius: 0.083 ft

Static Water Column Height: 20.47 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

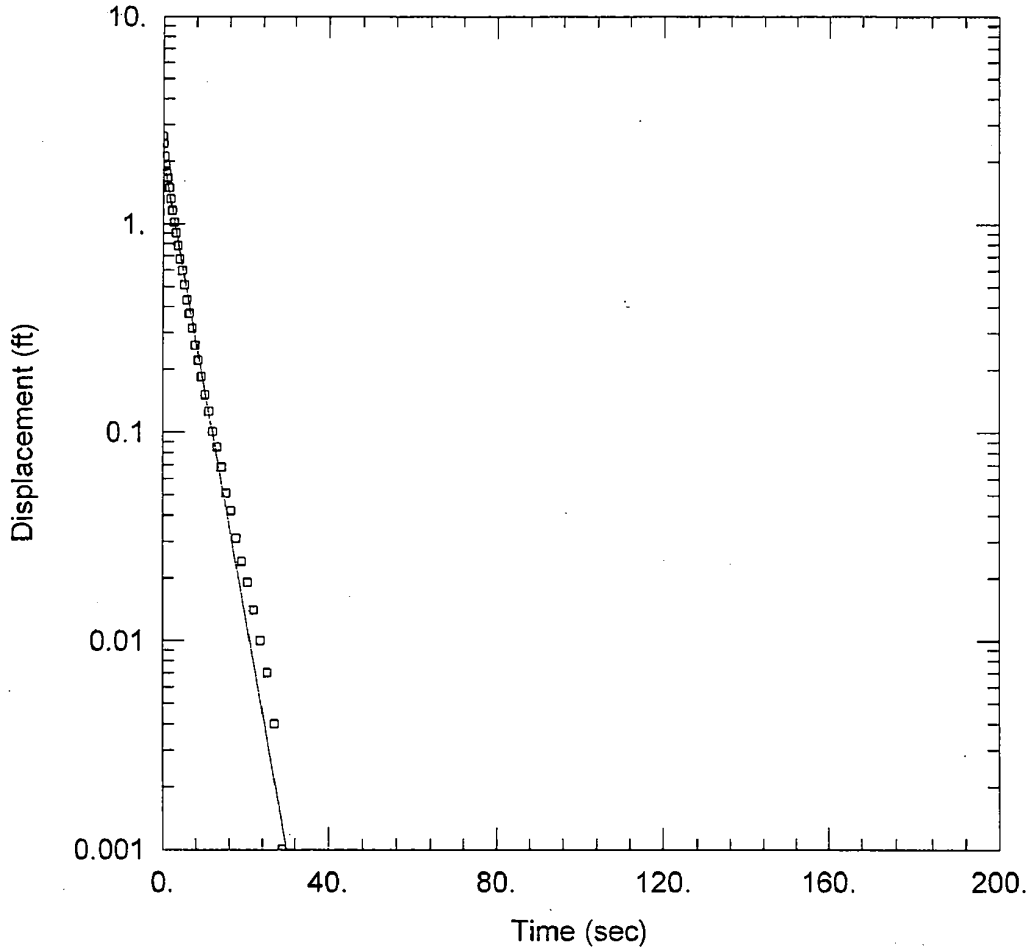
Solution Method: Butler

K = 61.99 ft/day

Le = 36.71 ft

Prepared by: WSV Date: 4-4-08

Checked by: BNJ Date: 4/4/08



OW-2304U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2304U
Test Date: 2-07-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2304U)

Initial Displacement: 2.641 ft
Total Well Penetration Depth: 50. ft
Casing Radius: 0.083 ft

Static Water Column Height: 20.47 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

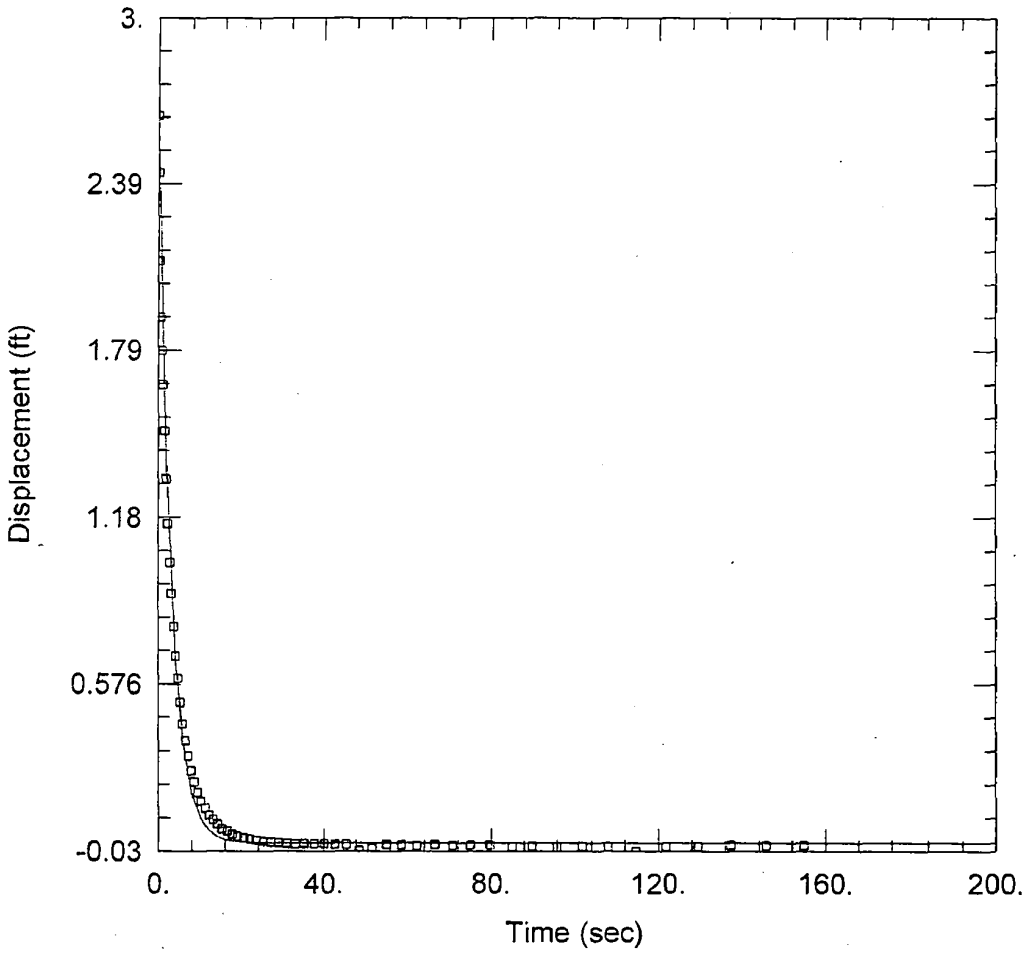
Solution Method: Bouwer-Rice

K = 35.62 ft/day

y0 = 2.078 ft

Prepared by: WSU Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2304U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2304U
Test Date: 2-07-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2304U)

Initial Displacement: 2.641 ft
Total Well Penetration Depth: 50. ft
Casing Radius: 0.083 ft

Static Water Column Height: 20.47 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

K = 53.45 ft/day

Solution Method: Butler

Le = 0.1 ft

Checked by: CKB Date: 4-4-08

MACTEC

SLUG TEST REPORT

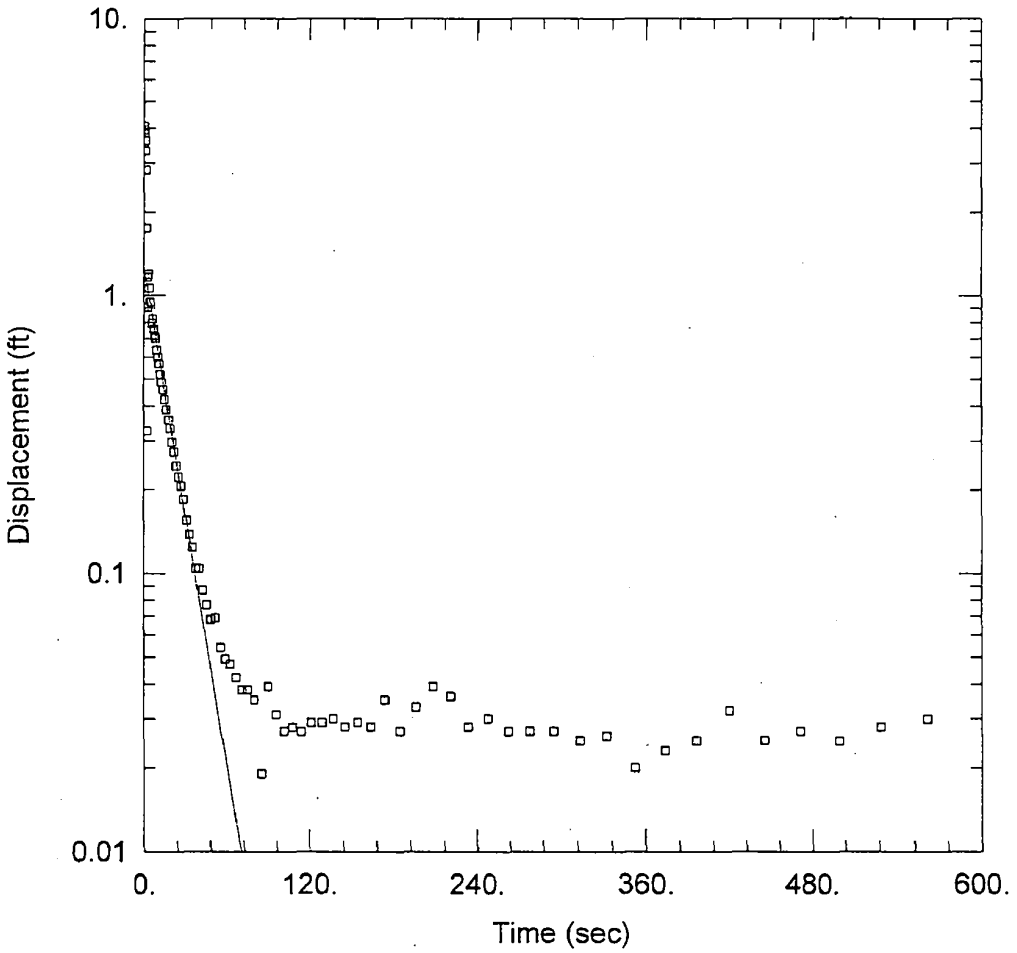
Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2307L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: K.M. BISSON K. TODD	Date: 1/25/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	51.20 feet		
Total Well Depth	113.27 feet		
Static Water Column Height (H)	62.07 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4 FEET	~4 FEET
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	100 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	119286		
Slug Data	SINGLE SLUG # 2		
Length	5.0 FEET		
weight			
Diameter	1.625		
Slug Test File	Background	Falling	Rising
File Name	OW-2307L BACKGROUND	OW-2307L FALLING-HEAD	OW-2307L RISING-HEAD
Start Time	9:32:47 AM	10:47:48 AM	
End Time	9:54:47 AM	10:52:01 AM	
Notes			

Rev 0

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2307L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2307L
Test Date: 1-23-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2307L)

Initial Displacement: 4.078 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 62.07 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

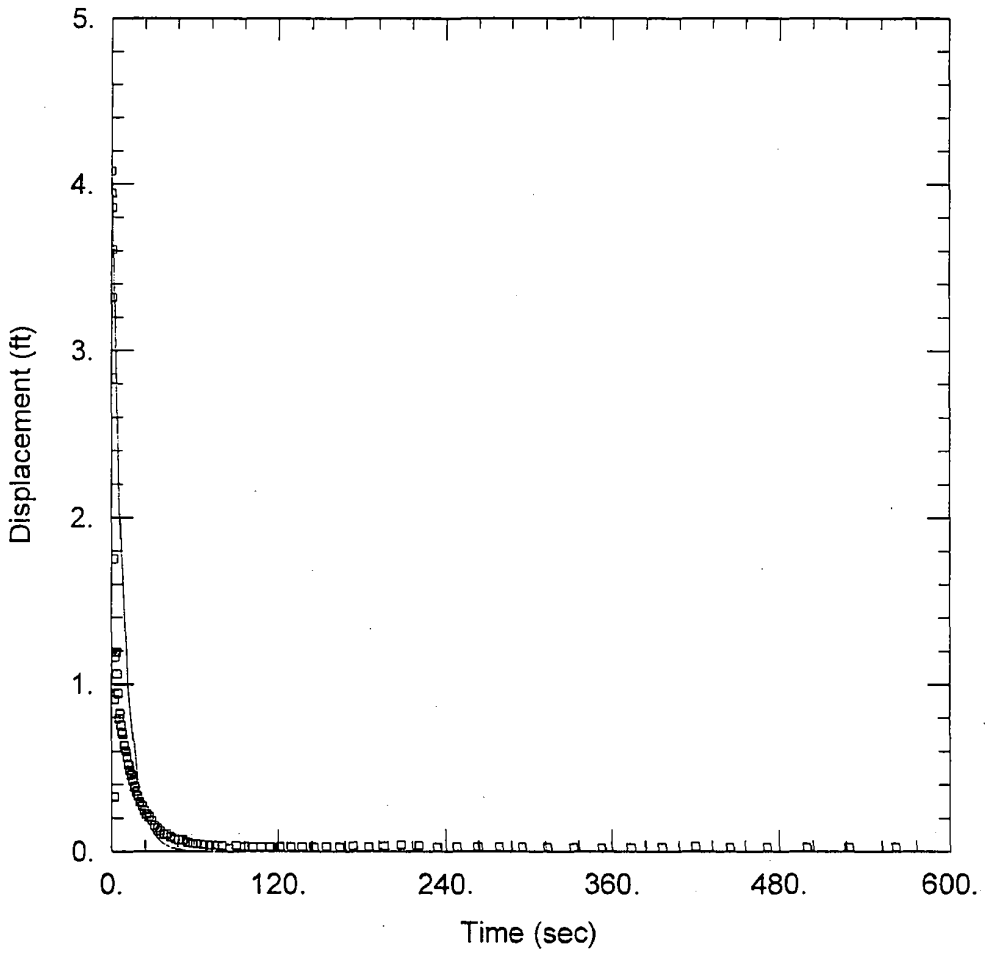
Solution Method: Bouwer-Rice

K = 10.65 ft/day

y0 = 1.28 ft

Prepared by: WJ Date: 4-4-08

Checked by: BHA Date: 4/4/08



OW-2307L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2307L
Test Date: 1-23-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2307L)

Initial Displacement: 4.078 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 62.07 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

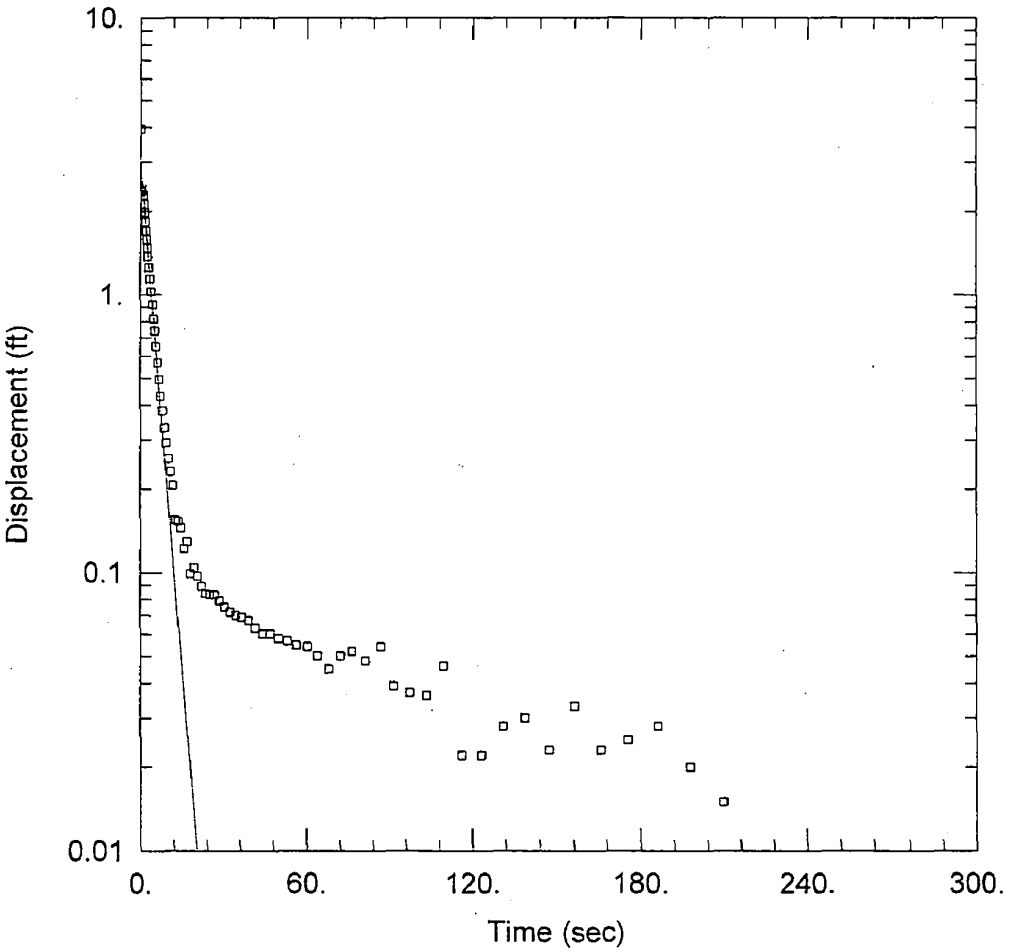
Solution Method: Butler

K = 19.05 ft/day

Le = 9.212 ft

Prepared by: WSV Date: 4-4-08

Checked by: BKH Date: 4/4/08



OW-2307L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2307L
Test Date: 1-23-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2307L)

Initial Displacement: 3.96 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 62.07 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

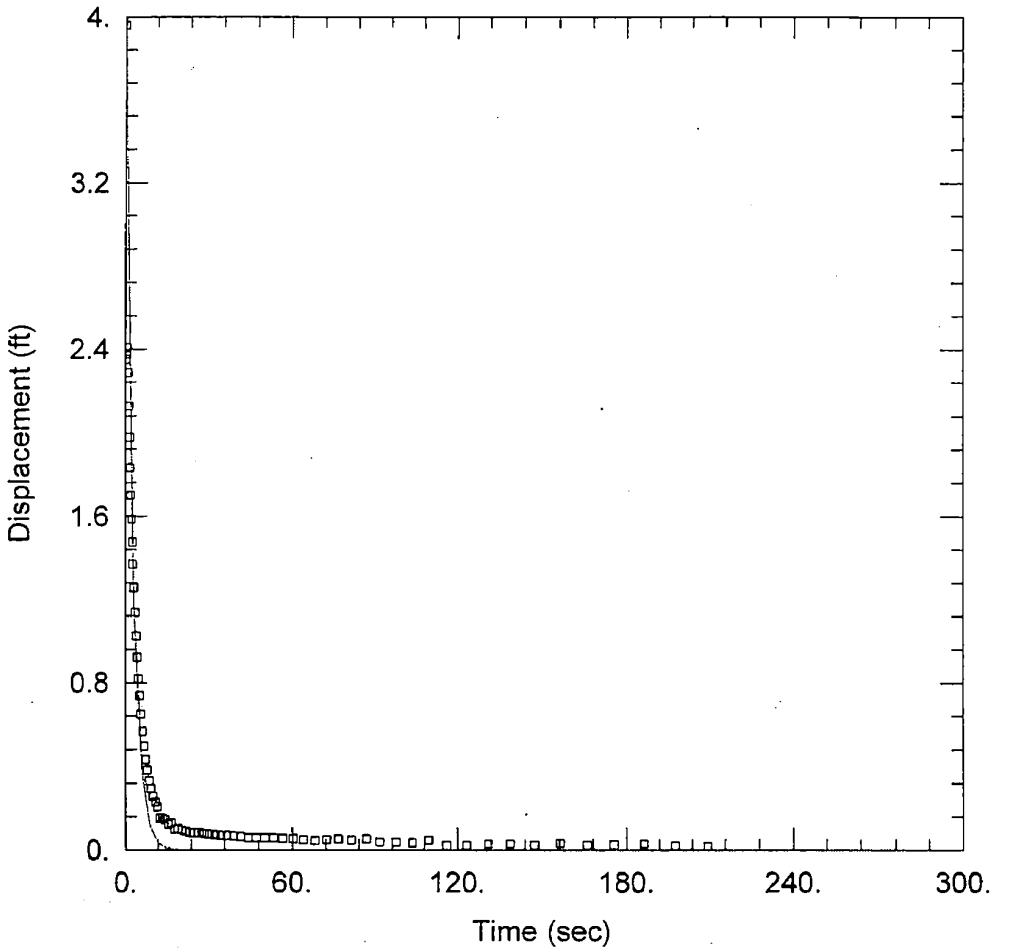
K = 43.17 ft/day

Solution Method: Bouwer-Rice

y0 = 3.065 ft

Prepared by: WJV Date: 1-4-08

Checked by: DWH Date: 4/9/08



OW-2307L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2307L
Test Date: 1-23-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2307L)

Initial Displacement: 3.96 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 62.07 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 63.09 ft/day

Le = 0.1 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-23040
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: K.M. Brisbow K. Cobb	Date: 1/23/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	~~47.30~~ info 1-23-08 45.88
Static Water Level	~~51.20~~ feet
Total Well Depth	68.11 feet
Static Water Column Height (H)	22.23 feet

	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	≈ 5'	~12'

Saturated Thickness (b)	feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	52 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	102426
Slug Data	SINGLE #1
Length	5.0'
weight	N/A
Diameter	1.625"

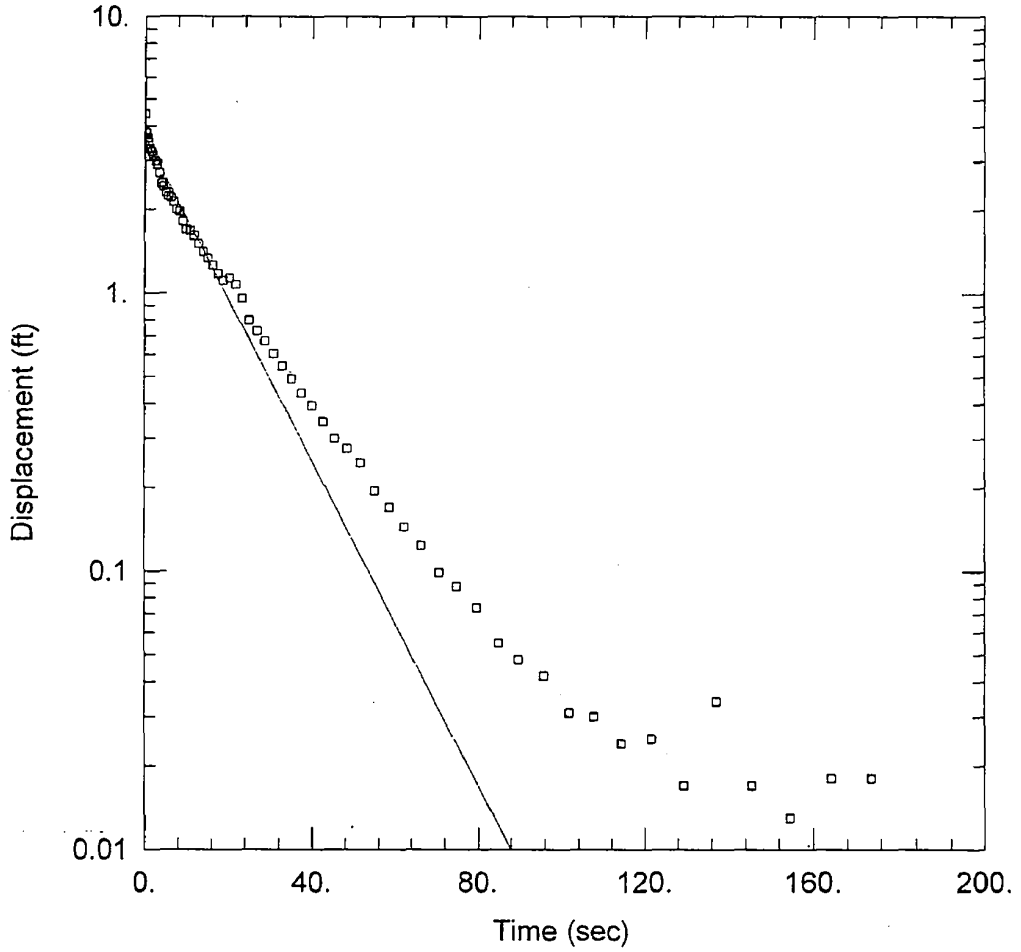
Slug Test File	Background	Falling	Rising
File Name	OW-23040 BACKGROUND	OW-23040 FALLING HEAD	OW-23040 RISING HEAD
Start Time	9:50:50 AM	10:24:15 AM	10:33:30 AM
End Time	10:16:50 AM	10:32:14 AM	10:39:07 AM

Notes

Rev 0

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW2307U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2307U
Test Date: 1-23-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2307U)

Initial Displacement: 4.427 ft
Total Well Penetration Depth: 62. ft
Casing Radius: 0.083 ft

Static Water Column Height: 22.23 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

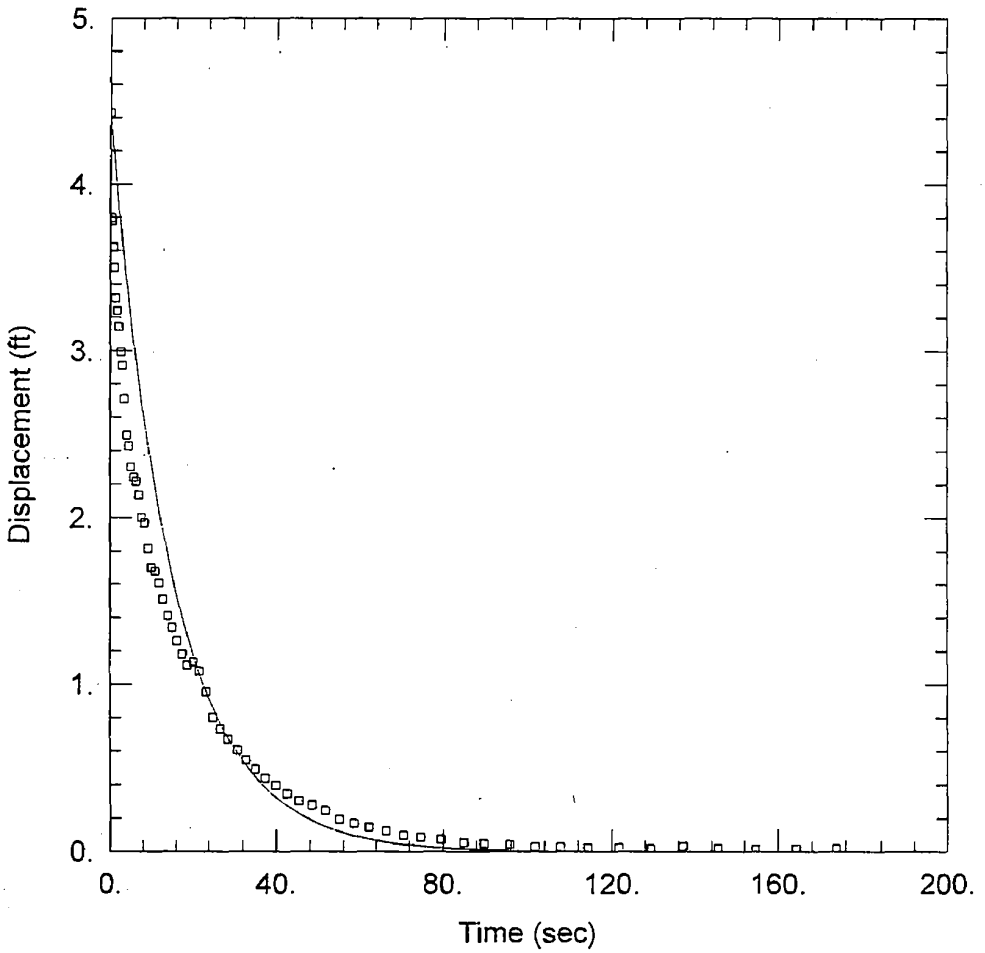
Solution Method: Bouwer-Rice

K = 9.637 ft/day

y0 = 3.656 ft

Prepared by: WL Date: 4-4-08

Checked by: BHA Date: 4/4/08



OW2307U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2307U
Test Date: 1-23-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2307U)

Initial Displacement: 4.427 ft
Total Well Penetration Depth: 62. ft
Casing Radius: 0.083 ft

Static Water Column Height: 22.23 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

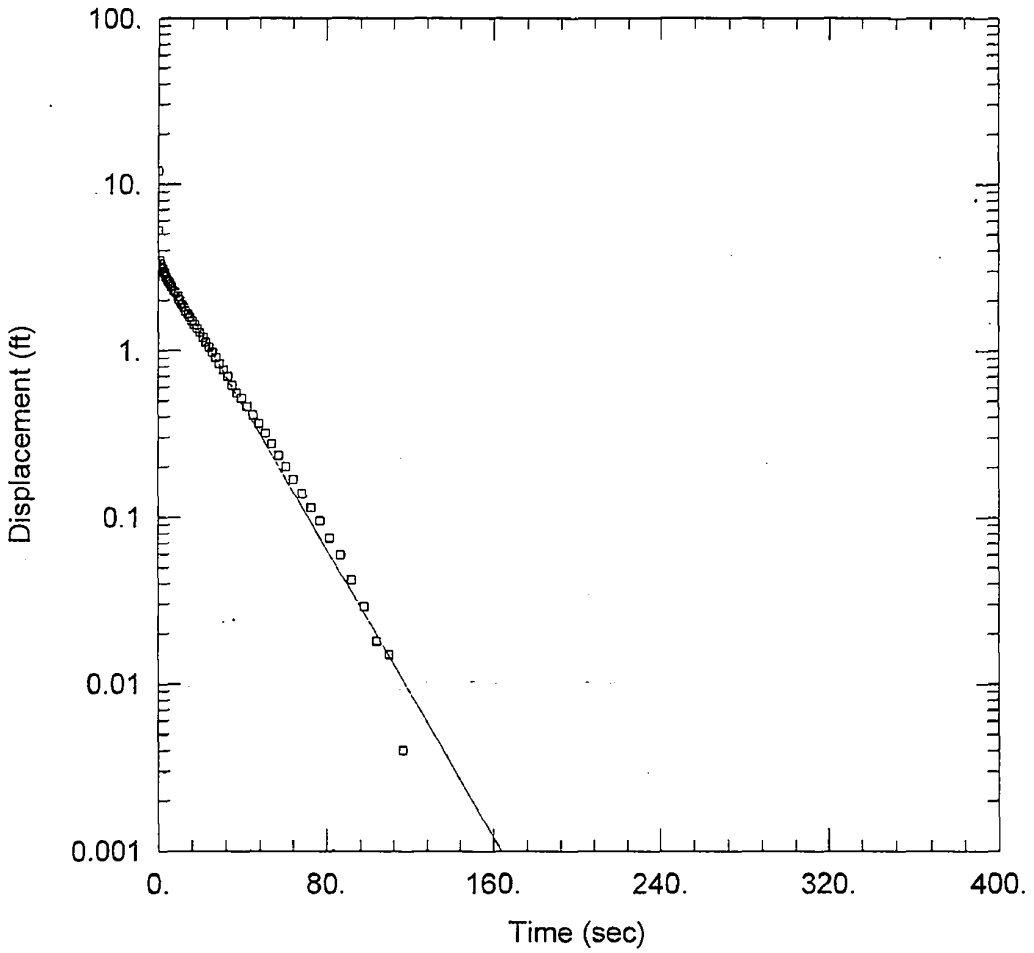
Solution Method: Butler

K = 10.33 ft/day

Le = 0.1 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2307U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2307U
Test Date: 1-23-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2307U)

Initial Displacement: 12.05 ft
Total Well Penetration Depth: 62. ft
Casing Radius: 0.083 ft

Static Water Column Height: 22.23 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

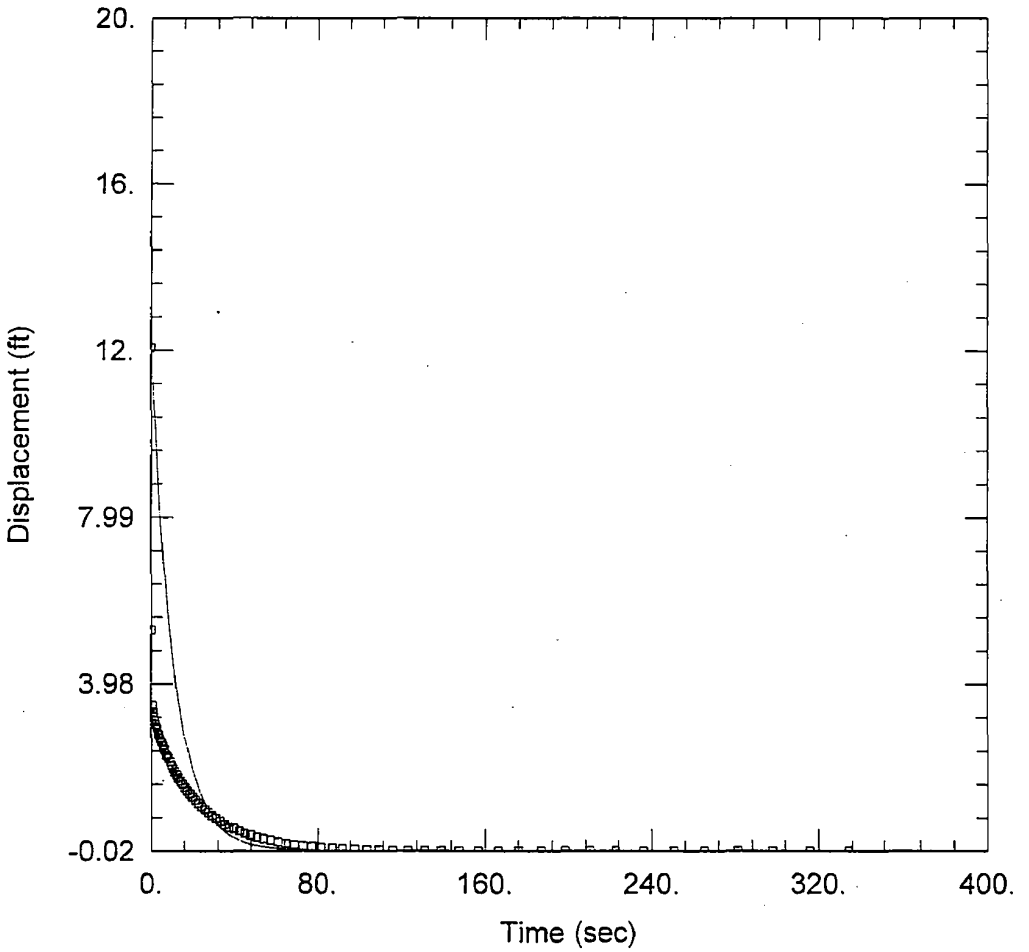
Solution Method: Bouwer-Rice

K = 7.13 ft/day

y0 = 3.448 ft

Prepared by: [illegible] Date: 1-4-08

Checked by: BWJ Date: 4/4/08



OW-2307U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2307U
Test Date: 1-23-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2307U)

Initial Displacement: 12.05 ft
Total Well Penetration Depth: 62. ft
Casing Radius: 0.083 ft

Static Water Column Height: 22.23 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 14.67 ft/day

Le = 0.1 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

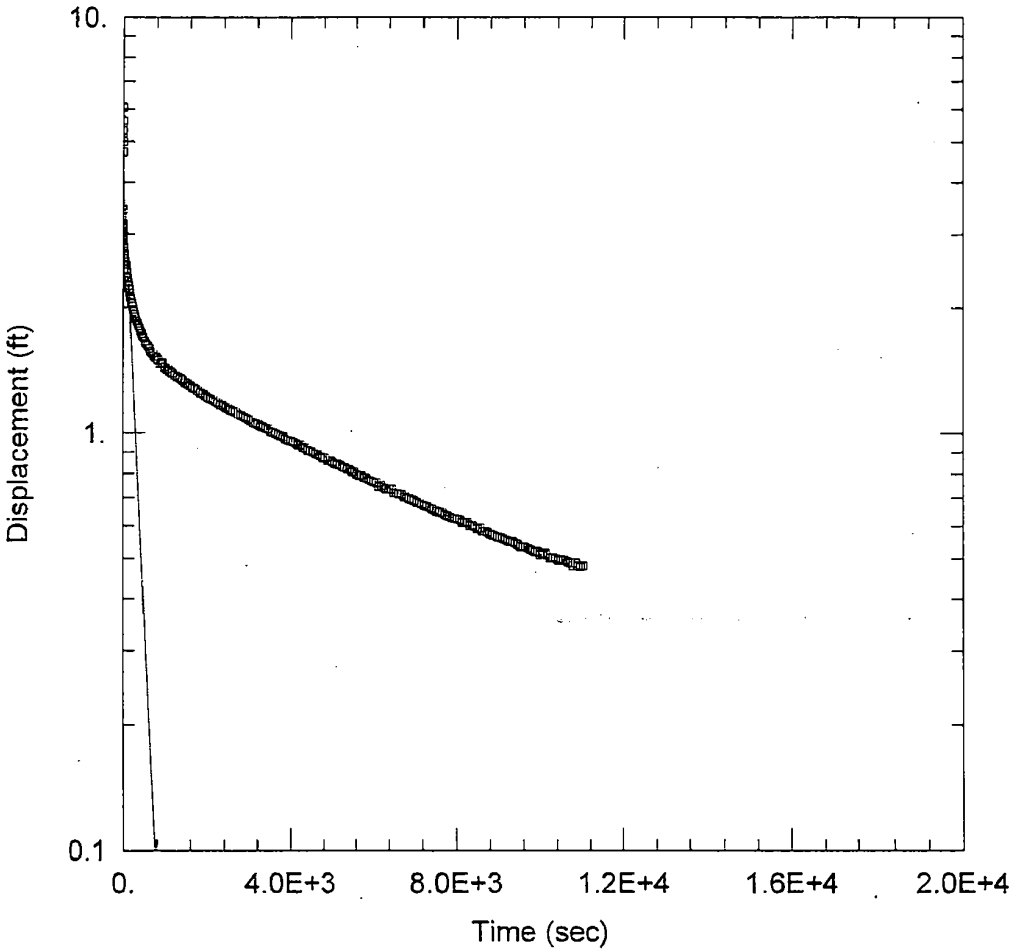
Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2319L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: L.M. BISSON T. MOORE	Date: 1/18/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	43.19 feet		
Total Well Depth	156.80 feet		
Static Water Column Height (H)	113.62 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~5.5 Feet	~6 Feet
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	145 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	119305		
Slug Data	SLUG # 2		
Length	5.0 FEET		
weight			
Diameter	1.625 INCH		
Slug Test File	Background	Falling	Rising
File Name	OW-2319L BACKGROUND	OW-2319L FALLING HEAD	OW-2319L RISING HEAD
Start Time	2:13:27 PM	2:38:26 PM	5:44:44 PM
End Time	2:37:27 PM	5:10:22 PM	9:22:32 AM 1/19
Notes	~1 FOOT SLUDGE AT BOTTOM		

Rev 0

Prepared by: WJS Date: 2-4-08

Checked by: BWJ Date: 4/4/08



OW-2319L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2319L
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2319L)

Initial Displacement: 6.047 ft
Total Well Penetration Depth: 155. ft
Casing Radius: 0.083 ft

Static Water Column Height: 113.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

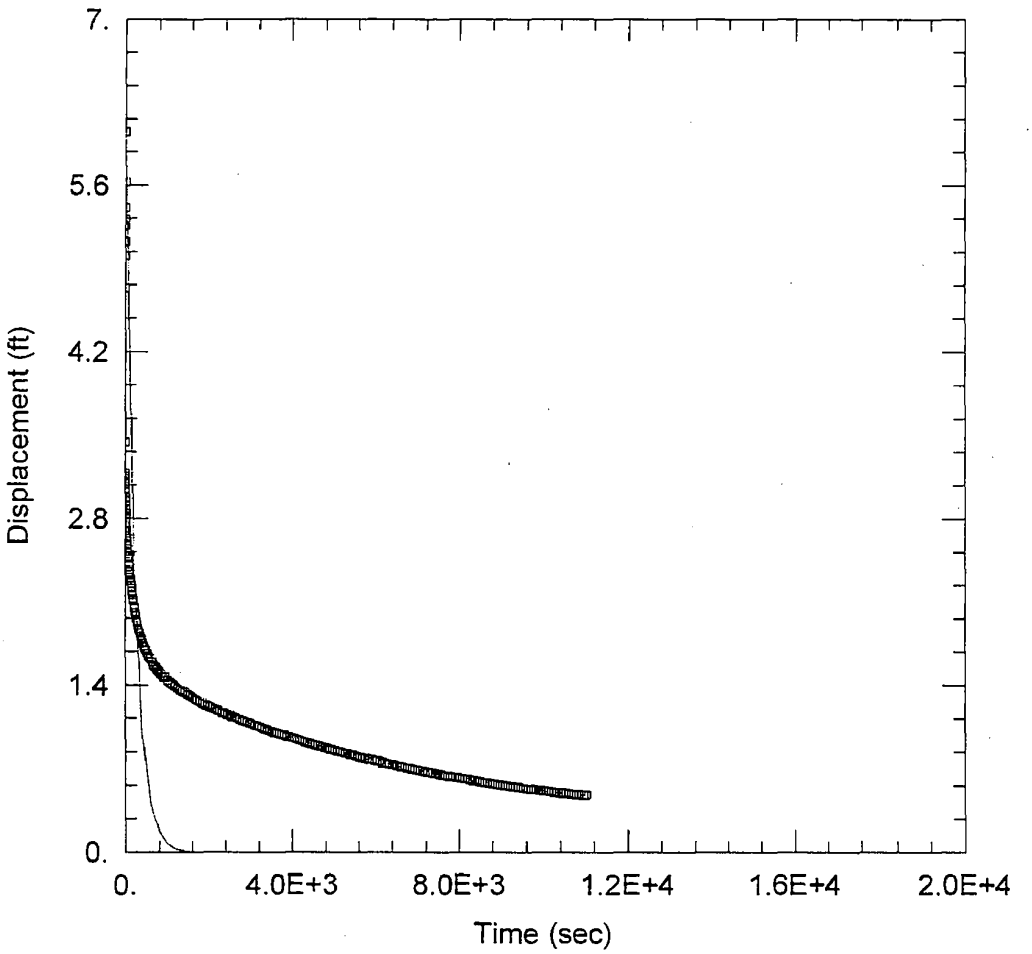
Solution Method: Bouwer-Rice

K = 0.7784 ft/day

y0 = 4.281 ft

Prepared by: WSV Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2319L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2319L
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2319L)

Initial Displacement: 6.047 ft
Total Well Penetration Depth: 155. ft
Casing Radius: 0.083 ft

Static Water Column Height: 113.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

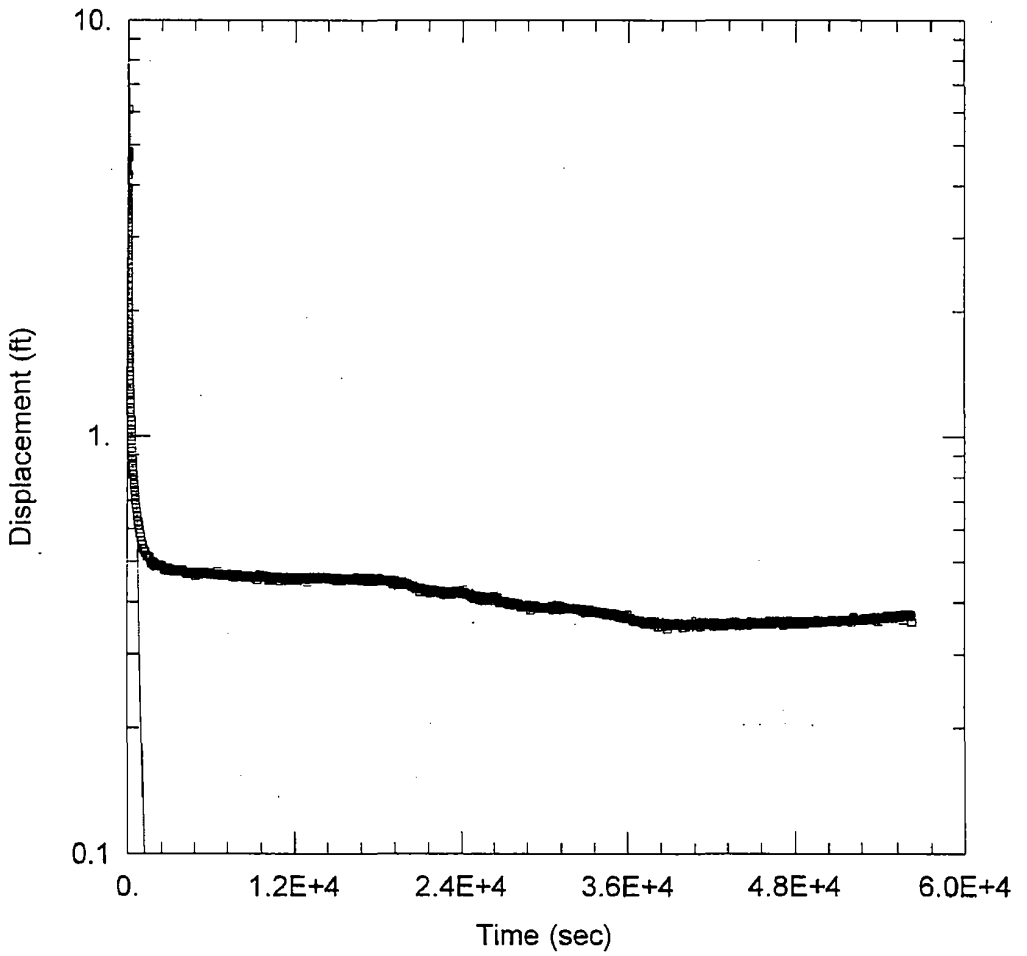
Solution Method: Butler

K = 0.7079 ft/day

Le = 0.1 ft

Prepared by: ilsv Date: 4-4-08

Checked by: BWS Date: 4/4/08



OW-2319L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2319L
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2319L)

Initial Displacement: 6.067 ft
Total Well Penetration Depth: 155. ft
Casing Radius: 0.083 ft

Static Water Column Height: 113.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

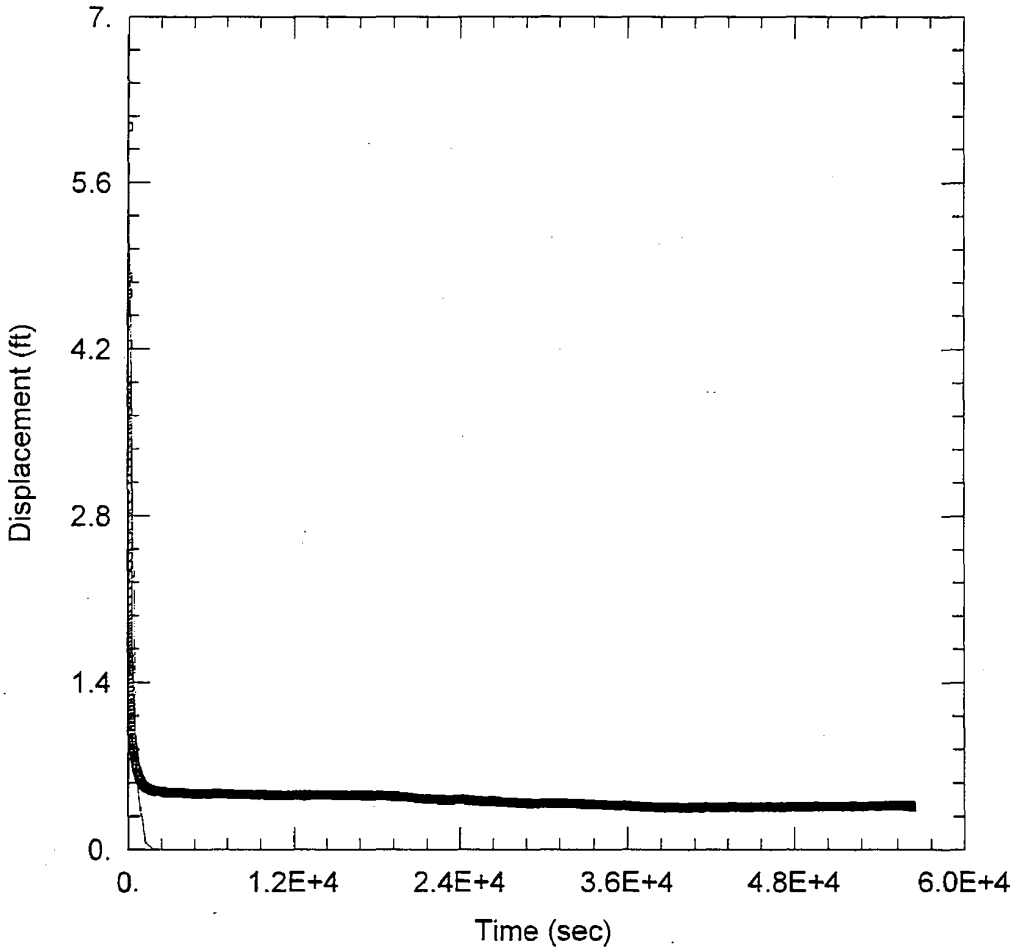
Solution Method: Bouwer-Rice

K = 0.6044 ft/day

y0 = 8.145 ft

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2319L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2319L
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2319L)

Initial Displacement: 6.067 ft
Total Well Penetration Depth: 155. ft
Casing Radius: 0.083 ft

Static Water Column Height: 113.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 0.6044 ft/day

Le = 1. ft

Checked by: CHB Date: 1-4-09

MACTEC

SLUG TEST REPORT

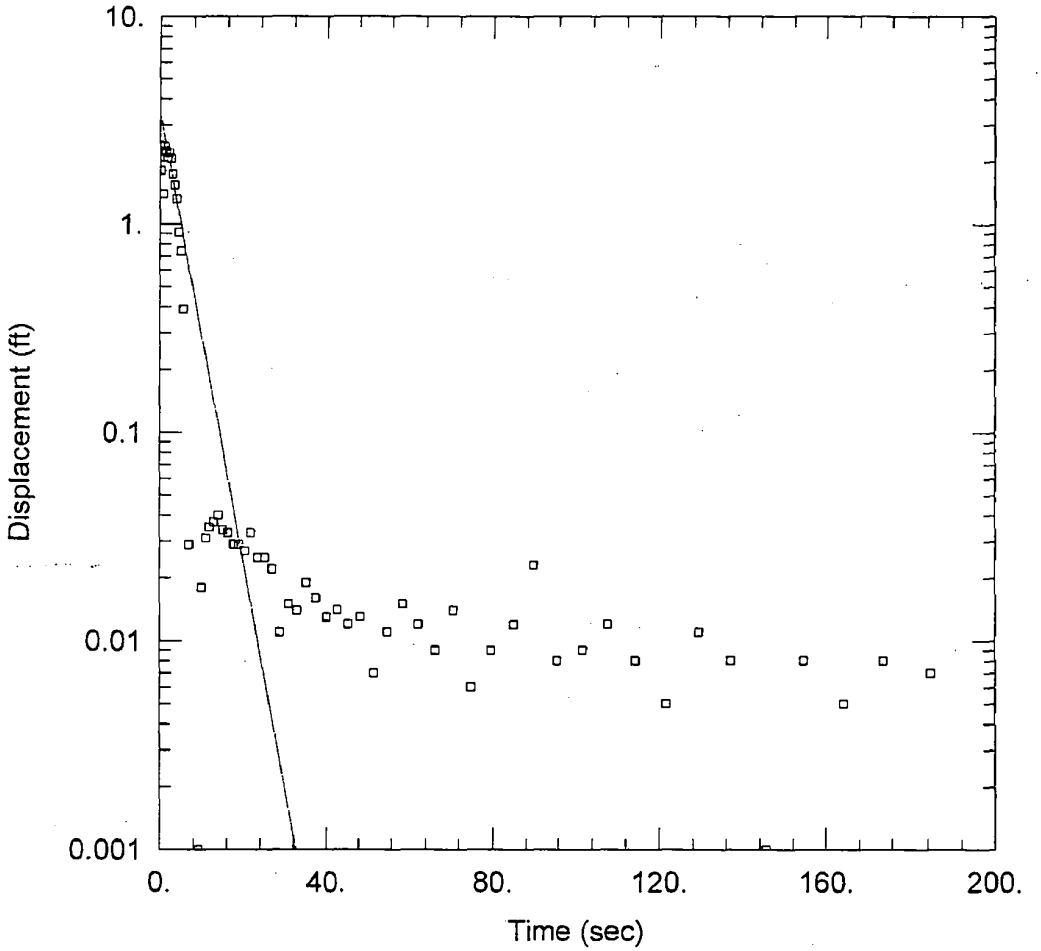
Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2319U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: L.M. BISSON, T. MOORE	Date: 1/18/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	40.73 feet		
Total Well Depth	98.15 feet		
Static Water Column Height (H)	57.42 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~ 2.5 FEET	~ 5 FEET
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)	85 feet		
Length of Well Screen (L)	10 feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	112299		
Slug Data	SLUG # 1		
Length	5.5 FEET		
weight			
Diameter	1.625 INCHES		
Slug Test File	Background	Falling	Rising
File Name	OW-2319U BACKGROUND	OW-2319U FALLING HEAD	OW-2319U RISING HEAD
Start Time	2:16:33 PM	2:27:56 PM	2:32:11 PM
End Time	2:25:33 PM	2:31:05 PM	2:34:26 PM
Notes			

Rev 0

Prepared by: WJS Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2319U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2319U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2319U)

Initial Displacement: 2.402 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 57.42 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

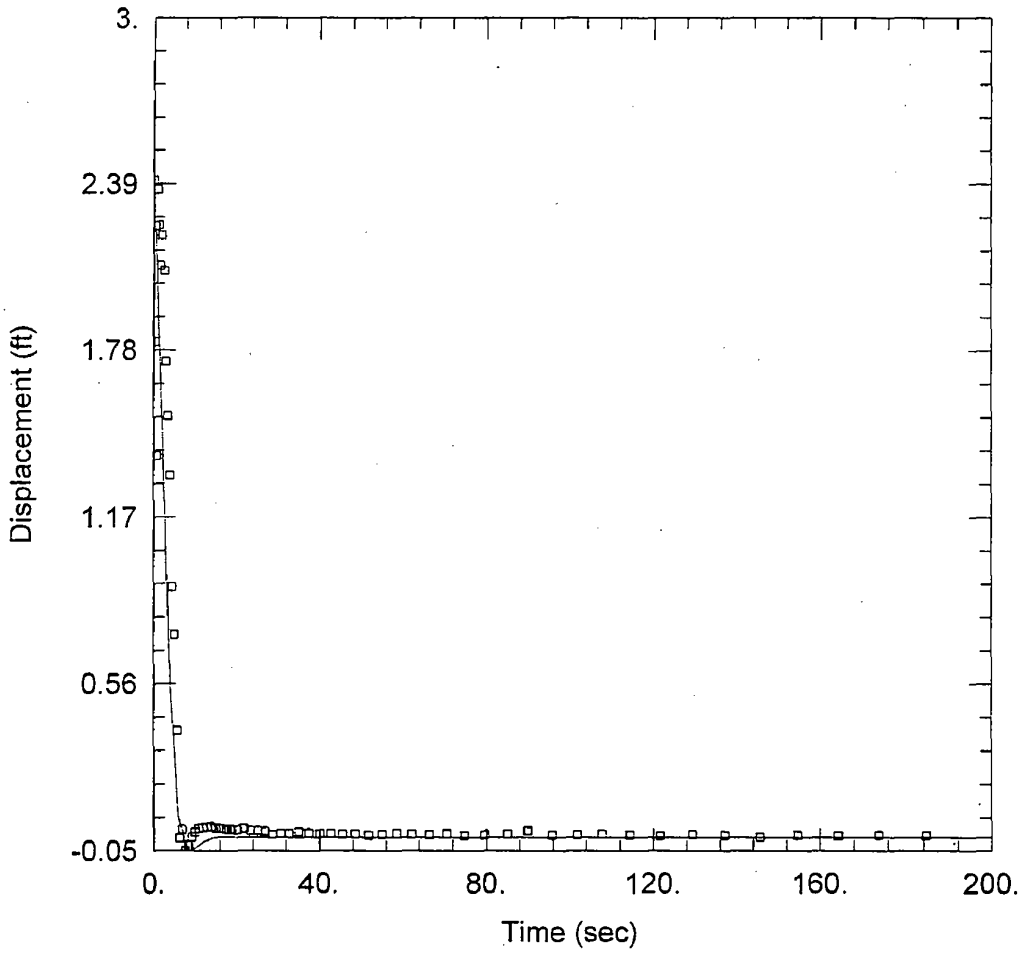
Solution Method: Bouwer-Rice

K = 37.72 ft/day

y0 = 3.48 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2319U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2319U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2319U)

Initial Displacement: 2.402 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 57.42 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

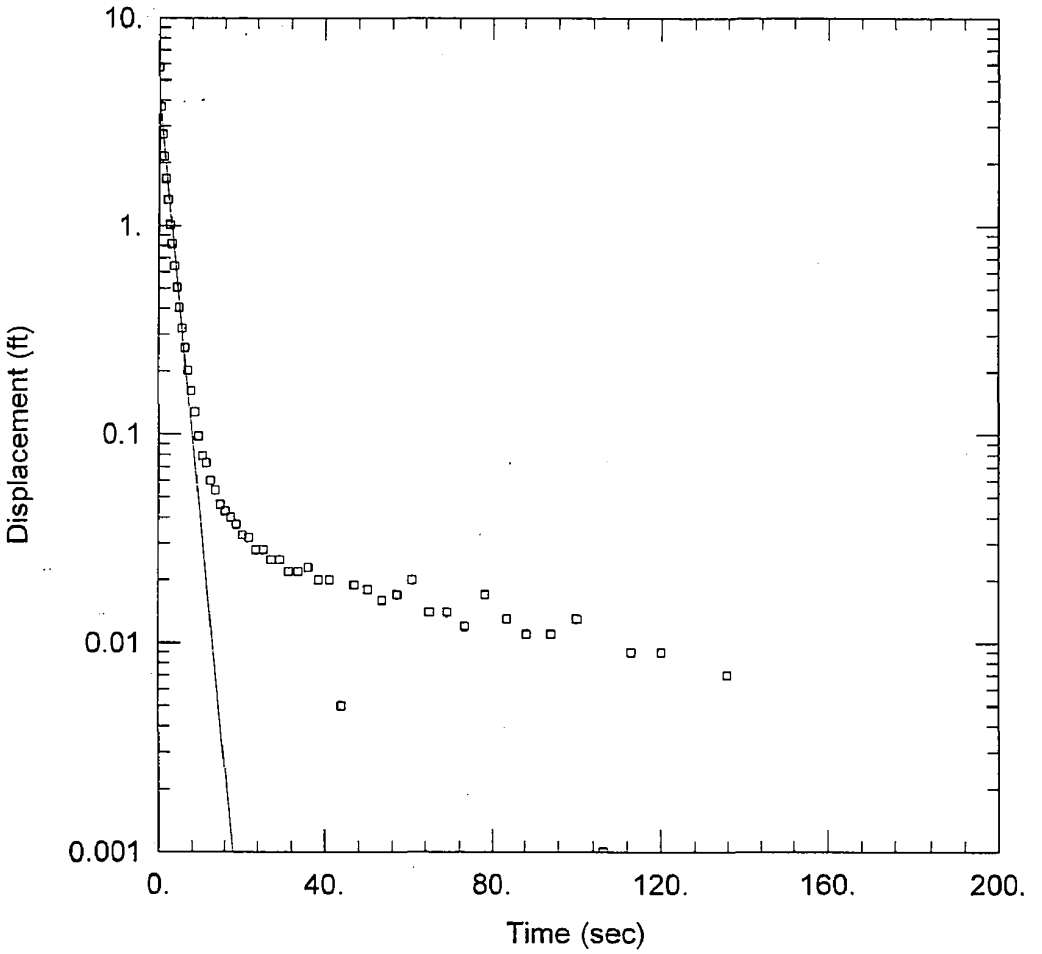
Solution Method: Butler

K = 58.38 ft/day

Le = 98.96 ft

Prepared by: WSI Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2319U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2319U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2319U)

Initial Displacement: 5.8 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 57.42 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

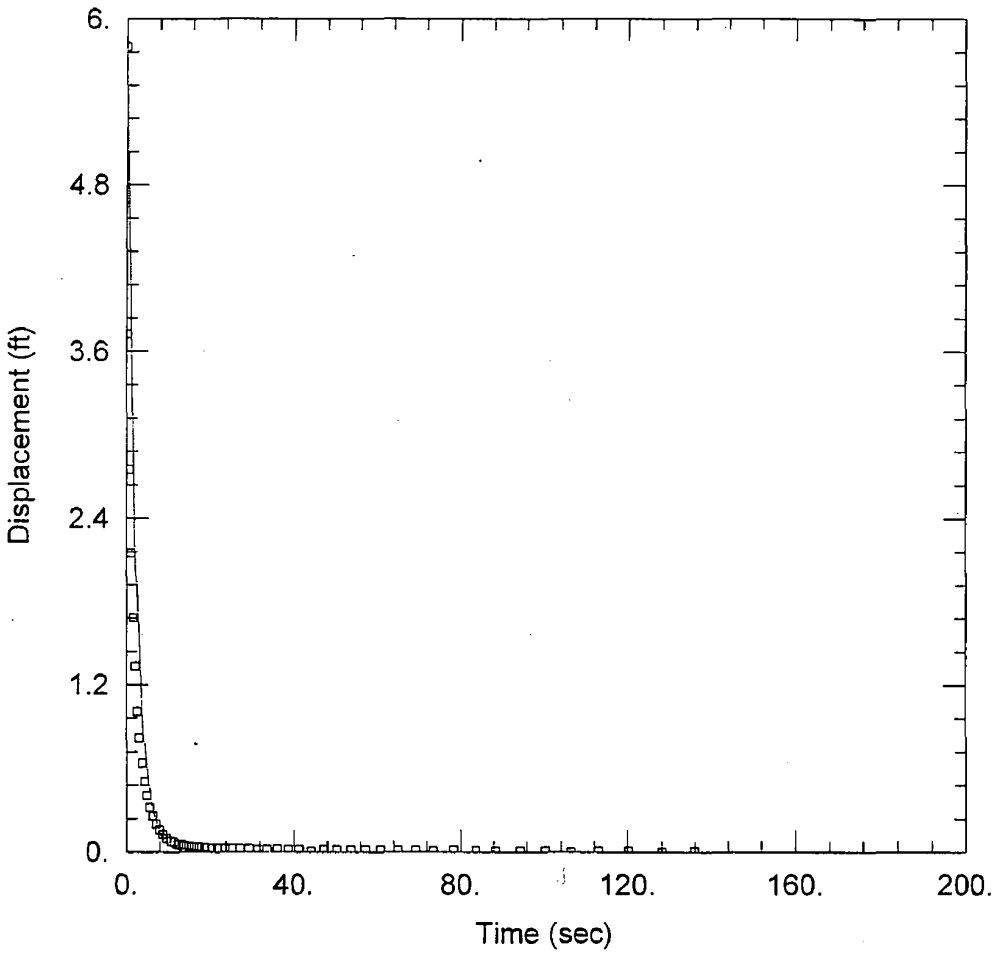
K = 69.49 ft/day

Solution Method: Bouwer-Rice

y0 = 4.144 ft

Prepared by: WSV Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2319U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2319U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2319U)

Initial Displacement: 5.8 ft
Total Well Penetration Depth: 95. ft
Casing Radius: 0.083 ft

Static Water Column Height: 57.42 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 75.61 ft/day

Le = 0.1 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-3320 L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: J.M. Bisson / J. Moore	Date: 1/18/08	
UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	43.18 feet		
Total Well Depth	153.55 feet		
Static Water Column Height (H)	110.37 feet		

	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4 FEET	~6 FEET

Saturated Thickness (b)	feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	140 Feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	
Slug Data	
Length	
weight	
Diameter	

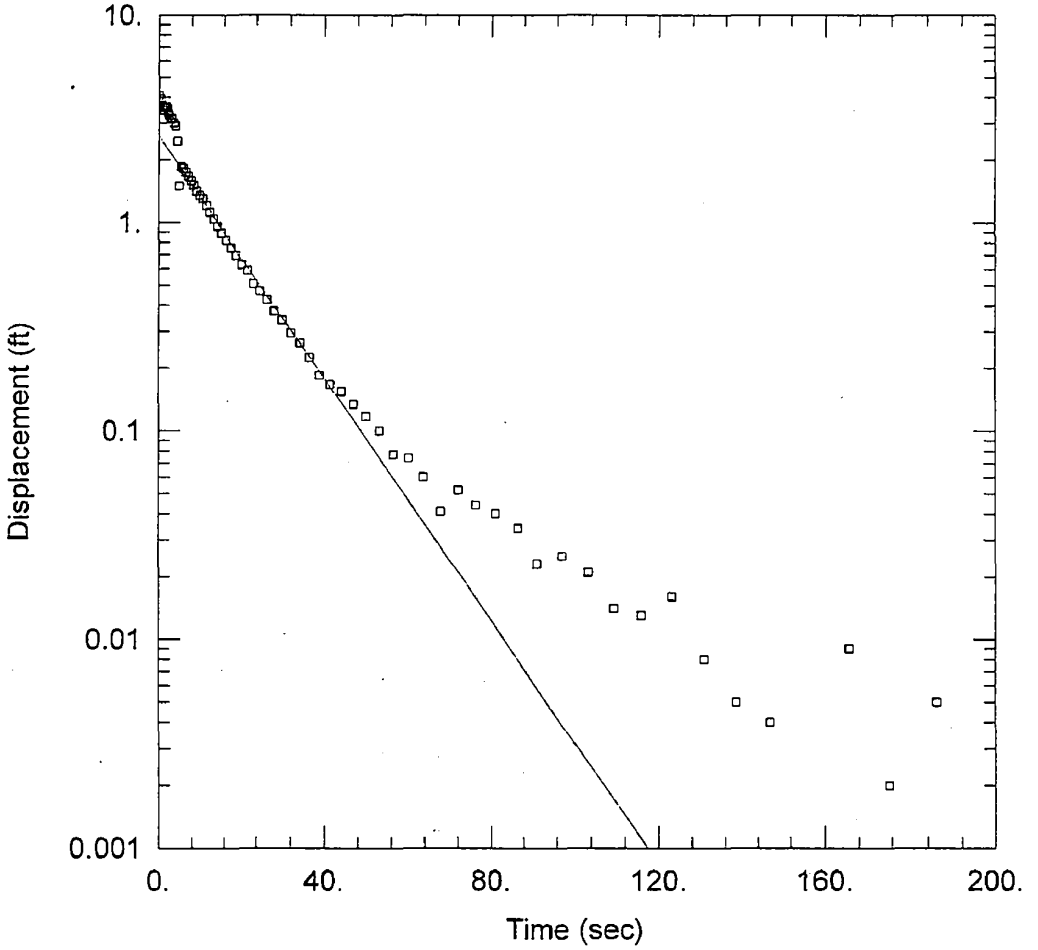
Slug Test File	Background	Falling	Rising
File Name	OW-3320 L BACKGROUND	OW-3320L FALLING HEAD	OW-3320 RISING HEAD
Start Time	12:13:39 PM	12:49:43	12:54:15
End Time	12:40:39 PM	12:52:52	12:58:28

Notes

Rev 0

Prepared by: WJV Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2320L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2320L
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2320L)

Initial Displacement: 4.095 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 110.4 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

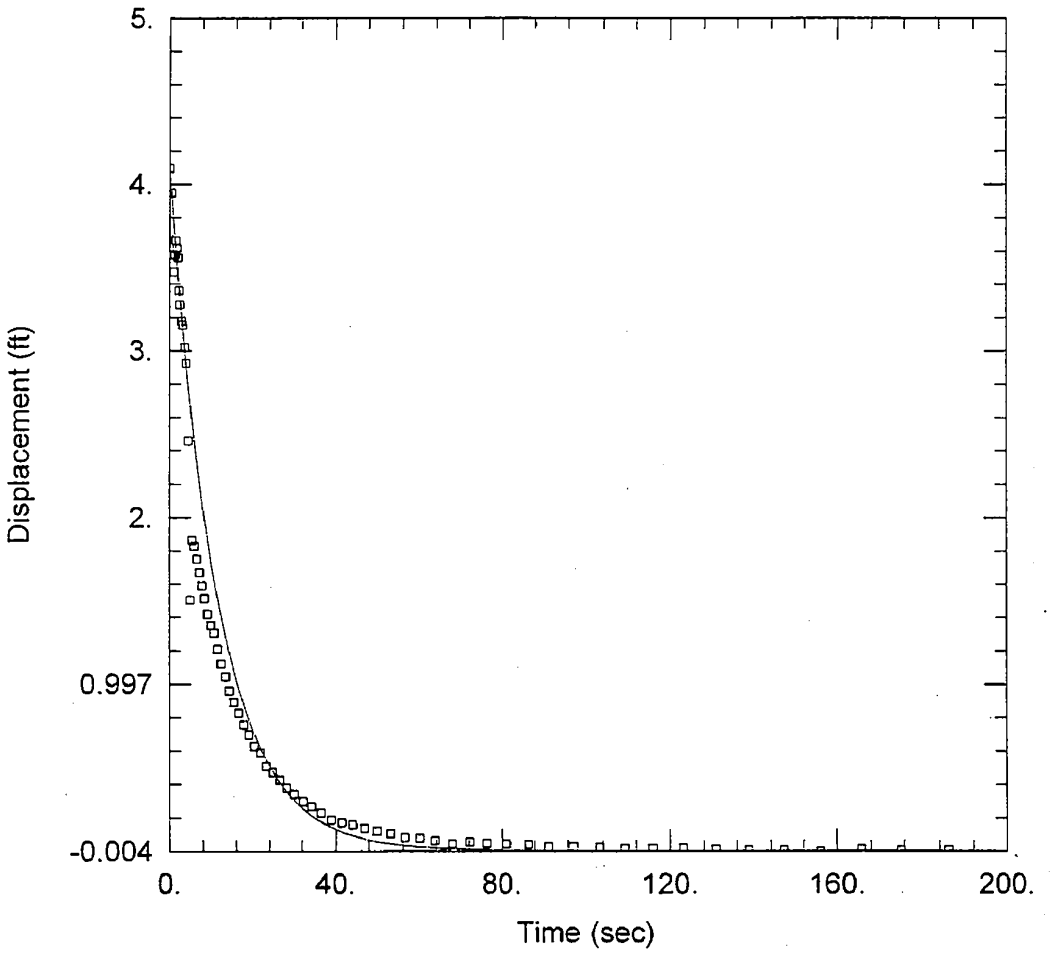
Solution Method: Bouwer-Rice

K = 10.62 ft/day

y0 = 2.615 ft

Prepared by: WJ Date: 4-4-08

Checked by: BLD Date: 4/4/08



OW-2320L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2320L
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2320L)

Initial Displacement: 4.095 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 110.4 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

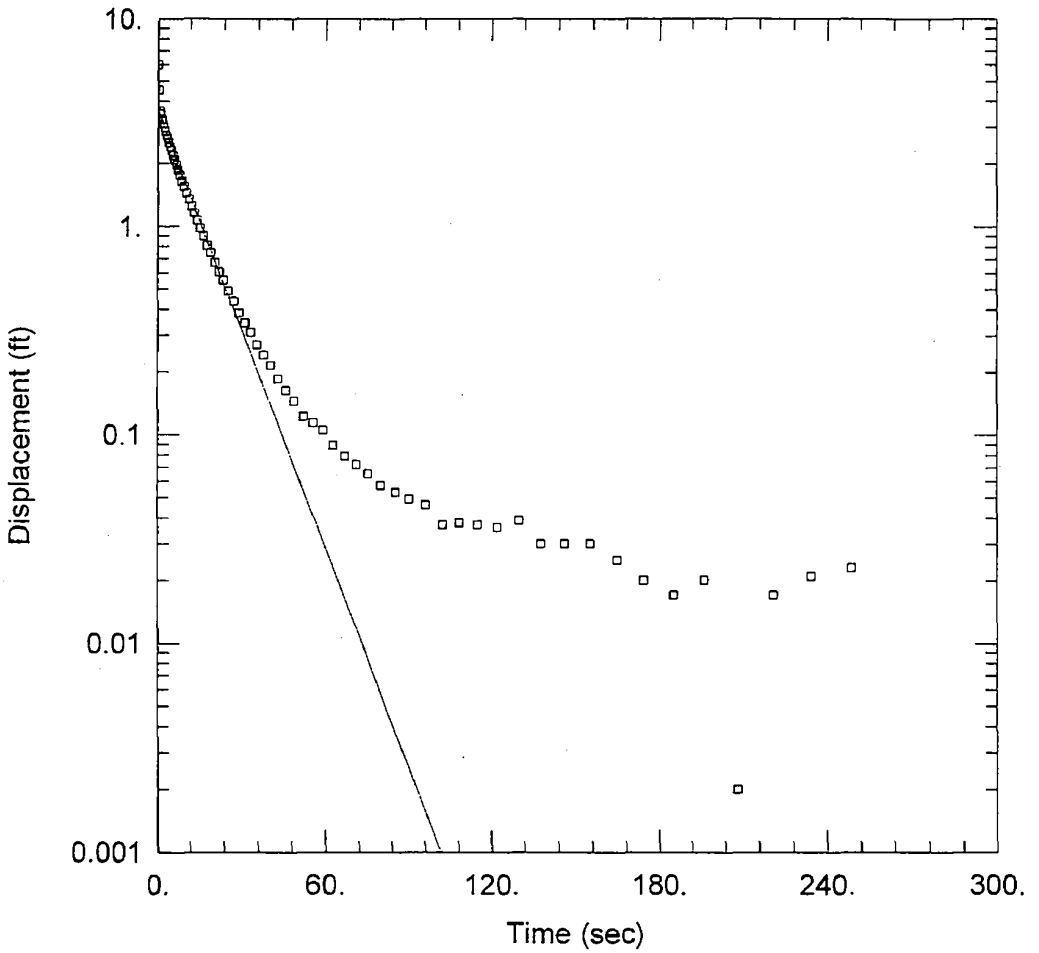
Aquifer Model: Confined

Solution Method: Butler

K = 13.74 ft/day

Le = 0.1 ft

Prepared by: WSL Date: 4-4-08
Checked by: BWJ Date: 4/4/08



OW-2320L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2320L
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 5. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2320L)

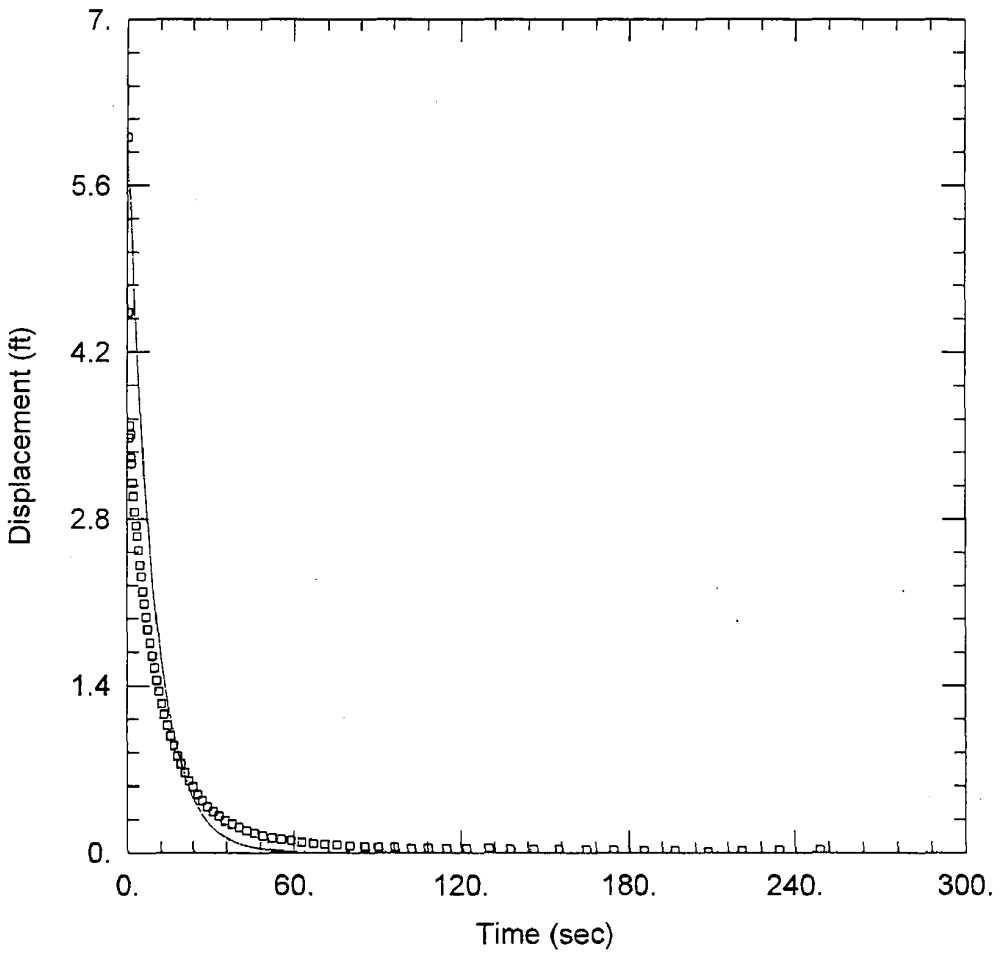
Initial Displacement: 6.004 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft
Static Water Column Height: 110.4 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 12.76 ft/day
y0 = 3.602 ft

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2320L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2320L
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 5. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2320L)

Initial Displacement: 6.004 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 110.4 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 17.09 ft/day

Le = 1. ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2320 U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: J.M BISSON J. MOORE	Date: 1/18/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	44.64 feet
Total Well Depth	113.35 feet
Static Water Column Height (H)	68.71 feet

	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4.2 FEET	~5.0 FEET

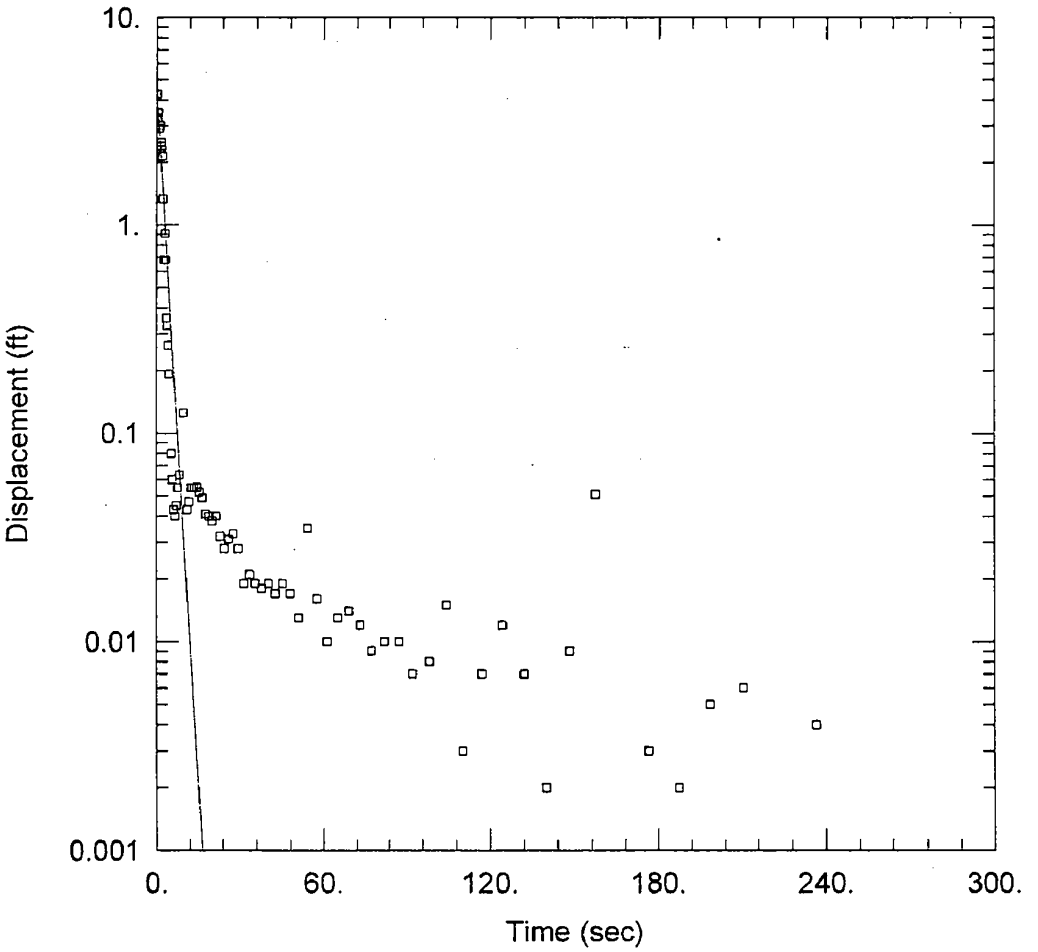
Saturated Thickness (b)	feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	100 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	119305
Slug Data	#2
Length	5.0 FEET
weight	
Diameter	1.625 INCHES

Slug Test File	Background	Falling	Rising
File Name	OW-2320 U BACKGROUND	OW-2320 U FALLING HEAD	OW-2320 U RISING HEAD
Start Time	11:58:25 AM	~~12:33:28~~ 12:28:05	12:33:26
End Time	12:25:25 PM	~~12:37:24~~ 12:32:07	12:36:17
Notes			

Rev 0

Prepared by: WSC Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2320U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2320U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2320U)

Initial Displacement: 4.266 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 68.71 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

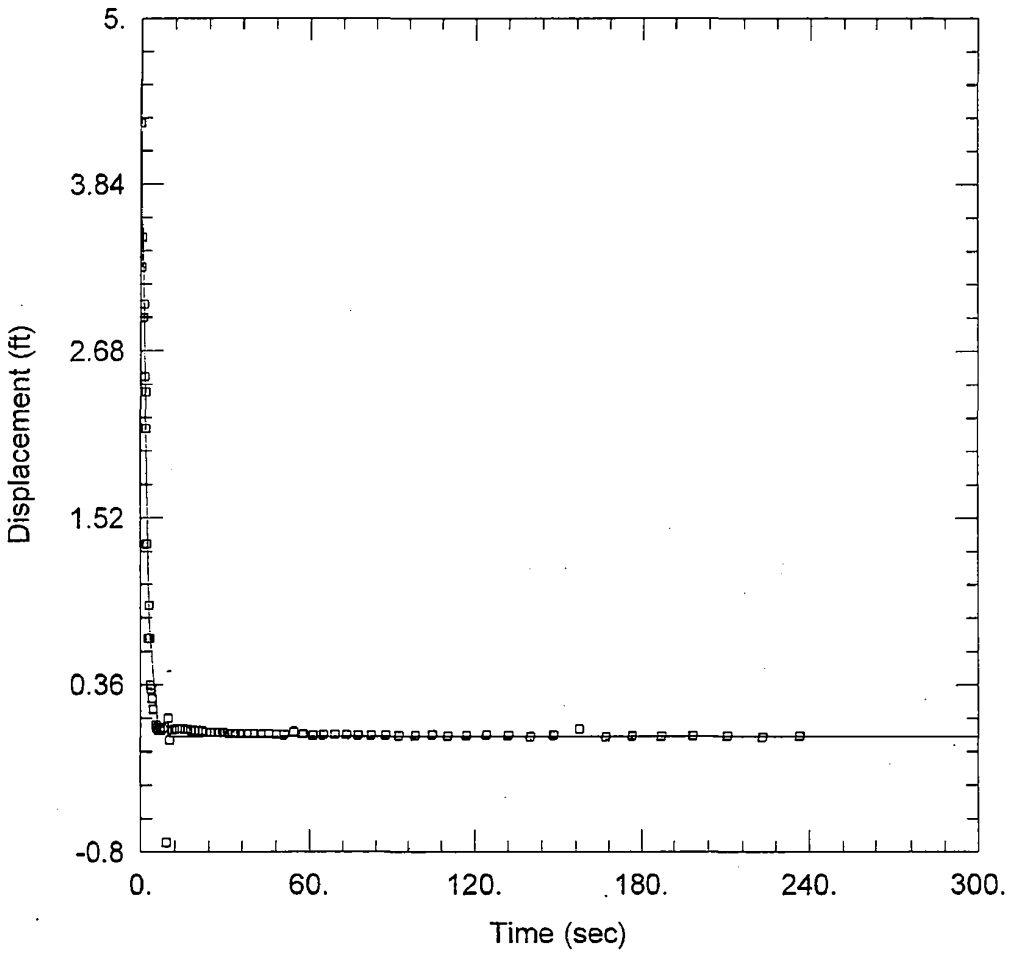
Solution Method: Bouwer-Rice

K = 77.06 ft/day

y0 = 4.4 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2320U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2320U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2320U)

Initial Displacement: 4.266 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 68.71 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

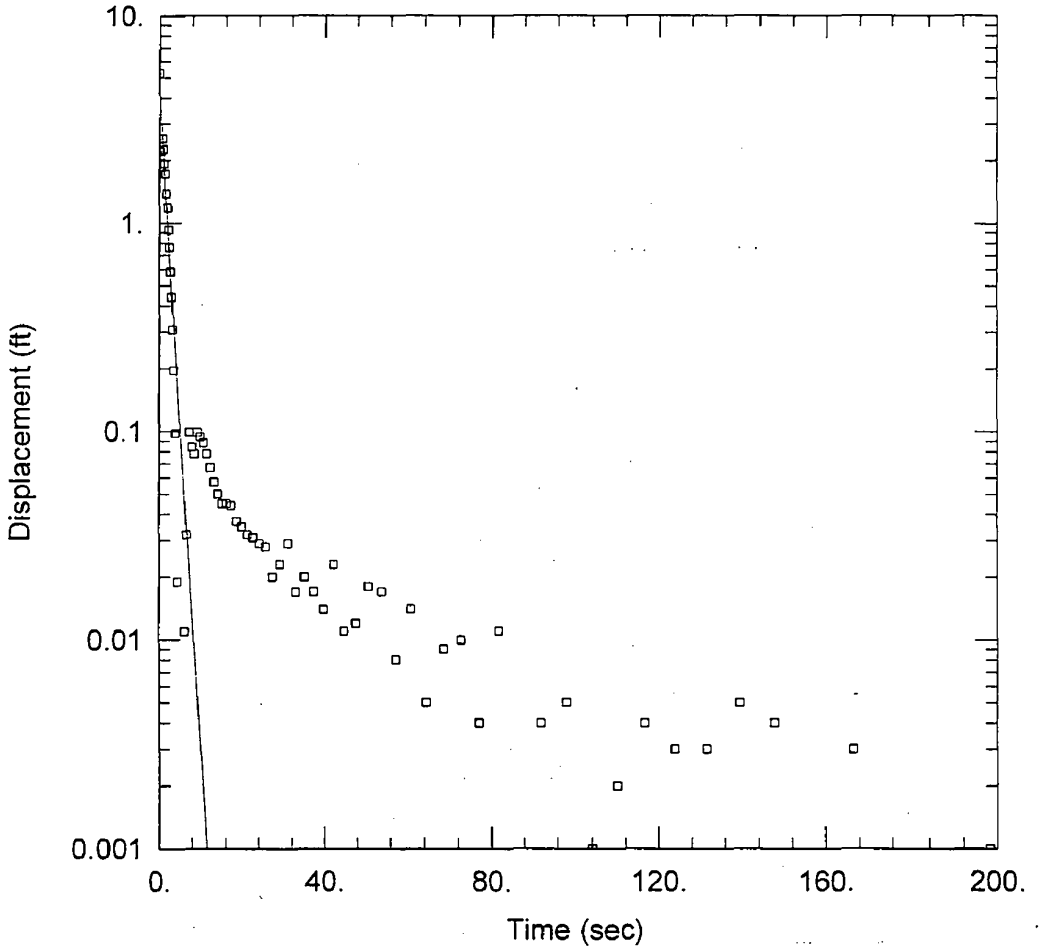
Solution Method: Butler

K = 82.09 ft/day

Le = 33.73 ft

Prepared by: WSV Date: 4-4-08

Checked by: BLM Date: 4/4/08



OW-2320U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2320U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2320U)

Initial Displacement: 5.301 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 68.71 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

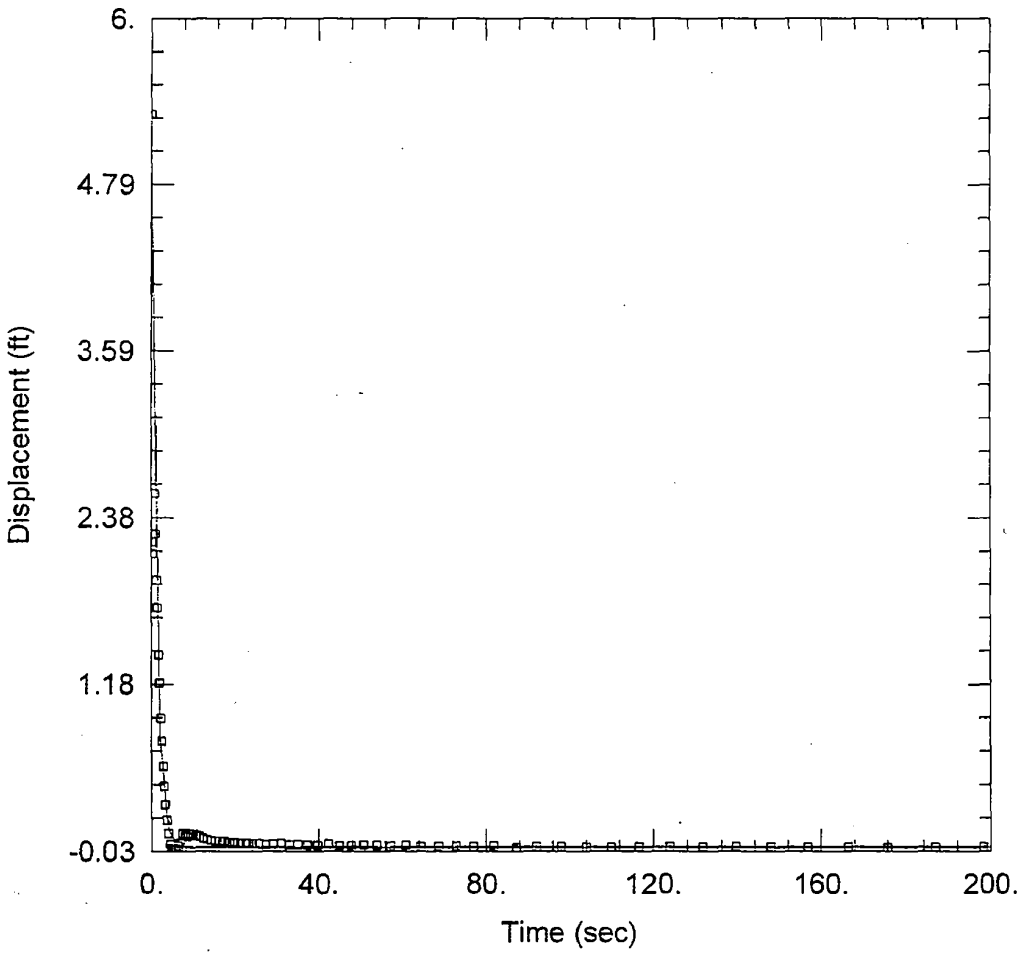
Solution Method: Bouwer-Rice

K = 110.2 ft/day

y0 = 4.165 ft

Prepared by: WSL Date: 4-4-08

Checked by: BAJ Date: 4/4/08



OW-2320U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2320U
Test Date: 1-18-08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2320U)

Initial Displacement: 5.301 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 68.71 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 152.5 ft/day

Le = 0.1 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

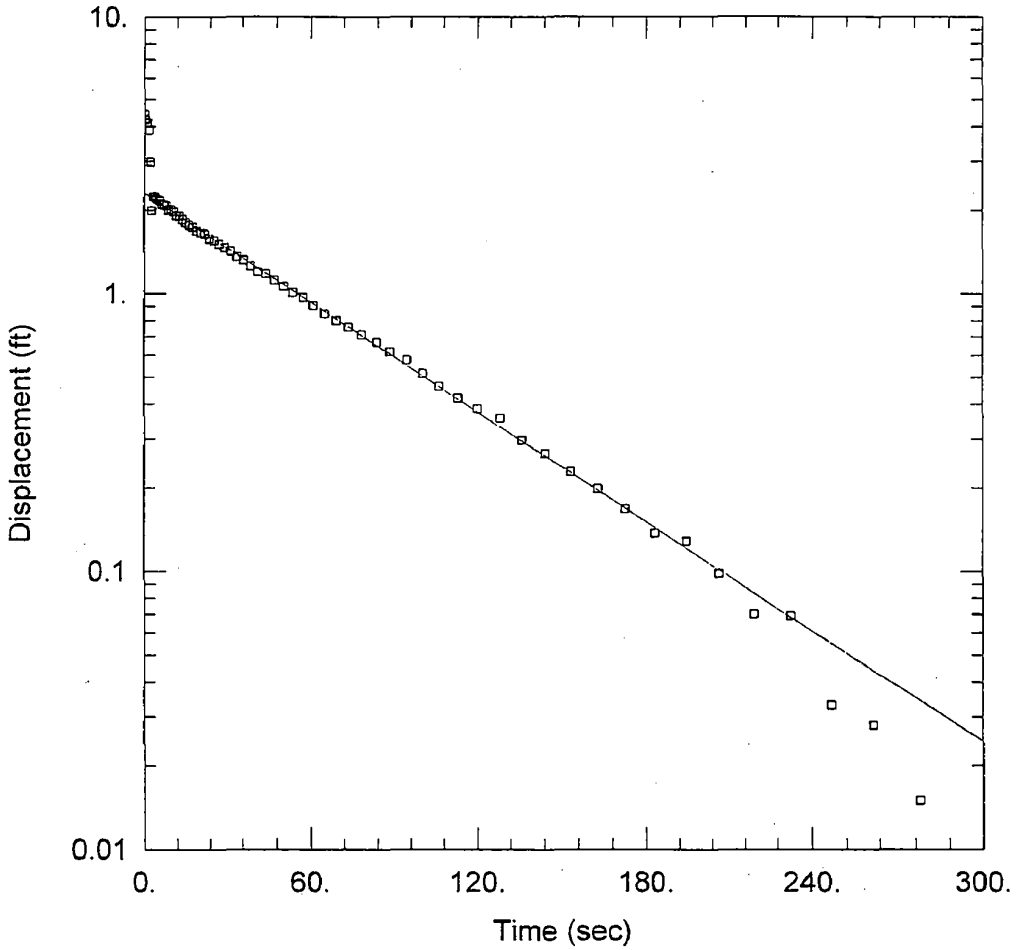
Project Name: Exelon COL	Project Number: 6489-07-1777	Page 1 of 1	OW-2321L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/5/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	51.48 feet		
Total Well Depth	153.06 feet		
Static Water Column Height (H)	101.58 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4.4	~4"
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)			
Length of Well Screen (L)	feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	106721		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-2321L Background	OW-2321L Falling Head	OW-2321L Rising Head
Start Time	4:38:34	4:57:04	5:04:22
End Time	4:53:34	5:01:48	5:07:02
Notes			

Rev:0

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2321L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2321L
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2321L)

Initial Displacement: 4.43 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 101.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

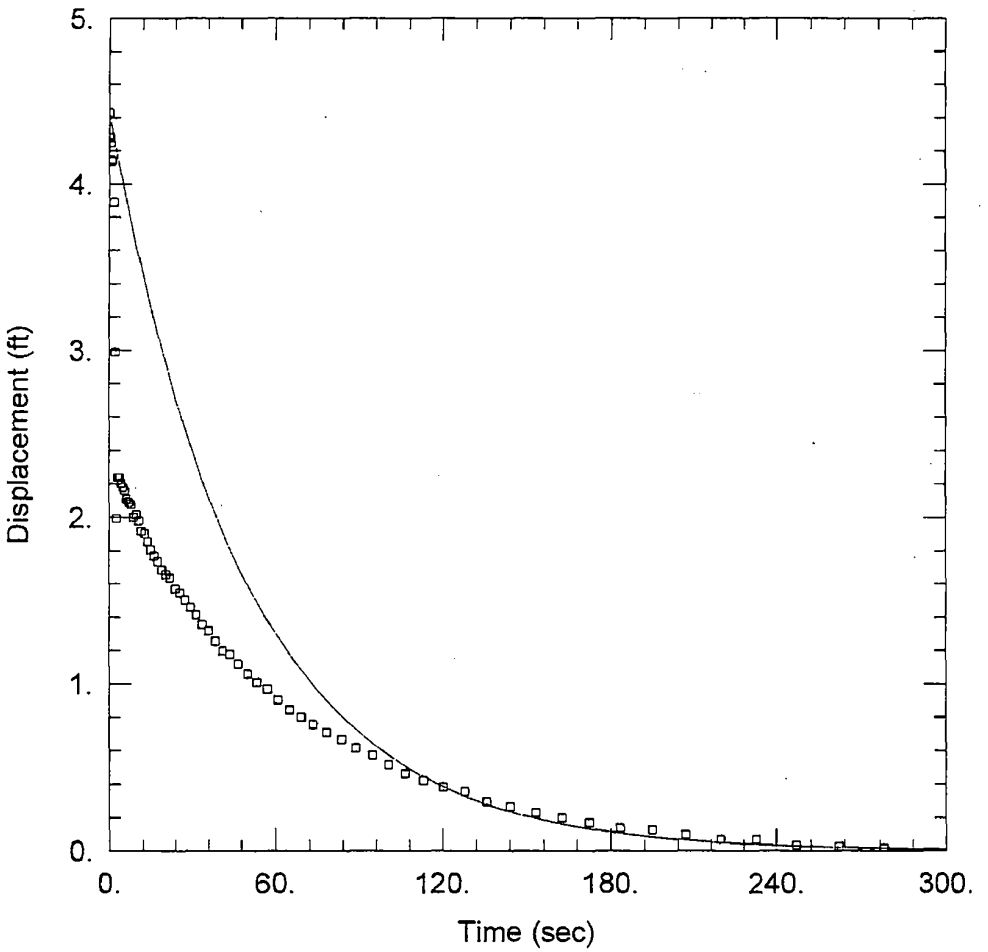
Solution Method: Bouwer-Rice

K = 2.401 ft/day

y0 = 2.306 ft

Prepared by: WJC Date: 4-4-08

Checked by: BMJ Date: 4/4/08



OW-2321L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2321L
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2321L)

Initial Displacement: 4.43 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 101.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

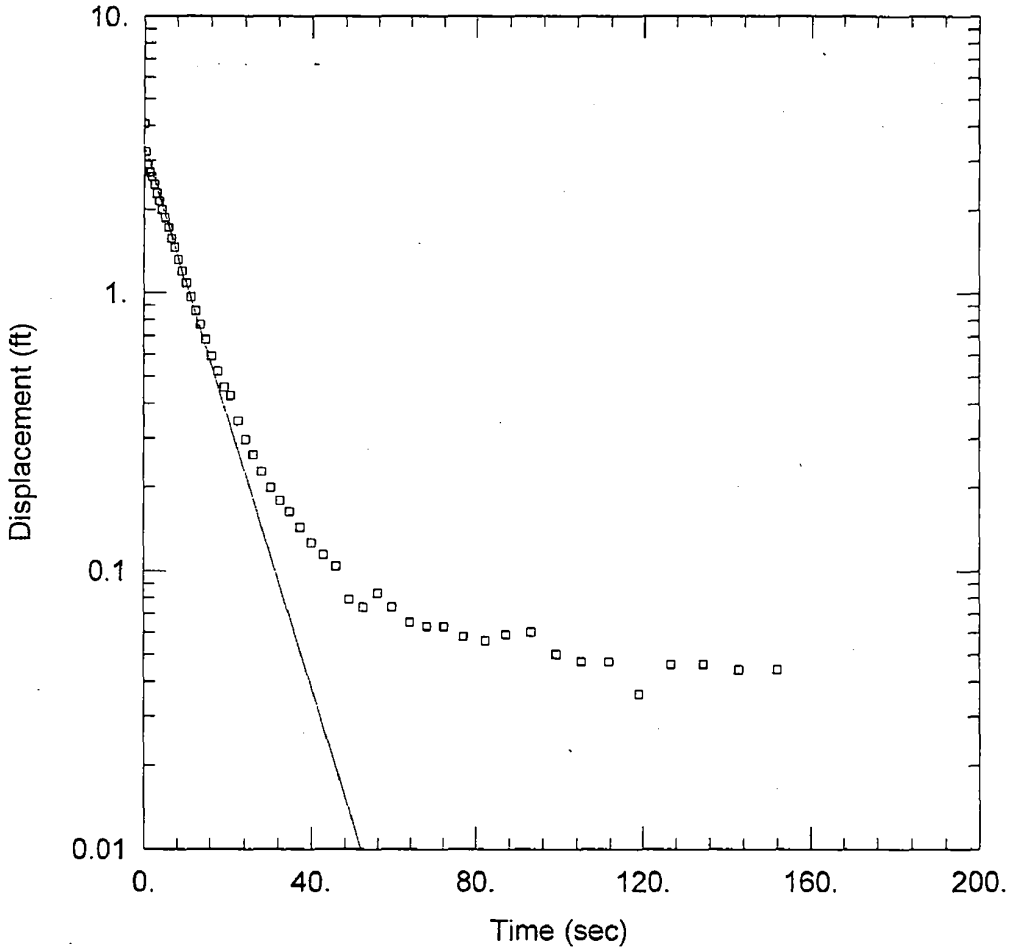
Solution Method: Butler

K = 3.212 ft/day

Le = 0.1 ft

Prepared by: WJC Date: 4-4-08

Checked by: BWH Date: 4/4/08



OW-2321L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2321L
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2321L)

Initial Displacement: 4.067 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 101.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

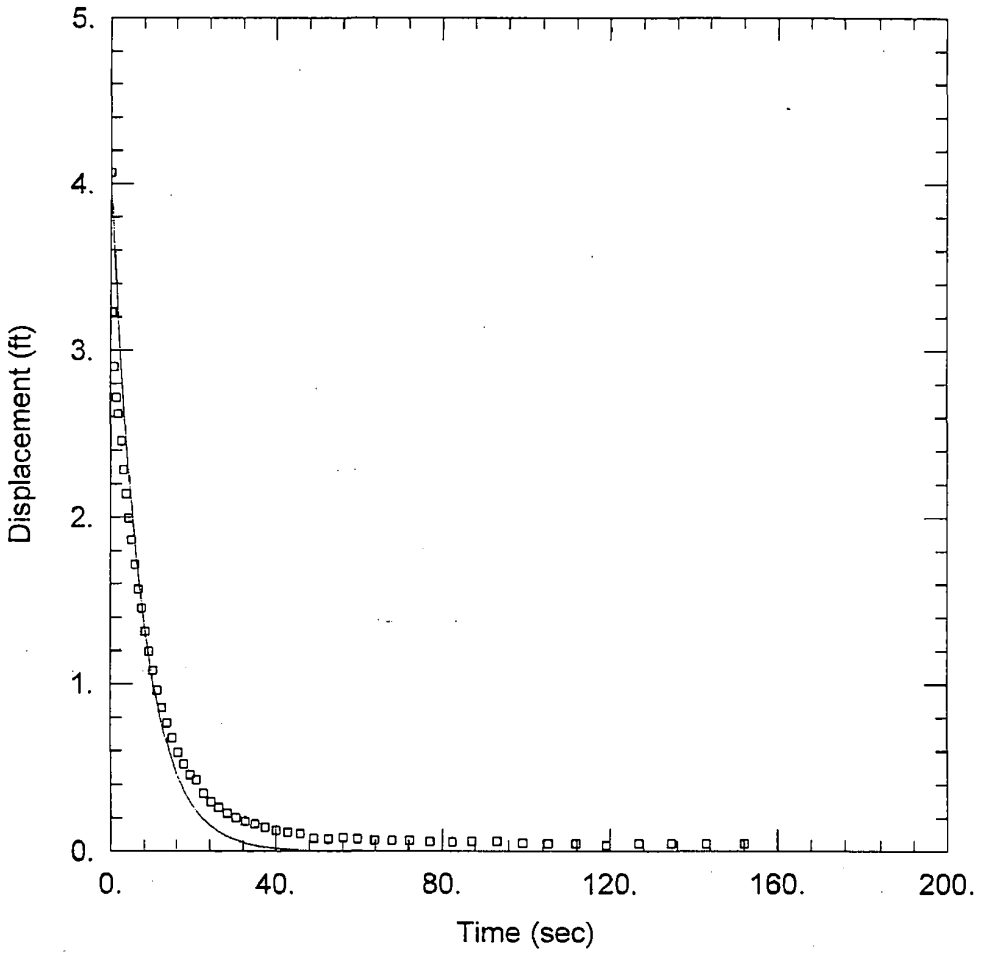
Solution Method: Bouwer-Rice

K = 17.81 ft/day

y0 = 3.399 ft

Prepared by: WSL Date: 4-4-08

Checked by: BAD Date: 4/4/08



OW-2321L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2321L
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2321L)

Initial Displacement: 4.067 ft
Total Well Penetration Depth: 150. ft
Casing Radius: 0.083 ft

Static Water Column Height: 101.6 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 21.56 ft/day

Le = 0.1 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2321 U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/15/08	

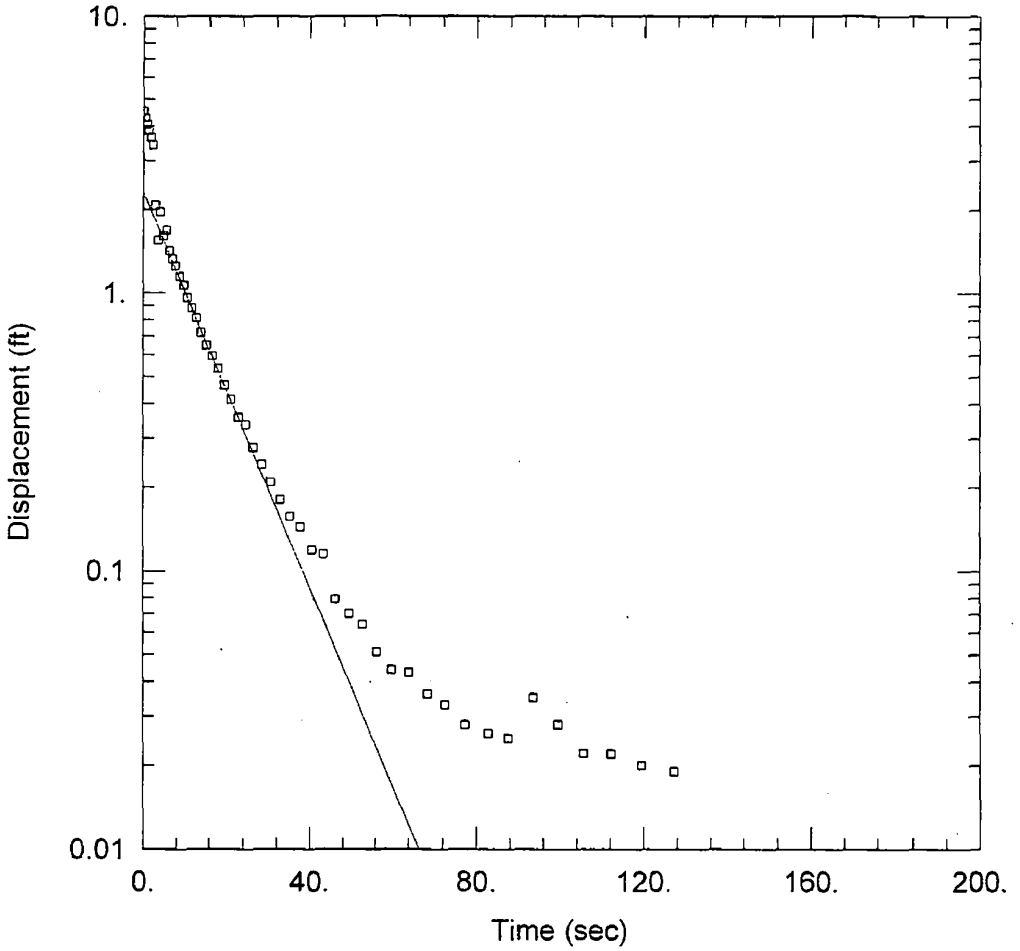
UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	51.45 feet		
Total Well Depth	113.17 feet		
Static Water Column Height (H)	61.72 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4.5'	~5.8
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)			
Length of Well Screen (L)	feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (rep)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	106721		
Slug Data	Slug #1		
Length	5.5'		
Weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-2321 U Background	OW-2321 U Falling Head	OW-2321 U Rising Head
Start Time	4:02:34	4:22:28	4:25:46
End Time	4:18:34	4:24:42	4:28:55

Notes

Rev 0

Prepared by: WSC Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2321U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2321U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2321U)

Initial Displacement: 4.523 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 61.72 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

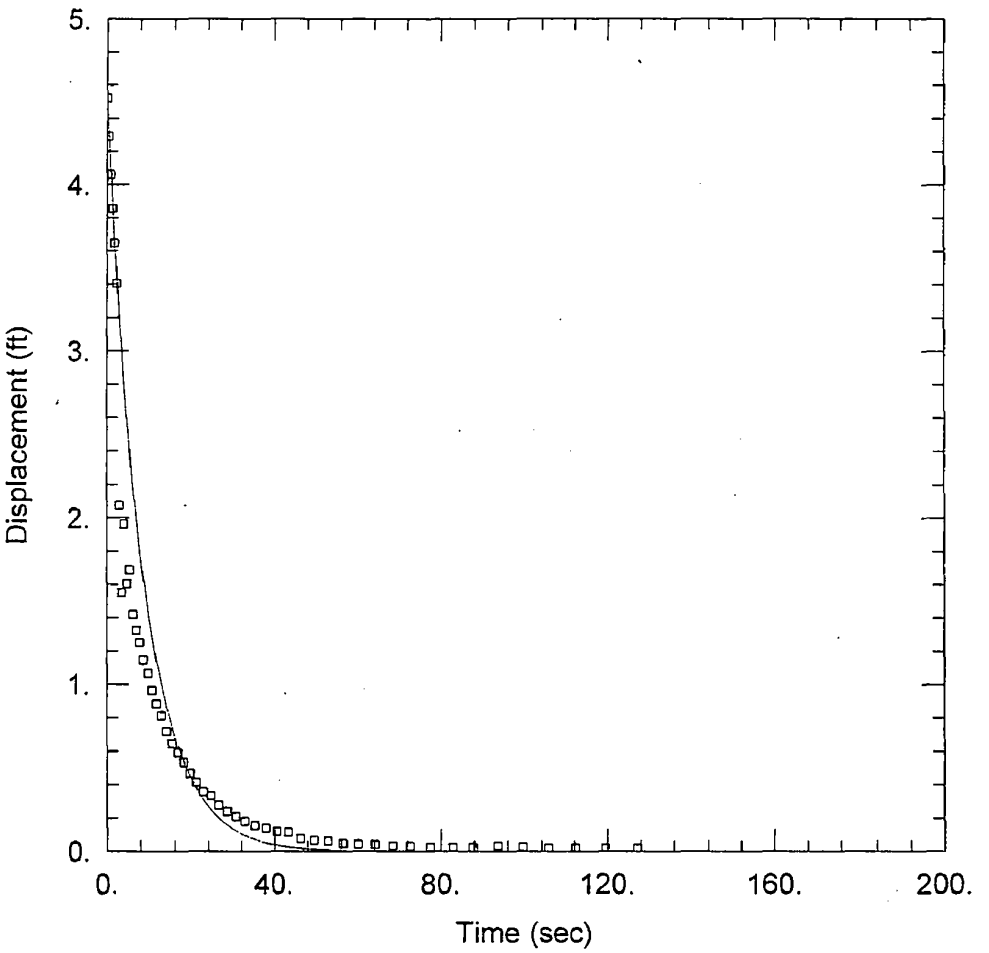
Solution Method: Bouwer-Rice

K = 12.55 ft/day

y0 = 2.31 ft

Prepared by: WJG Date: 4-4-08

Checked by: BNJ Date: 4/4/08



OW-2321U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2321U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2321U)

Initial Displacement: 4.523 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 61.72 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

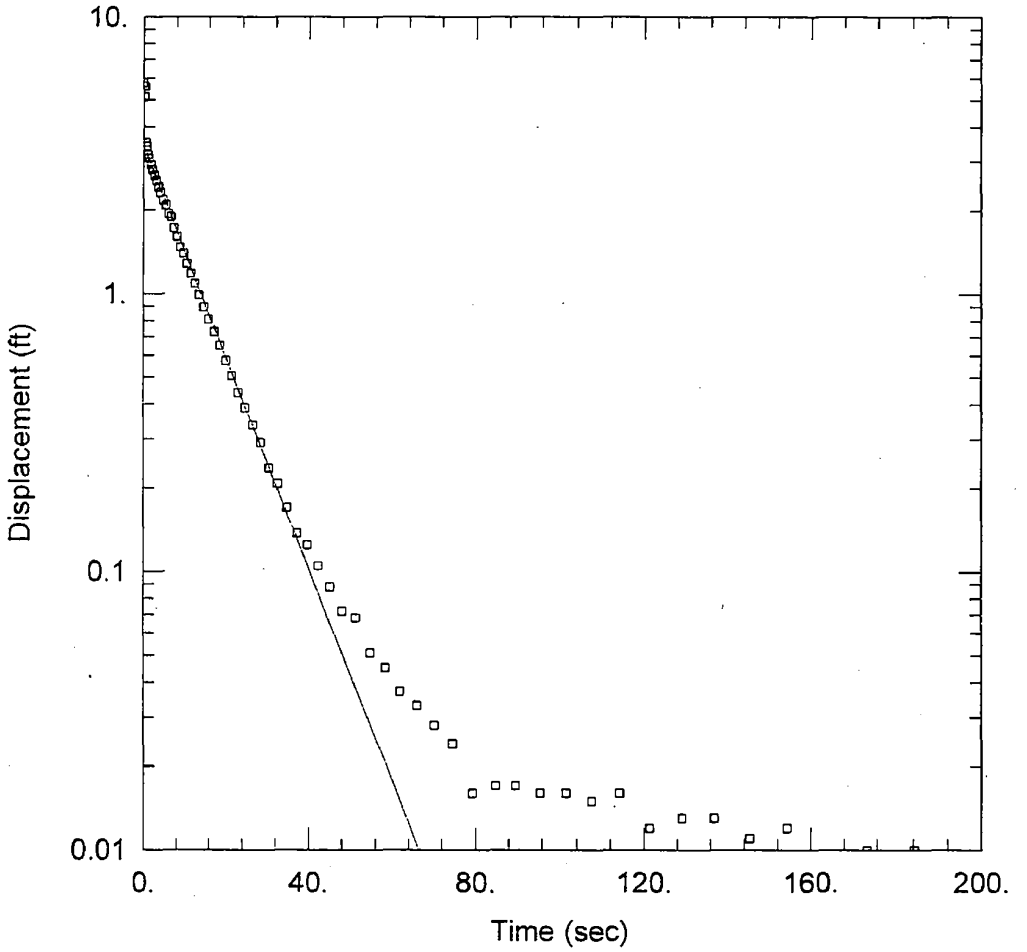
Solution Method: Butler

K = 18.51 ft/day

Le = 0.1 ft

Prepared by: WSL Date: 4-4-08

Checked by: BLM Date: 4/4/08



OW-2321U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2321U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2321U)

Initial Displacement: 5.741 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 61.72 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

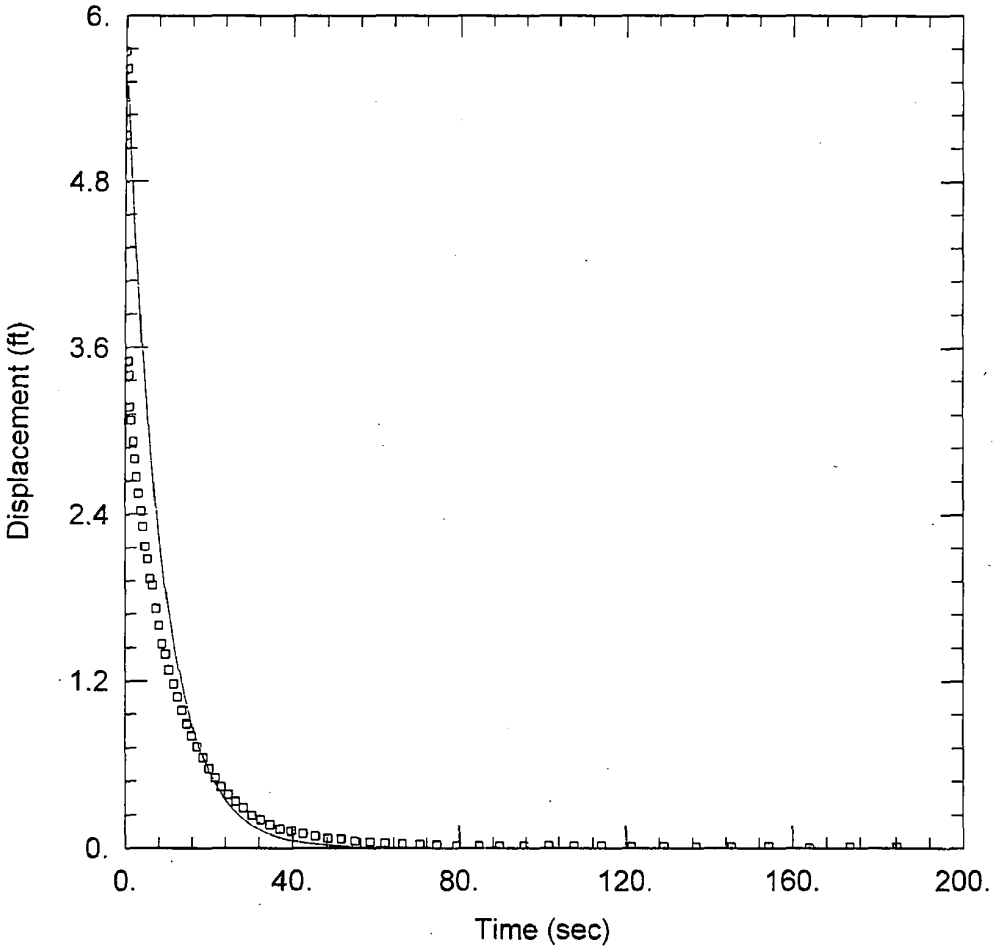
Solution Method: Bouwer-Rice

K = 13.45 ft/day

y0 = 3.427 ft

Prepared by: WJ Date: 4-4-08

Checked by: BWH Date: 4/4/08



OW-2321U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2321U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2321U)

Initial Displacement: 5.741 ft
Total Well Penetration Depth: 110. ft
Casing Radius: 0.083 ft

Static Water Column Height: 61.72 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 18.42 ft/day

Le = 0.1 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon GDL	Project Number: 6469-07-1777	Page 1 of 1	OW-2324L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/5/08	

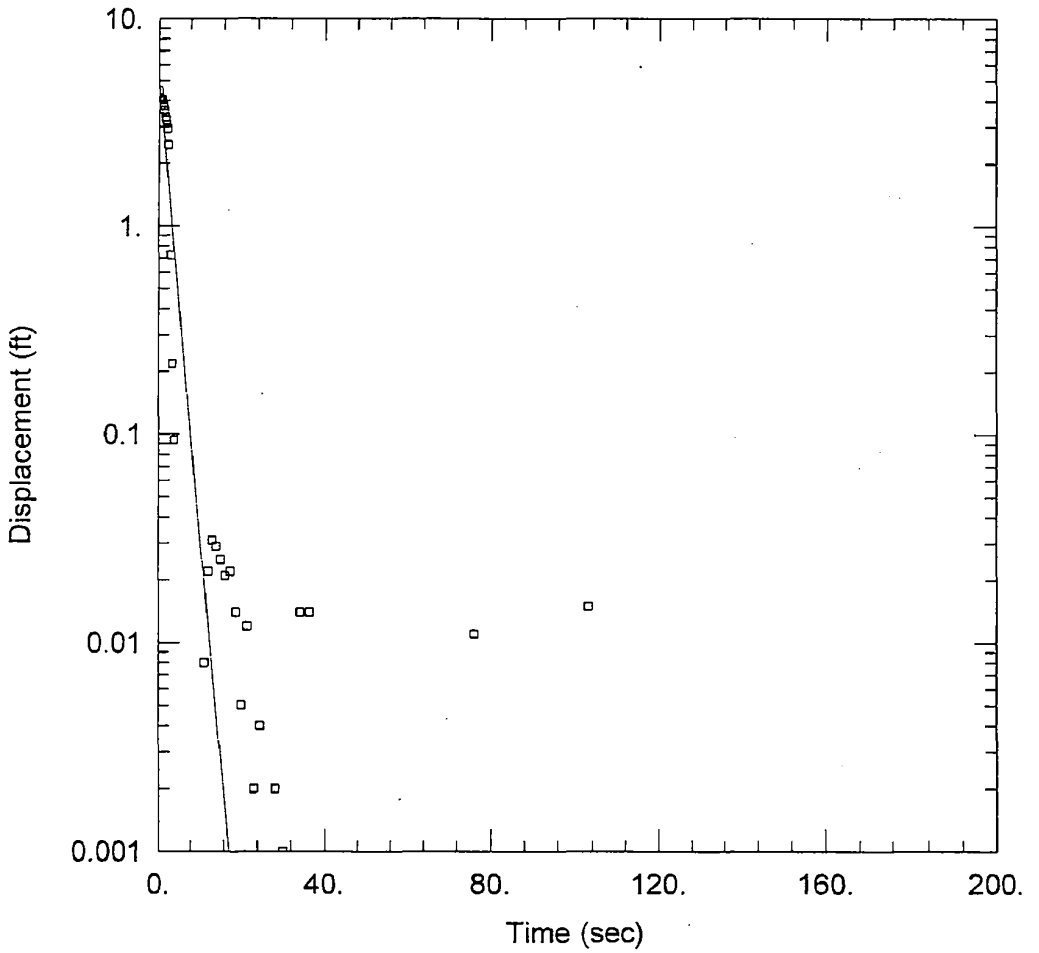
UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	11.65 feet		
Total Well Depth	128.17 feet		
Static Water Column Height (H)	116.52 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4.5'	~3'
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)			
Length of Well Screen (L)	feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	10672		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-2324L Background	OW-2324L Falling Head	OW-2324L Rising Head
Start Time	2:34:23	2:51:42	2:55:28
End Time	2:44:23	2:53:49	2:57:28

Notes

Rev 0

Prepared by: WSV Date: 4-4-08

Checked by: BMJ Date: 4/4/08



OW-2324L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324L
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324L)

Initial Displacement: 4.49 ft
Total Well Penetration Depth: 125. ft
Casing Radius: 0.083 ft

Static Water Column Height: 116.5 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

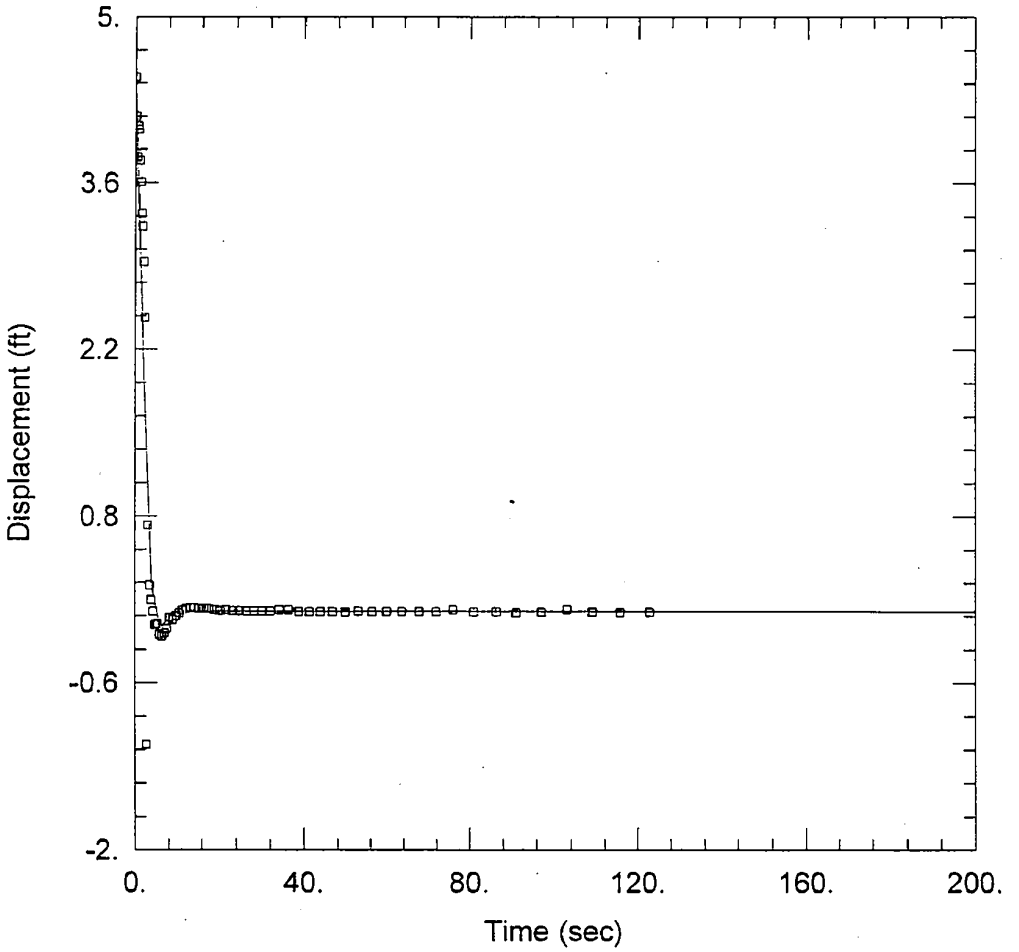
Aquifer Model: Confined

Solution Method: Bouwer-Rice

K = 77. ft/day

y0 = 5.309 ft

Prepared by: WJV Date: 4-4-08
Checked by: BHH Date: 4/4/08



OW-2324L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324L
Test Date: 2/5/08

AQUIFER DATA

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

WELL DATA (OW-2324L)

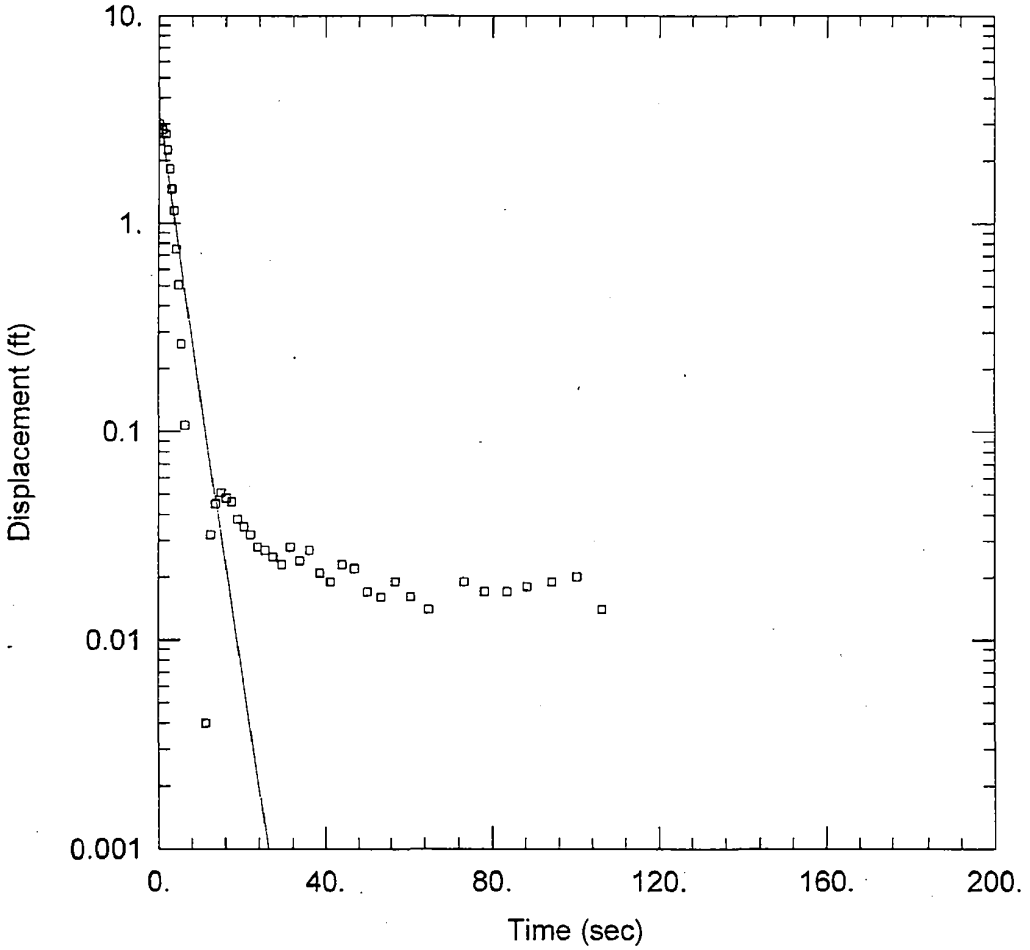
Initial Displacement: 4.49 ft
Total Well Penetration Depth: 125. ft
Casing Radius: 0.083 ft
Static Water Column Height: 116.5 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Butler
K = 85.12 ft/day
Le = 52.92 ft

Prepared by: WSLr Date: 4-4-08

Checked by: BHD Date: 4/4/08



OW-2324L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324L
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324L)

Initial Displacement: 2.999 ft
Total Well Penetration Depth: 125. ft
Casing Radius: 0.083 ft

Static Water Column Height: 116.5 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

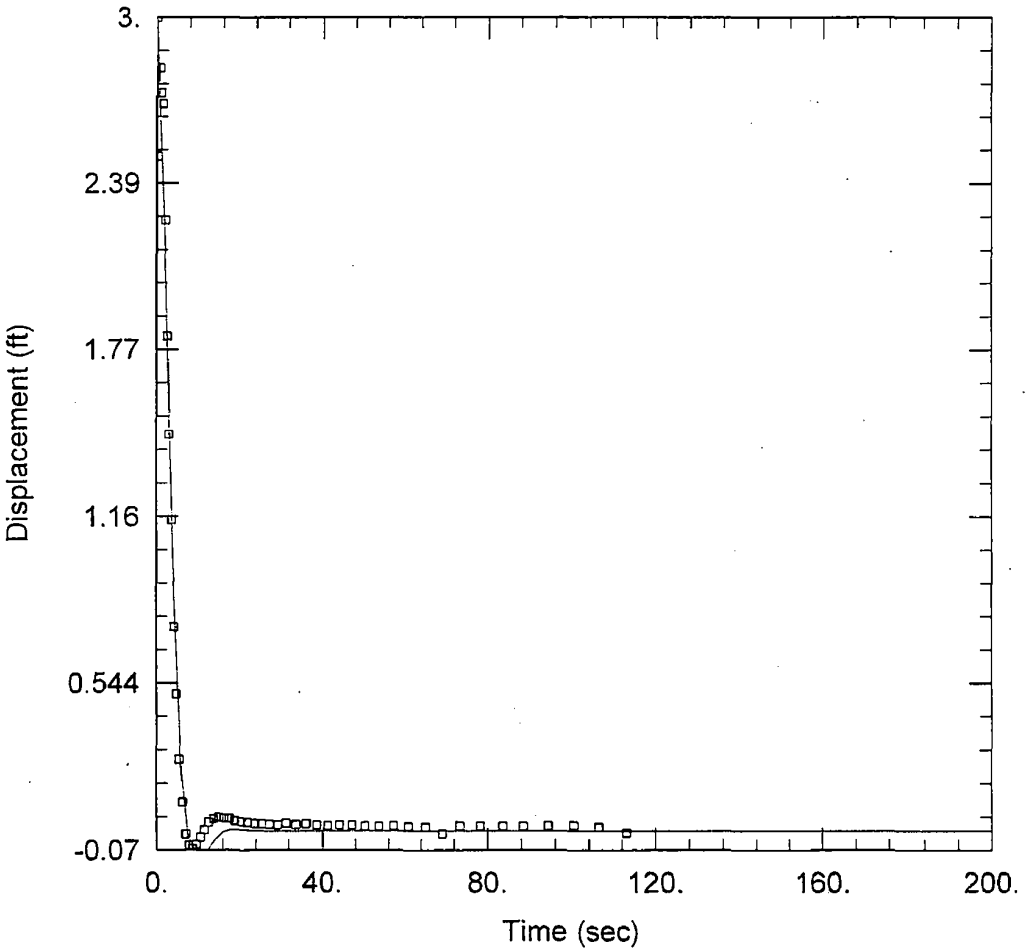
Solution Method: Bouwer-Rice

K = 48.21 ft/day

y0 = 3.403 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: BWH Date: 4/4/08



OW-2324L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324L
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324L)

Initial Displacement: 2.999 ft
Total Well Penetration Depth: 125. ft
Casing Radius: 0.083 ft

Static Water Column Height: 116.5 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 52.8 ft/day

Le = 147.5 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	OW-2324U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/5/08	

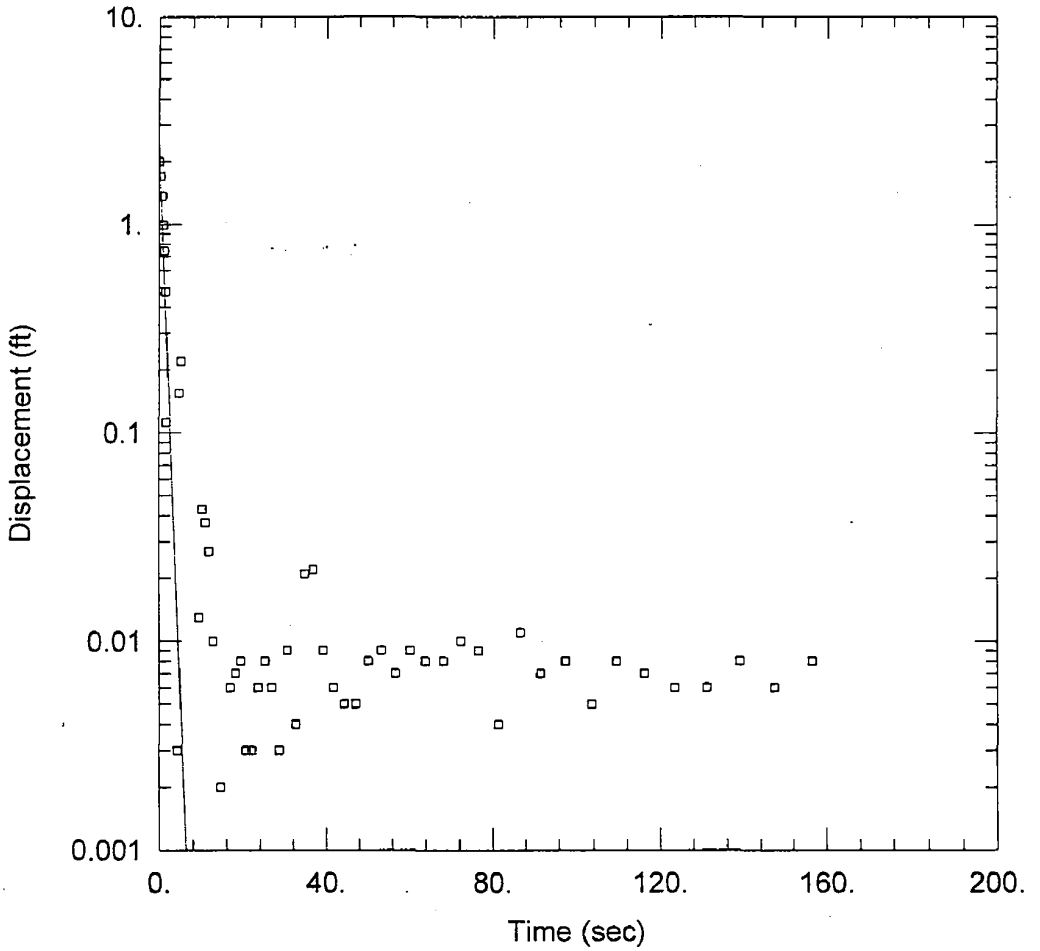
UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	11.15 feet		
Total Well Depth	47.98 feet		
Static Water Column Height (H)	36.83 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~2'	~1.5'
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)			
Length of Well Screen (L)	feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	106721		
Slug Data	Slug #1		
Length	5.5 feet		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-2324U Background	OW-2324U Falling Head	OW-2324U Rising Head
Start Time	1:53:54	2:11:25	2:16:38
End Time	2:08:54	2:14:05	2:19:07

Notes
Recd Falling & Rising Head because of such fast recovery. OW-2324U Falling Head B
OW-2324U Rising Head B
Used ~~Fast Linear~~ Bouwer & Rice

Rev.0

Prepared by: WSU Date: 4-4-08

Checked by: BLH Date: 4/4/08



OW-2324U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 8. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324U)

Initial Displacement: 2.014 ft
Total Well Penetration Depth: 45. ft
Casing Radius: 0.083 ft

Static Water Column Height: 36.83 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

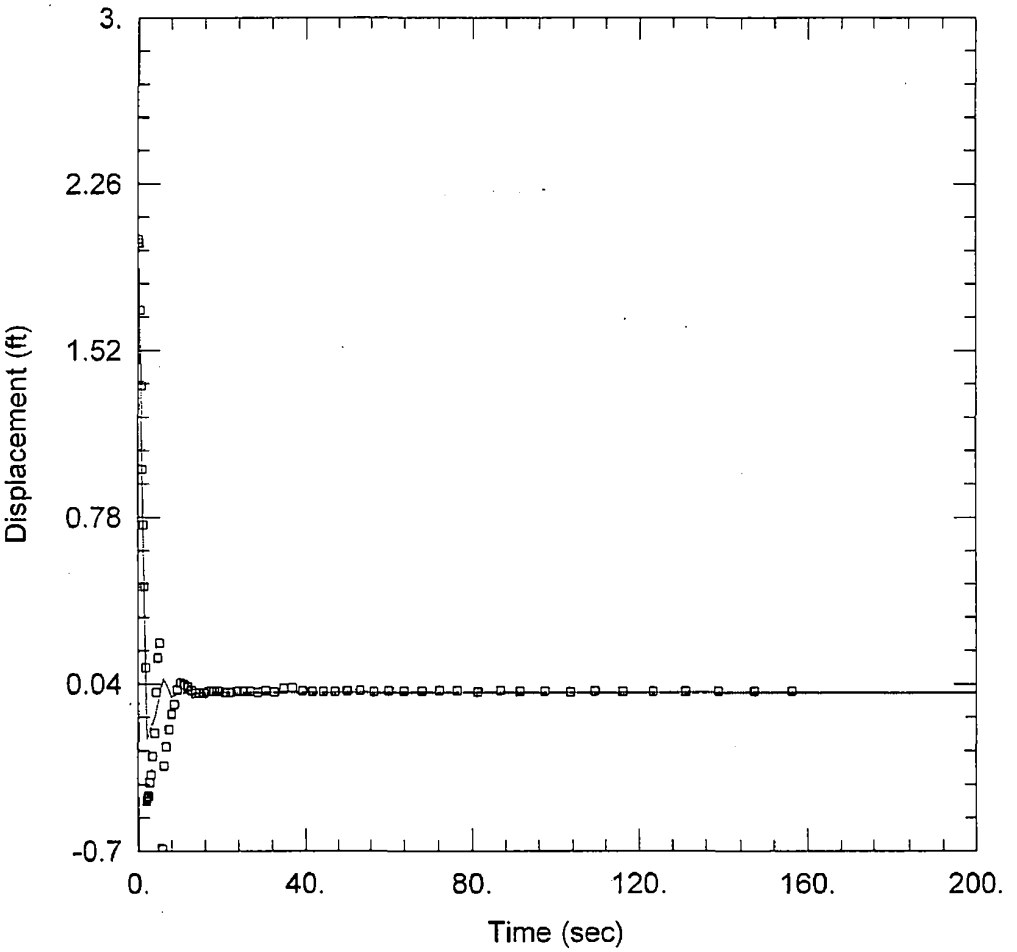
Solution Method: Bouwer-Rice

K = 169.1 ft/day

y0 = 2.461 ft

Prepared by: WSC Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2324U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 8. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324U)

Initial Displacement: 2.014 ft
Total Well Penetration Depth: 45. ft
Casing Radius: 0.083 ft

Static Water Column Height: 36.83 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

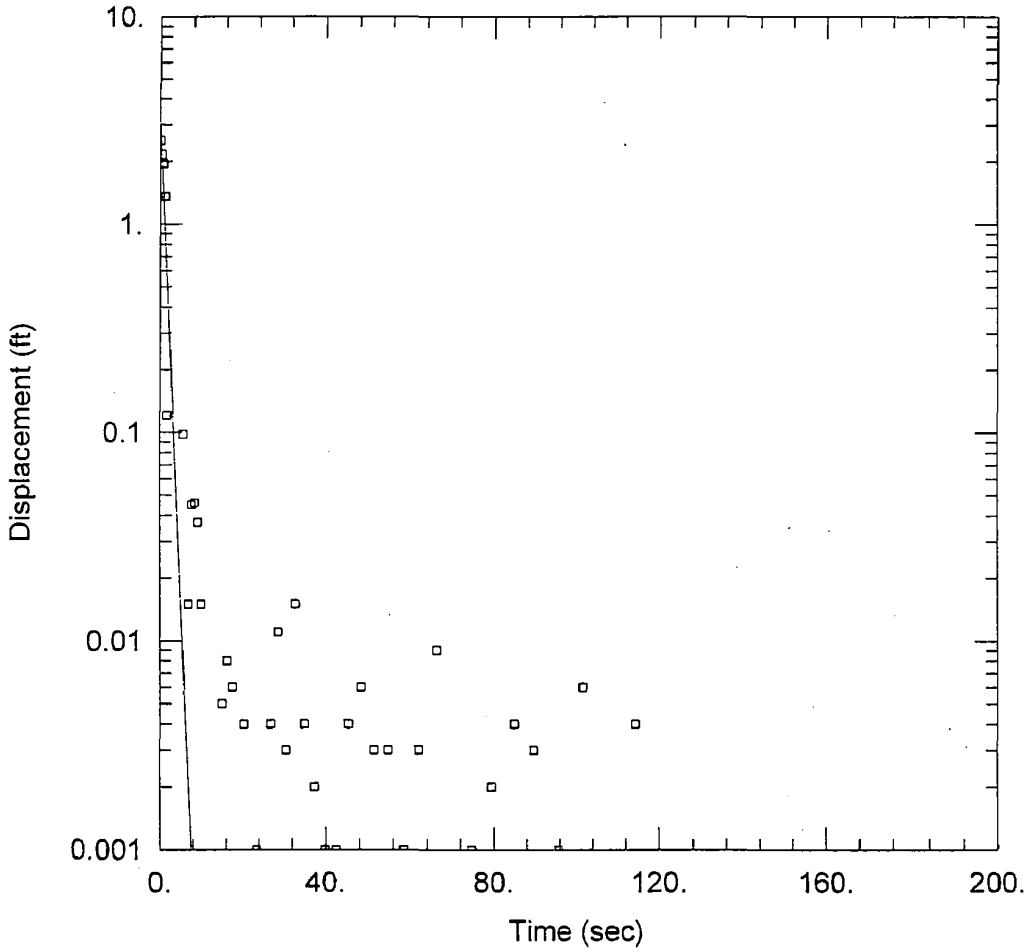
Solution Method: Butler

K = 233.9 ft/day

Le = 18.74 ft

Prepared by: WJL Date: 4-2-08

Checked by: BWJ Date: 4/4/08



OW-2324U FALLING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 8. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324U)

Initial Displacement: 2.529 ft
Total Well Penetration Depth: 45. ft
Casing Radius: 0.083 ft

Static Water Column Height: 36.82 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

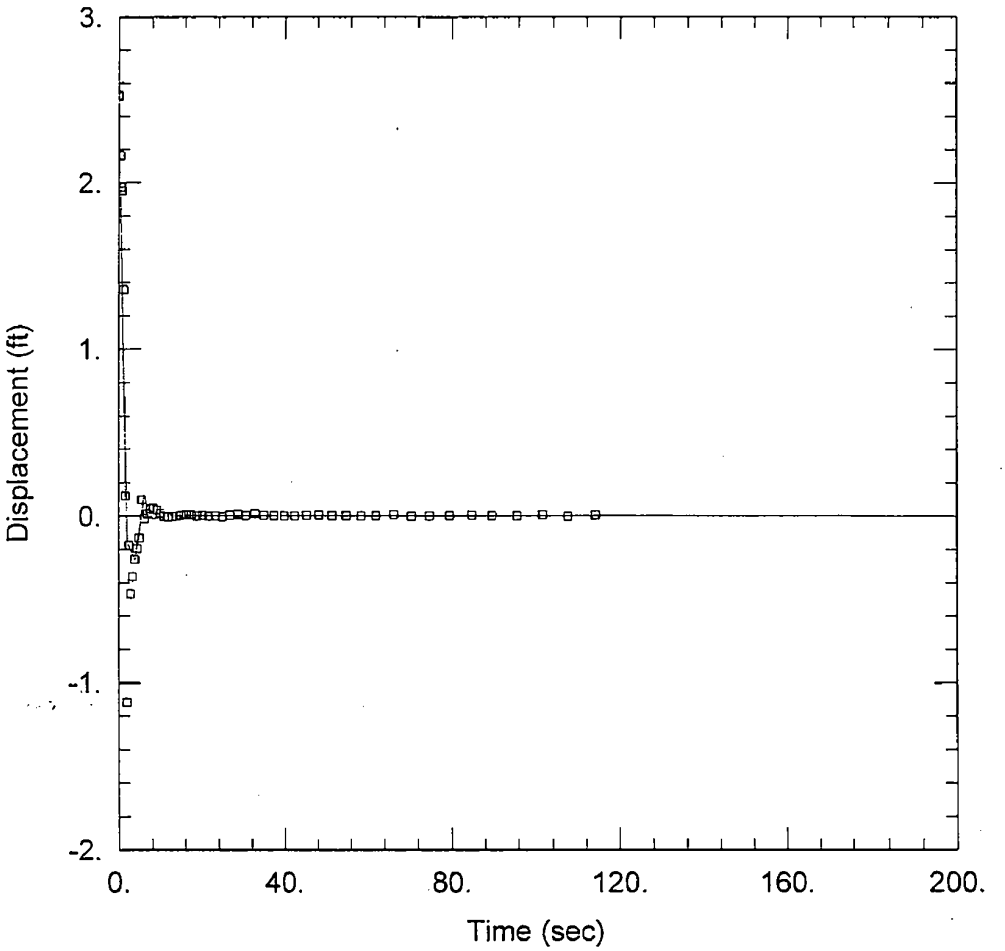
Solution Method: Bouwer-Rice

K = 147.3 ft/day

y0 = 3.088 ft

Prepared by: LWSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2324U FALLING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 8. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324U)

Initial Displacement: 2.529 ft
Total Well Penetration Depth: 45. ft
Casing Radius: 0.083 ft

Static Water Column Height: 36.82 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

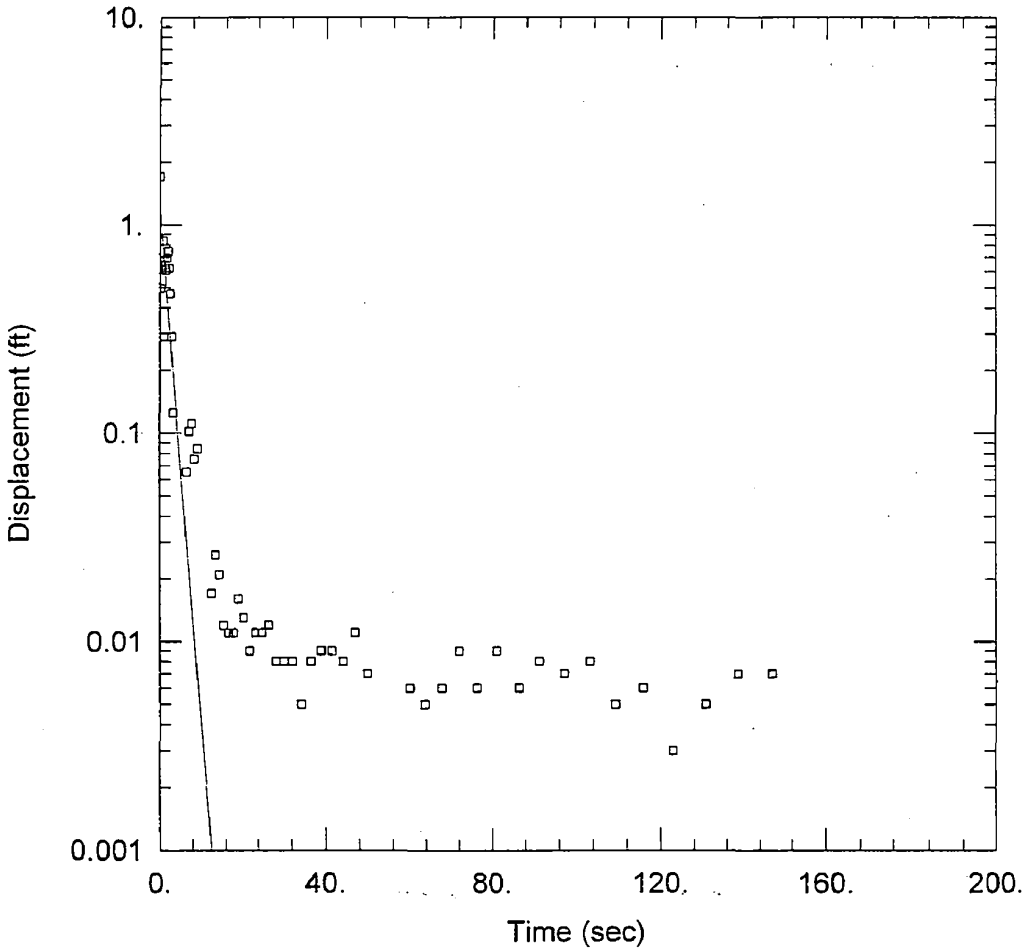
Solution Method: Butler

K = 226. ft/day

Le = 22.34 ft

Prepared by: WJC Date: 4-4-08

Checked by: BNJ Date: 4/4/08



OW-2324U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 8. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324U)

Initial Displacement: 1.709 ft
Total Well Penetration Depth: 45. ft
Casing Radius: 0.083 ft

Static Water Column Height: 36.83 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

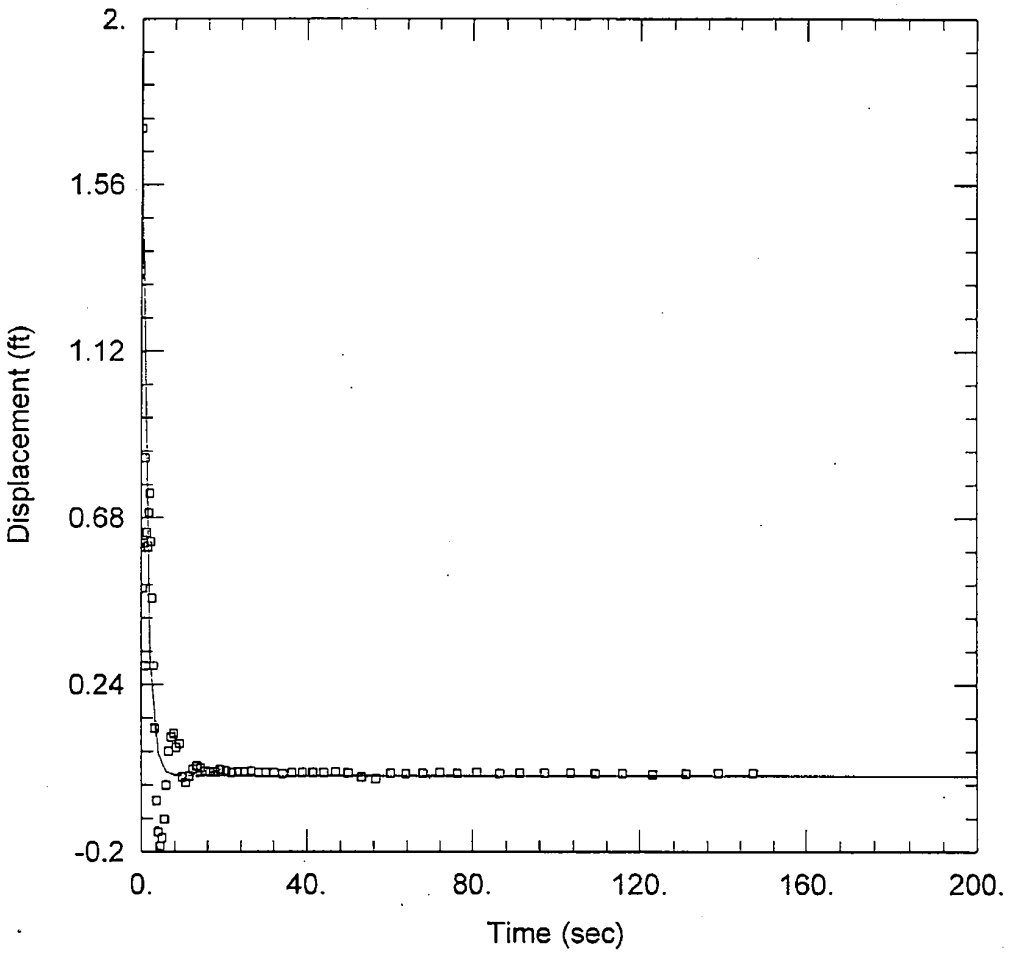
Solution Method: Bouwer-Rice

K = 78.51 ft/day

y0 = 1.184 ft

Prepared by: WSL Date: 4-4-08

Checked by: BMJ Date: 4/4/08



OW-2324U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 8. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324U)

Initial Displacement: 1.709 ft
Total Well Penetration Depth: 45. ft
Casing Radius: 0.083 ft

Static Water Column Height: 36.83 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

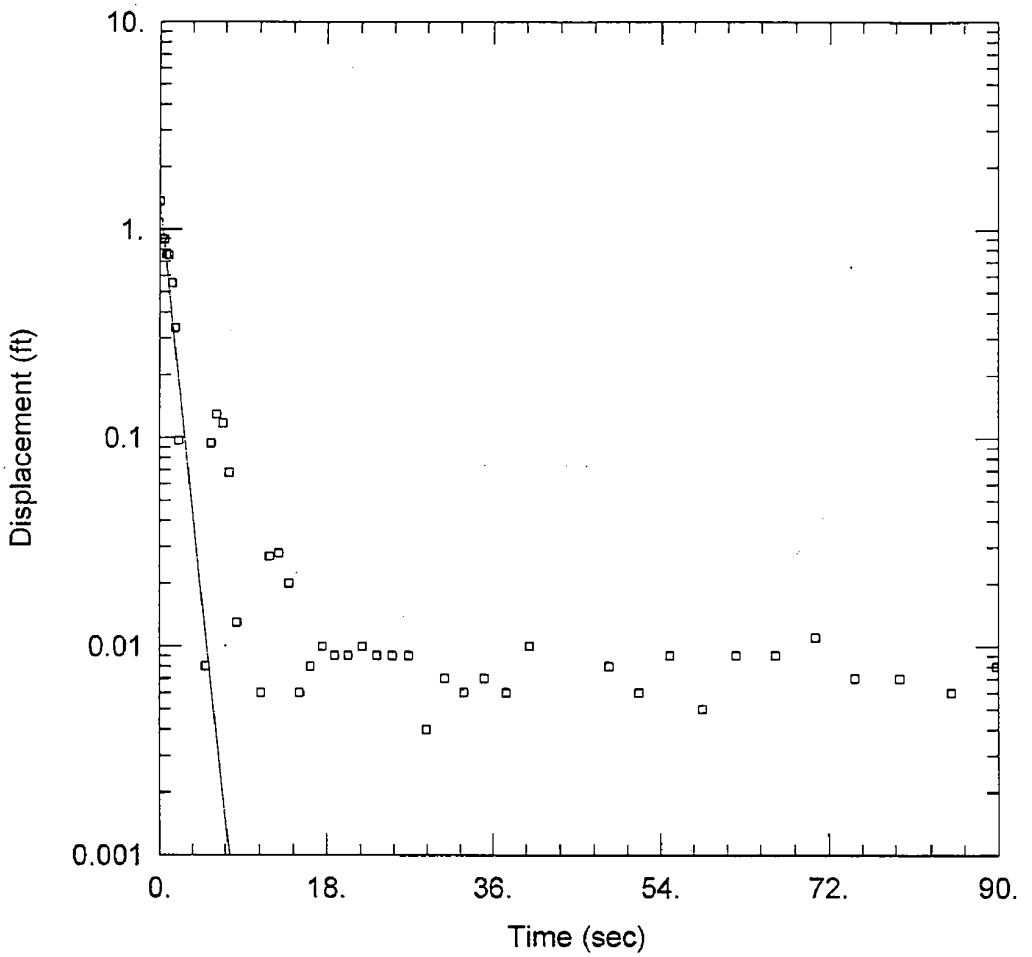
Solution Method: Butler

K = 134.5 ft/day

Le = 0.1 ft

Prepared by: WSC Date: 4-4-08

Checked by: BMM Date: 4/4/08



OW-2324U RISING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 8. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324U)

Initial Displacement: 1.364 ft
Total Well Penetration Depth: 45. ft
Casing Radius: 0.083 ft

Static Water Column Height: 36.83 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

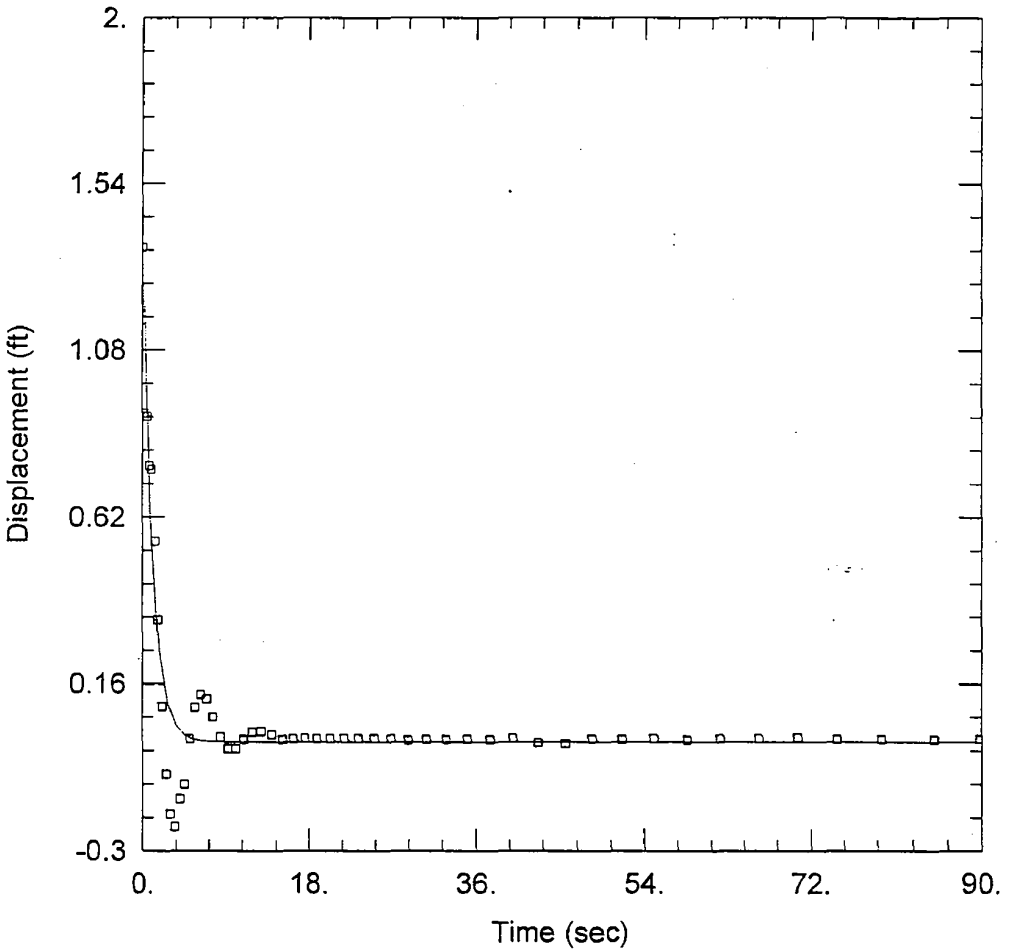
Solution Method: Bouwer-Rice

K = 130.4 ft/day

y0 = 1.371 ft

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2324U RISING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2324U
Test Date: 2/5/08

AQUIFER DATA

Saturated Thickness: 8. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2324U)

Initial Displacement: 1.364 ft
Total Well Penetration Depth: 45. ft
Casing Radius: 0.083 ft

Static Water Column Height: 36.83 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 150.3 ft/day

Le = 0.434 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2348L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/6/08	

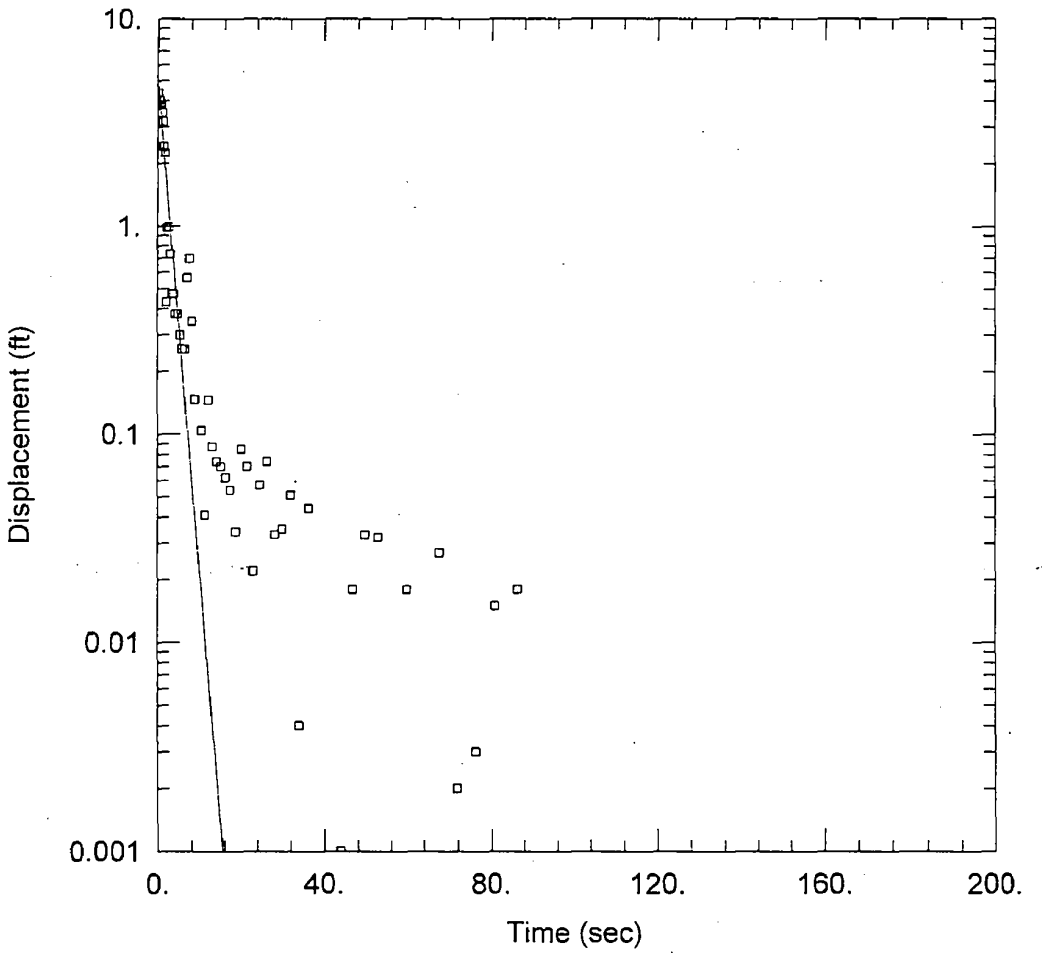
UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	39.31 feet		
Total Well Depth	148.32 feet		
Static Water Column Height (H)	109.01 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4.5'	~5.5
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)			
Length of Well Screen (L)	feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (req)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	109262		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625"		
Slug Test File	Background	Falling	Rising
File Name	OW-2348L Background	OW-2348L Falling Head	OW-2348L Rising Head
Start Time	2:56:32	~~3:13:47~~ 3:18:02	3:21:57
End Time	3:11:32	3:19:49	3:23:22

Notes
Very fast recovery - try again w/ Label B

Rev B

Prepared by: WJL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2348L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348L
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348L)

Initial Displacement: 4.367 ft
Total Well Penetration Depth: 144. ft
Casing Radius: 0.083 ft

Static Water Column Height: 109. ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

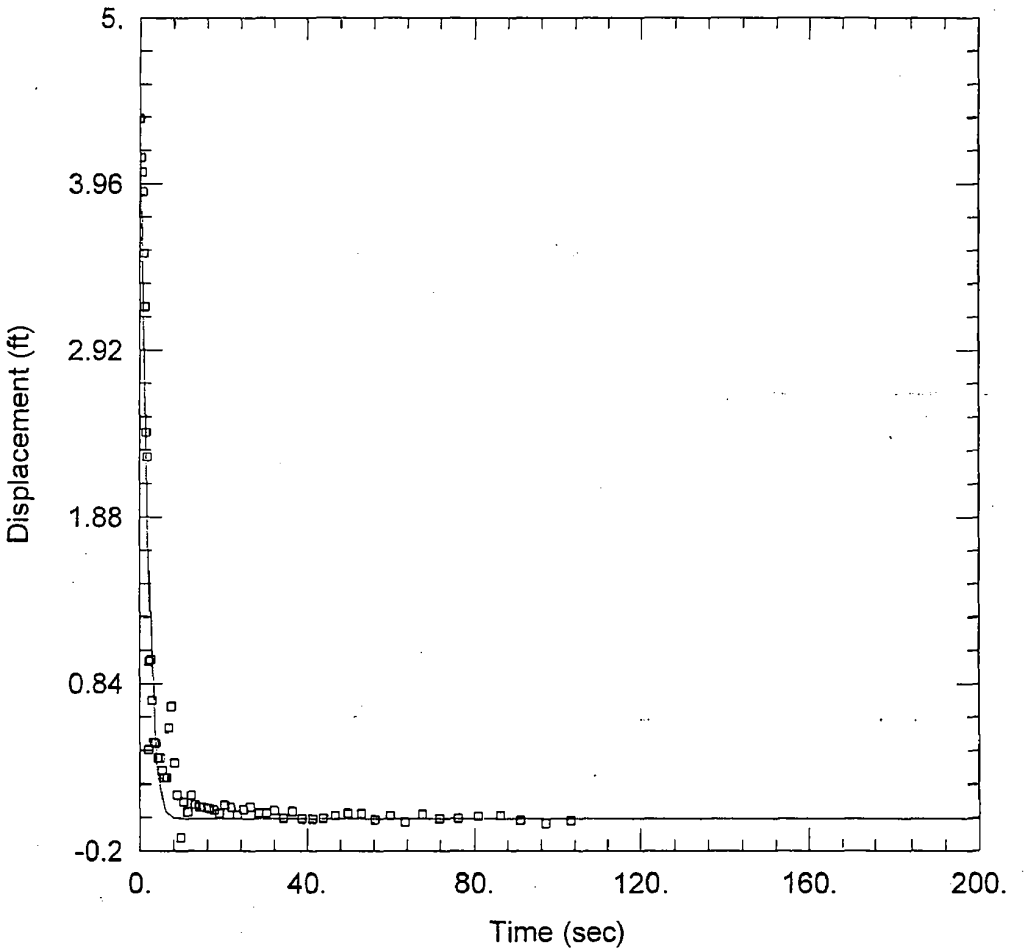
Solution Method: Bouwer-Rice

K = 86.08 ft/day

y0 = 4.979 ft

Prepared by: WSB Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2348L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348L
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348L)

Initial Displacement: 4.367 ft
Total Well Penetration Depth: 144. ft
Casing Radius: 0.083 ft

Static Water Column Height: 109. ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

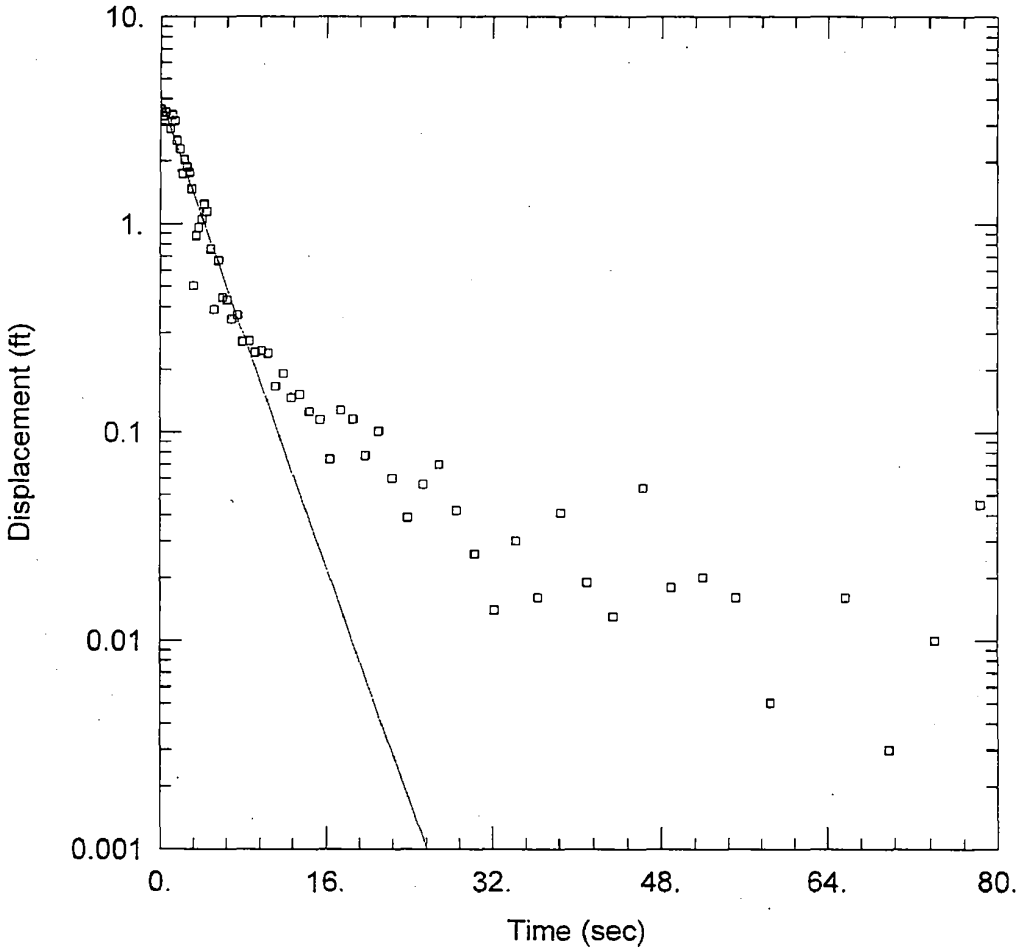
Solution Method: Butler

K = 86.7 ft/day

Le = 29.19 ft

Prepared by: WXL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2348L FALLING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348L
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348L)

Initial Displacement: 3.597 ft
Total Well Penetration Depth: 144. ft
Casing Radius: 0.083 ft

Static Water Column Height: 109. ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

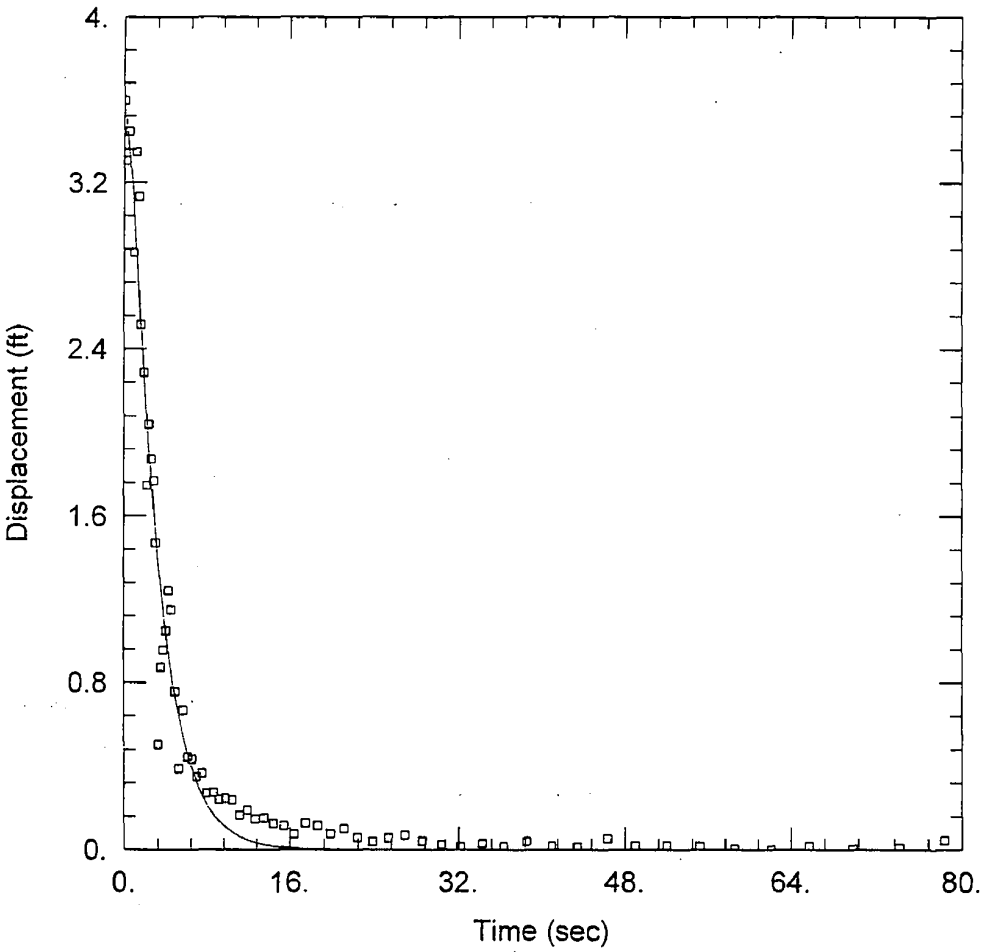
Solution Method: Bouwer-Rice

K = 50.94 ft/day

y0 = 3.951 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: BHJ Date: 4/4/08



OW-2348L FALLING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348L
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348L)

Initial Displacement: 3.597 ft
Total Well Penetration Depth: 144. ft
Casing Radius: 0.083 ft

Static Water Column Height: 109. ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

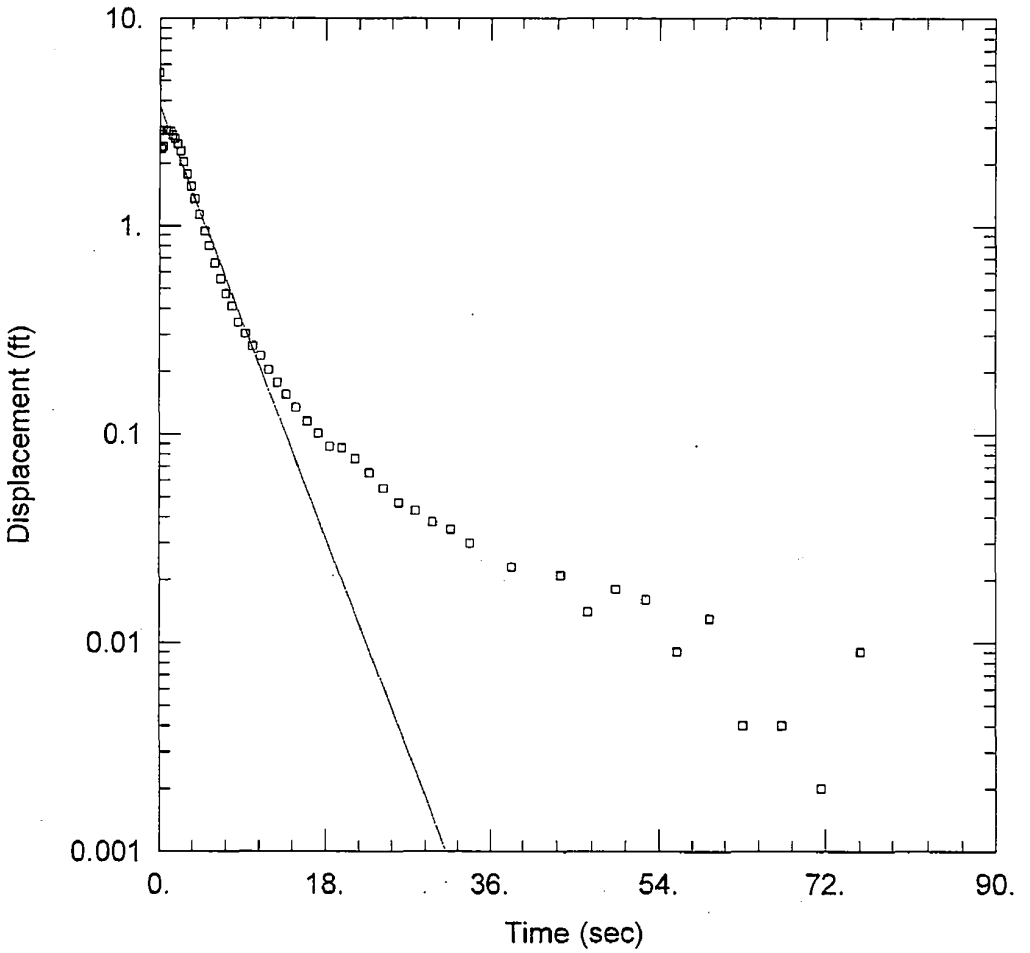
Solution Method: Butler

K = 49.39 ft/day

Le = 56.9 ft

Prepared by: WSV Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2348L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348L
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW2348L)

Initial Displacement: 5.458 ft
Total Well Penetration Depth: 144. ft
Casing Radius: 0.083 ft

Static Water Column Height: 109. ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

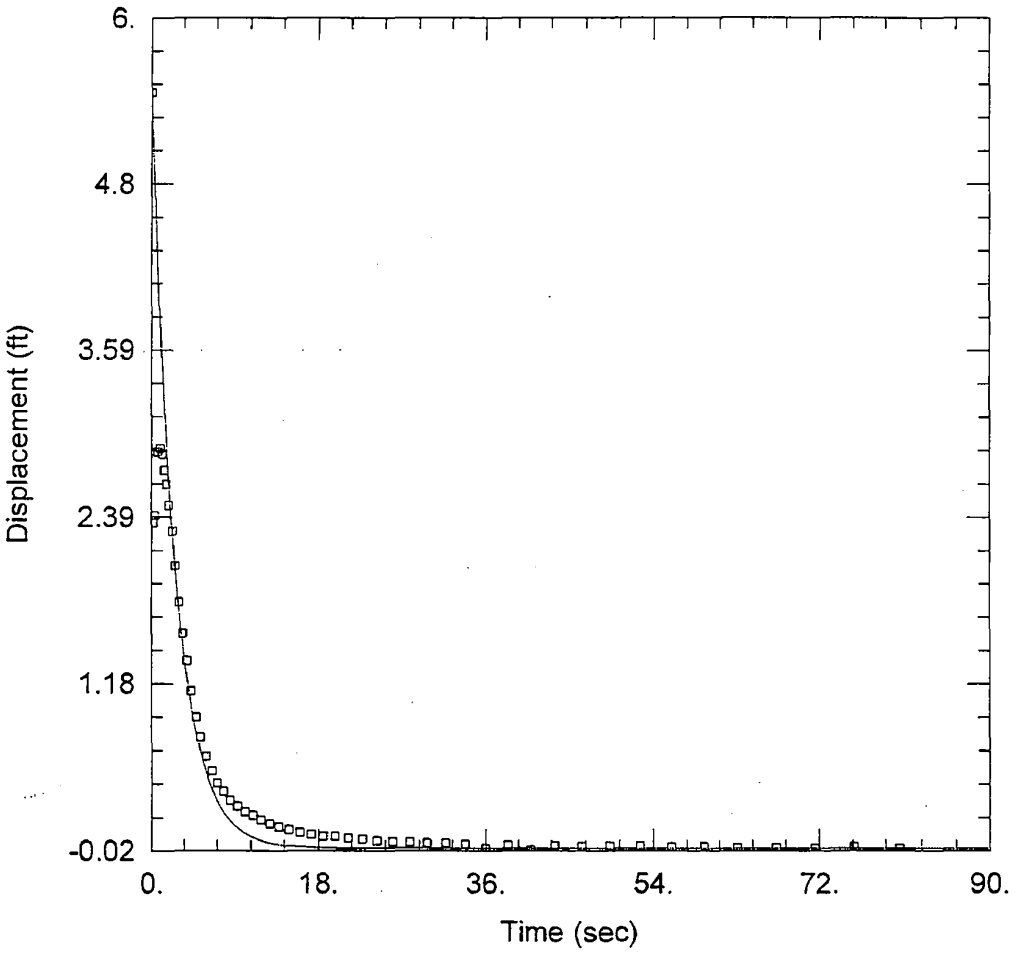
Solution Method: Bouwer-Rice

K = 41.74 ft/day

y0 = 3.77 ft

Prepared by: WXV Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2348L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348L
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW2348L)

Initial Displacement: 5.458 ft
Total Well Penetration Depth: 144. ft
Casing Radius: 0.083 ft

Static Water Column Height: 109. ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

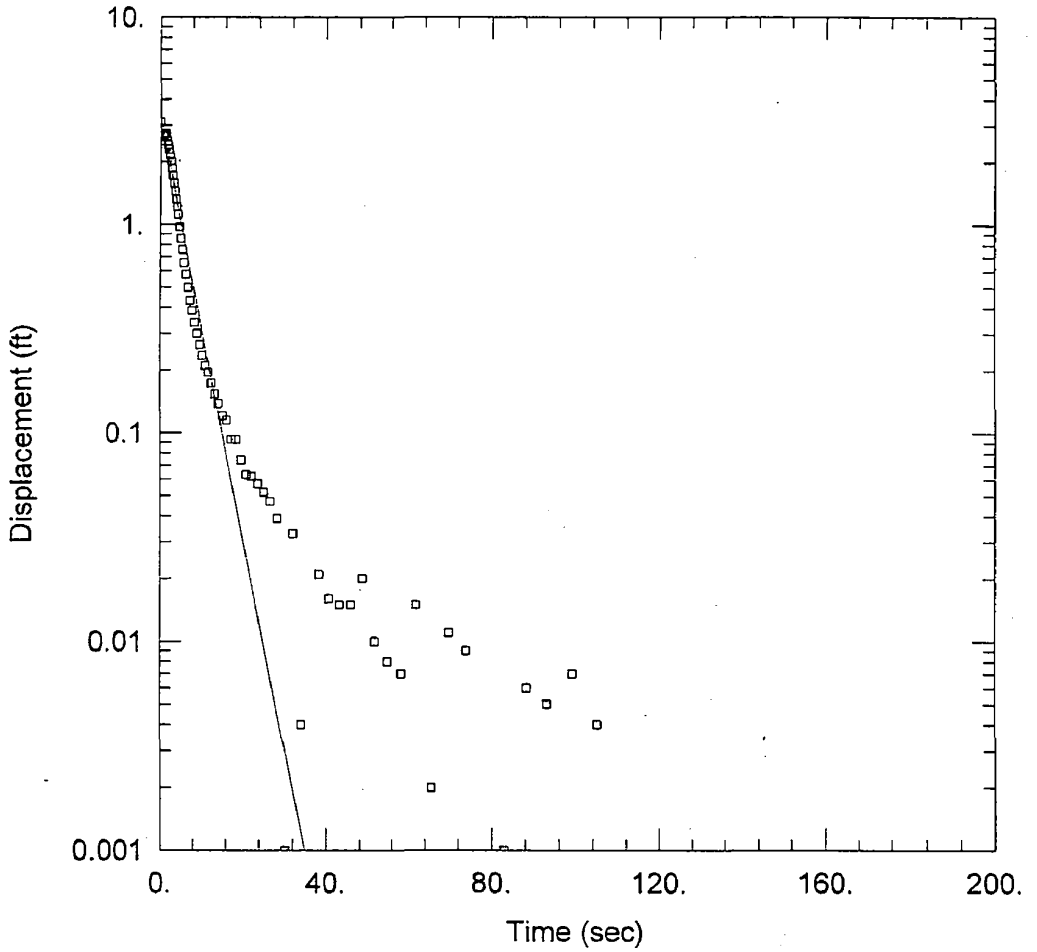
Solution Method: Butler

K = 62.03 ft/day

Le = 0.1 ft

Prepared by: WSL Date: 4-4-08

Checked by: BLD Date: 4/4/08



OW-2348L RISING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348L
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348L)

Initial Displacement: 3.111 ft
Total Well Penetration Depth: 144. ft
Casing Radius: 0.083 ft

Static Water Column Height: 109. ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

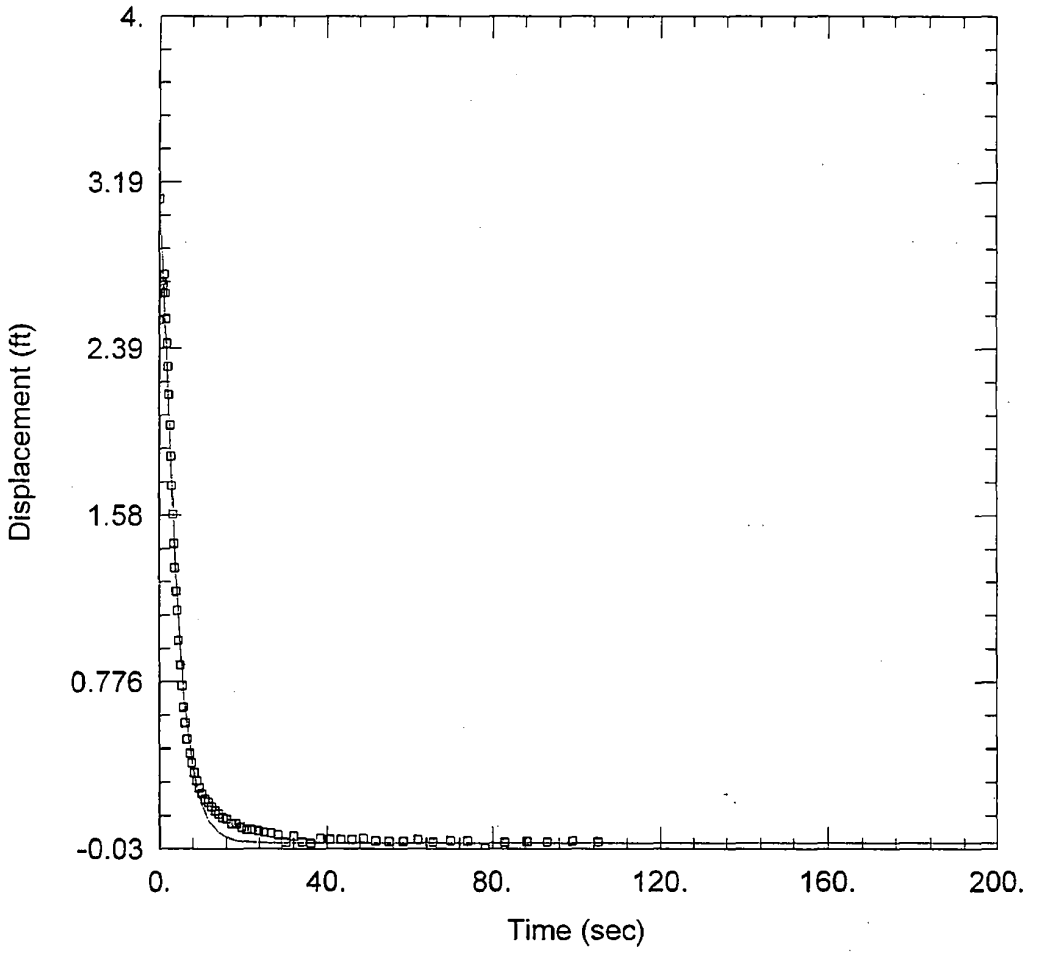
Solution Method: Bouwer-Rice

K = 36.72 ft/day

y0 = 3.319 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: [illegible] Date: 4/4/08



OW-2348L RISING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348L
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348L)

Initial Displacement: 3.111 ft
Total Well Penetration Depth: 144. ft
Casing Radius: 0.083 ft

Static Water Column Height: 109. ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 37.56 ft/day

Le = 116.4 ft

Checked by: CAB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2348U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/6/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	38.88 feet		
Total Well Depth	83.09 feet		
Static Water Column Height (H)	44.21 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_o)	NA	~2'	~2.3'
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)			
Length of Well Screen (L)	feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (rcl)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	106721		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625"		
Slug Test File	Background	Falling	Rising
File Name	OW-2348U Background	OW-2348U Falling Head	OW-2348U Rising Head
Start Time	2:22:13	2:39:48	2:43:24
End Time	2:37:13	2:42:02	2:45:11

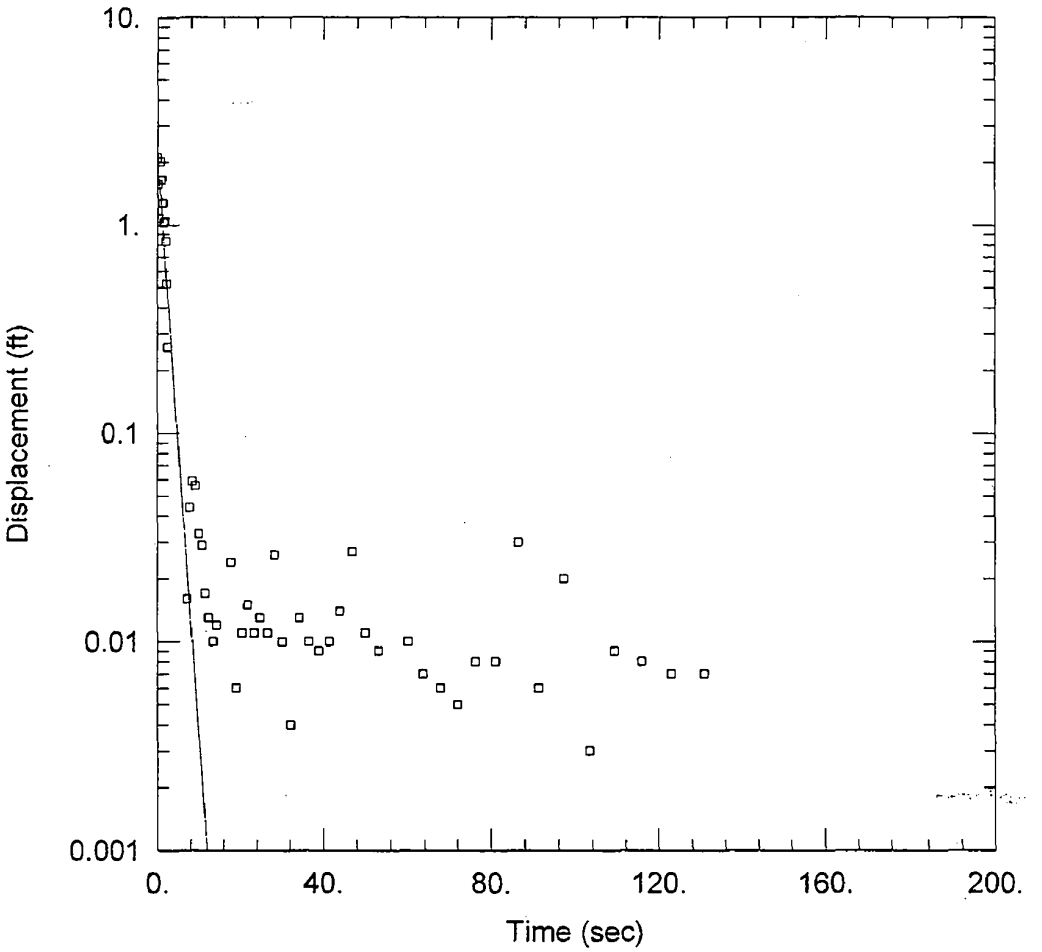
Notes

very fast recharge - try again at Rising & Falling Head Test. Need to Label Hose B.

Rev 0

Prepared by: WJ Date: 4-4-08

Checked by: BWD Date: 4/4/08



OW-2348U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348U
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348U)

Initial Displacement: 2.108 ft
Total Well Penetration Depth: 80. ft
Casing Radius: 0.083 ft

Static Water Column Height: 44.21 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

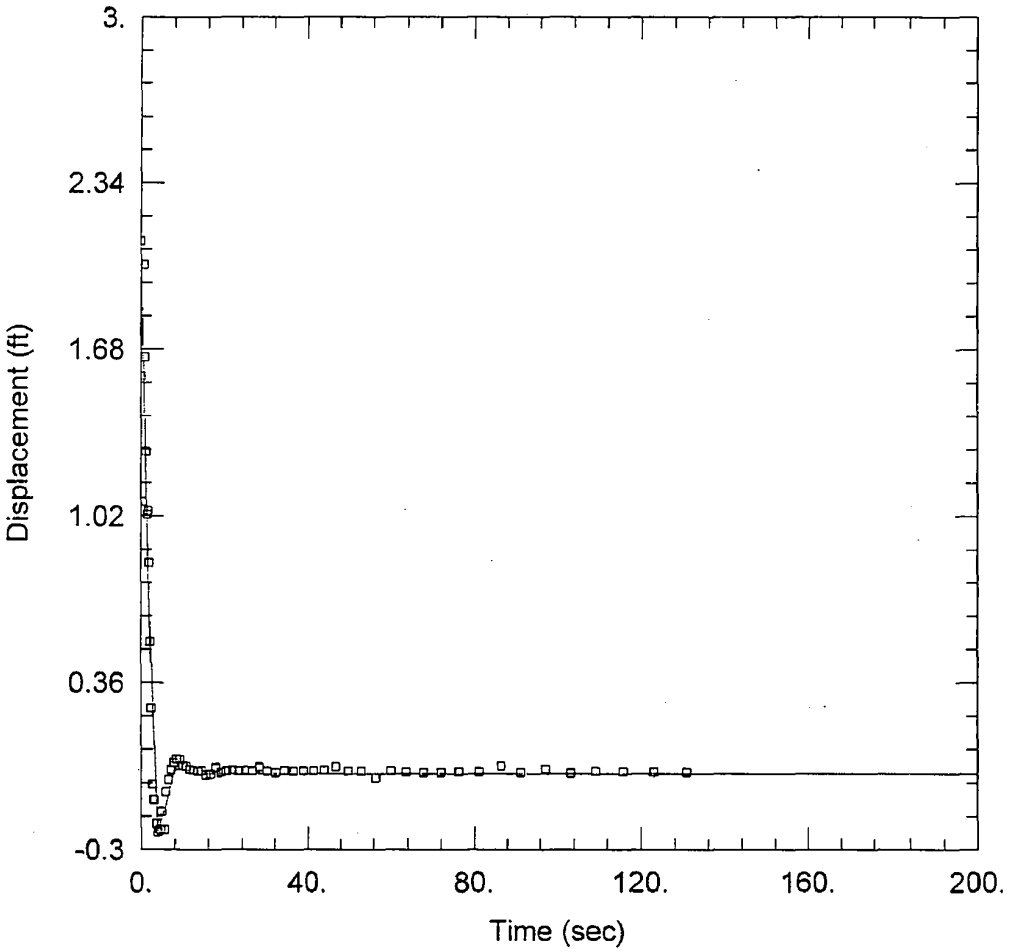
Solution Method: Bouwer-Rice

K = 95.58 ft/day

y0 = 2.22 ft

Prepared by: WL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2348U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348U
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348U)

Initial Displacement: 2.108 ft
Total Well Penetration Depth: 80. ft
Casing Radius: 0.083 ft

Static Water Column Height: 44.21 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

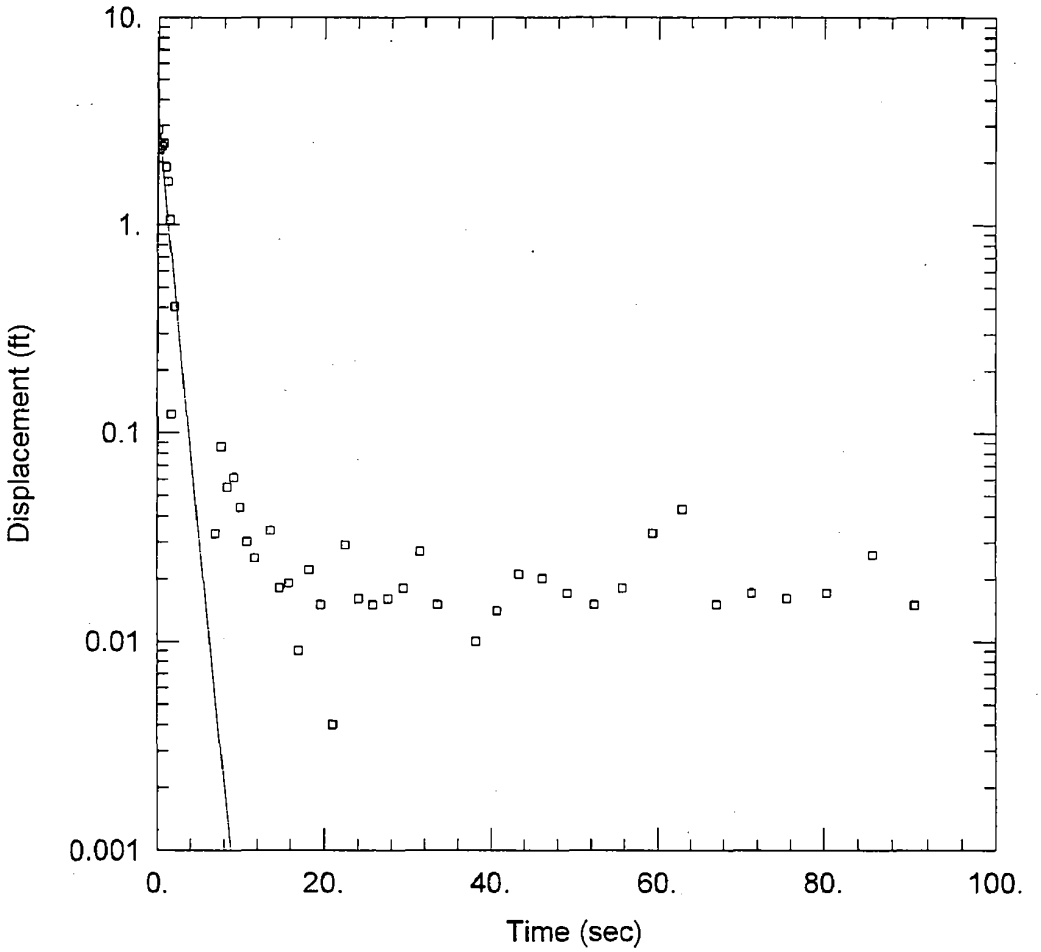
Solution Method: Butler

K = 121.5 ft/day

Le = 43.43 ft

Prepared by: WJL Date: 4-4-08

Checked by: BHJ Date: 4/4/08



OW-2348U FALLING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348U
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348U)

Initial Displacement: 2.854 ft
Total Well Penetration Depth: 80. ft
Casing Radius: 0.083 ft

Static Water Column Height: 44.21 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

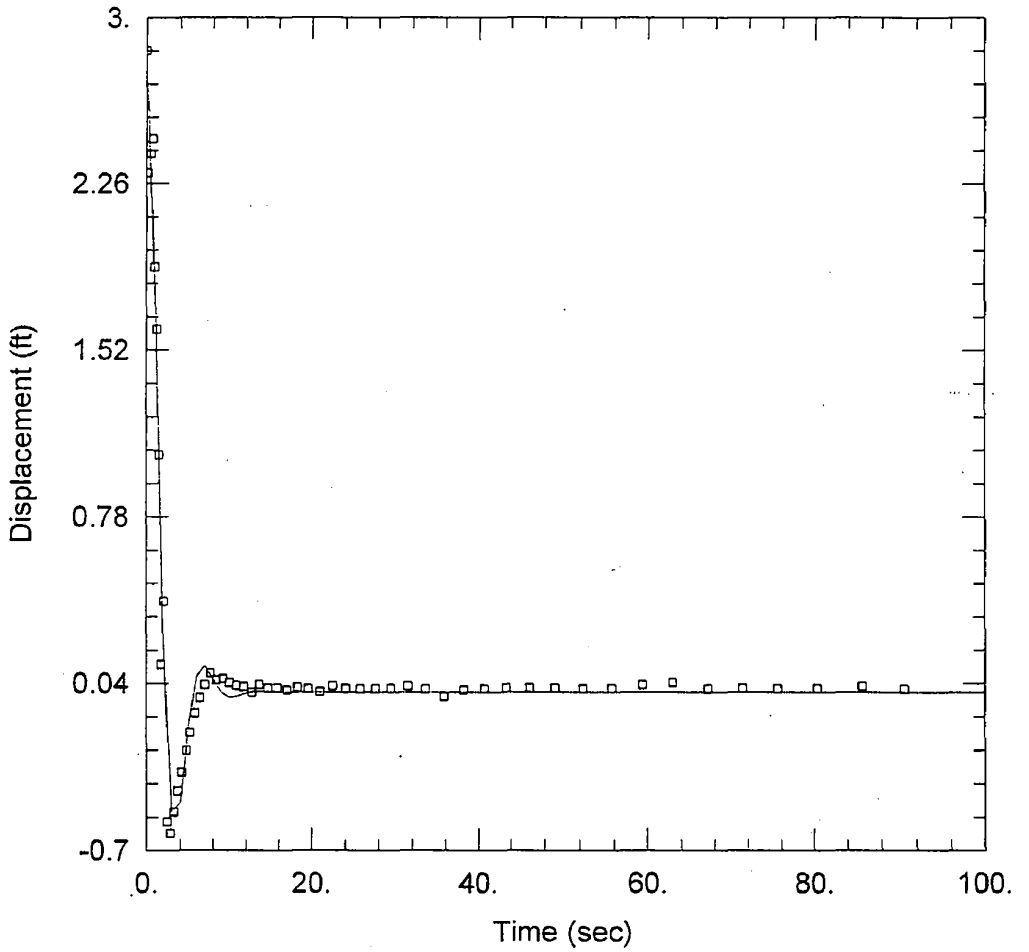
Solution Method: Bouwer-Rice

K = 135.6 ft/day

y0 = 3.308 ft

Prepared by: WJ Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2348U FALLING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348U
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348U)

Initial Displacement: 2.854 ft
Total Well Penetration Depth: 80. ft
Casing Radius: 0.083 ft

Static Water Column Height: 44.21 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

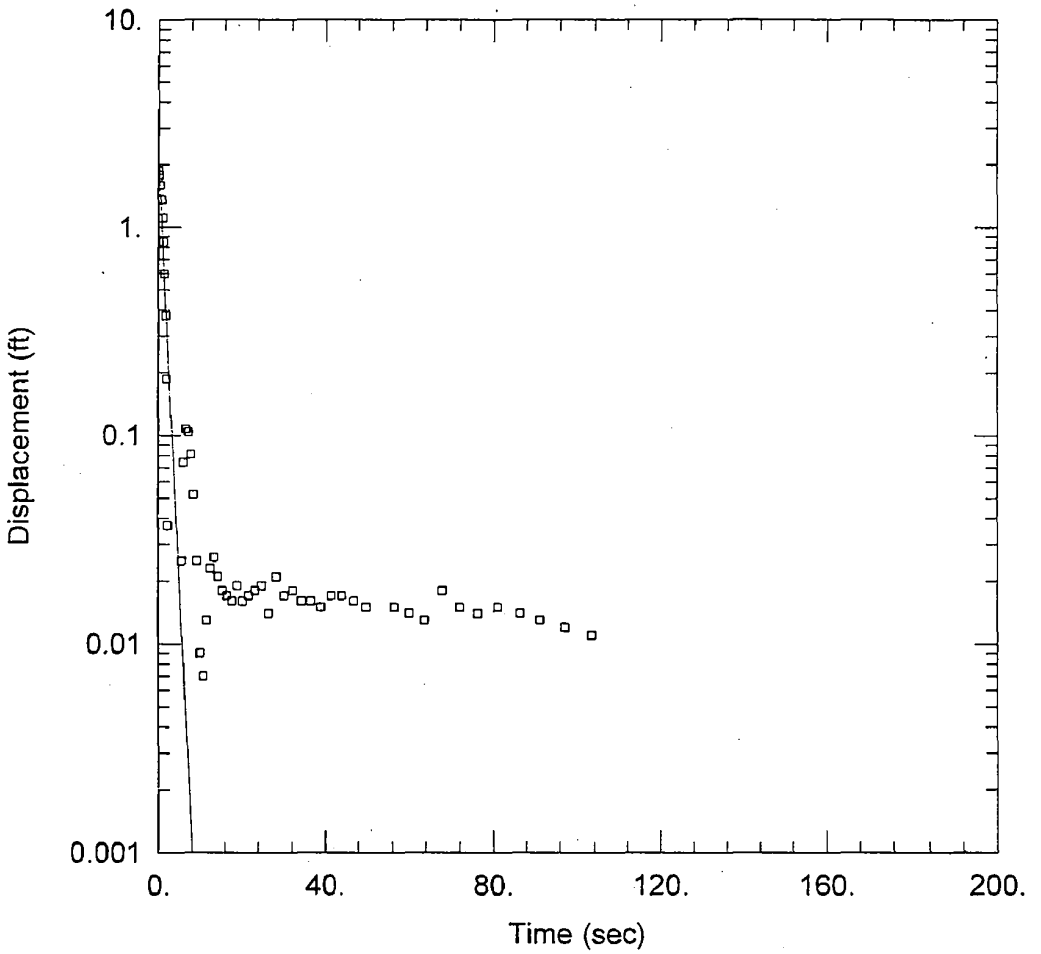
Solution Method: Butler

K = 185. ft/day

Le = 29.89 ft

Prepared by: WSV Date: 4-4-08

Checked by: BLU Date: 4/4/08



OW-2348U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348U
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348U)

Initial Displacement: 1.876 ft
Total Well Penetration Depth: 80. ft
Casing Radius: 0.083 ft

Static Water Column Height: 44.21 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

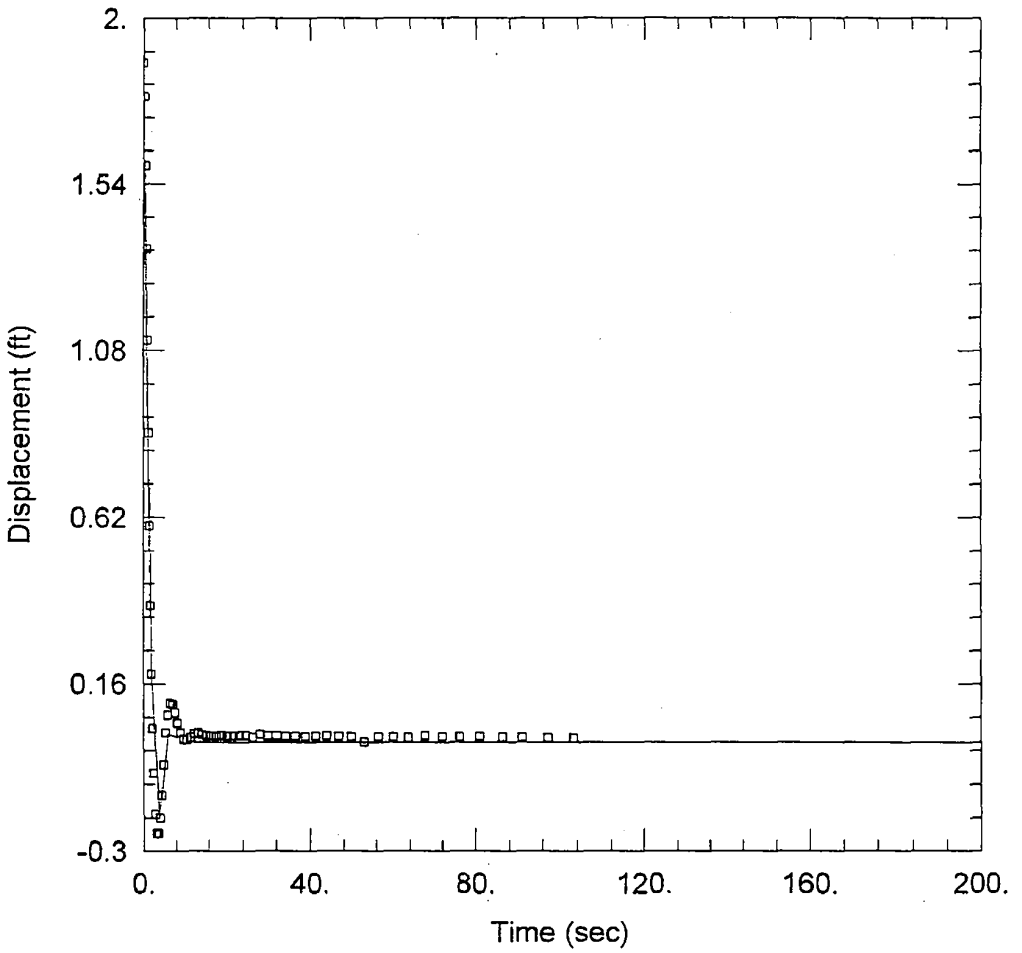
Solution Method: Bouwer-Rice

K = 140.7 ft/day

y0 = 2.21 ft

Prepared by: WJ Date: 4-4-08

Checked by: BLU Date: 4/4/08



OW-2348U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348U
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348U)

Initial Displacement: 1.876 ft
Total Well Penetration Depth: 80. ft
Casing Radius: 0.083 ft

Static Water Column Height: 44.21 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

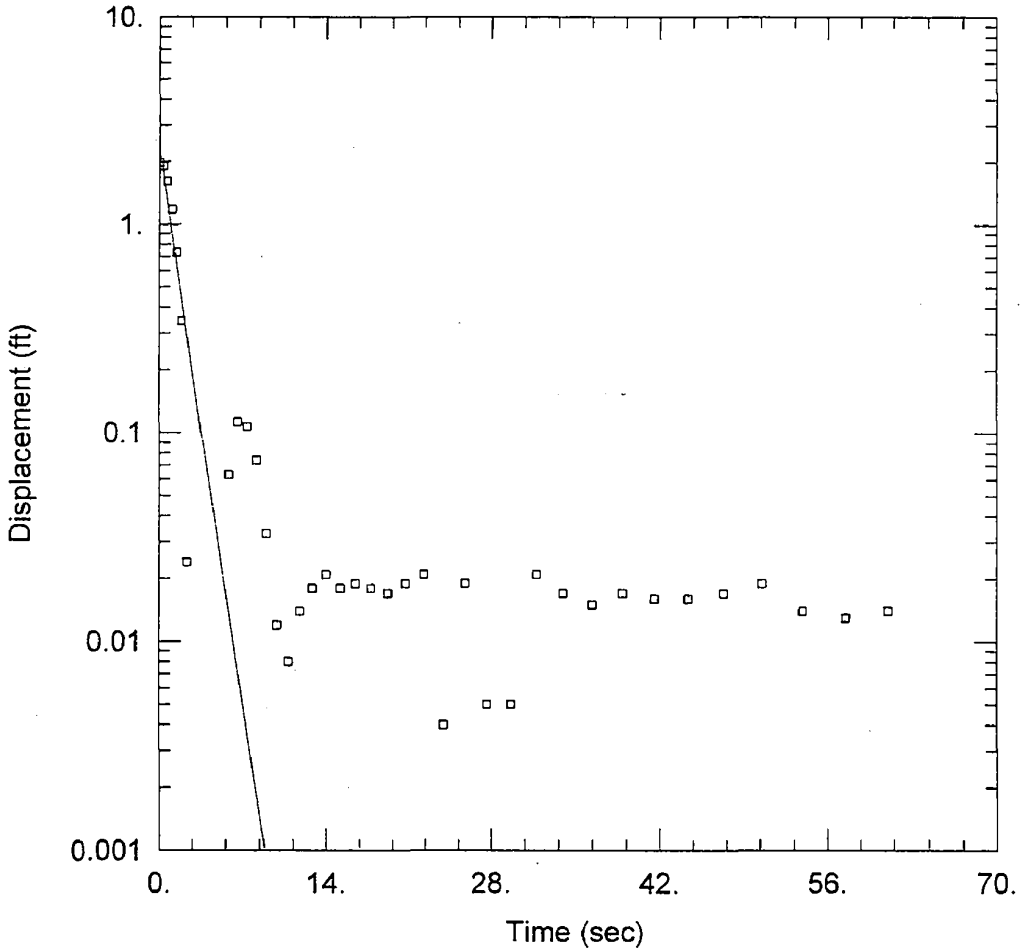
Solution Method: Butler

K = 167.2 ft/day

Le = 25.91 ft

Prepared by: WSK Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2348U RISING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348U
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348U)

Initial Displacement: 1.981 ft
Total Well Penetration Depth: 80. ft
Casing Radius: 0.083 ft

Static Water Column Height: 44.21 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

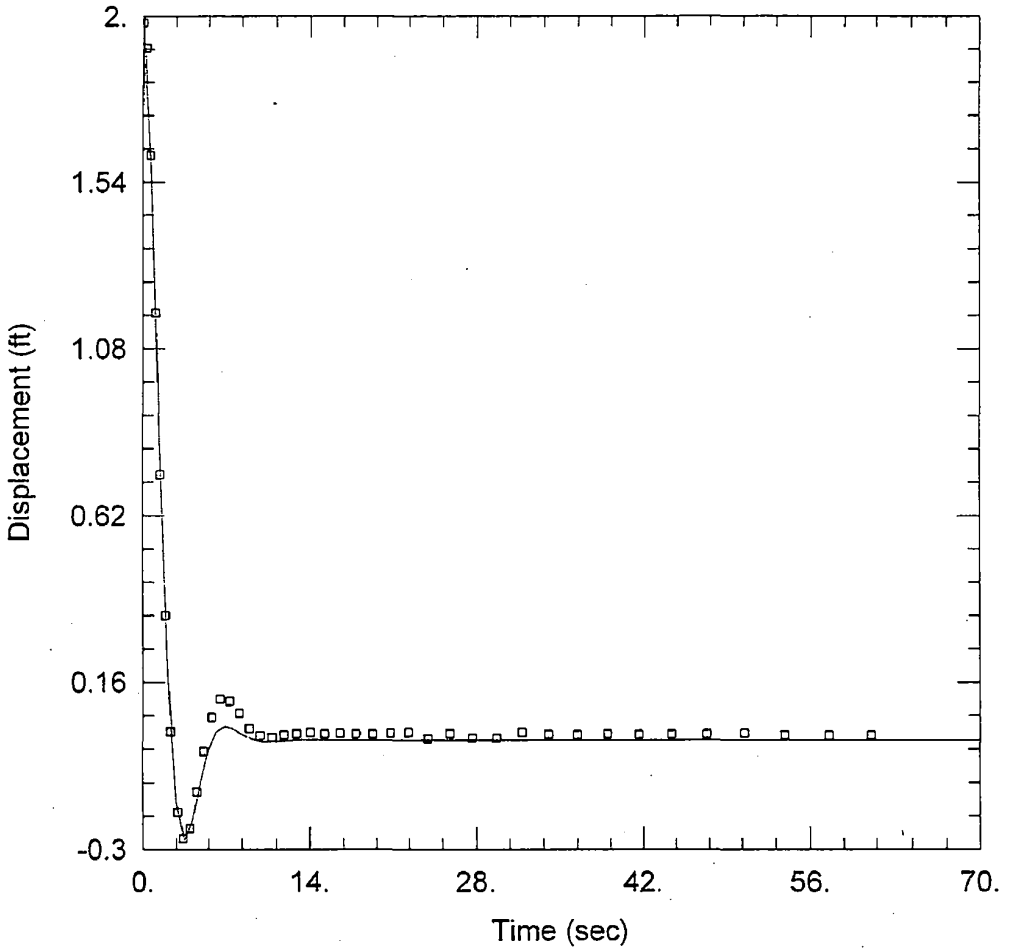
Solution Method: Bouwer-Rice

K = 128.9 ft/day

y0 = 2.297 ft

Prepared by: WSC Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2348U RISING HEAD B

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2348U
Test Date: 2/6/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2348U)

Initial Displacement: 1.981 ft
Total Well Penetration Depth: 80. ft
Casing Radius: 0.083 ft

Static Water Column Height: 44.21 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 158.5 ft/day

Le = 29.04 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2352L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/16/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	45.06 feet
Total Well Depth	84.90 feet (Soft bottom)
Static Water Column Height (H)	39.84 feet

	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~3.4'	~3.2

Saturated Thickness (b)	feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	
Length of Well Screen (L)	feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	17312
Slug Data	Slug #1
Length	5.5'
weight	
Diameter	1.625 inches

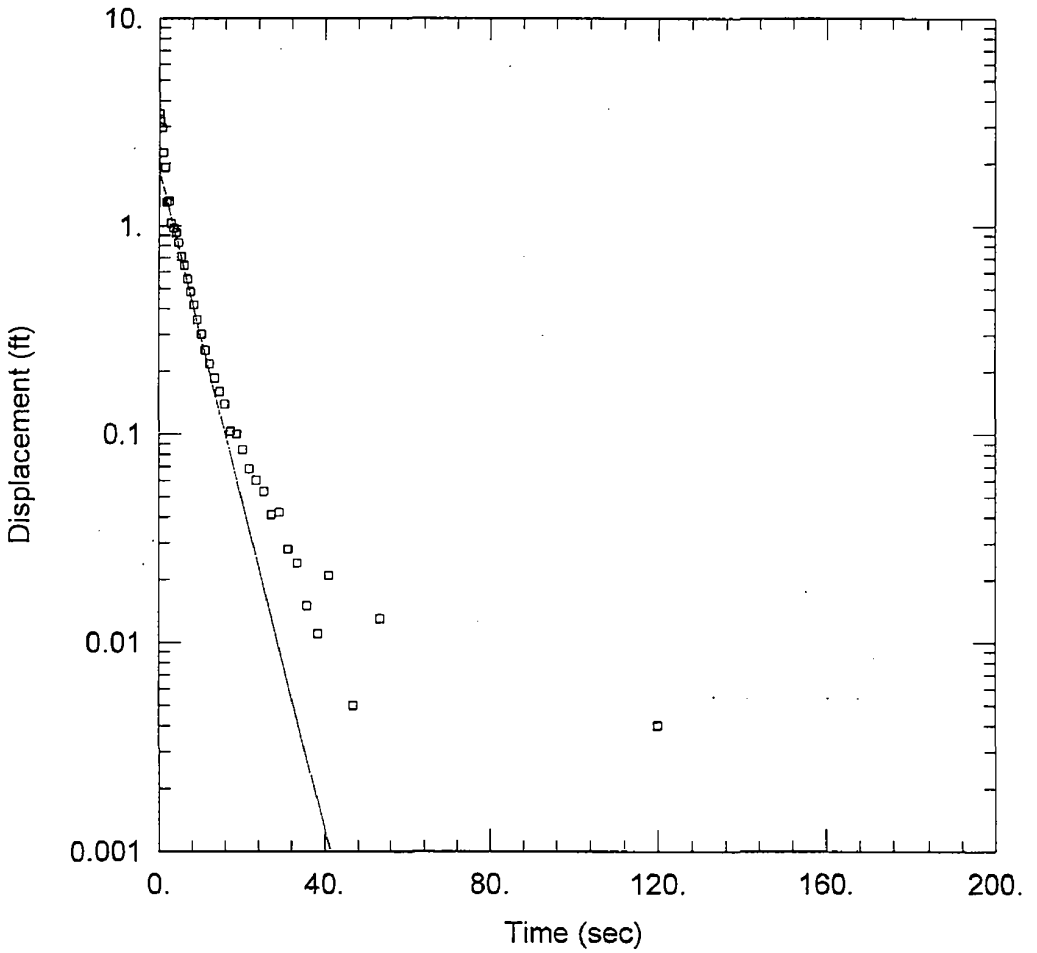
Slug Test File	Background	Falling	Rising
File Name	OW-2352L Background	OW-2352L Falling Head	OW-2352L Rising Head
Start Time	12:18:10	12:36:08	12:41:11
End Time	12:33:10	12:38:22	12:43:26

Notes

Rev 0

Prepared by: WSV Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2352L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2352L
Test Date: 2/16/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2352L)

Initial Displacement: 3.462 ft
Total Well Penetration Depth: 90. ft
Casing Radius: 0.083 ft

Static Water Column Height: 39.84 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

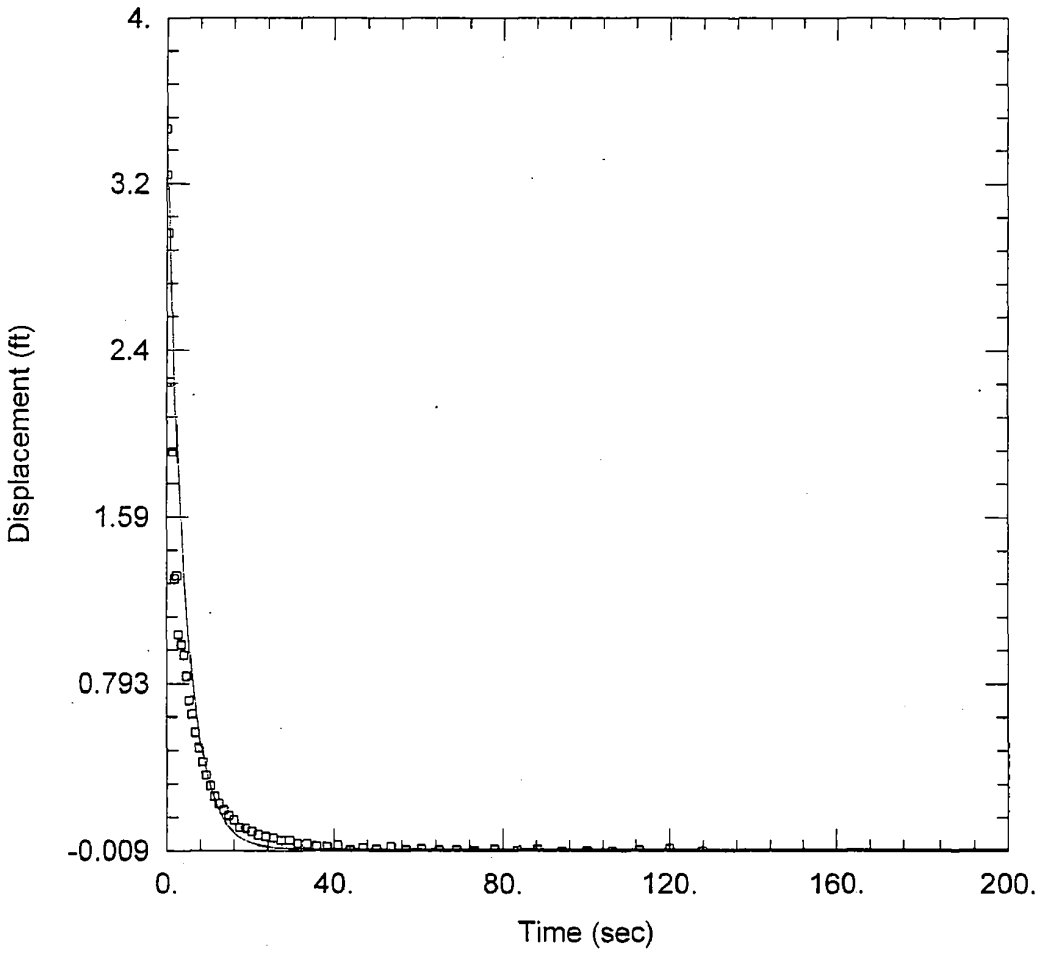
Solution Method: Bouwer-Rice

K = 27.26 ft/day

y0 = 1.85 ft

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2352L FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2352L
Test Date: 2/16/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2352L)

Initial Displacement: 3.462 ft
Total Well Penetration Depth: 90. ft
Casing Radius: 0.083 ft

Static Water Column Height: 39.84 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

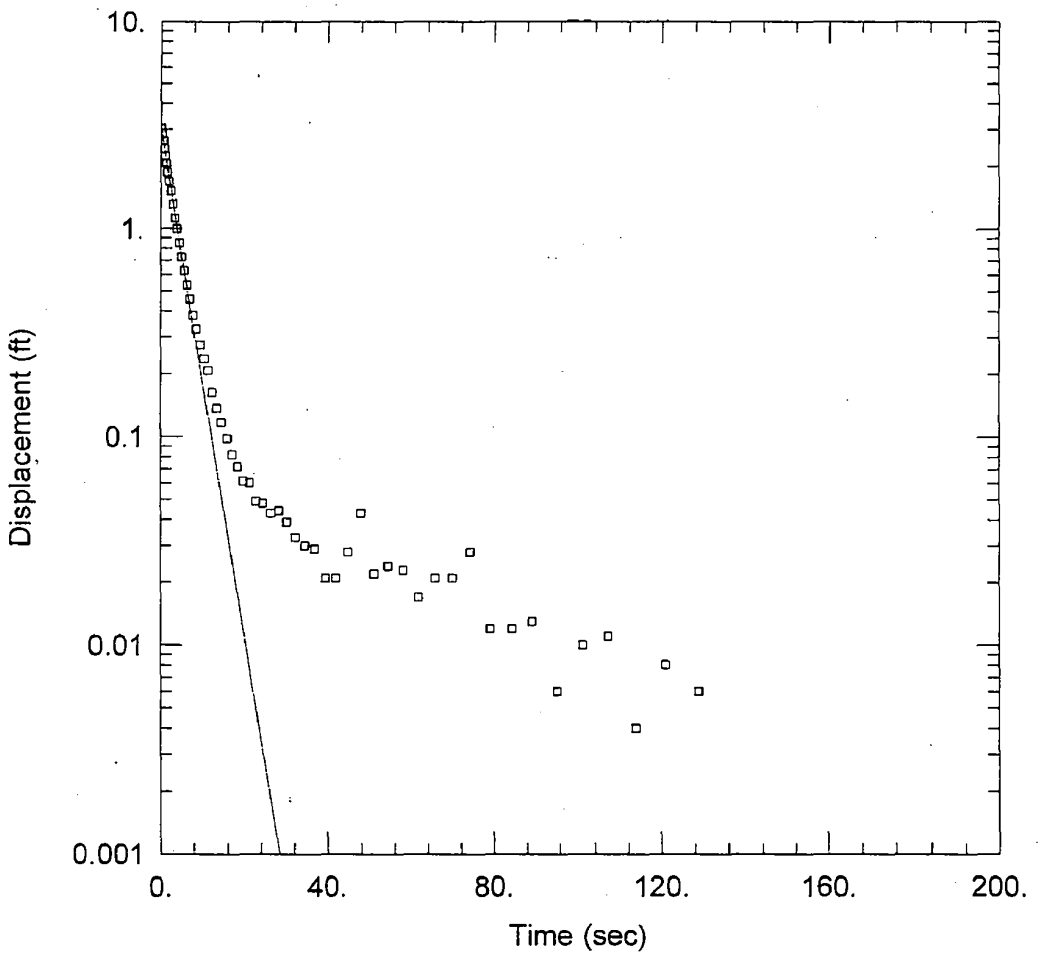
Solution Method: Butler

K = 37.82 ft/day

Le = 0.1 ft

Prepared by: WJ Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2352L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2352L
Test Date: 2/16/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2352L)

Initial Displacement: 3.068 ft
Total Well Penetration Depth: 90. ft
Casing Radius: 0.083 ft

Static Water Column Height: 39.84 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

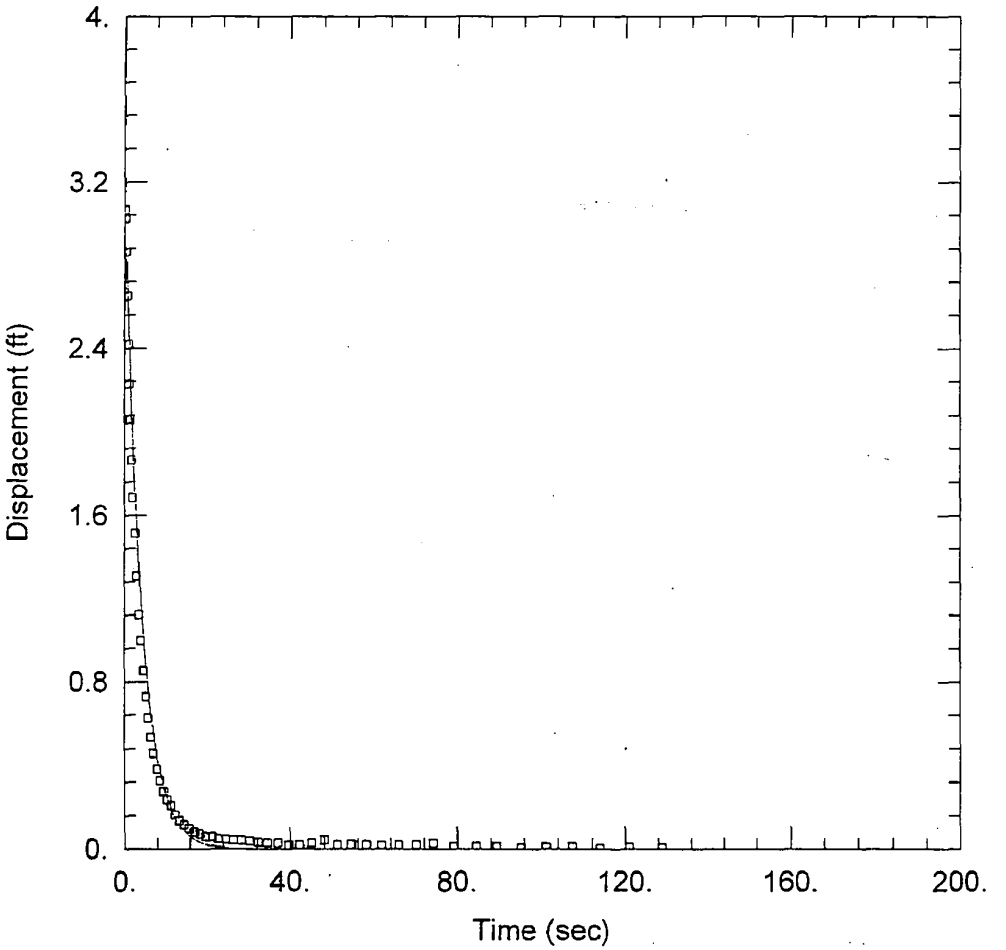
Solution Method: Bouwer-Rice

K = 42.33 ft/day

y0 = 3.111 ft

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2352L RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2352L
Test Date: 2/16/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2352L)

Initial Displacement: 3.068 ft
Total Well Penetration Depth: 90. ft
Casing Radius: 0.083 ft

Static Water Column Height: 39.84 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 38.63 ft/day

Le = 6.927 ft

Checked by: CHB Date: 4-4-08

MACTEC

SLUG TEST REPORT

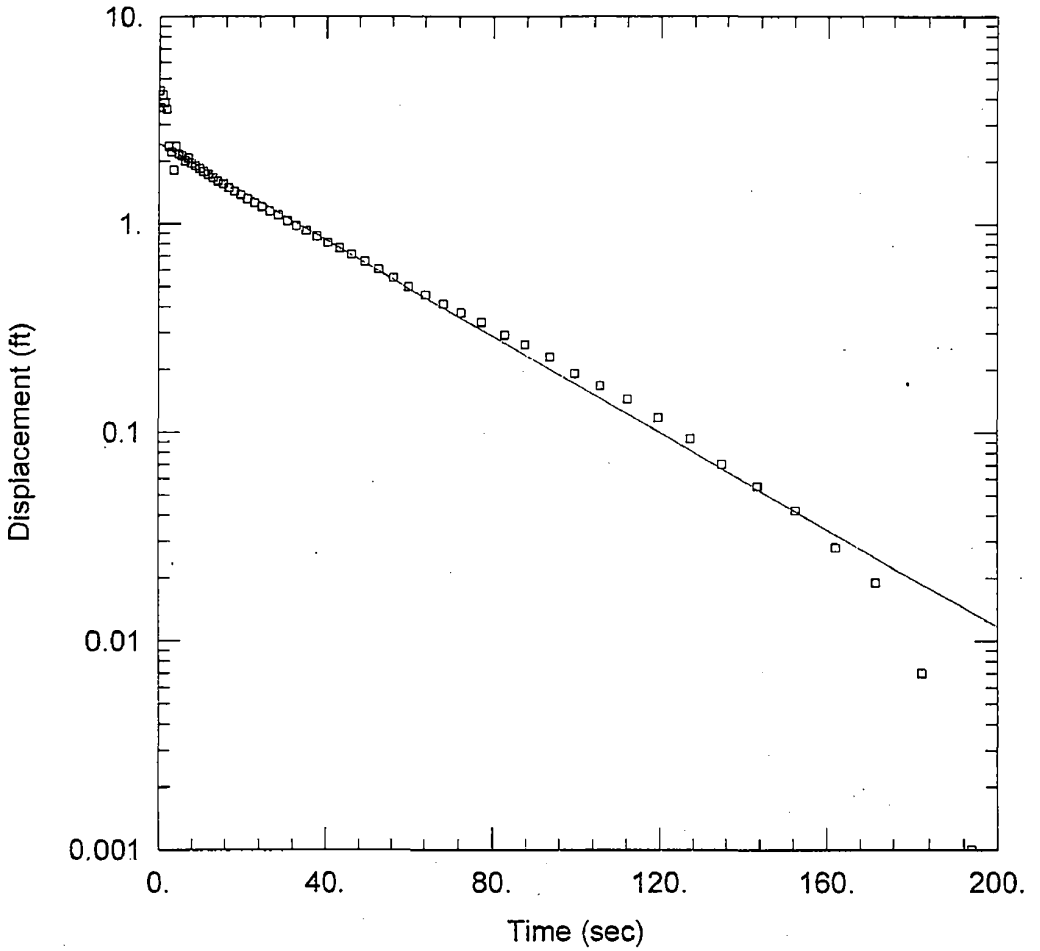
Project Name: Exelon COL	Project Number: 6469-07-1777	Page 1 of 1	OW-2352U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: Jeff Moore	Date: 2/16/08	

UNITS			
Length	Feet		
Time	Minutes		
Well Data			
Static Water Level	44.98 feet		
Total Well Depth	58.60 feet		
Static Water Column Height (H)	13.62 feet		
	Background	Falling Head	Rising Head
Observed Initial Displacement (H_0)	NA	~4.5'	~3'
Saturated Thickness (b)	feet		
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		
Depth to Top of Well Screen (d)			
Length of Well Screen (L)	feet		
Radius of Well Casing (rc)	0.083 feet		
Radius of Screen (rw)	0.083 feet		
Radius of Probe (rcp)			
Radius of Boring (rsk) Skin Effect	0.083 feet		
Probe Serial Number	117812		
Slug Data	Slug #1		
Length	5.5'		
weight			
Diameter	1.625 inches		
Slug Test File	Background	Falling	Rising
File Name	OW-2352U Background	OW-2352U Falling Head	OW-2352U Rising Head
Start Time	11:42:01	12:00:42	12:07:00
End Time	11:58:01	12:04:03	12:09:49
Notes			

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: BNJ Date: 4/4/08



OW-2352U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2352U
Test Date: 2/16/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2352U)

Initial Displacement: 4.368 ft
Total Well Penetration Depth: 55. ft
Casing Radius: 0.083 ft

Static Water Column Height: 13.62 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

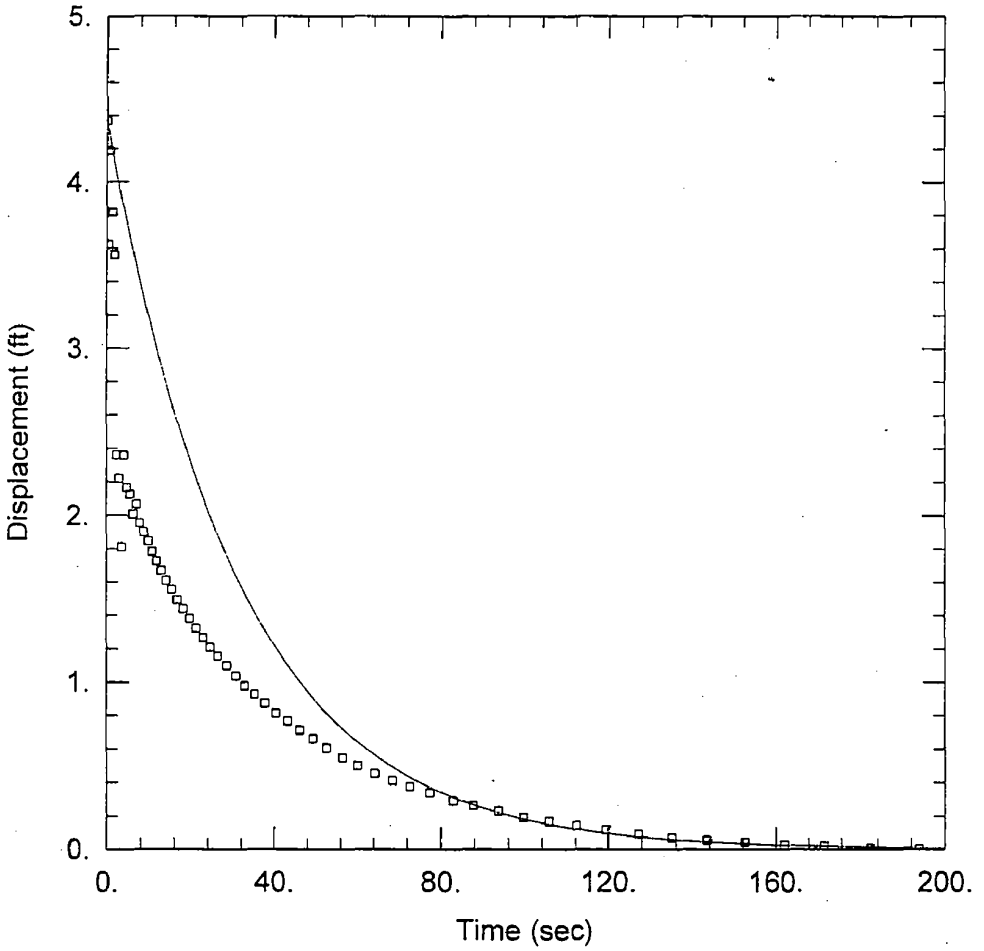
Solution Method: Bouwer-Rice

K = 3.776 ft/day

y0 = 2.436 ft

Prepared by: WSK Date: 4-4-08

Checked by: BWJ Date: 4/4/08



OW-2352U FALLING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2352U
Test Date: 2/16/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2352U)

Initial Displacement: 4.368 ft
Total Well Penetration Depth: 55. ft
Casing Radius: 0.083 ft

Static Water Column Height: 13.62 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

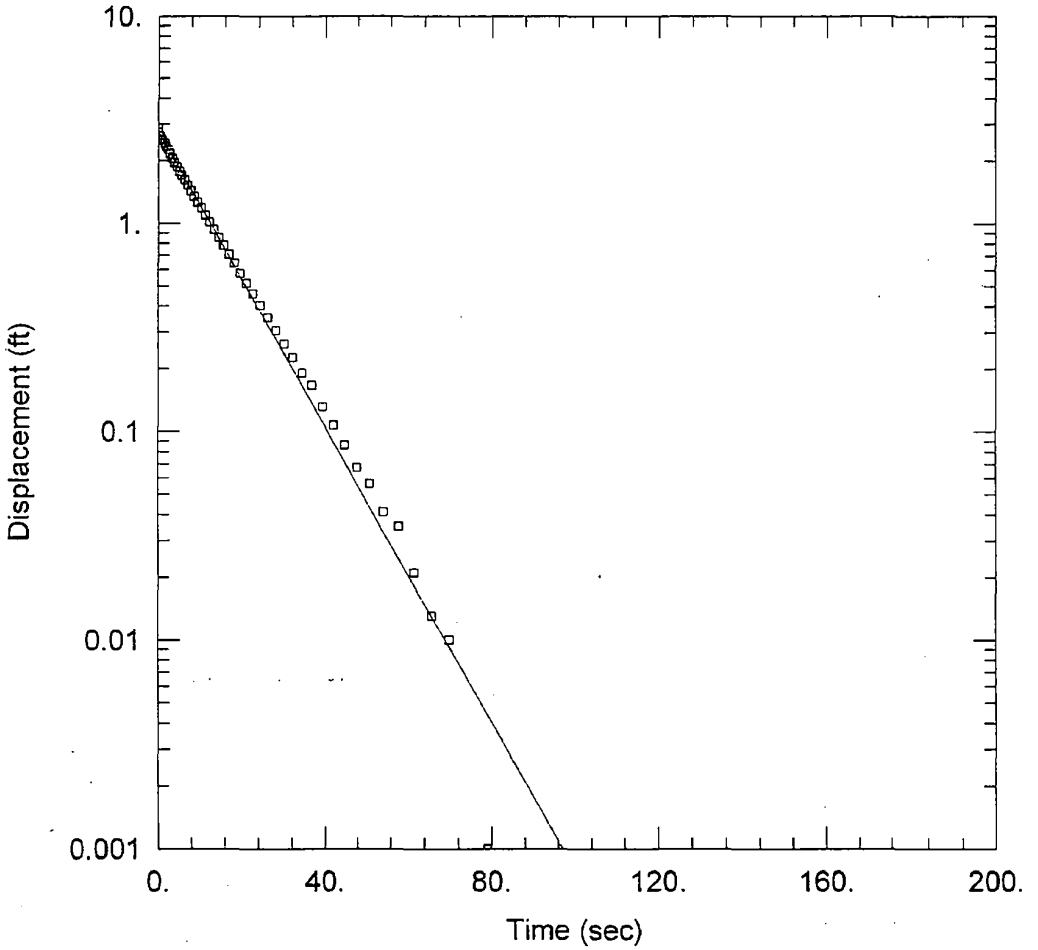
Solution Method: Butler

K = 5.028 ft/day

Le = 0.1 ft

Prepared by: [illegible] Date: 4-4-08

Checked by: [illegible] Date: 4/4/08



OW-2352U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2352U
Test Date: 2/16/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2352U)

Initial Displacement: 2.882 ft
Total Well Penetration Depth: 55. ft
Casing Radius: 0.083 ft

Static Water Column Height: 13.62 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

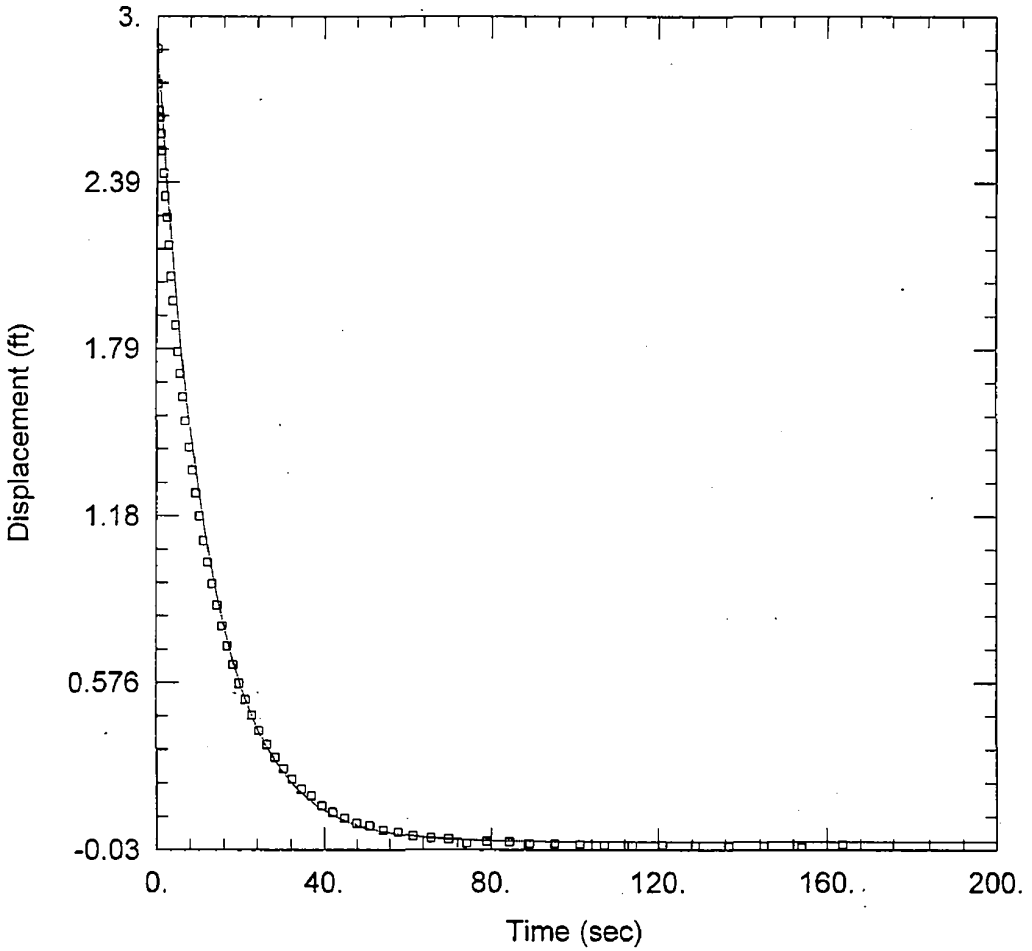
Solution Method: Bouwer-Rice

K = 11.53 ft/day

y0 = 2.757 ft

Prepared by: WS Date: 4-4-08

Checked by: BWH Date: 4/4/08



OW-2352U RISING HEAD

PROJECT INFORMATION

Company: MACTEC
Client: Bechtel Power Corp.
Project: 6468-07-1777.210
Location: Victoria, Texas
Test Well: OW-2352U
Test Date: 2/16/08

AQUIFER DATA

Saturated Thickness: 10. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (OW-2352U)

Initial Displacement: 2.882 ft
Total Well Penetration Depth: 55. ft
Casing Radius: 0.083 ft

Static Water Column Height: 13.62 ft
Screen Length: 10. ft
Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Confined

Solution Method: Butler

K = 12.79 ft/day

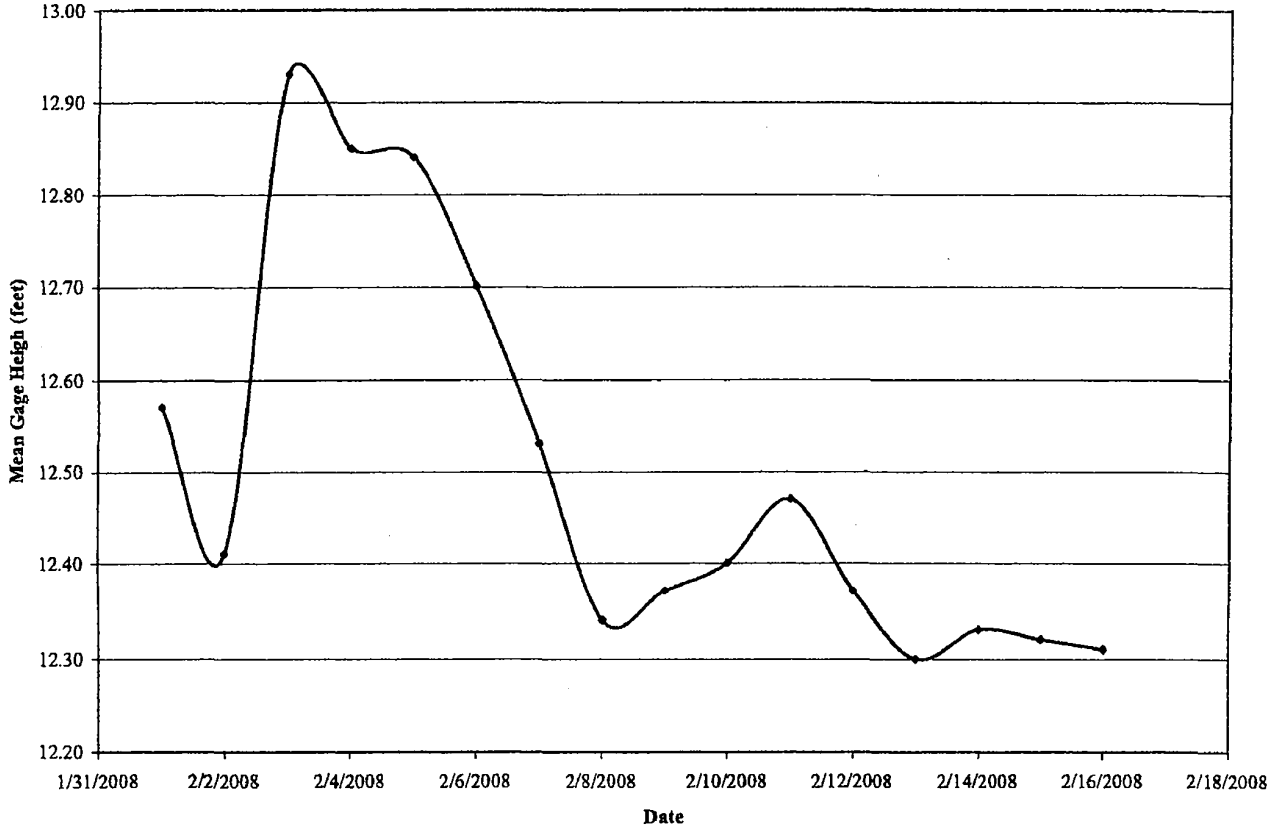
Le = 0.1 ft

Aquifer Pump Test Data Forms

Prepared by: [illegible] Date: 4-8-08

Checked by: CHB Date: 4/8/08

TW-2320 and TW-2359 Aquifer Pump Tests
USGS Station 08177520 - Mean Gage Height vs. Time
Guadalupe River Near Bloomington, Texas
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



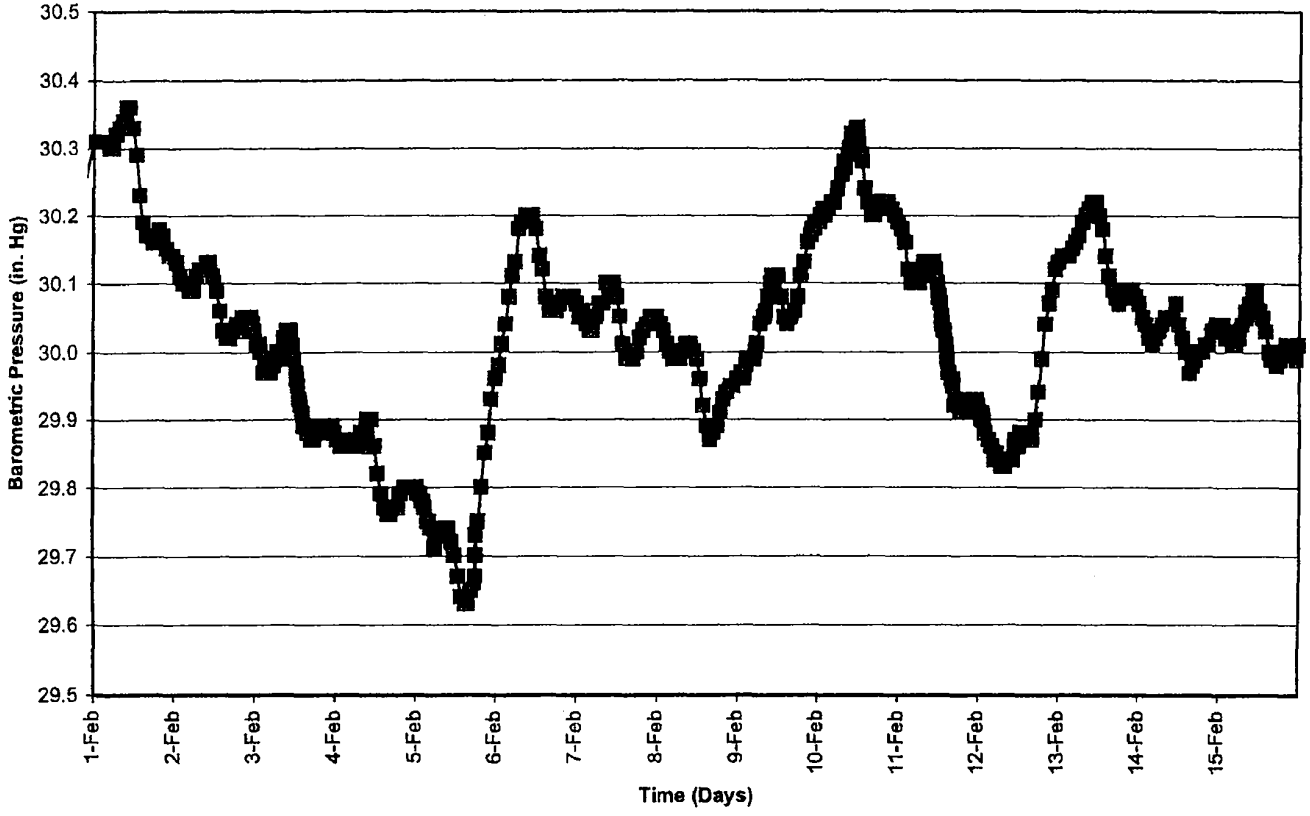
Gage data obtained from the United States Geologic Survey website (http://water.usgs.gov)

MACTEC Engineering and Consulting, Inc.
Raleigh, NC

Prepared by: [illegible] Date: 4-8-08

Checked by: CHB Date: 4/8/08

TW-2320 and TW-2359 Aquifer Pump Tests
Barometric Pressure vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



Barometric pressure data obtained from the Victoria Airport weather station.

MACTEC Engineering and Consulting, Inc.
Raleigh, NC

Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
1	0.04	
300	3.19	16
600	3.23	32
900	3.21	48
1200	3.19	64
1499	3.19	80
1799	3.19	96
2099	3.19	112
2398	3.19	128
2698	3.19	144
3297	3.19	176
3597	3.17	191
3897	3.17	207
4197	3.17	223
4496	3.17	239
4796	3.17	255
5096	3.17	270
5395	3.17	286
5695	3.17	302
5995	3.17	318
6294	3.17	334
6594	3.17	350
6894	3.17	365
7194	3.17	381
7493	3.17	397
7793	3.15	413
8093	3.15	429
8392	3.15	444
8692	3.15	460
8992	3.15	476
9291	3.15	491
9591	3.15	507
9891	3.15	523
10191	3.15	539
10490	3.17	554
10790	3.17	570
11090	3.17	586
11389	3.17	602
11689	3.17	618
11989	3.17	634
12288	3.17	649
12588	3.17	665
12888	3.19	681
13188	3.19	697
13487	3.19	713
13787	3.19	729
14087	3.17	745
14386	3.17	761
14686	3.17	776
14986	3.17	792
15285	3.17	808
15585	3.17	824
15885	3.17	840
16185	3.17	856
16484	3.17	871
16784	3.17	887
17084	3.19	903
17383	3.17	919
17683	3.17	935
17983	3.17	951

Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
18282	3.17	967
18582	3.17	982
18882	3.19	998
19182	3.19	1014
19481	3.19	1030
19781	3.17	1046
20081	3.17	1062
20380	3.17	1078
20680	3.17	1093
20980	3.19	1109
21279	3.19	1125
21579	3.19	1141
22179	3.19	1173
22478	3.17	1189
22778	3.17	1205
23078	3.17	1221
23377	3.17	1236
23677	3.17	1252
23977	3.17	1268
24276	3.17	1284
24576	3.19	1300
24876	3.19	1316
25176	3.19	1332
25475	3.17	1347
25775	3.19	1363
26075	3.21	1379
26374	3.21	1395
26674	3.21	1412
26974	3.21	1428
27273	3.21	1444
27573	3.19	1459
27873	3.21	1476
28472	3.21	1508
28772	3.21	1524
29072	3.19	1540
29371	3.19	1555
29671	3.21	1572
29971	3.19	1587
30270	3.19	1603
30570	3.19	1619
30870	3.21	1635
31170	3.23	1651
31469	3.21	1667
31769	3.21	1684
32069	3.21	1700
32368	3.21	1716
32668	3.19	1732
32968	3.19	1747
33267	3.21	1763
33567	3.19	1779
33867	3.21	1795
34167	3.19	1811
34466	3.19	1827
34766	3.19	1843
35066	3.17	1859
35365	3.17	1875
35665	3.19	1891
35965	3.19	1907
36264	3.19	1923
36564	3.21	1939

Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
36864	3.21	1955
37164	3.19	1971
37463	3.19	1987
37763	3.19	2003
38063	3.21	2019
38362	3.17	2034
38662	3.19	2050
38962	3.19	2066
39261	3.17	2082
39561	3.19	2098
39861	3.19	2114
40161	3.19	2130
40460	3.19	2146
40760	3.19	2162
41359	3.19	2194
41659	3.17	2209
41959	3.17	2225
42258	3.17	2241
42558	3.19	2257
42858	3.17	2273
43158	3.17	2289
43457	3.19	2305
43757	3.17	2320
44057	3.19	2336
44356	3.21	2352
44656	3.19	2368
44956	3.19	2384
45255	3.21	2400
45555	3.21	2416
45855	3.21	2432
46155	3.23	2448
46454	3.19	2464
47054	3.21	2496
47353	3.21	2512
47653	3.21	2528
47953	3.21	2545
48252	3.21	2561
48552	3.21	2577
48852	3.19	2593
49152	3.21	2609
49451	3.19	2624
49751	3.19	2640
50051	3.21	2656
50350	3.21	2672
50650	3.19	2688
50950	3.19	2704
51249	3.19	2720
51549	3.17	2736
51849	3.17	2752
52149	3.19	2768
52448	3.19	2784
52748	3.21	2800
53048	3.19	2816
53347	3.19	2832
53647	3.21	2848
53947	3.19	2864
54246	3.19	2880
54546	3.21	2896
54846	3.21	2912
55146	3.19	2928

Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
55445	3.21	2944
55745	3.19	2959
56045	3.19	2975
56344	3.21	2991
56644	3.21	3007
56944	3.21	3024
57243	3.21	3040
57543	3.19	3055
57843	3.19	3071
58143	3.17	3087
58442	3.17	3103
58742	3.17	3119
59042	3.19	3135
59341	3.19	3151
59641	3.17	3167
59941	3.19	3183
60240	3.17	3198
60540	3.17	3214
60840	3.17	3230
61140	3.17	3246
61439	3.19	3262
61739	3.19	3278
62039	3.19	3294
62338	3.19	3310
62638	3.19	3325
62938	3.19	3341
63237	3.17	3357
63537	3.15	3373
63837	3.17	3389
64137	3.19	3405
64436	3.17	3421
64736	3.17	3436
65036	3.17	3452
65335	3.19	3468
65635	3.19	3484
65935	3.19	3500
66234	3.17	3516
66534	3.19	3532
66834	3.17	3548
67134	3.19	3563
67433	3.19	3579
67733	3.19	3595
68033	3.17	3611
68332	3.17	3627
68632	3.19	3643
68932	3.17	3659
69231	3.19	3675
69531	3.19	3691
69831	3.19	3707
70131	3.19	3722
70430	3.21	3739
70730	3.19	3754
71030	3.19	3770
71329	3.19	3786
71629	3.19	3802
71929	3.19	3818
72228	3.21	3834
72528	3.19	3850
72828	3.19	3866
73128	3.19	3882

Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
73427	3.23	3898
73727	3.21	3914
74027	3.21	3930
74326	3.21	3946
74626	3.21	3962
74926	3.19	3978
75225	3.19	3994
75525	3.21	4010
75825	3.19	4026
76125	3.19	4042
76424	3.19	4058
76724	3.21	4074
77024	3.21	4090
77323	3.21	4106
77623	3.21	4122
77923	3.21	4138
78222	3.19	4154
78522	3.21	4170
78822	3.19	4186
79122	3.19	4202
79421	3.17	4218
79721	3.17	4234
80021	3.17	4249
80320	3.17	4265
80620	3.17	4281
80920	3.17	4297
81219	3.17	4313
81519	3.19	4329
81819	3.19	4345
82119	3.19	4360
82418	3.21	4377
82718	3.19	4392
83018	3.19	4408
83317	3.19	4424
83617	3.19	4440
83917	3.19	4456
84216	3.19	4472
84516	3.19	4488
84816	3.19	4504
85116	3.21	4520
85415	3.19	4536
85715	3.21	4552
86015	3.21	4568
86314	3.19	4584
86614	3.19	4600
86914	3.21	4616
87213	3.21	4632
87513	3.21	4648
87813	3.21	4664
88113	3.19	4680
88412	3.19	4696
88712	3.21	4712
89012	3.19	4728
89311	3.19	4744
89611	3.19	4760
89911	3.19	4776
90210	3.19	4791
90510	3.19	4807
90810	3.19	4823
91110	3.19	4839

Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
91409	3.21	4855
91709	3.23	4871
92009	3.21	4887
92308	3.21	4903
92608	3.21	4920
92908	3.19	4935
93207	3.19	4951
93507	3.19	4967
93807	3.19	4983
94107	3.19	4999
94406	3.19	5015
94706	3.19	5031
95006	3.19	5047
95305	3.19	5063
95605	3.19	5079
95905	3.21	5095
96204	3.19	5111
96504	3.19	5127
96804	3.19	5143
97104	3.19	5159
97403	3.19	5174
97703	3.21	5191
98003	3.19	5206
98302	3.19	5222
98602	3.17	5238
98902	3.17	5254
99201	3.19	5270
99501	3.17	5286
99801	3.19	5302
100101	3.19	5318
100400	3.19	5334
100700	3.21	5350
101000	3.19	5366
101299	3.19	5381
101599	3.19	5397
101899	3.19	5413
102198	3.19	5429
102498	3.19	5445
102798	3.19	5461
103098	3.19	5477
103397	3.21	5493
103697	3.19	5509
103997	3.19	5525
104296	3.19	5541
104596	3.19	5557
104896	3.19	5573
105195	3.19	5589
105495	3.21	5605
106095	3.19	5637
106394	3.19	5652
106694	3.19	5668
106994	3.17	5684
107293	3.21	5700
107593	3.23	5716
107893	3.21	5732
108192	3.23	5749
108492	3.23	5765
108792	3.21	5781
109092	3.21	5797
109391	3.21	5813

Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
109691	3.21	5829
109991	3.21	5845
110290	3.21	5861
110590	3.21	5877
110890	3.21	5893
111189	3.23	5909
111489	3.21	5925
111789	3.21	5941
112089	3.19	5957
112388	3.21	5973
112688	3.21	5989
112988	3.23	6005
113287	3.23	6021
113587	3.21	6037
113887	3.21	6053
114186	3.21	6069
114486	3.21	6086
114786	3.21	6102
115086	3.17	6117
115385	3.17	6133
115685	3.19	6149
115985	3.19	6165
116284	3.17	6181
116584	3.19	6197
116884	3.19	6213
117183	3.19	6229
117483	3.19	6245
117783	3.19	6261
118083	3.17	6276
118382	3.19	6292
118682	3.19	6308
118982	3.19	6324
119281	3.19	6340
119581	3.19	6356
119881	3.19	6372
120180	3.19	6388
120480	3.19	6404
120780	3.19	6420
121080	3.19	6436
121379	3.19	6452
121679	3.19	6468
121979	3.19	6483
122278	3.19	6499
122578	3.19	6515
122878	3.17	6531
123177	3.19	6547
123477	3.19	6563
123777	3.19	6579
124077	3.19	6595
124376	3.21	6611
124676	3.19	6627
124976	3.19	6643
125275	3.19	6659
125575	3.17	6674
125875	3.19	6690
126174	3.19	6706
126474	3.19	6722
126774	3.17	6738
127074	3.19	6754
127373	3.19	6770

Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
127673	3.19	6786
127973	3.19	6802
128272	3.17	6818
128572	3.17	6833
128872	3.19	6849
129171	3.19	6865
129471	3.19	6881
129771	3.19	6897
130071	3.17	6913
130370	3.19	6929
130670	3.19	6945
130970	3.19	6961
131269	3.19	6977
131569	3.19	6993
131869	3.19	7009
132168	3.17	7024
132468	3.19	7040
132768	3.19	7056
133068	3.19	7072
133367	3.17	7088
133667	3.19	7104
133967	3.19	7120
134266	3.19	7136
134566	3.19	7152
134866	3.19	7168
135165	3.21	7184
135465	3.21	7200
135765	3.19	7216
136065	3.19	7232
136364	3.19	7248
136664	3.21	7264
136964	3.17	7279
137263	3.17	7295
137563	3.19	7311
137863	3.19	7327
138162	3.19	7343
138462	3.19	7359
138762	3.17	7375
139062	3.19	7391
139361	3.17	7407
139661	3.17	7422
139961	3.17	7438
140260	3.17	7454
140560	3.17	7470
140860	3.17	7486
141159	3.17	7501
141459	3.17	7517
141759	3.19	7533
142059	3.19	7549
142358	3.19	7565
142658	3.19	7581
142958	3.17	7597
143257	3.19	7613
143557	3.17	7629
143857	3.17	7644
144156	3.17	7660
144456	3.17	7676
144756	3.17	7692
145056	3.17	7708
145355	3.17	7724

Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
145655	3.17	7739
145955	3.17	7755
146254	3.17	7771
146554	3.17	7787
146854	3.17	7803
147153	3.17	7819
147453	3.19	7834
147753	3.19	7850
148053	3.17	7866
148352	3.17	7882
148652	3.19	7898
148952	3.17	7914
149251	3.19	7930
149551	3.19	7946
149851	3.17	7962
150150	3.17	7977
150450	3.19	7993
150750	3.19	8009
151050	3.19	8025
151349	3.17	8041
151649	3.19	8057
151949	3.17	8073
152248	3.19	8089
152548	3.19	8105
152848	3.19	8121
153147	3.21	8137
153447	3.19	8152
153747	3.17	8168
154047	3.17	8184
154346	3.17	8200
154646	3.19	8216
154946	3.19	8232
155245	3.19	8248
155545	3.19	8264
155845	3.19	8280
156144	3.19	8296
156444	3.19	8311
156744	3.19	8327
157044	3.17	8343
157343	3.19	8359
157643	3.19	8375
157943	3.19	8391
158242	3.21	8407
158542	3.17	8423
158842	3.19	8439
159141	3.19	8455
159441	3.19	8471
159741	3.23	8487
160041	3.21	8503
160340	3.21	8519
160640	3.21	8535
160940	3.23	8551
161239	3.21	8567
161539	3.21	8583
161839	3.21	8599
162138	3.17	8615
162438	3.17	8631
162738	3.17	8647
163038	3.17	8662
163337	3.17	8678

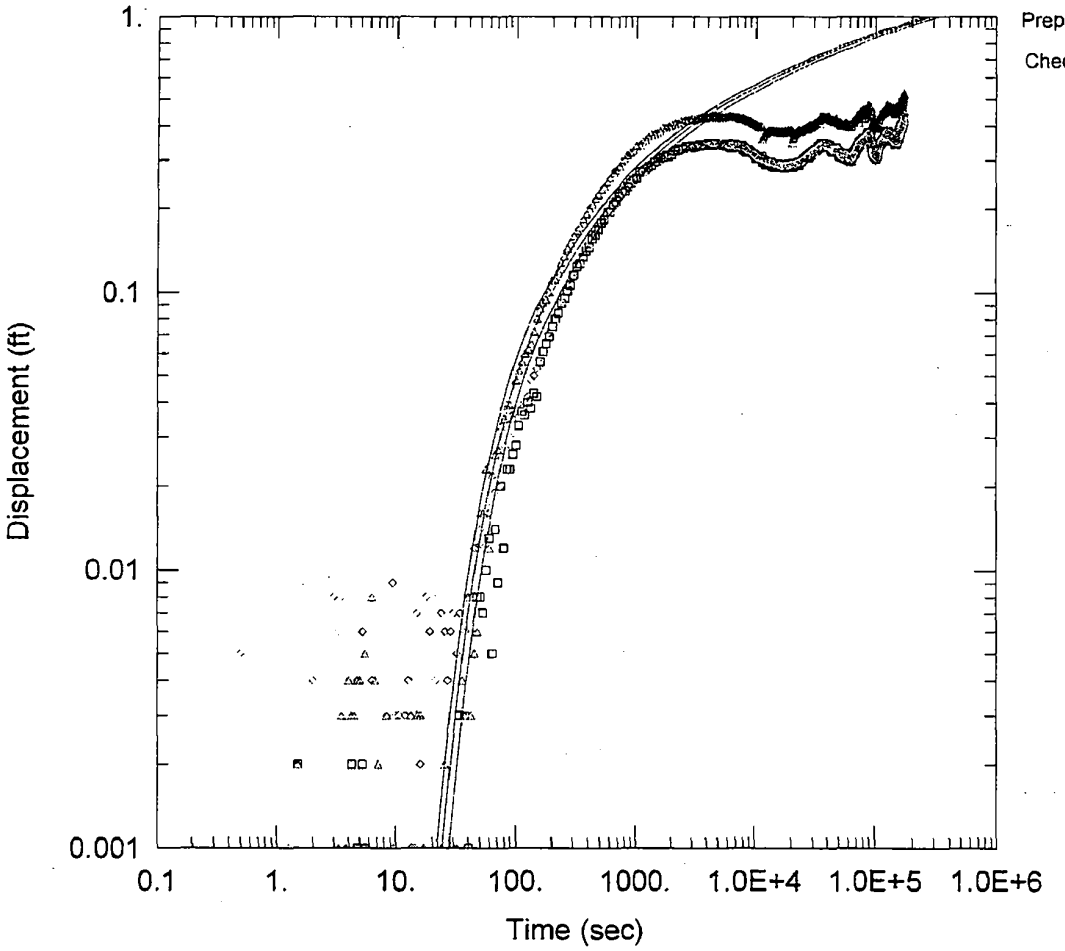
Summary of Aquifer Pumping Rate Measurements
TW-2320 Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
163637	3.17	8694
163937	3.19	8710
164236	3.19	8726
164536	3.19	8742
164836	3.21	8758
165135	3.21	8774
165435	3.19	8790
165735	3.21	8806
166035	3.21	8822
166334	3.23	8838
166634	3.21	8854
166934	3.19	8870
167233	3.21	8886
167533	3.21	8902
167833	3.19	8918
168132	3.21	8934
168432	3.21	8950
168732	3.21	8966
169032	3.21	8982
169331	3.19	8998
169631	3.21	9014
169931	3.21	9030
170230	3.21	9046
170530	3.21	9062
170830	3.21	9078
171129	3.21	9094
171429	3.21	9110
171729	3.21	9126
172029	3.21	9142
172328	3.21	9158
172770	3.21	9182
172770	0.00	
252930	0.00	

Prepared by: CHB Date: 4-4-08

Checked by: BWJ Date: 4/4/08

Prepared by: CHB Date: 4-4-08
Checked by: BND Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (COMBINED EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

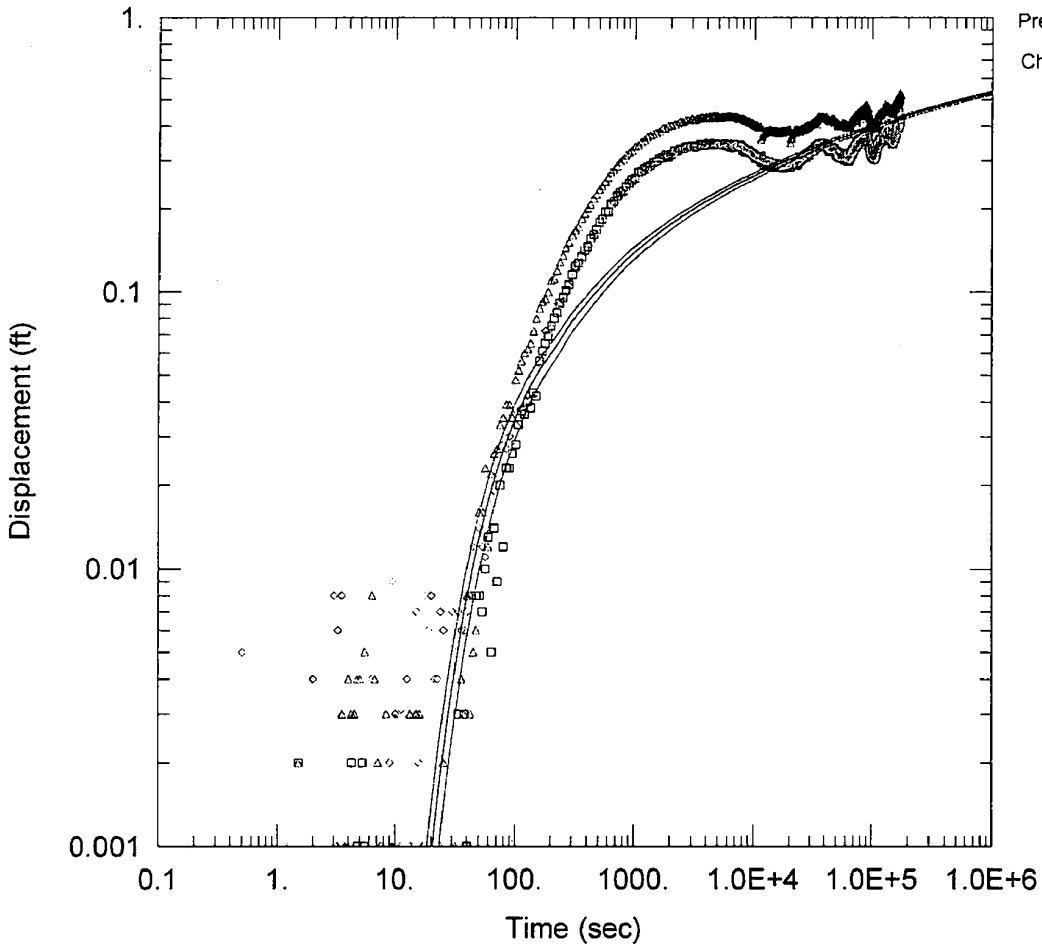
Well Name	X (ft)	Y (ft)
▫ OW-2320 U1	2607080.05	13407445.66
△ OW-2320 U2	2607093.25	13407436.76
◇ OW-2320 U3	2607121.37	13407448.17

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 374. ft^2/day
S = 1.801E-5
Kz/Kr = 1.
b = 7. ft

Prepared by: WV Date: 5-9-08
Checked by: WBR Date: 5-12-08



TW-2320 AQUIFER PUMP TEST (COMBINED LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

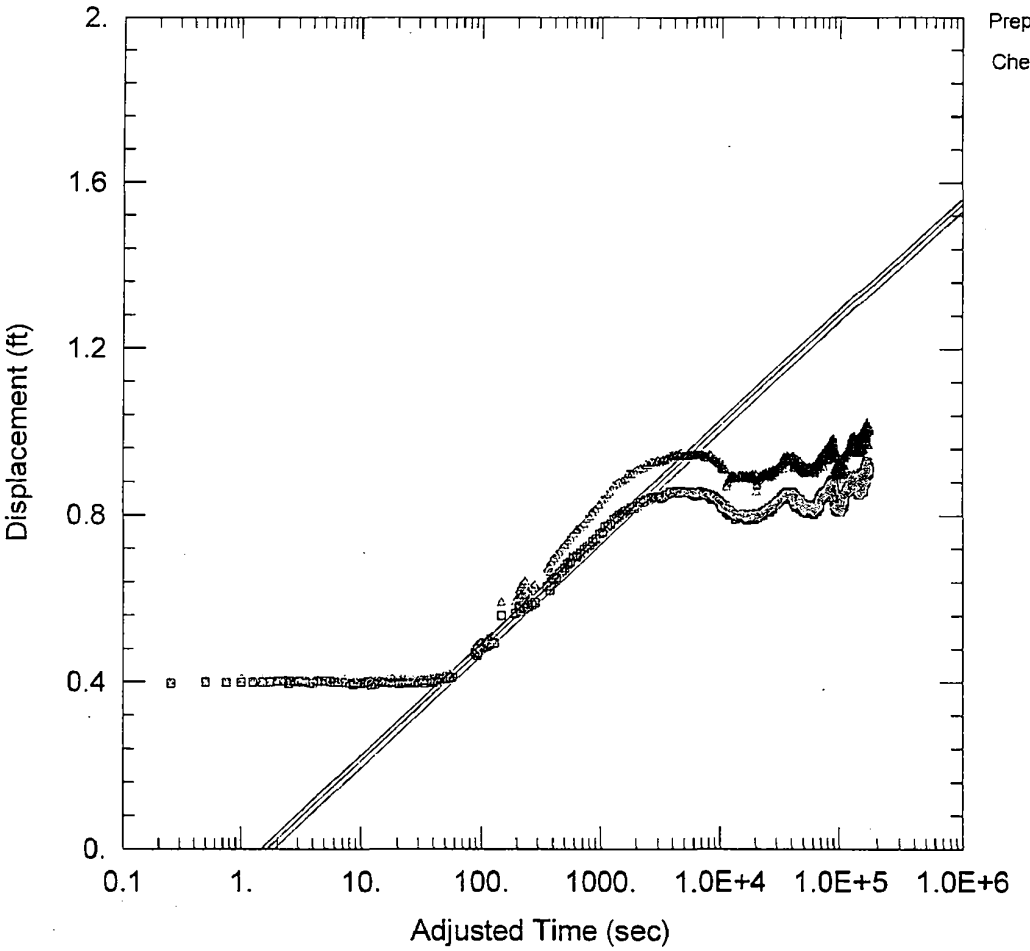
Well Name	X (ft)	Y (ft)
▫ OW-2320 U1	2607080.05	13407445.66
▵ OW-2320 U2	2607093.25	13407436.76
· OW-2320 U3	2607121.37	13407448.17

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 854.2 ft^2/day
S = 2.798E-5
Kz/Kr = 1.
b = 7. ft

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (COMBINED WITH RECOVERY EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
▫ OW-2320 U1	2607080.05	13407445.66
△ OW-2320 U2	2607093.25	13407436.76
OW-2320 U3	2607121.37	13407448.17

SOLUTION

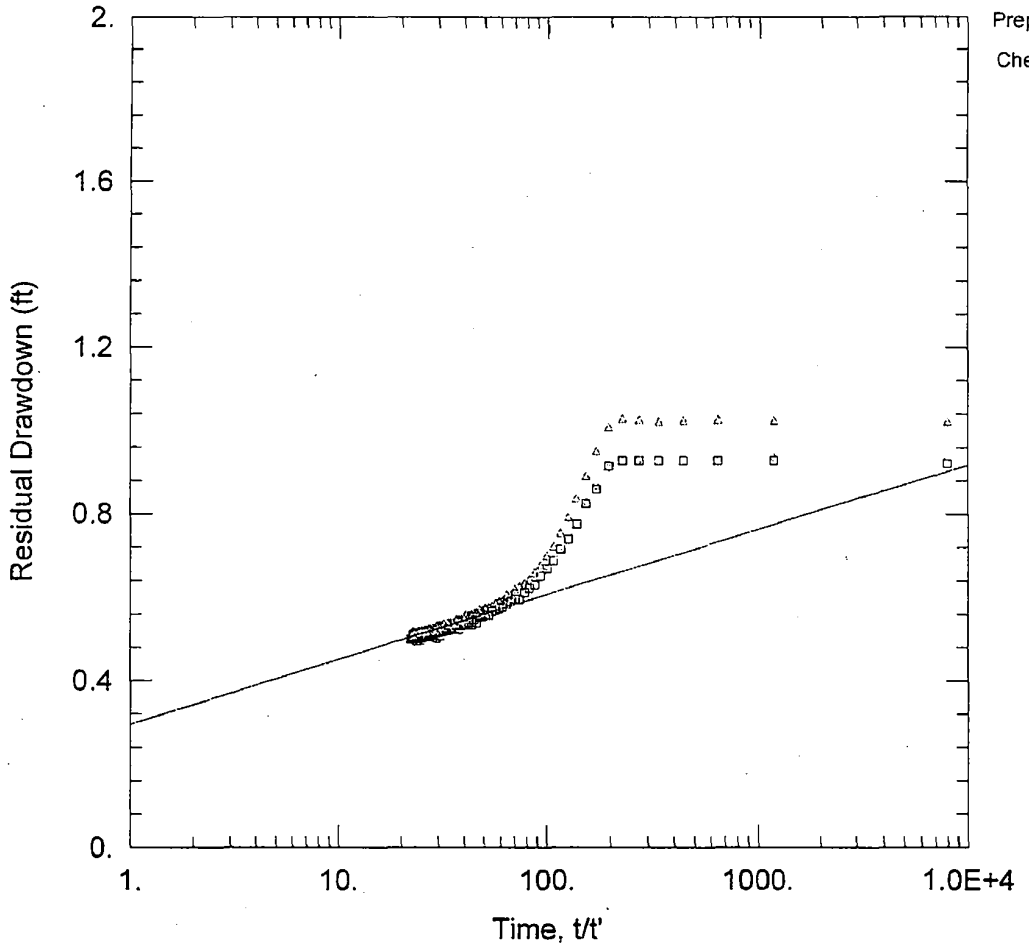
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 423.1 ft^2/day

S = 2.354E-7

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (COMBINED LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
OW-2320 U1	2607080.05	13407445.66
OW-2320 U2	2607093.25	13407436.76
OW-2320 U3	2607121.37	13407448.17

SOLUTION

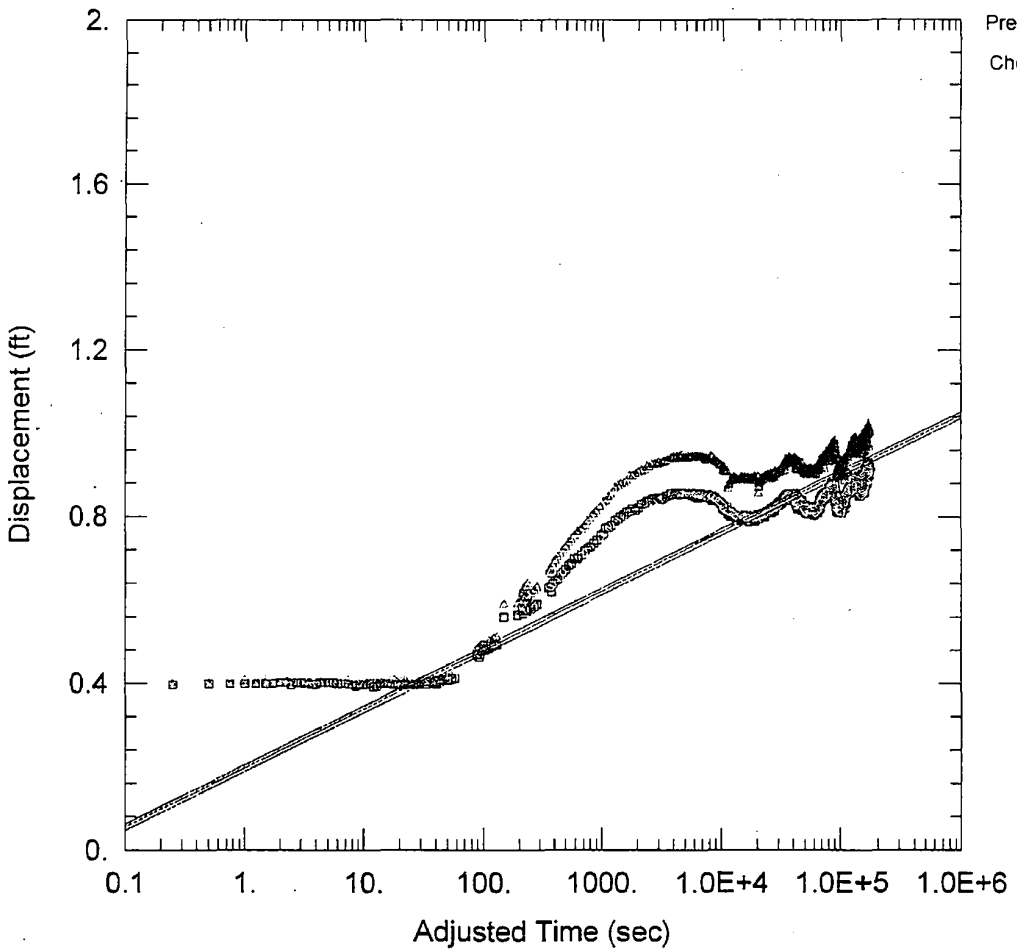
Aquifer Model: Confined

Solution Method: Theis (Recovery)

T = 727.9 ft^2/day

S/S' = 0.01275

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (COMBINED WITH RECOVERY LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
▫ OW-2320 U1	2607080.05	13407445.66
△ OW-2320 U2	2607093.25	13407436.76
OW-2320 U3	2607121.37	13407448.17

SOLUTION

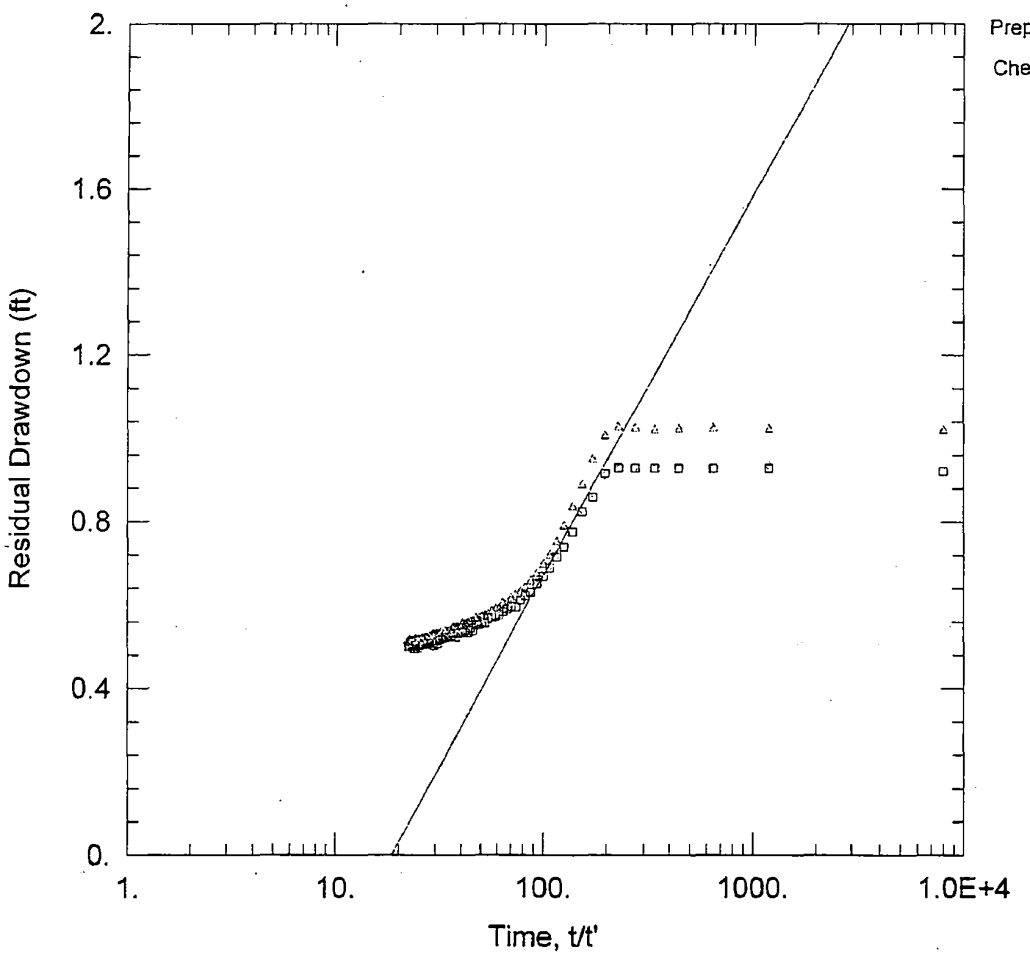
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 800.6 ft^2/day

S = 1.104E-8

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (COMBINED WITH RECOVERY LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
▫ OW-2320 U1	2607080.05	13407445.66
△ OW-2320 U2	2607093.25	13407436.76
OW-2320 U3	2607121.37	13407448.17

SOLUTION

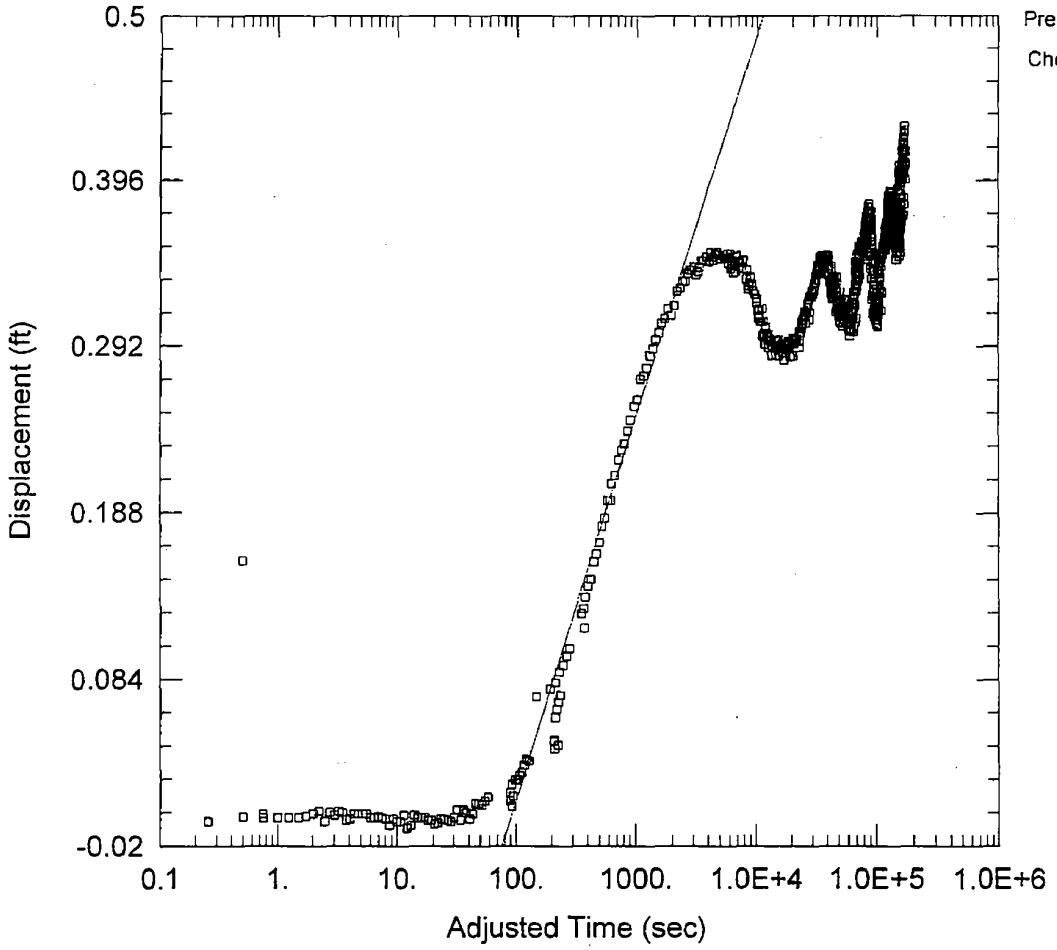
Aquifer Model: Confined

Solution Method: Theis (Recovery)

T = 123.8 ft^2/day

S/S' = 18.56

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
▫ OW-2320 U1	2607080.05	13407445.66

SOLUTION

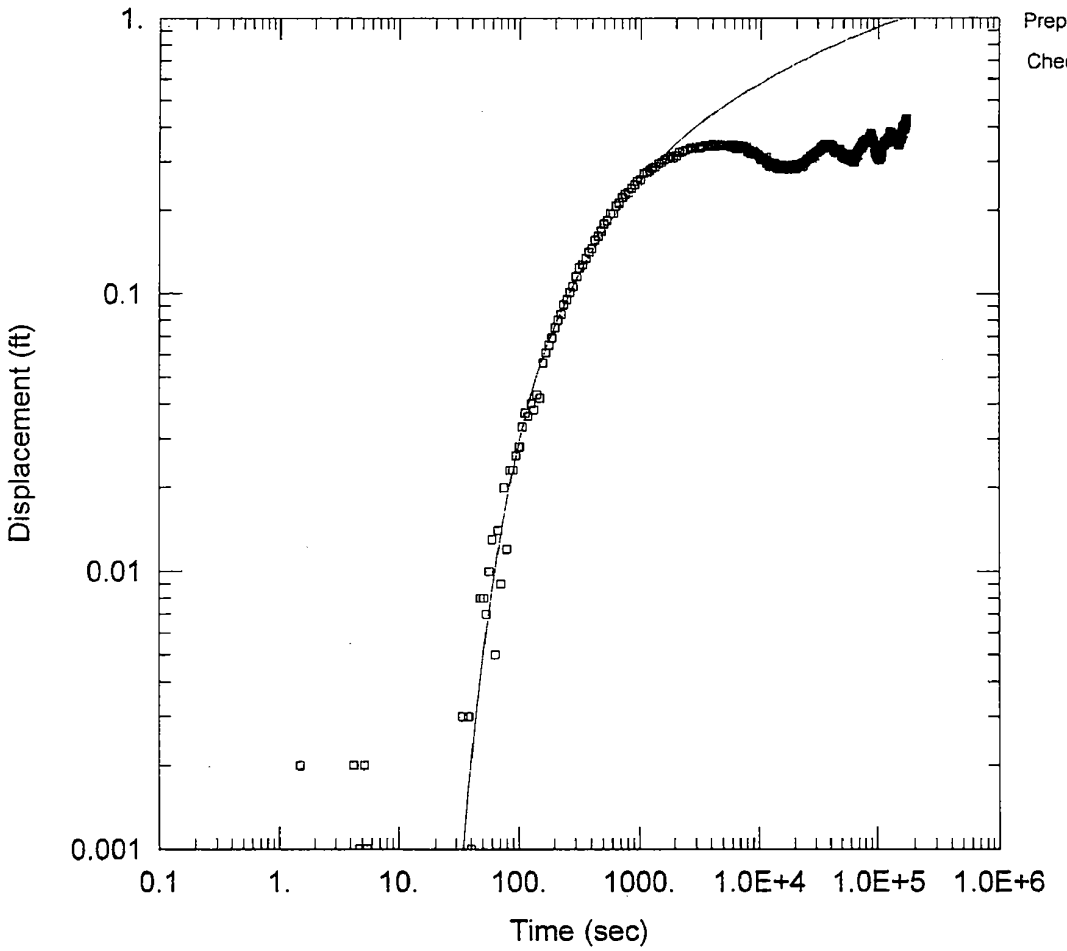
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 471.6 ft^2/day

S = 1.659E-5

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

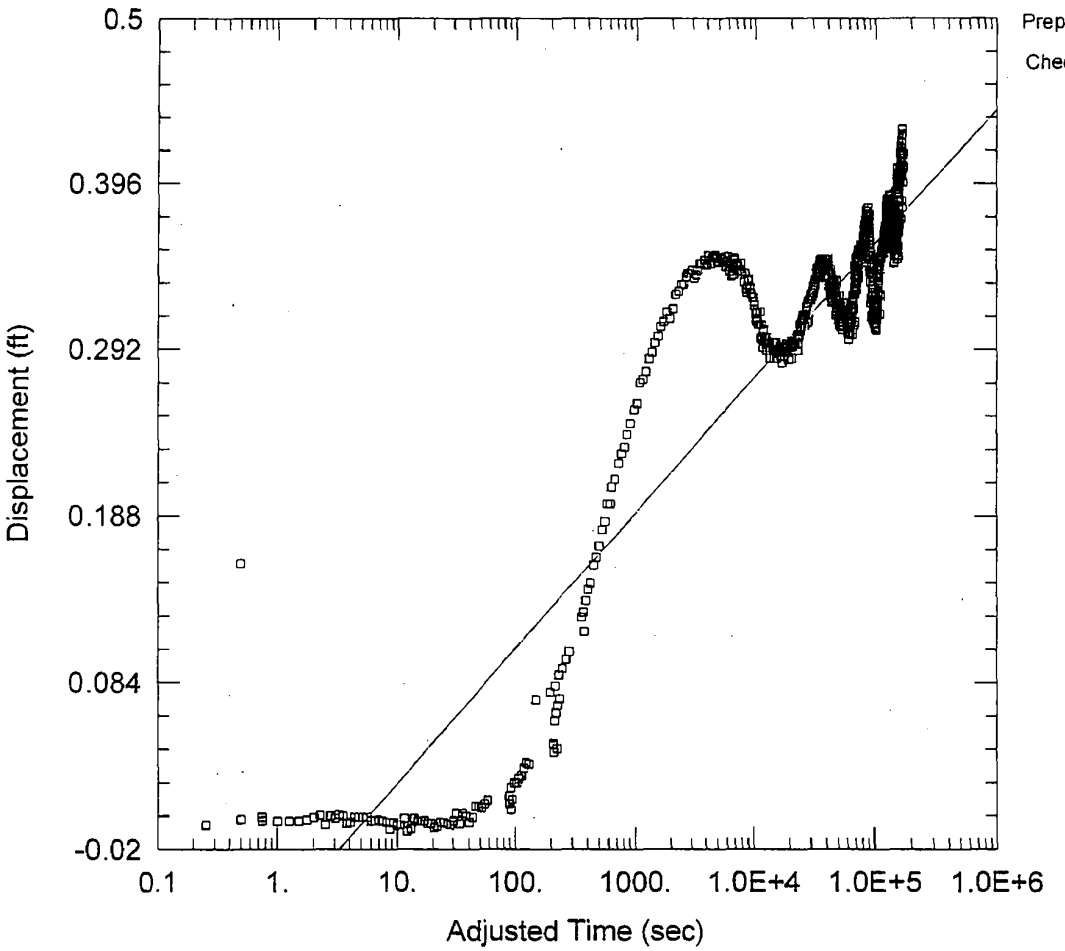
Well Name	X (ft)	Y (ft)
▫ OW-2320 U1	2607080.05	13407445.66

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 325.3 ft^2/day
Kz/Kr = 1.
S = 2.617E-5
b = 7. ft

Prepared by: CHB Date: 4-4-08
Checked by: BMJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
▫ OW-2320 U1	2607080.05	13407445.66

SOLUTION

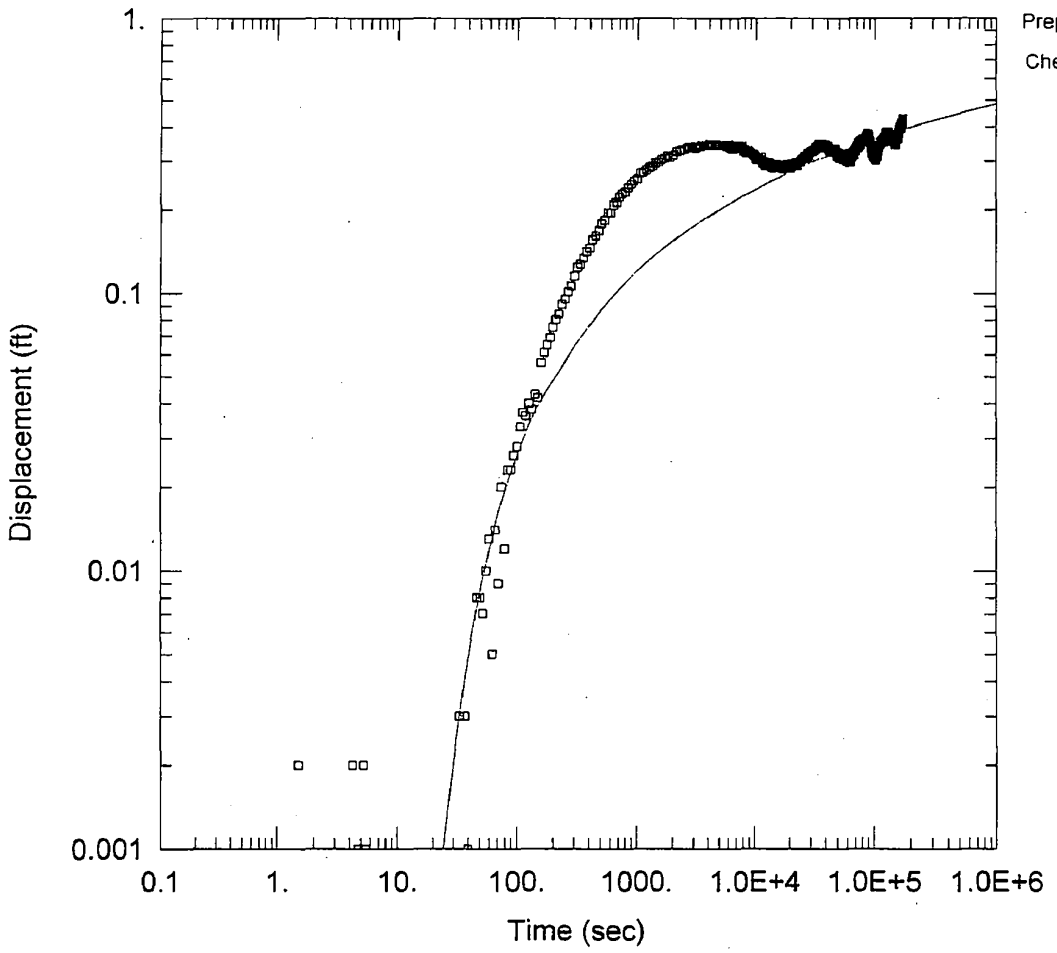
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 1343.2 ft^2/day

S = 2.89E-6

Prepared by: CHB Date: 4-4-08
Checked by: BNJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

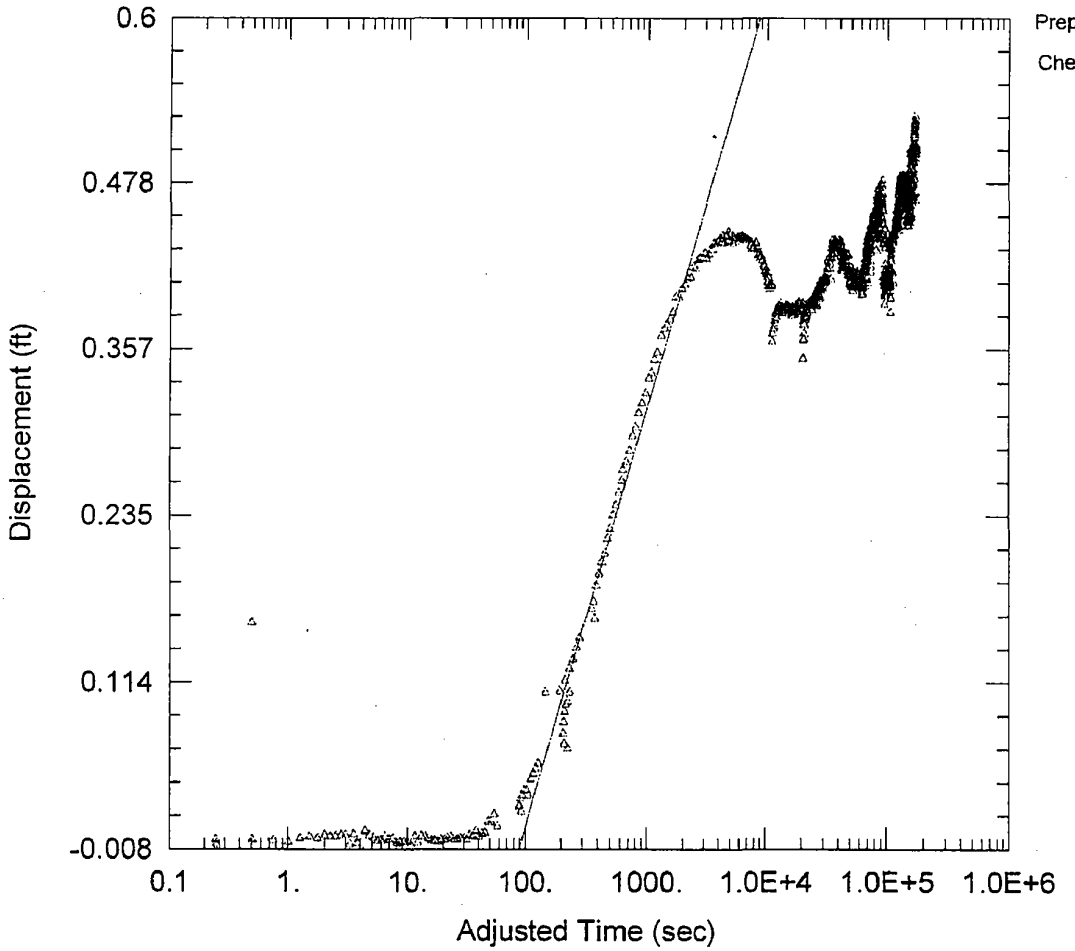
Well Name	X (ft)	Y (ft)
▫ OW-2320 U1	2607080.05	13407445.66

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 916.7 ft^2/day
S = 4.065E-5
Kz/Kr = 1.
b = 7. ft

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
OW-2320 U2	2607093.25	13407436.76

SOLUTION

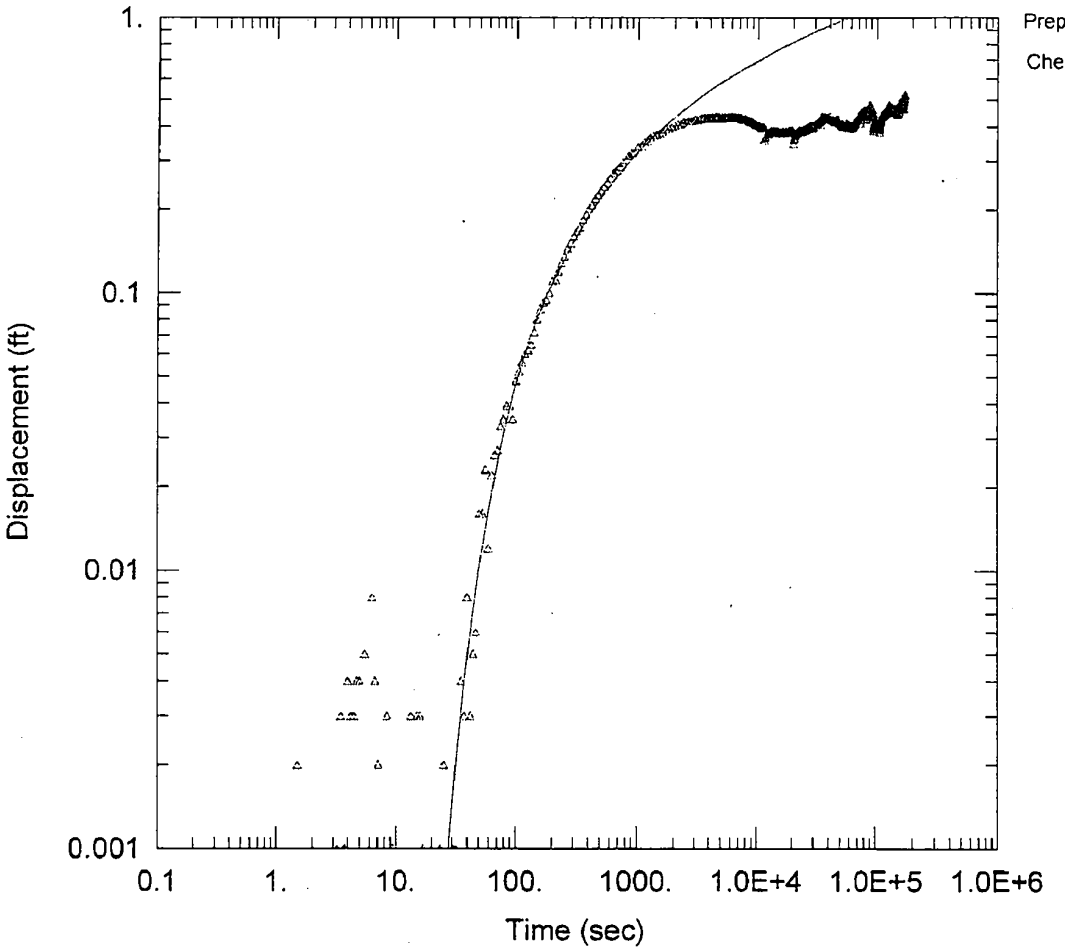
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 370.4 ft^2/day

S = 1.182E-5

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

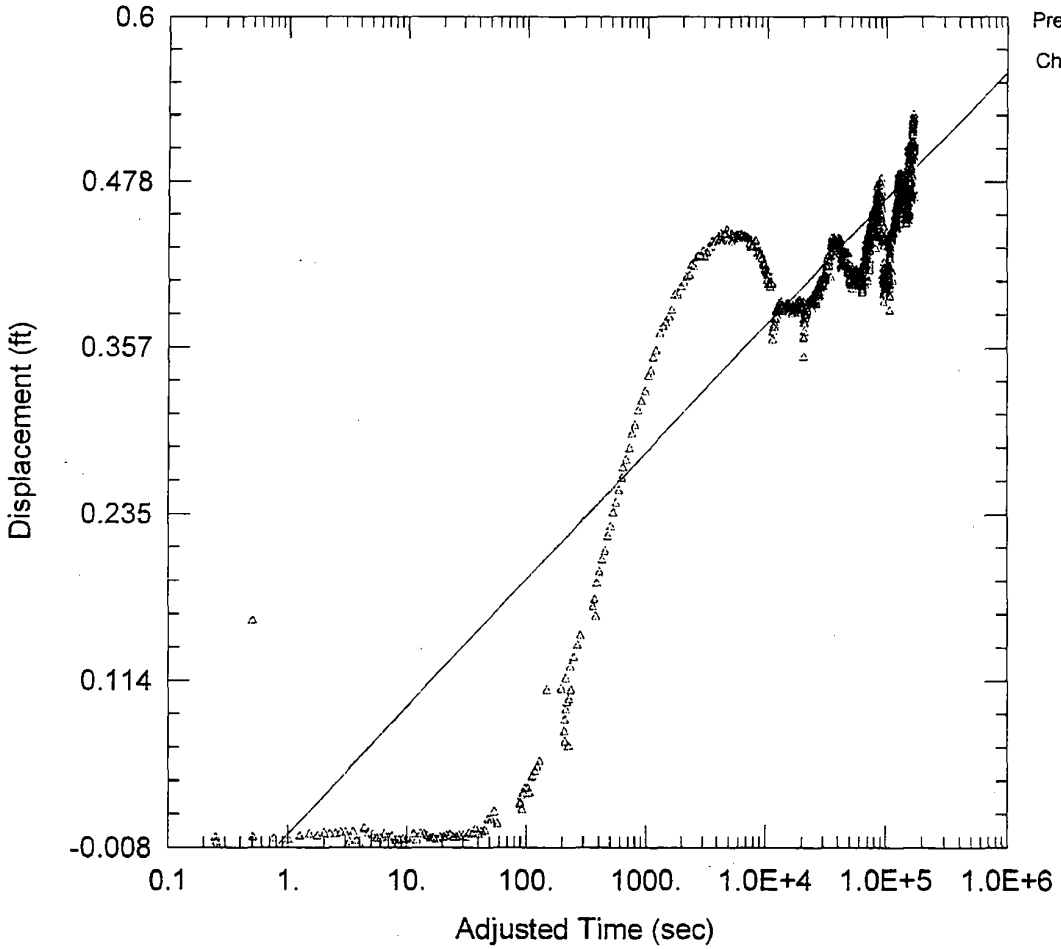
Well Name	X (ft)	Y (ft)
△ OW-2320 U2	2607093.25	13407436.76

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 284. ft^2/day
Kz/Kr = 1.
S = 1.678E-5
b = 7. ft

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
OW-2320 U2	2607093.25	13407436.76

SOLUTION

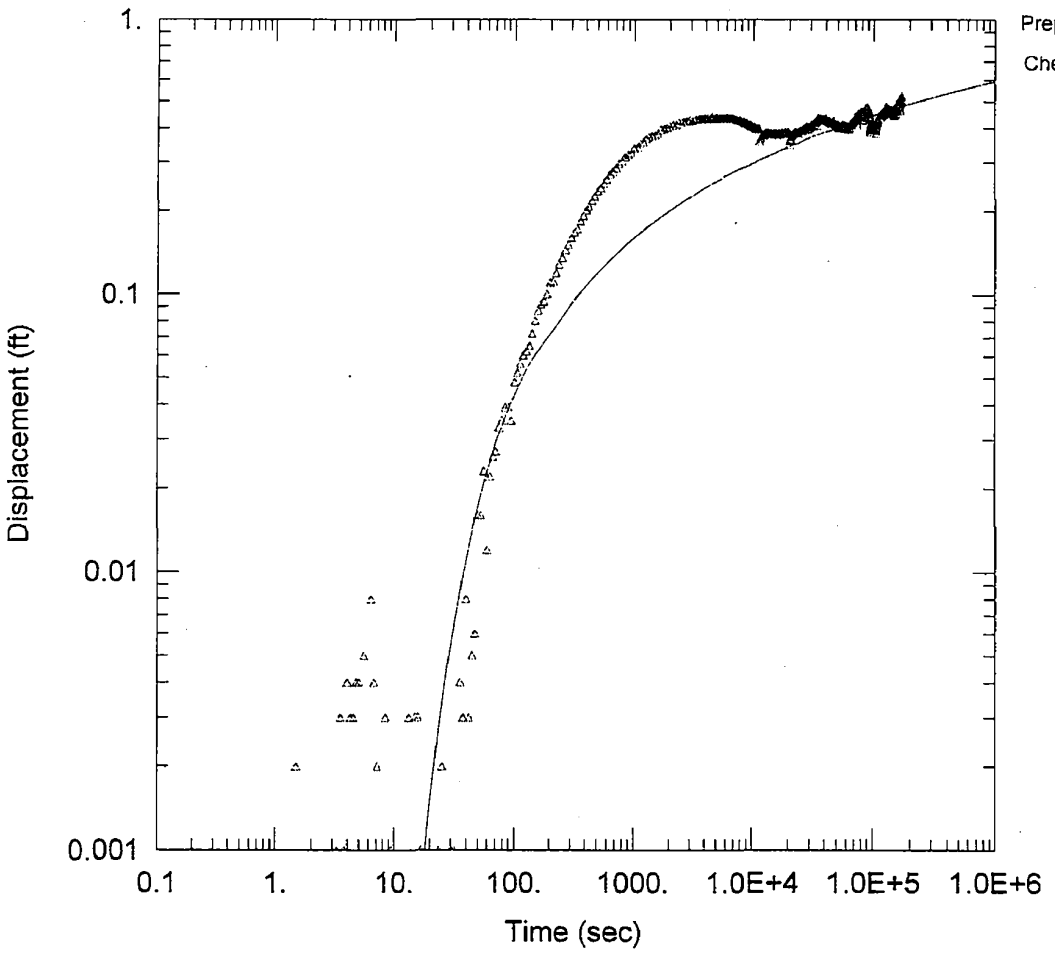
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 1220. ft^2/day

S = 3.969E-7

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

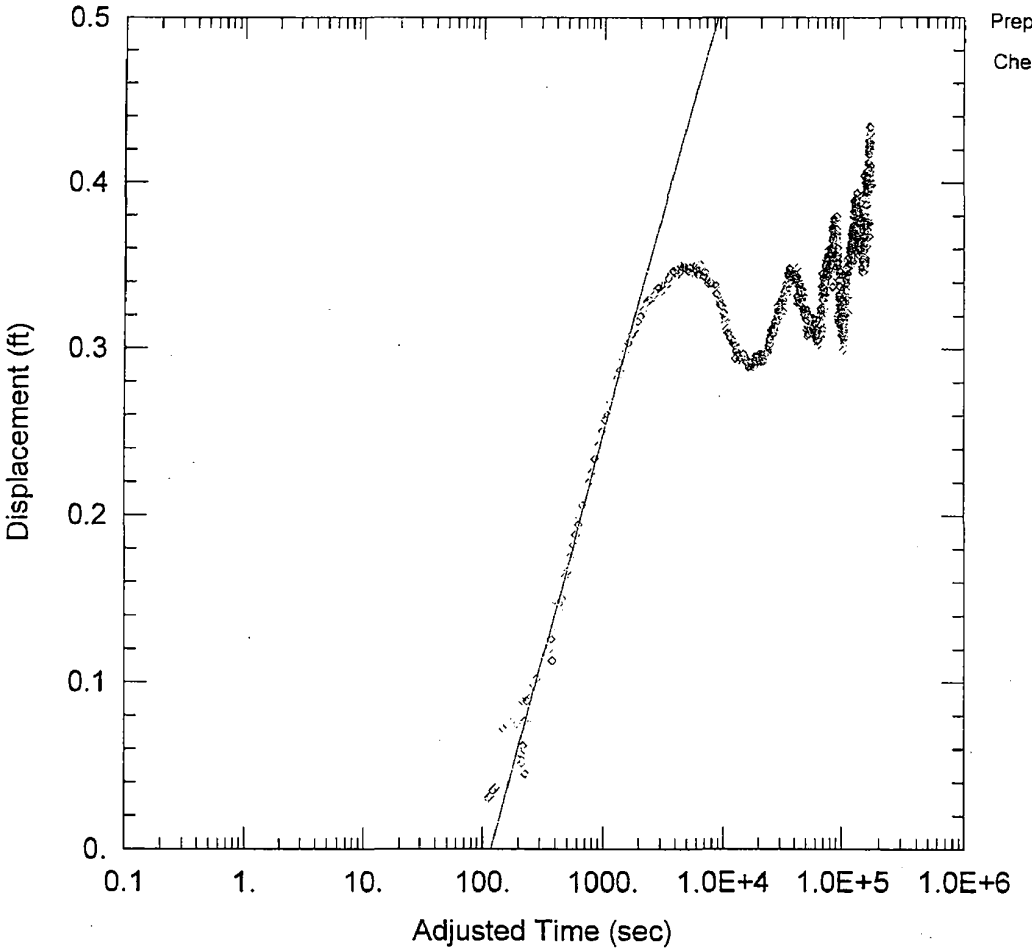
Well Name	X (ft)	Y (ft)
△ OW-2320 U2	2607093.25	13407436.76

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 776.6 ft^2/day
Kz/Kr = 1.
S = 2.278E-5
b = 7. ft

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
OW-2320 U3	2607121.37	13407448.17

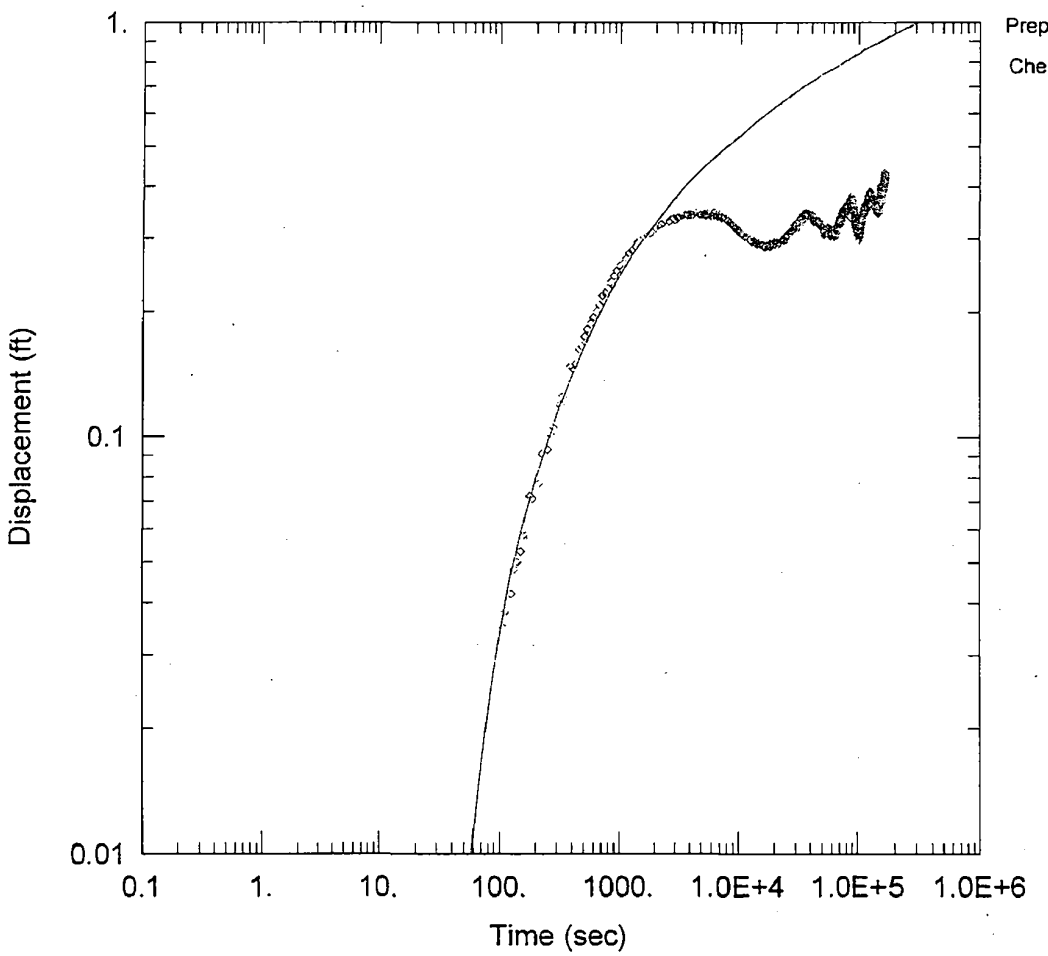
SOLUTION

Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 422.3 ft^2/day

S = 1.46E-5



Prepared by: CHB Date: 4-4-08
Checked by: BMJ Date: 4/4/08

TW-2320 AQUIFER PUMP TEST (EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

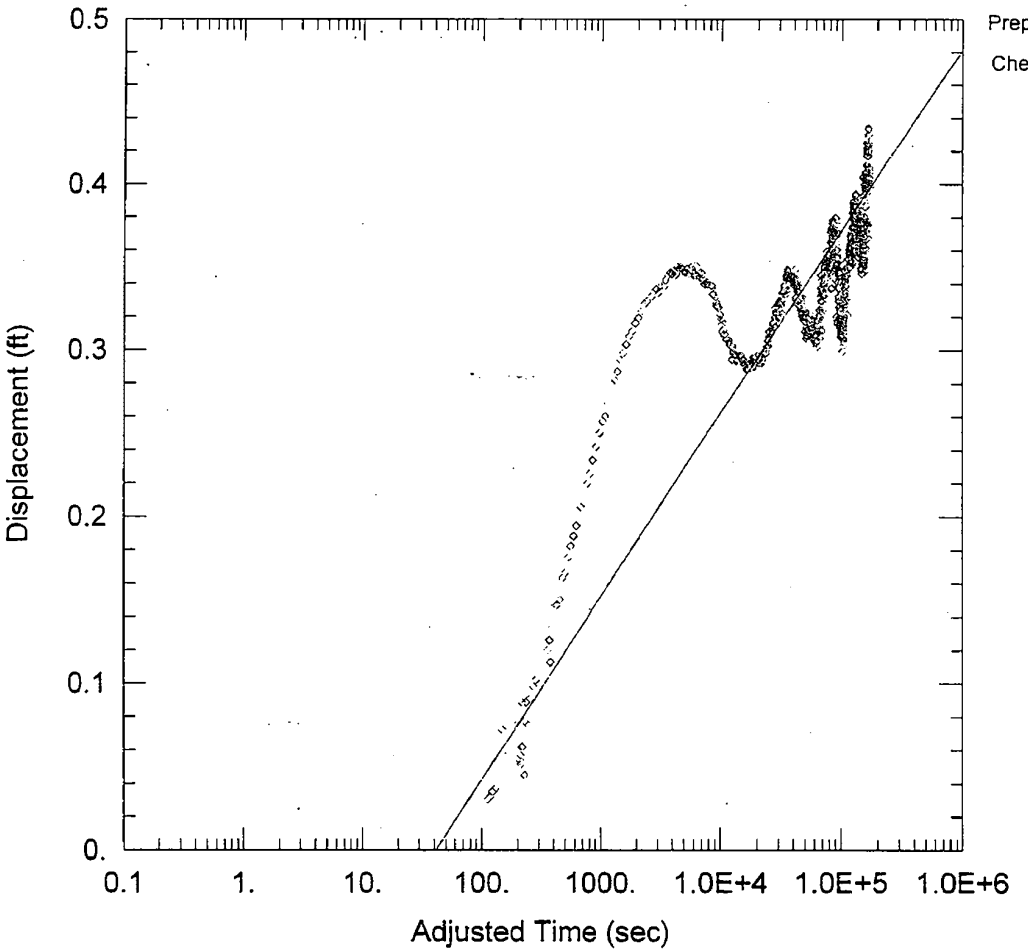
Well Name	X (ft)	Y (ft)
◇ OW-2320 U3	2607121.37	13407448.17

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 365.8 ft^2/day
S = 1.981E-5
Kz/Kr = 1.
b = 7. ft

Prepared by: CHB Date: 4-4-08
Checked by: BLH Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 7. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
OW-2320 U3	2607121.37	13407448.17

SOLUTION

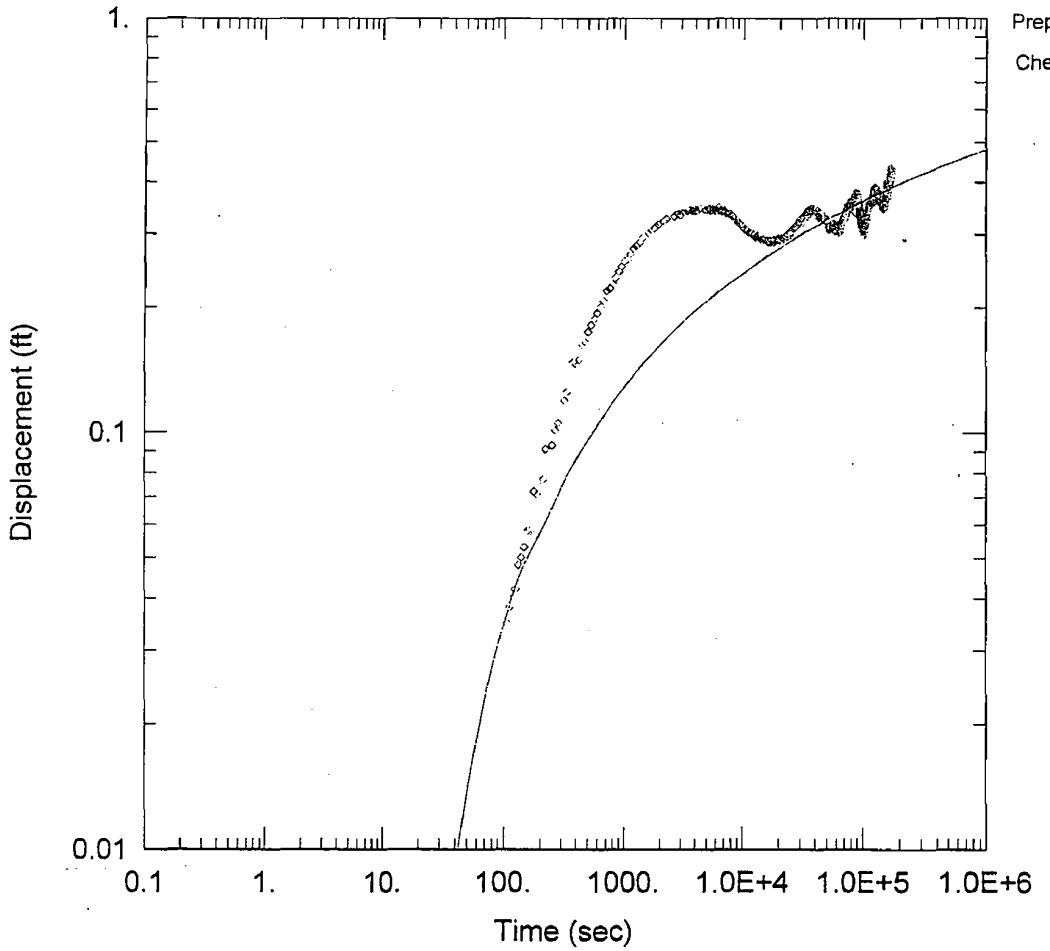
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 1030.9 ft^2/day

S = 1.251E-5

Prepared by: CHB Date: 4-4-08
Checked by: BHJ Date: 4/4/08



TW-2320 AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2320
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2320	2606849.7	13407569.51

Observation Wells

Well Name	X (ft)	Y (ft)
◇ OW-2320 U3	2607121.37	13407448.17

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 956.4 ft^2/day
Kz/Kr = 1.

S = 2.482E-5
b = 7. ft

Checked by: CHB Date: 4/7/08

MACTEC

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: TW-2320
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: __/__/__	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	39.49 feet
Total Well Depth	82 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	2/7/08 6:00 PM	2/12/08 1250	2/13/08 10:30	See drawdown
End time	2/12/08 10:00 AM	2/13/08 9:41 AM	2/14/08 845 AM	See drawdown
Flow Rate	NA	See file	See file	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	
Length of Well Screen (L)	feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	101719

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	TW-2320 Background	TW-2320 Step Test	TW-2320 24 Hour Test	See drawdown
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

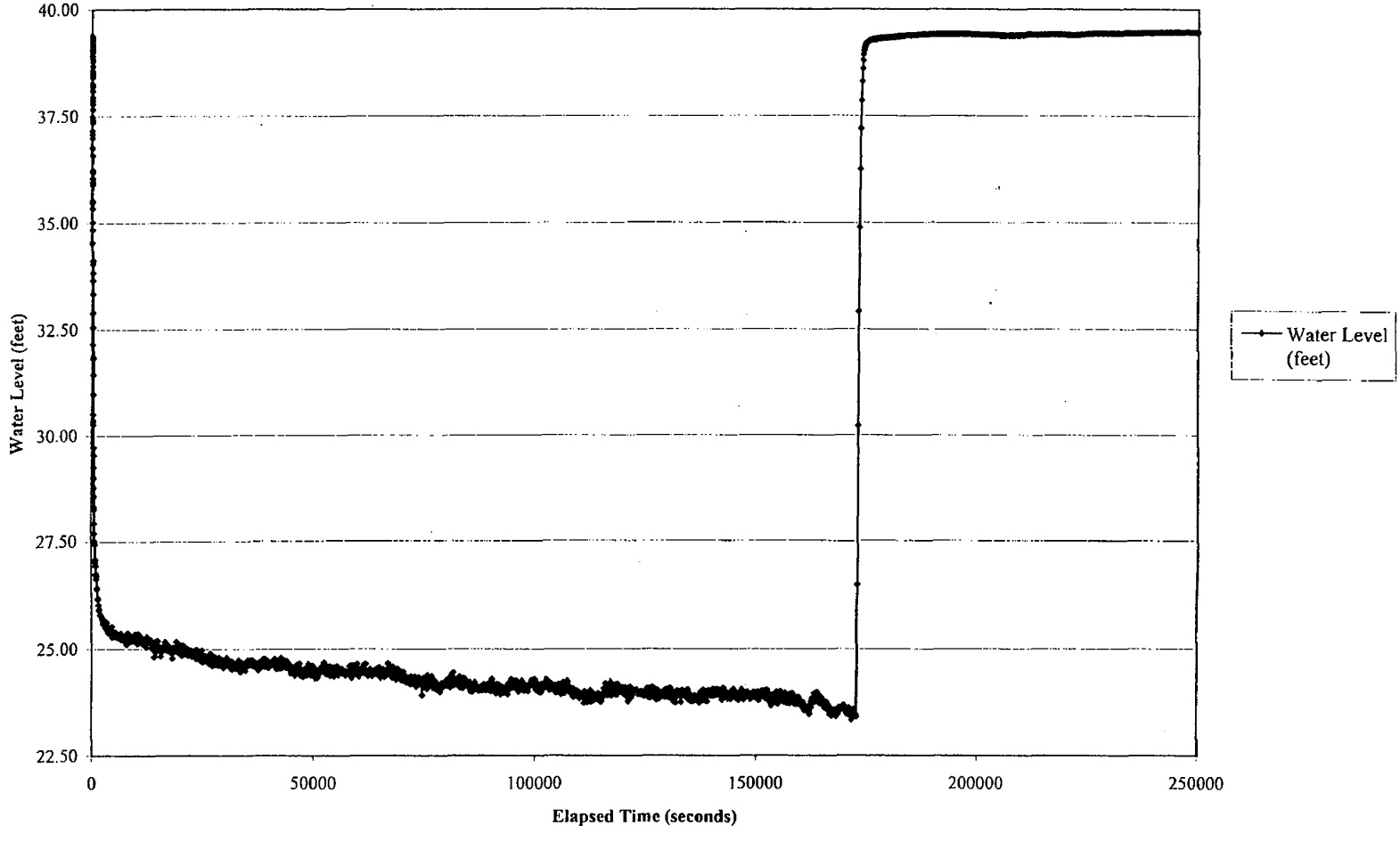
Notes

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2320 Aquifer Pump Test
TW-2320 Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHB Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2320 U1
Client: **Bechtel**	Contractor: **MACTEC**		
Location: Victoria	MACTEC Rep: C. Bruce	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	43.71 feet
Total Well Depth	83 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	2.7.08 6:00pm	2.12.08 12:50pm	2.13.08 10:30am	See download
End time	2.12.08 10:00am	2.13.08 9:00am	2.16.08 8:43am	See download
Flow Rate	NA	~~NA~~ see file KR 2.16.08	See file	See download

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	60 feet
Length of Well Screen (L)	20 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	109262

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2320U1 Background	OW-2320 U1B Step Test	OW-2320 U1 24hr Test	NA (24-hr)
Start Time	NA	NA	NA	NA (24-hr)
End Time	NA	NA	NA	NA (24-hr)

Notes

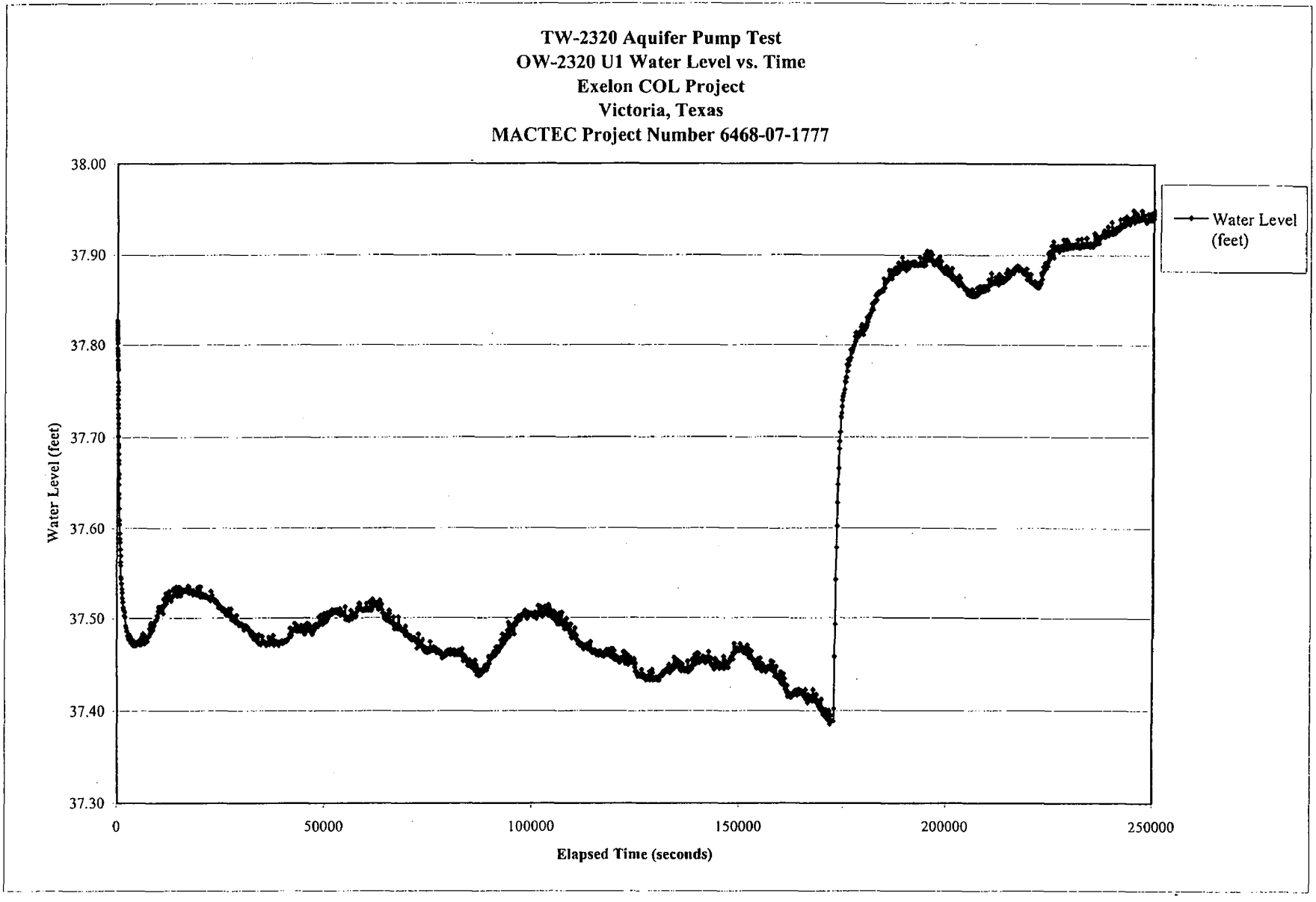
Step test labeled improperly

downloaded on 2.16.08

Rev 0

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08



MACTEC

Checked by: CHB Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2320 U2
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	43.78 feet
Total Well Depth	82.45 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	2-7-08 6:00 pm	2-12-08 12:37 pm	2-13-08 10:30 am	See drawdown
End time	2-12-08 10:00 am	2-13-08 9:39 am	2-16-08 8:43 am	See drawdown
Flow Rate	NA	see file	See file	See drawdown

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	60 feet
Length of Well Screen (L)	20 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	119286

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2320 U2 Background	OW-2320 U2 Step Test	OW-2320 U2 24hr test	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

KB 2-16-08

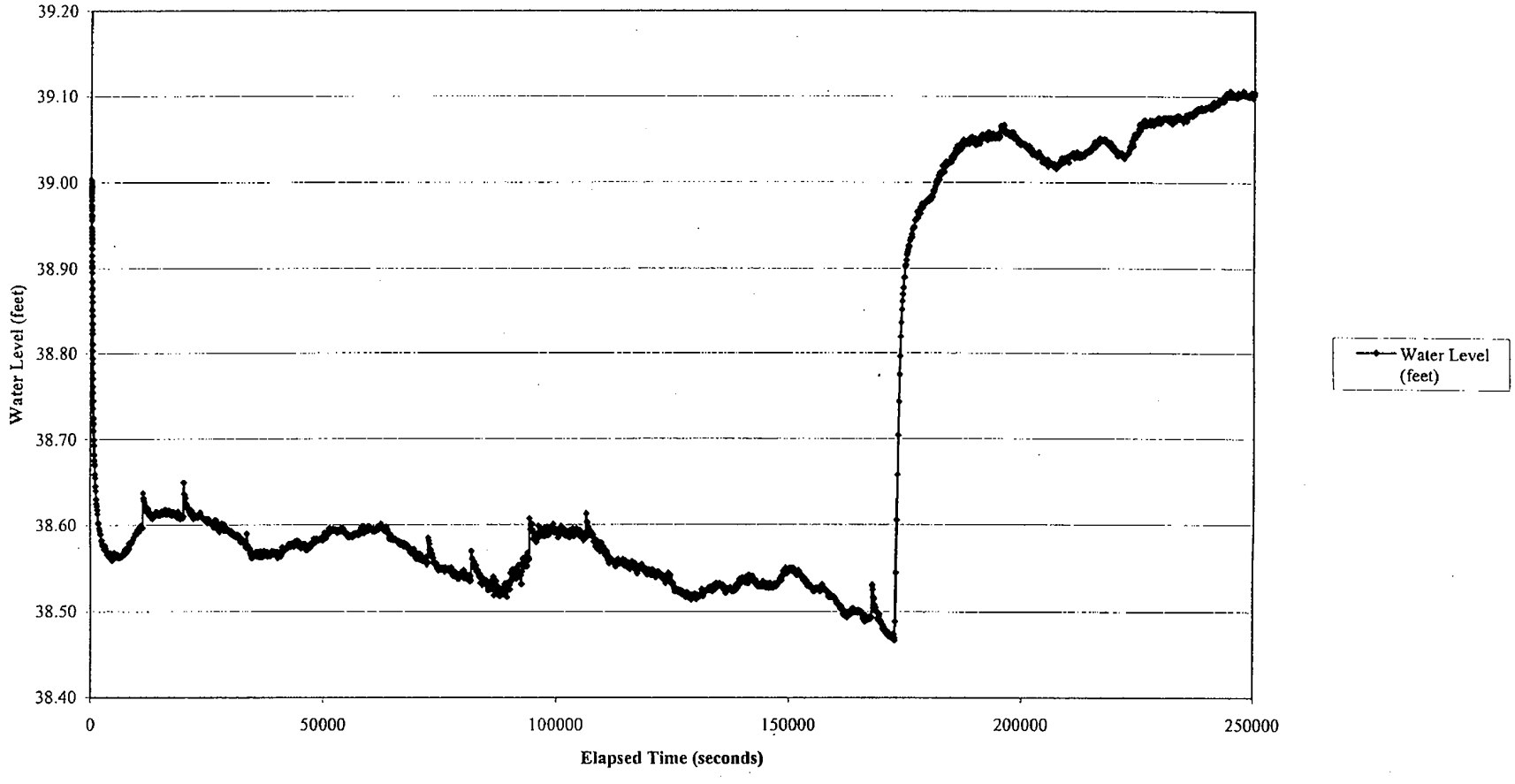
downloaded ~~12~~ 2-16-08

Rev 0

Prepared by: WS Date: 4-4-08

Checked by: BWA Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-2320 U2 Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHB Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-232003
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	43.78 feet
Total Well Depth	82.88 feet
Static Water Column Height (H)	39.10 feet

	Background	Step Test	Draw Down	Recovery
Start time	2/7/08 6:00 PM	2/12/08 12:50 PM	2/13/08 10:30 AM	NA
End time	2/12/08 10:00 AM	2/13/08 9:39 AM	2/16/08 8:47 AM	NA
Flow Rate	NA	See File	See File	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	60
Length of Well Screen (L)	20 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	102426

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-232003 Background	OW-232003 Step test	OW-232003 24 Hour Test	See drawdown
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

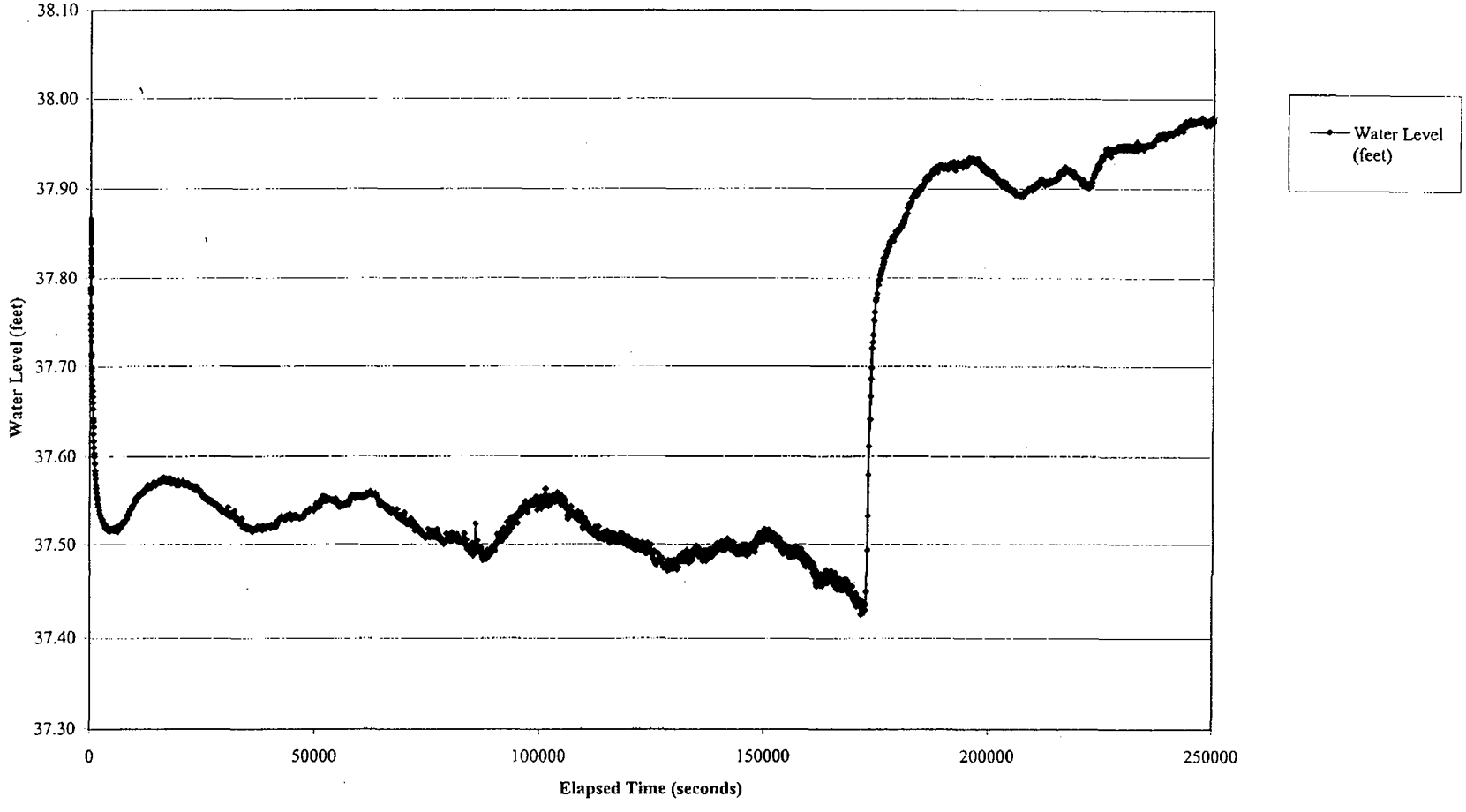
Notes: NA

Rev 0

Prepared by: WJ Date: 4-4-08

Checked by: [illegible] Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-2320 U3 Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHG Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-232044
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: G. Bruce	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	43.97 feet
Total Well Depth	83.0 feet
Static Water Column Height (H)	39.03 feet

	Background	Step Test	Draw Down	Recovery
Start time	2-7-08 6:00 pm	2-12-08 12:50 pm	2-13-08 10:30 am	see drawdown
End time	2-12-08 10:00 am	2-13-08 9:45 am	2-16-08 8:49 am	see drawdown
Flow Rate	NA	See file	See file	see drawdown

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	60 feet
Length of Well Screen (L)	20 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	119305

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-232044 Background	OW-232044 Step Test	OW-232044 24 hour	NA (See 24 hr)
Start Time	NA	NA	NA	NA (See 24 hr)
End Time	NA	NA	NA	NA (See 24 hr)

Notes

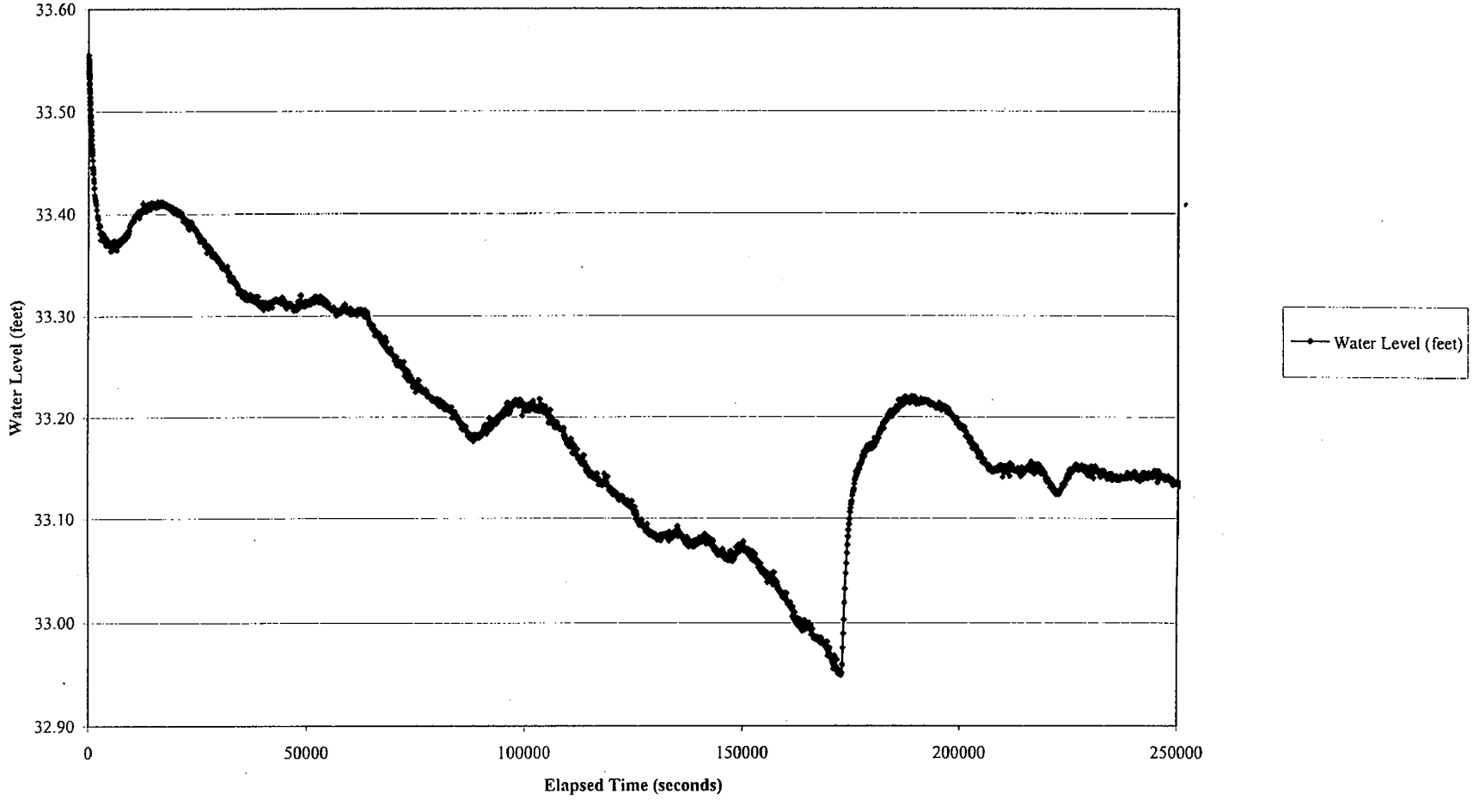
downloaded on 2.17.08

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: [illegible] Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-2320 U4 Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHB Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2320 U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	44.75 feet
Total Well Depth	113.35 feet
Static Water Column Height (H)	68.6 feet

	Background	Step Test	Draw Down	Recovery
Start time	2/7/08 6:00 PM	See background	2/13/08 10:30 AM	See drawdown
End time	2/13/08 9:00 AM	see background	2/16/08 8:51 AM	See drawdown
Flow Rate	NA	see file	see file	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	108
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	112335

Slug Test File	~~OW-2320~~ Background	Step Test	Draw Down	Recovery
File Name	OW-2320 U Background	See Background	OW-2320U 24 Hr Test	See drawdown
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

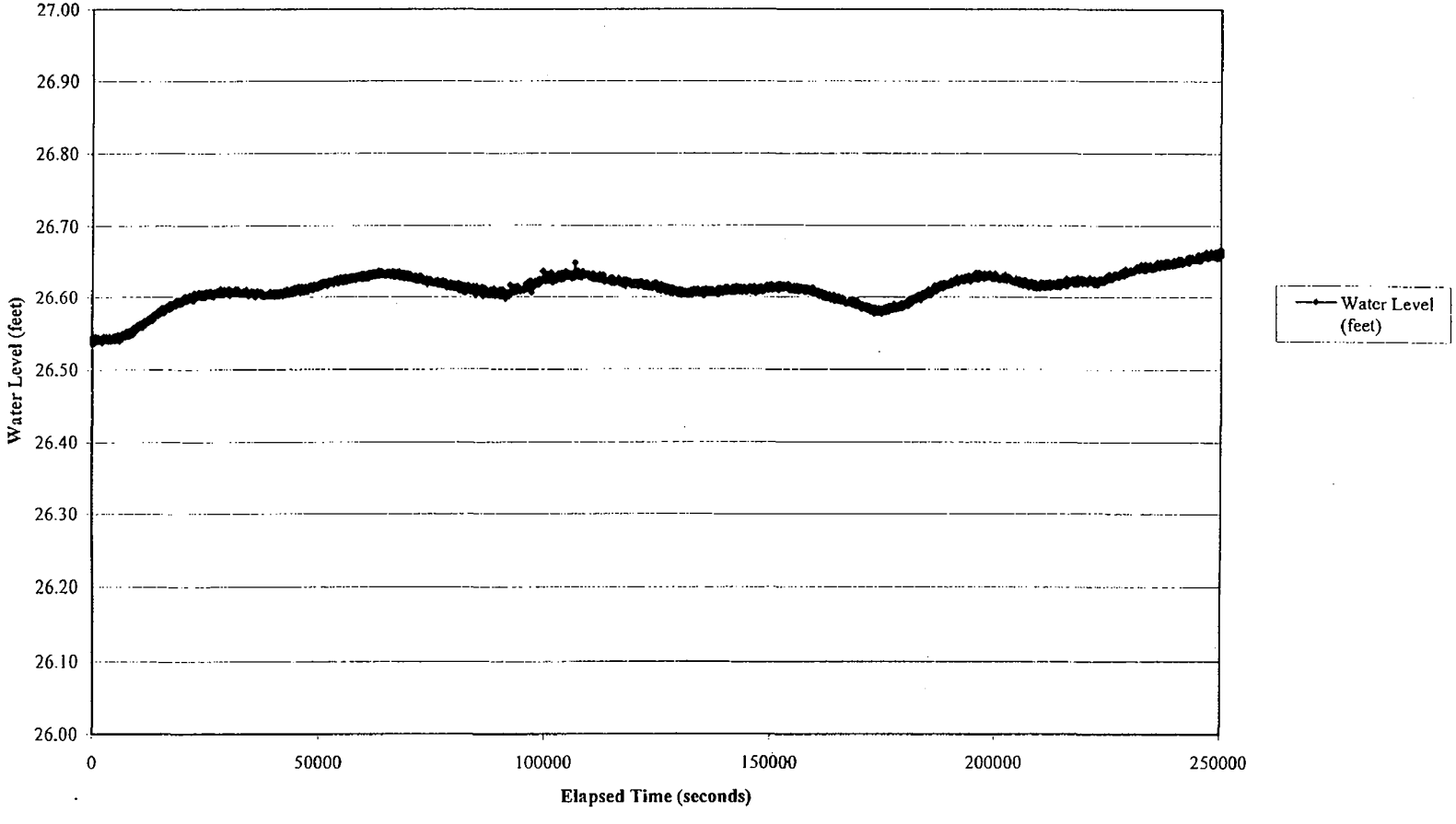
No step test set up on Probe (to far away for response)

Rev 0

Prepared by: LSR Date: 4-4-08

Checked by: BWS Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-2320U Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHB Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2320 L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: C. Bruce	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	43.22' feet
Total Well Depth	152 feet
Static Water Column Height (H)	108.78 feet

	Background	Step Test	Draw Down	Recovery
Start time	2.7.08 6:00pm	NA	2.13.08 10:30am	see download
End time	2.13.08 9:00am	NA	2.16.08 8:53am	see download
Flow Rate	NA	NA	See file	see download

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	140 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	117812

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2320 L Background	NA	OW-2320 L 24 hr Test	NA (See 24 hr)
Start Time	NA	NA	see download	NA (see 24 hr)
End Time	NA	NA	see download	NA (see 24 hr)

Notes

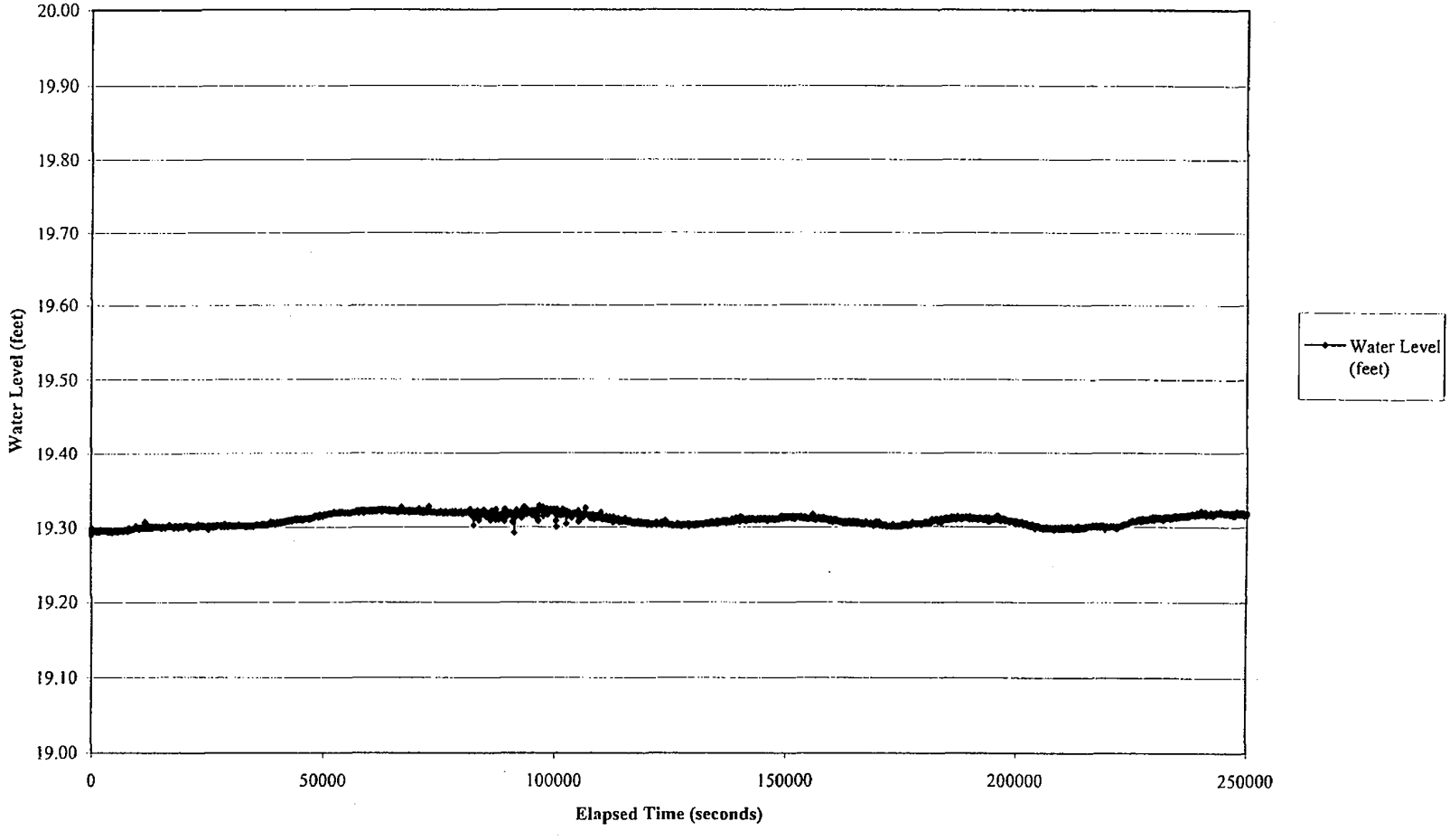
downloaded 2.17.08

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-2320L Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



Checked by: CHS Date: 4/7/08

MACTEC

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2321 U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: C. Bruce	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	51.70 feet
Total Well Depth	113.17 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	2-7-08 6:00 pm	NA	NA	NA
End time	2-16-08 8:00 am	NA	NA	NA
Flow Rate	NA	NA	NA	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	100
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	103078

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2321 U Background	NA	NA	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

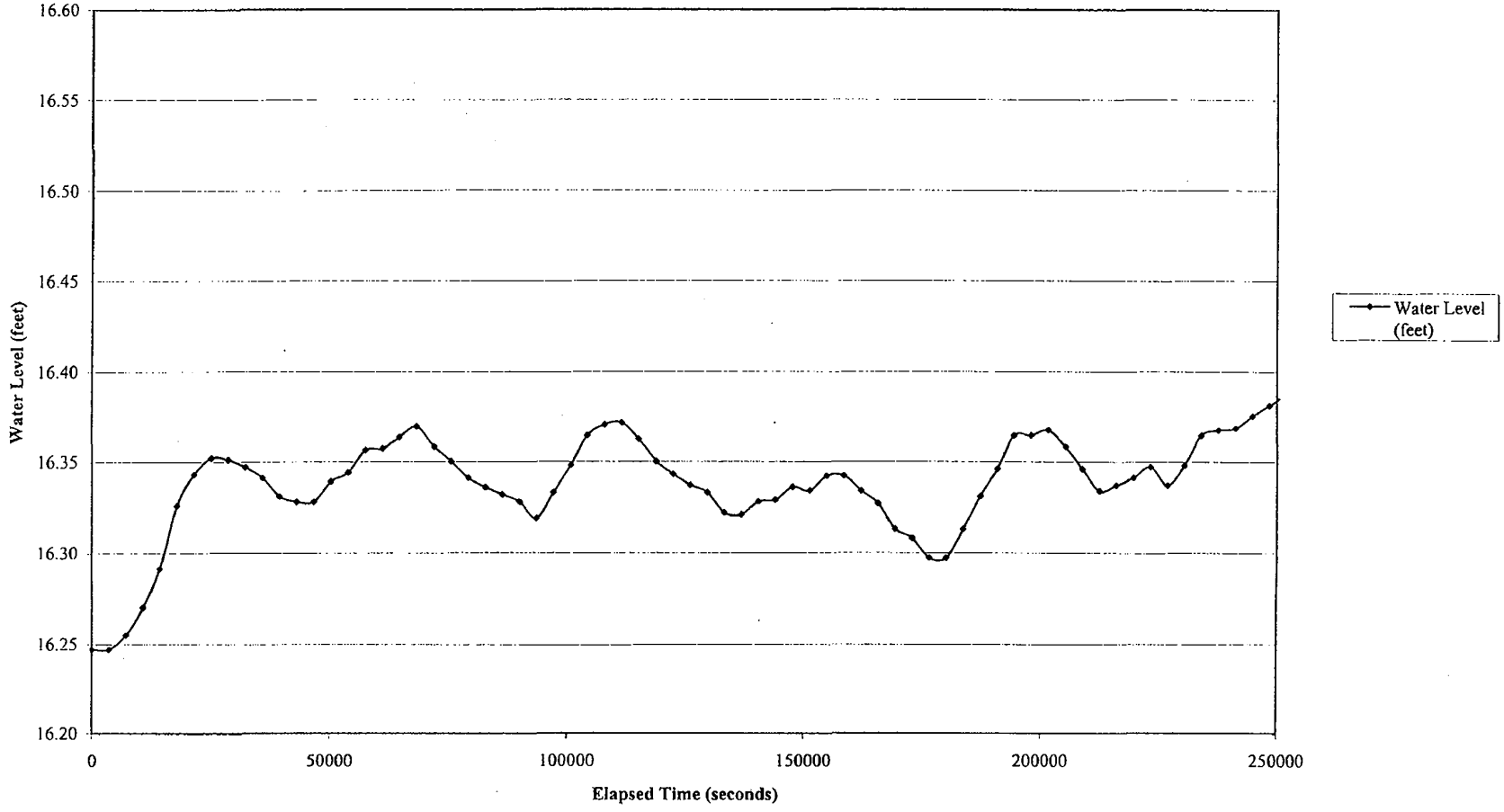
downloaded 2-16-08

Rev 0

Prepared by: WSb Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-2321U Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



Checked by: CHS Date: 4/7/08

MACTEC

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2321 L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	51.71 feet
Total Well Depth ~~153.10 KB~~ 2/7/08	153.06 feet
Static Water Column Height (H)	101.35 feet

	Background	Step Test	Draw Down	Recovery
Start time	2/7/08 6:00 PM	NA	NA	NA
End time	2/16/08 6:00 AM	NA	NA	NA
Flow Rate	See Log	NA	NA	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	140 ft
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	109183

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2321 L Background	NA	NA	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

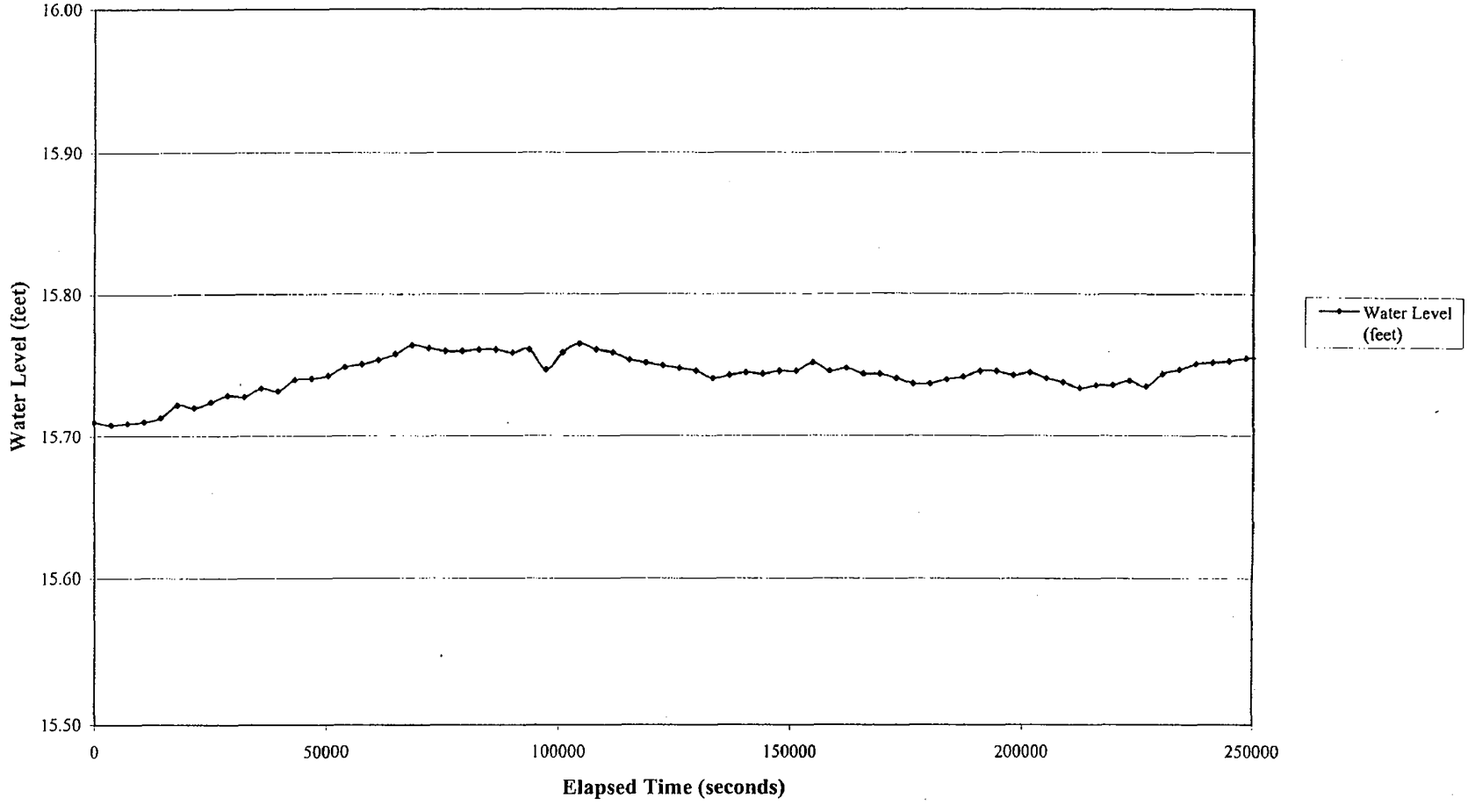
Background for TW-2320 pumping test

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: BWA Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-2321L Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHB Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2319U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	40.81 feet
Total Well Depth	CHB ~~156.00~~ feet 98.15
Static Water Column Height (H)	CHB ~~115.99~~ feet 57.34

	Background	Step Test	Draw Down	Recovery
Start time	2/7/08 6:00 PM	See Background	2/13/08 10:30 AM	See drawdown
End time	2/13/08 10:00 AM	NA	2/16/08 9:09 AM	See drawdown
Flow Rate	NA	see file	See file	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	85
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	112299

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2317U Background	See Background	OW-2319U 24 Hour test	see drawdown
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

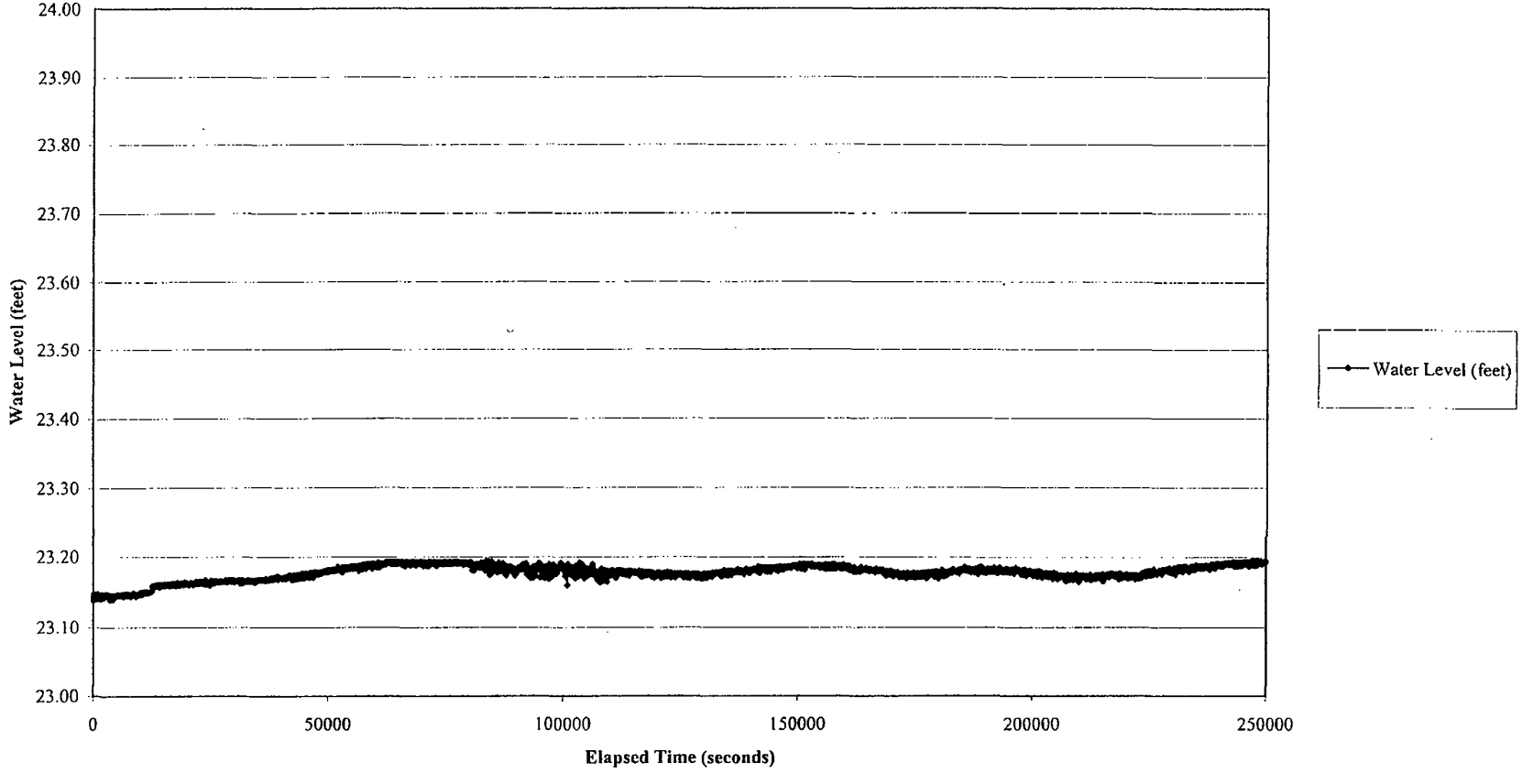
Non-C

Rev 0

Prepared by: WSC Date: 4-4-08

Checked by: BLJ Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-2319U Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHD Date: 4/7/08

PUMP TEST REPORT

roject Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2319 L
lient: Bechtel	Contractor: MACTEC		
ocation: Victoria	MACTEC Rep:	Date: 2/7/08	

NITS	
ength	Feet
ime	Minutes
Vell Data	
tatic Water Level	41.68 feet
otal Well Depth	156.80 feet
tatic Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
tart time	2/7/08 6:PM	see Background	See Background	See Background
nd time	2/16/08 9:00 AM	NA	NA	NA
low Rate	NA	See File	See File	NA

aturated Thickness (b)	See Log feet
onductivity Anisotropy (Kv/Kh)	Assume 1 to 1
epth to Top of Well Screen (d)	145
ength of Well Screen (L)	10 feet
adius of Well Casing (rc)	0.083 feet
adius of Screen (rw)	0.083 feet
adius of Probe (req)	0.060 feet
adius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	11 67-99

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2319L Background	NA	NA	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

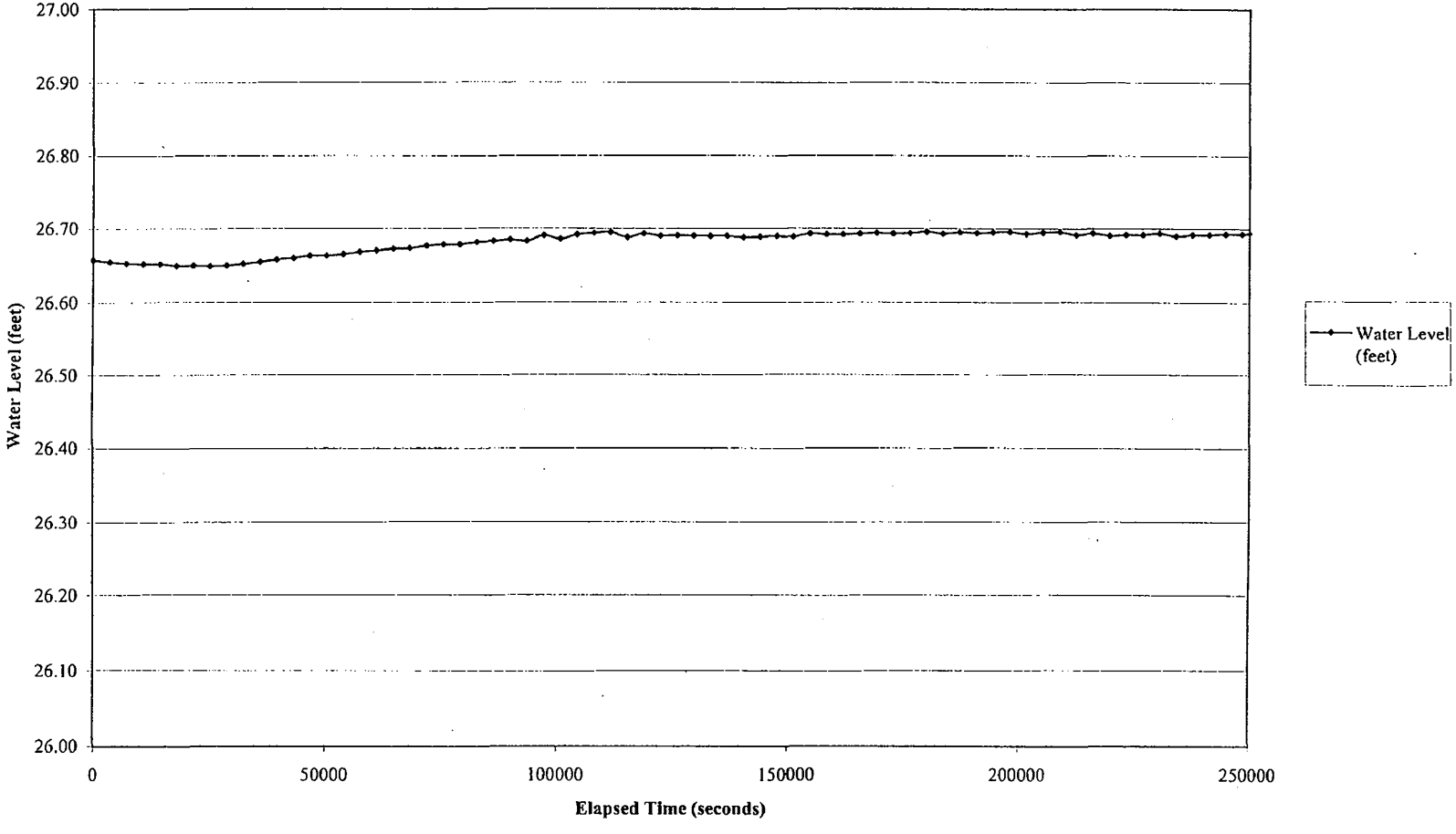
Notes: Run on Background only

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: [illegible] Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-2319L Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CAB Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-01 U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	42.19 feet
Total Well Depth	63 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	2-7-08 6:00 pm	NA	2-13-08 10:30 am	see download
End time	2-13-08 9:00 am	NA	2-16-08 9:01 am	see download
Flow Rate	NA	NA	see file	see download

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	50 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	109172

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-01 Background	NA	OW-01 U 24-hr Test	NA (see 24-hr)
Start Time	NA	NA	NA	NA (see 24-hr)
End Time	NA	NA	NA	NA

Notes

file name improperly named

OW-01 Background should be OW-01 U Background

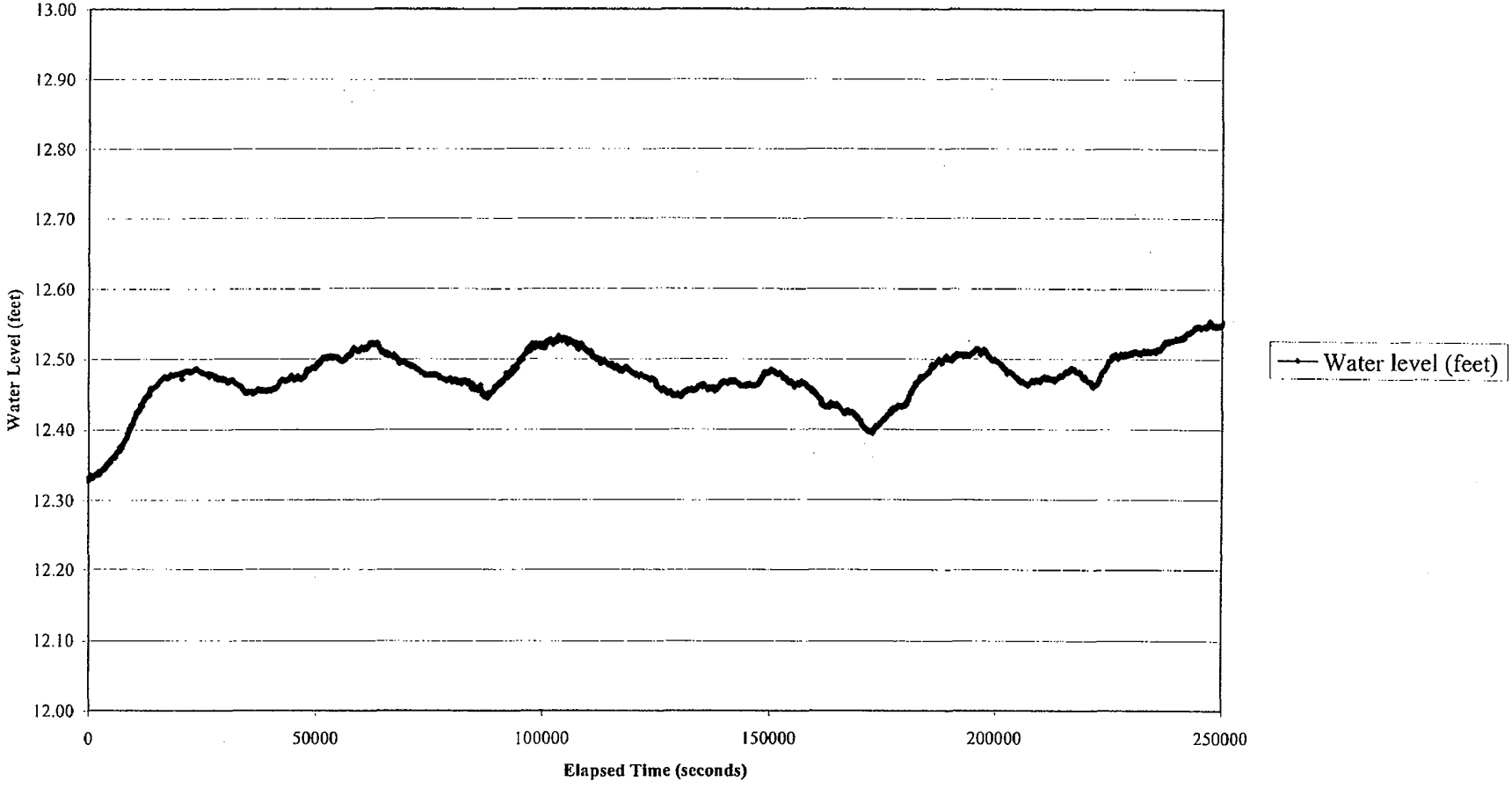
downloaded 2-16-08

Rev 0

Prepared by: EWS Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-01U Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHS Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-01L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: G Bruce	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	42.49 feet
Total Well Depth	113 feet
Static Water Column Height (H)	70.01 feet

	Background	Step Test	Draw Down	Recovery
Start time	2-7-08 6:00pm	NA	NA	NA
End time	2-16-08 9:00am	NA	NA	NA
Flow Rate	NA	NA	NA	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	100
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	106546

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-01L Background	NA	NA	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

run as background for test TW-2320

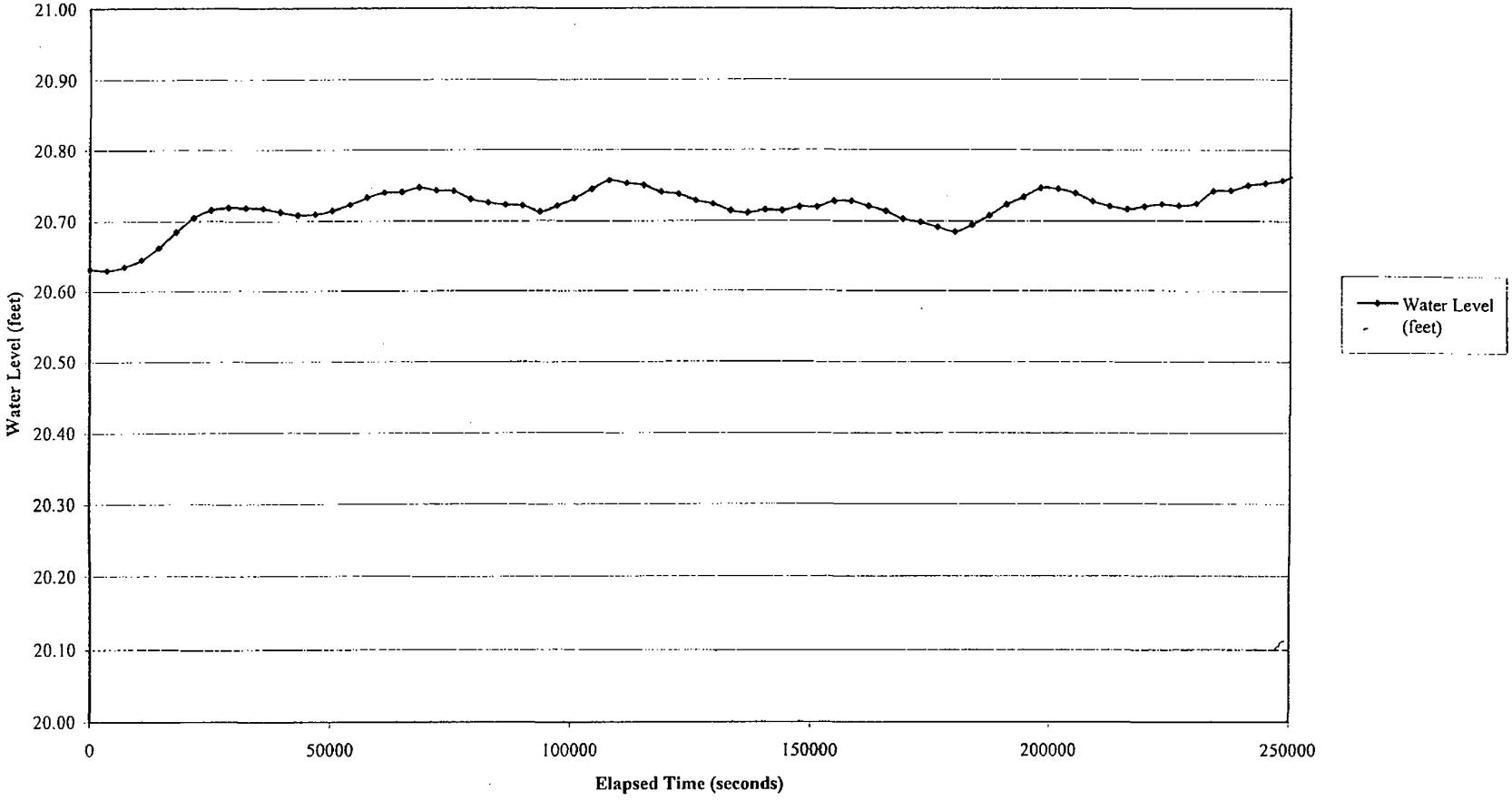
downloaded on 2.17.08

Rev 0

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-01L Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHB Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-02U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	51.43 feet
Total Well Depth	66 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	2.7.08 5:00 pm	NA	2.13.08 ~~10:15am~~ 10:30 KR 2/16/08	See download
End time	2.13.08 10:00 am	NA	2.16.08 8:21am	see download
Flow Rate	NA	NA	See file	See download

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	53 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	106721

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-02U Background	NA	OW-02U 24-hr Test	NA (See 24hr)
Start Time	NA	NA	NA	NA (see 24 hr)
End Time	NA	NA	NA	NA (See 24hr)

Notes

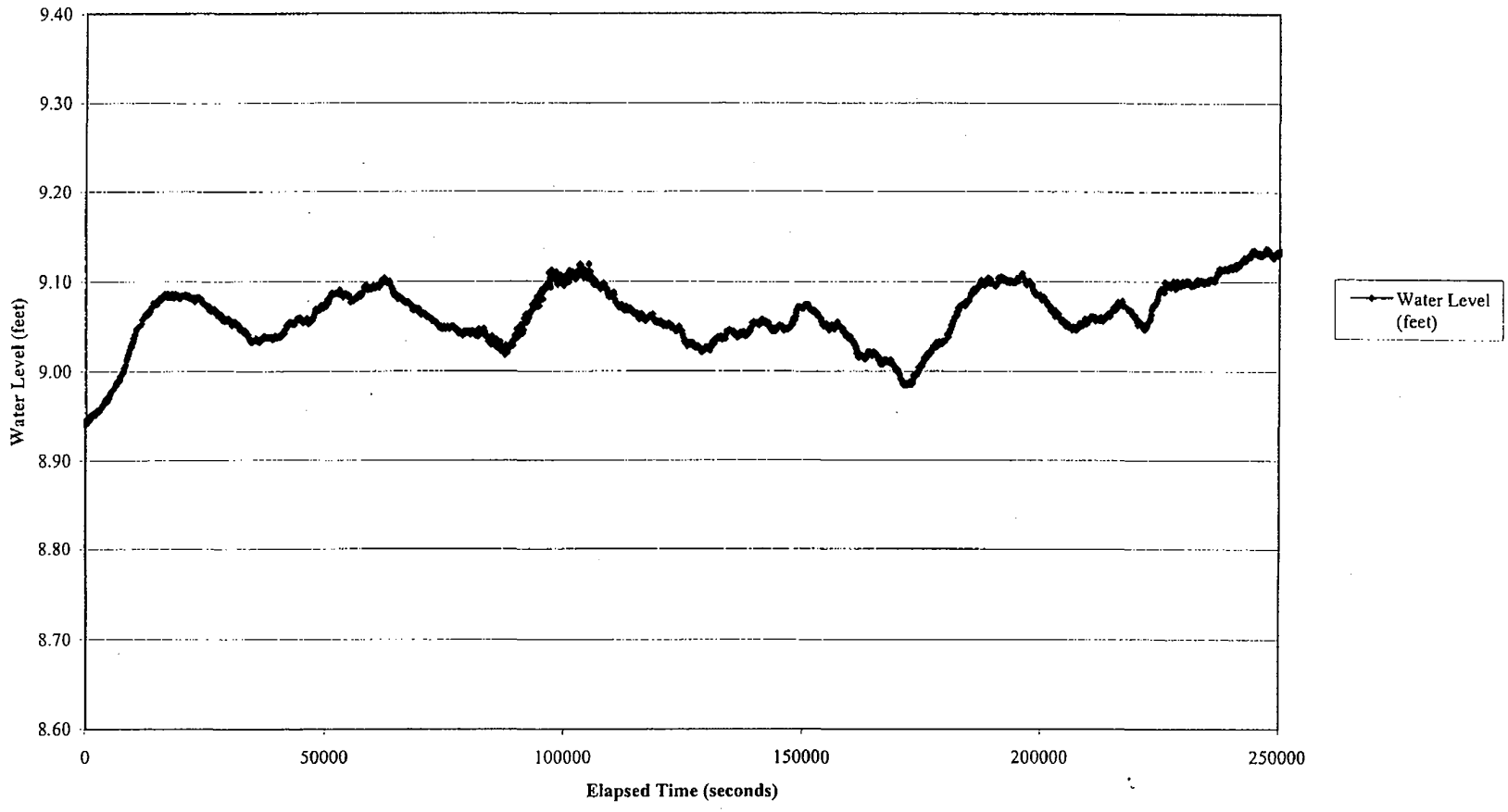
downloaded 2.16.08

Rev 0

Prepared by: WSK Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-02U Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC

Checked by: CHS Date: 4/7/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-02 L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: C. Bowe	Date: 2/7/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	51.38 feet
Total Well Depth	112 feet
Static Water Column Height (H)	60.62 feet

	Background	Step Test	Draw Down	Recovery
Start time	2-7-08 6:00pm	NA	NA	NA
End time	2-16-08 8:00am	NA	NA	NA
Flow Rate	NA	NA	NA	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	198
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	117929

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-02 L Background	NA	NA	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

background for test TW-2320

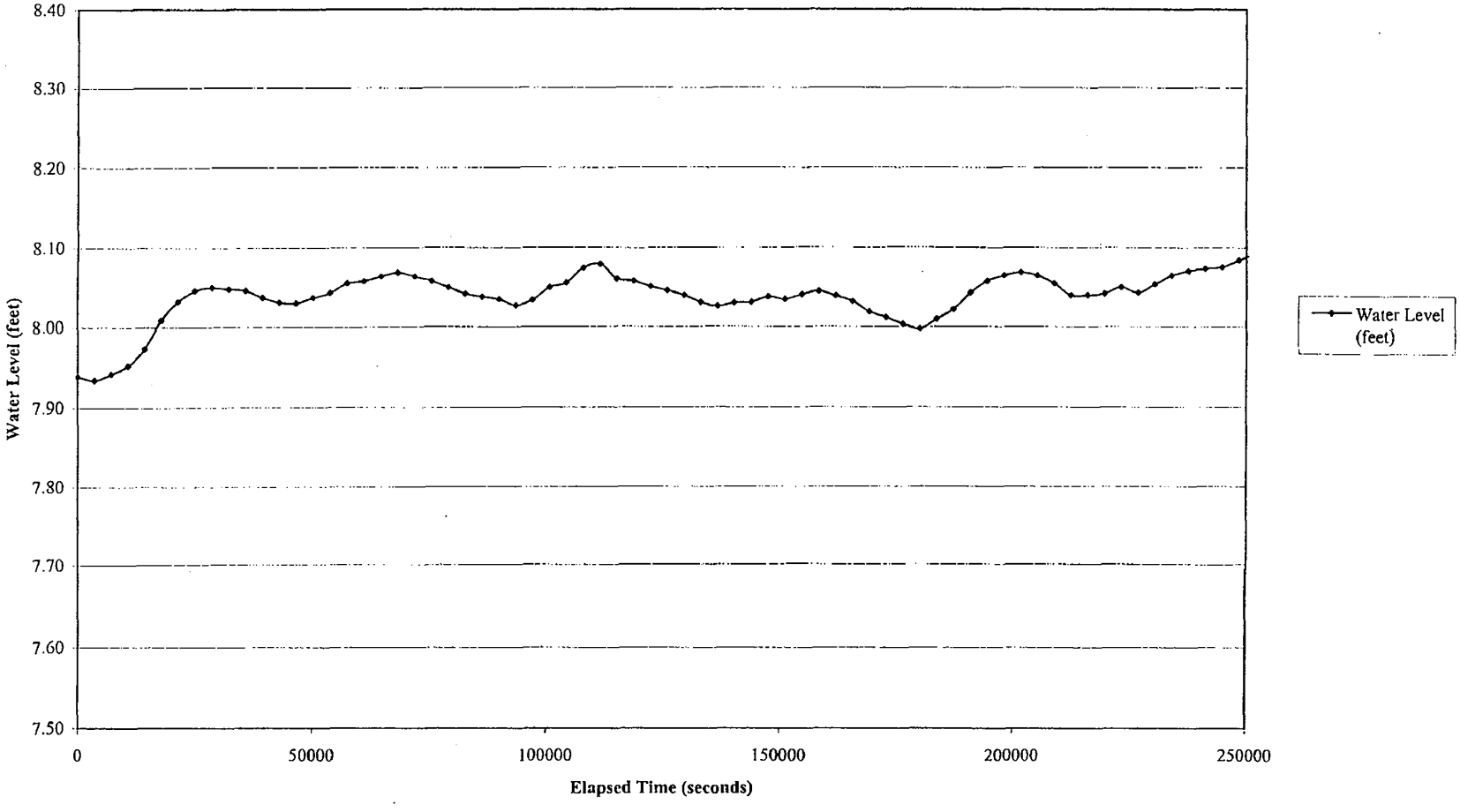
downloaded 2/17/08

Rev 0

Prepared by: WSi Date: 4-4-08

Checked by: BWA Date: 4/4/08

TW-2320 Aquifer Pump Test
OW-02L Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



Summary of Aquifer Pumping Rate Measurements
TW-2359 24 Hour Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
1	16.15	
301	21.51	108
601	21.29	214
901	21.21	320
1201	21.19	426
1501	21.17	532
1801	21.15	638
2101	21.13	743
2401	21.10	849
2701	21.02	954
3001	21.04	1059
3301	21.02	1164
3601	21.04	1269
3901	21.04	1375
4201	21.06	1480
4501	21.06	1585
4801	21.10	1691
5101	21.10	1796
5401	21.10	1902
5701	21.10	2007
6001	21.13	2113
6301	21.13	2219
6601	21.10	2324
6901	21.13	2430
7201	21.13	2535
7501	21.13	2641
7801	21.13	2747
8101	21.10	2852
8401	21.13	2958
8701	21.13	3063
9001	21.13	3169
9301	21.13	3275
9601	21.13	3380
9901	21.10	3486
10201	21.10	3591
10501	21.10	3697
10801	21.10	3802
11101	21.10	3908
11401	21.10	4013
11701	21.10	4119
12001	21.10	4224
12301	21.10	4330
12601	21.10	4435
12901	21.10	4541

Summary of Aquifer Pumping Rate Measurements
TW-2359 24 Hour Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
13201	21.10	4646
13501	21.08	4752
13801	21.10	4857
14101	21.10	4963
14401	21.10	5068
14701	21.08	5174
15001	21.08	5279
15301	21.08	5385
15601	21.10	5490
15901	21.10	5596
16201	21.08	5701
16501	21.10	5807
16801	21.10	5912
17101	21.10	6018
17401	21.08	6123
17701	21.10	6229
18001	21.08	6334
18301	21.08	6440
18601	21.08	6545
18901	21.08	6650
19201	21.08	6756
19501	21.06	6861
19801	21.06	6966
20101	21.06	7072
20401	21.08	7177
20701	21.06	7283
21001	21.08	7388
21301	21.06	7493
21601	21.06	7599
21901	21.06	7704
22201	20.96	7809
22501	20.74	7912
22801	21.00	8017
23101	21.19	8123
23401	21.17	8229
23701	21.21	8335
24001	21.19	8441
24301	21.21	8547
24601	21.23	8653
24901	21.21	8759
25201	21.23	8865
25501	21.23	8972
25801	21.25	9078
26101	21.25	9184

Summary of Aquifer Pumping Rate Measurements
TW-2359 24 Hour Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
26401	21.27	9290
26701	21.27	9397
27001	21.27	9503
27301	21.27	9609
27601	21.29	9716
27901	21.27	9822
28201	21.27	9929
28501	21.29	10035
28801	21.27	10141
29101	21.29	10248
29401	21.31	10354
29701	21.31	10461
30001	21.33	10567
30301	21.31	10674
30601	21.31	10781
30901	21.31	10887
31201	21.23	10993
31501	21.31	11100
31801	21.31	11206
32101	21.29	11313
32401	21.31	11419
32701	21.31	11526
33001	21.33	11632
33301	21.31	11739
33601	21.31	11846
33901	21.31	11952
34201	21.31	12059
34501	21.31	12165
34801	21.31	12272
35101	21.31	12378
35401	21.31	12485
35701	21.31	12591
36001	21.31	12698
36301	21.31	12804
36601	21.31	12911
36901	21.31	13017
37201	21.29	13124
37501	21.29	13230
37801	21.29	13337
38101	21.29	13443
38401	21.29	13550
38701	21.27	13656
39001	21.29	13762
39301	21.29	13869

Summary of Aquifer Pumping Rate Measurements
TW-2359 24 Hour Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
39601	21.29	13975
39901	21.31	14082
40201	21.31	14188
40501	21.31	14295
40801	21.27	14401
41101	21.25	14507
41401	21.21	14614
41701	21.19	14719
42001	21.19	14825
42301	21.21	14931
42601	21.23	15038
42901	21.23	15144
43201	21.23	15250
43501	21.23	15356
43801	21.23	15462
44101	21.23	15568
44401	21.23	15674
44701	21.23	15780
45001	21.23	15887
45301	21.25	15993
45601	21.27	16099
45901	21.25	16205
46201	21.27	16312
46501	21.23	16418
46801	21.25	16524
47101	21.27	16630
47401	21.27	16737
47701	21.27	16843
48001	21.25	16949
48301	21.27	17056
48601	21.27	17162
48901	21.27	17268
49201	21.27	17375
49501	21.27	17481
49801	21.27	17587
50101	21.29	17694
50401	21.29	17800
50701	21.29	17907
51001	21.31	18013
51301	21.31	18120
51601	21.29	18226
51901	21.27	18333
52201	21.29	18439
52501	21.29	18545

Summary of Aquifer Pumping Rate Measurements
TW-2359 24 Hour Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
52801	21.27	18652
53101	21.27	18758
53401	21.27	18864
53701	21.27	18971
54001	21.25	19077
54301	21.27	19183
54601	21.27	19290
54901	21.29	19396
55201	21.29	19503
55501	21.29	19609
55801	21.29	19715
56101	21.27	19822
56401	21.29	19928
56701	21.29	20035
57001	21.29	20141
57301	21.31	20248
57601	21.31	20354
57901	21.31	20461
58201	21.29	20567
58501	21.29	20674
58801	21.29	20780
59101	21.29	20886
59401	21.29	20993
59701	21.29	21099
60001	21.29	21206
60301	21.29	21312
60601	21.29	21419
60901	21.29	21525
61201	21.29	21631
61501	21.29	21738
61801	21.29	21844
62101	21.25	21951
62401	21.21	22057
62701	21.21	22163
63001	21.21	22269
63301	21.19	22375
63601	21.17	22480
63901	21.19	22586
64201	21.19	22692
64501	21.17	22798
64801	21.17	22904
65101	21.19	23010
65401	21.17	23116
65701	21.17	23222

Summary of Aquifer Pumping Rate Measurements
TW-2359 24 Hour Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
66001	21.19	23327
66301	21.23	23434
66601	21.25	23540
66901	21.21	23646
67201	21.23	23752
67501	21.25	23858
67801	21.29	23965
68101	21.31	24071
68401	21.33	24178
68701	21.31	24284
69001	21.33	24391
69301	21.33	24498
69601	21.31	24604
69901	21.31	24711
70201	21.31	24817
70501	21.31	24924
70801	21.31	25030
71101	21.31	25137
71401	21.31	25243
71701	21.33	25350
72001	21.33	25457
72301	21.33	25563
72601	21.33	25670
72901	21.33	25777
73201	21.33	25883
73501	21.35	25990
73801	21.37	26097
74101	21.35	26204
74401	21.35	26310
74701	21.37	26417
75001	21.35	26524
75301	21.33	26631
75601	21.33	26737
75901	21.35	26844
76201	21.35	26951
76501	21.35	27057
76801	21.35	27164
77101	21.35	27271
77401	21.35	27378
77701	21.31	27484
78001	21.29	27591
78301	21.31	27697
78601	21.35	27804
78901	21.35	27911

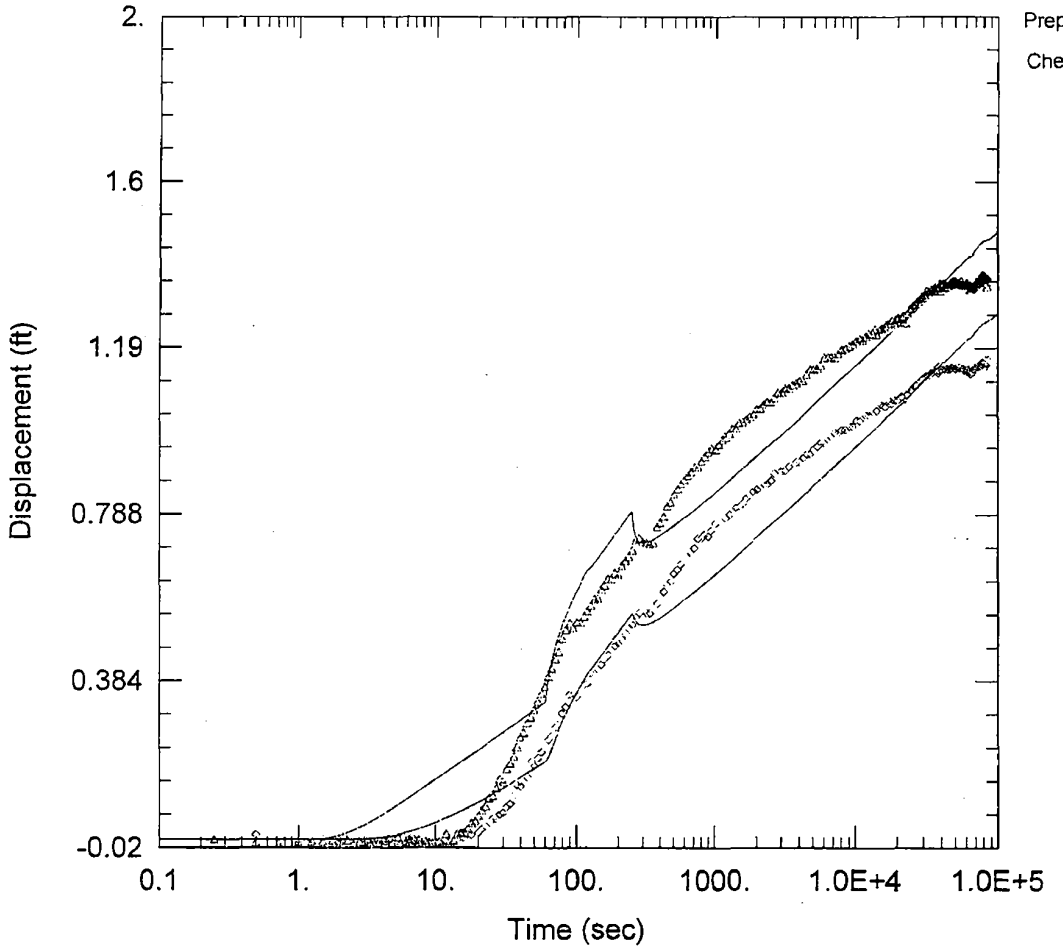
Summary of Aquifer Pumping Rate Measurements
TW-2359 24 Hour Aquifer Pump Test
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777

ELAPESED TIME (sec.)	FLOW RATE (5 min. avg.) (gpm)	TOTAL FLOW (5 min. avg.) (gal.)
79201	21.35	28017
79501	21.33	28124
79801	21.35	28231
80101	21.31	28337
80401	21.31	28444
80701	21.31	28550
81001	21.29	28657
81301	21.31	28763
81601	21.27	28870
81901	21.27	28976
82201	21.29	29083
82501	21.25	29189
82801	21.23	29295
83101	21.27	29401
83401	21.25	29507
83701	21.25	29614
84001	21.23	29720
84301	21.27	29826
84601	21.27	29932
84901	21.29	30039
85201	21.27	30145
85501	21.23	30251
85801	21.13	30357
86101	21.13	30463
86401	21.17	30568
86402	0.00	30568
157080	0.00	30568

Prepared by: CHB Date: 4-4-08

Checked by: BWA Date: 4/4/08

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (COMBINED EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

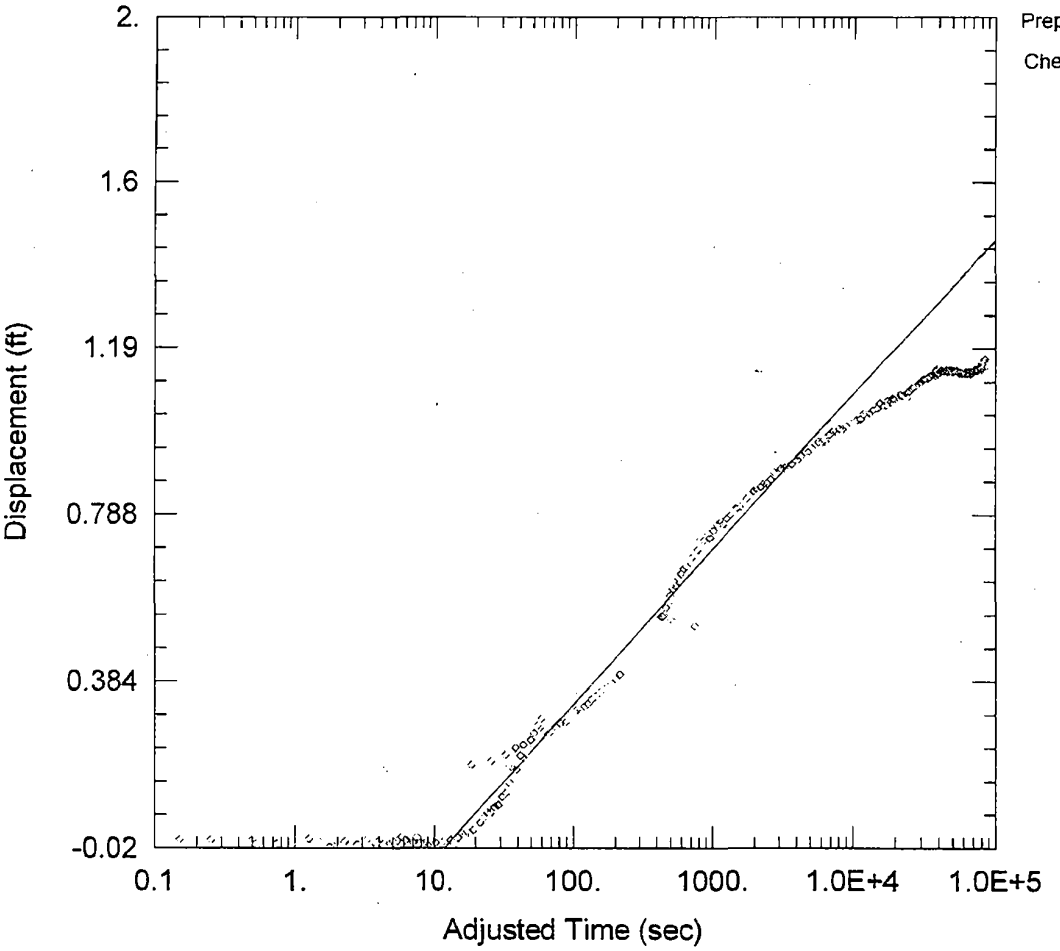
Well Name	X (ft)	Y (ft)
△ OW-2359 L2	2605433.37	13417259.76
◇ OW-2359 L3	2605416.18	13417278.58

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 2311.6 ft^2/day
S = 0.0002628
Kz/Kr = 1.
b = 20. ft

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

Well Name	X (ft)	Y (ft)
OW-2359 L3	2605416.18	13417278.58

SOLUTION

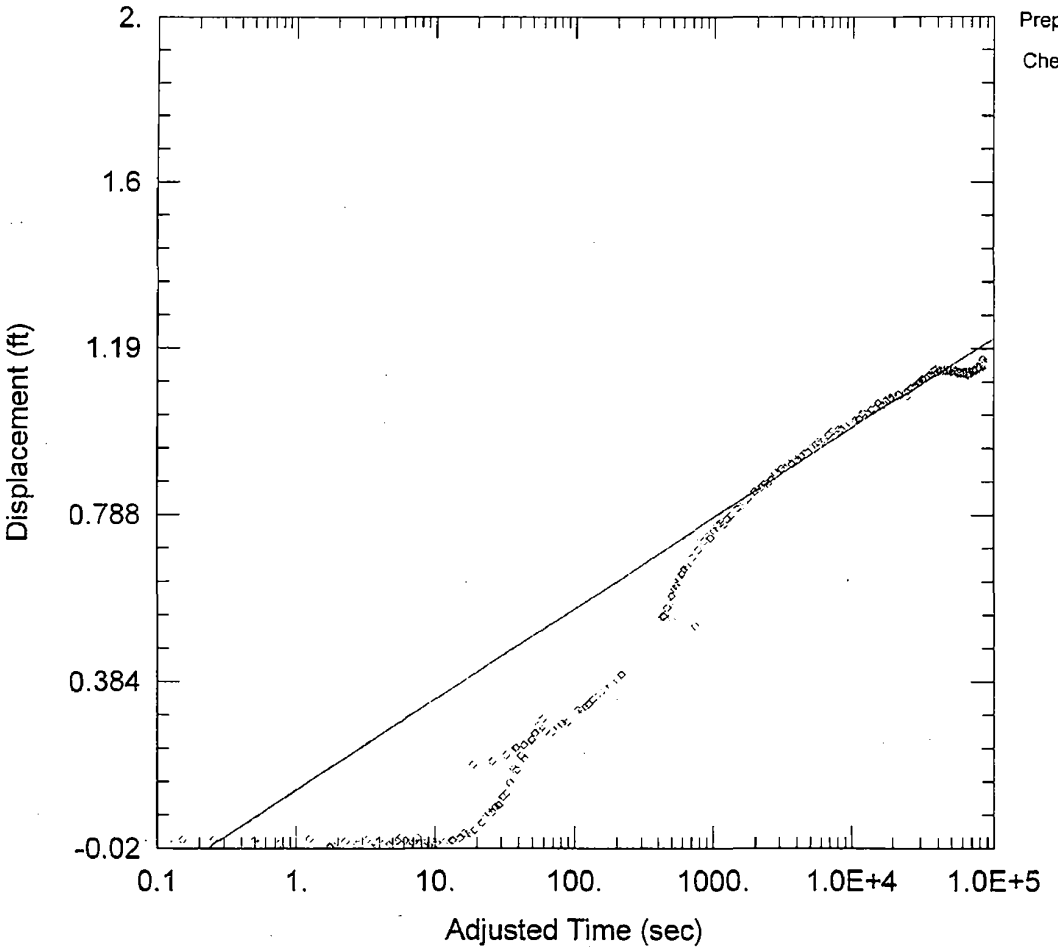
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 1986.2 ft^2/day

S = 0.0002729

Prepared by: CHB Date: 4-4-08
Checked by: BWA Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

Well Name	X (ft)	Y (ft)
OW-2359 L3	2605416.18	13417278.58

SOLUTION

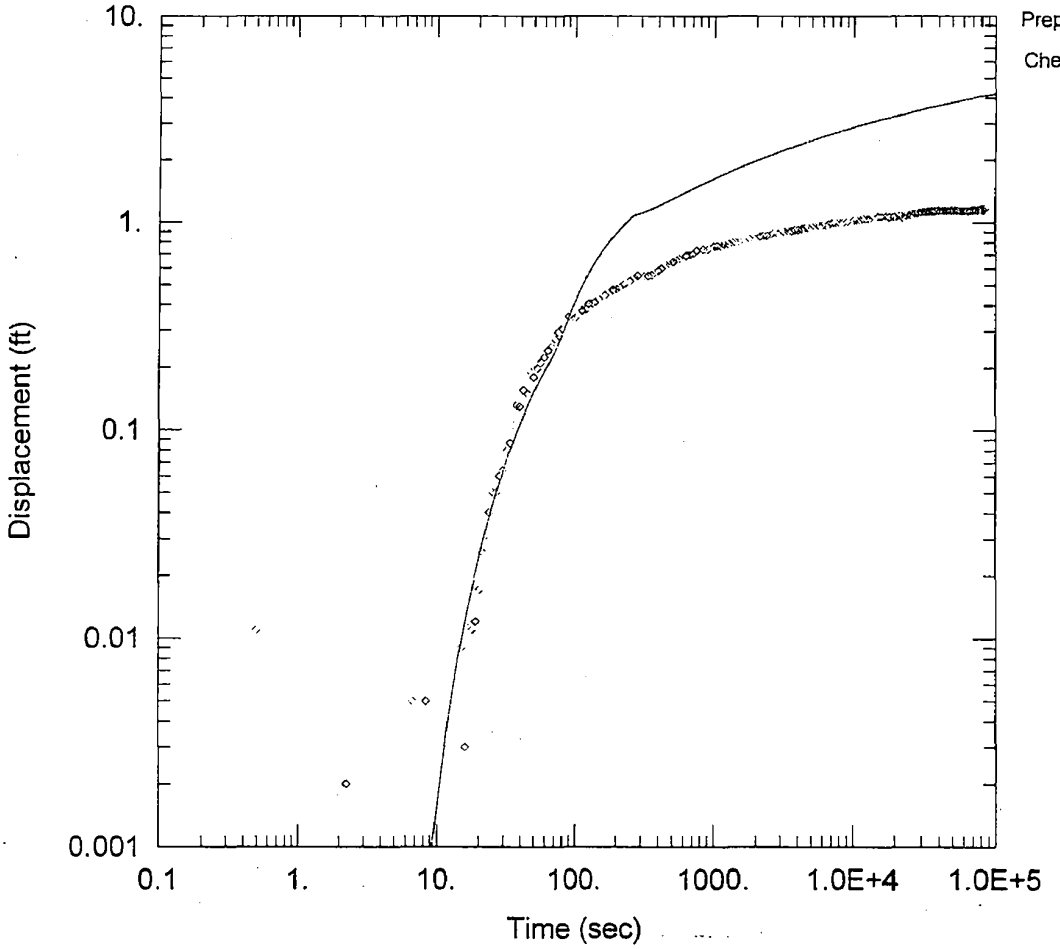
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 3407.2 ft^2/day

S = 9.738E-6

Prepared by: CHB Date: 4-4-08
Checked by: BWA Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

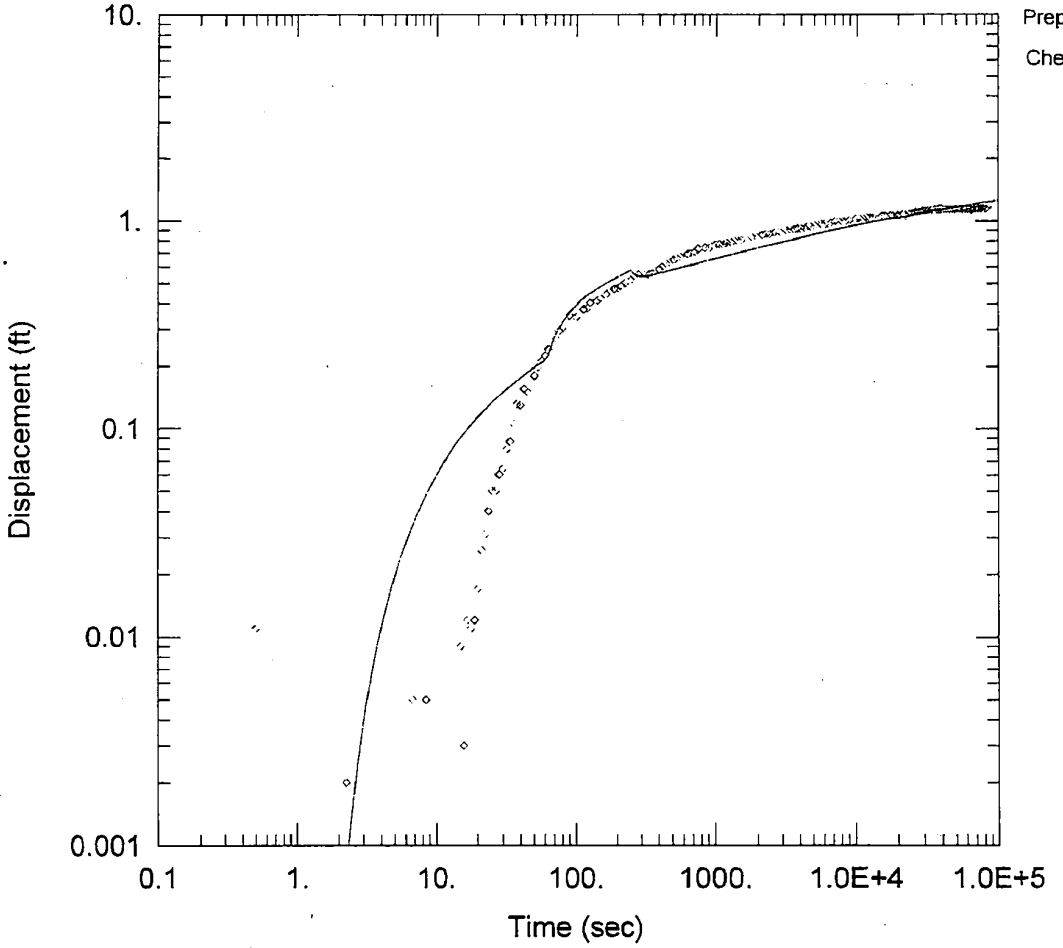
Well Name	X (ft)	Y (ft)
◇ OW-2359 L3	2605416.18	13417278.58

SOLUTION

Aquifer Model: Confined
T = 568.6 ft^2/day
Kz/Kr = 1.

Solution Method: Theis
S = 0.0003754
b = 20. ft

Prepared by: CHB Date: 4-4-08
Checked by: BKJ Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

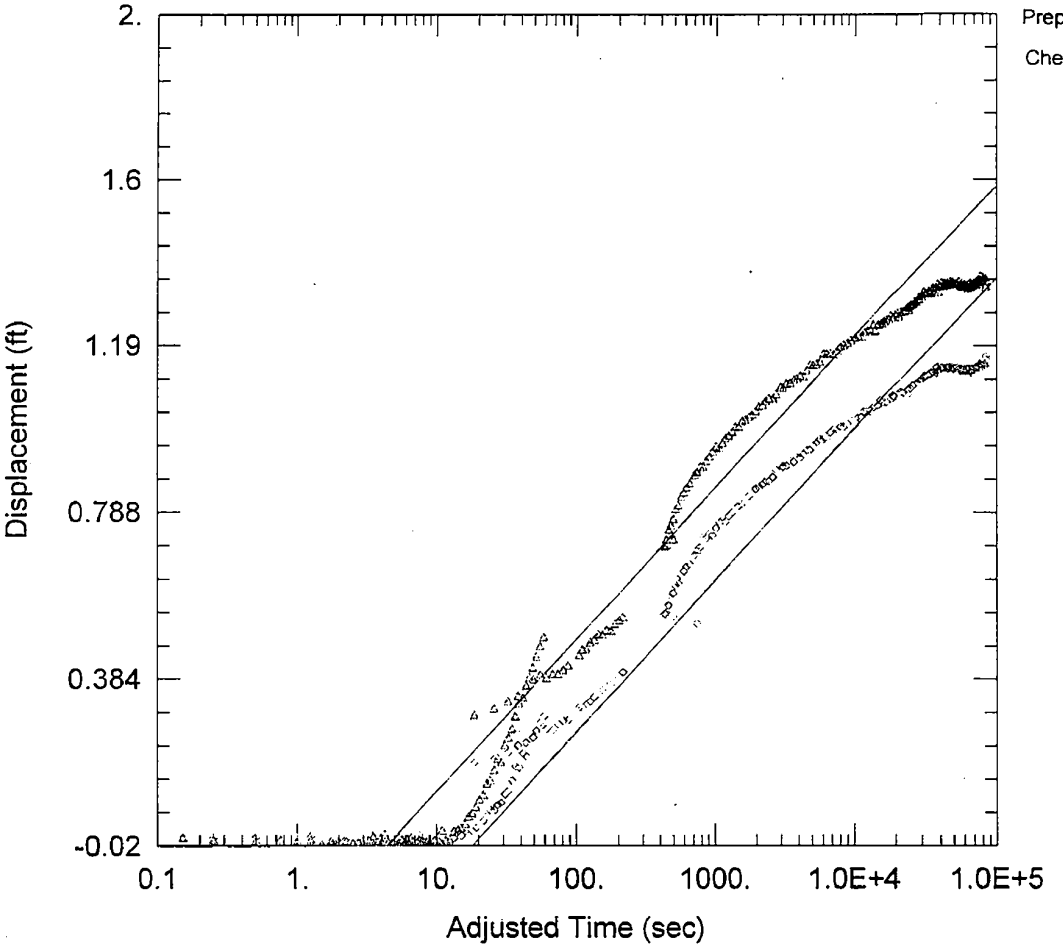
Well Name	X (ft)	Y (ft)
◇ OW-2359 L3	2605416.18	13417278.58

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 2452.5 ft^2/day
S = 0.0001919
Kz/Kr = 1.
b = 20. ft

Prepared by: CHB Date: 4-4-08
Checked by: BWS Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (COMBINED MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

Well Name	X (ft)	Y (ft)
△ OW-2359 L2	2605433.37	13417259.76
OW-2359 L3	2605416.18	13417278.58

SOLUTION

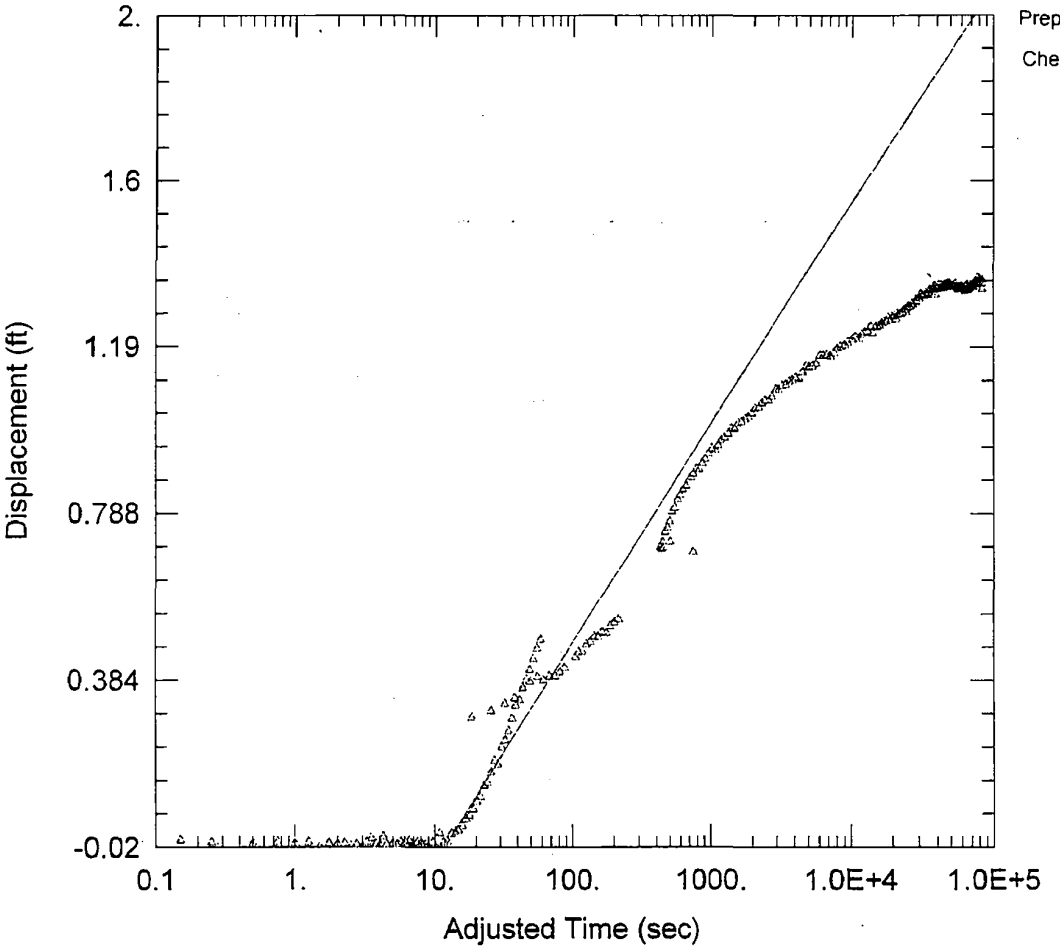
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 2032.2 ft^2/day

S = 0.000421

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

Well Name	X (ft)	Y (ft)
△ OW-2359 L2	2605433.37	13417259.76

SOLUTION

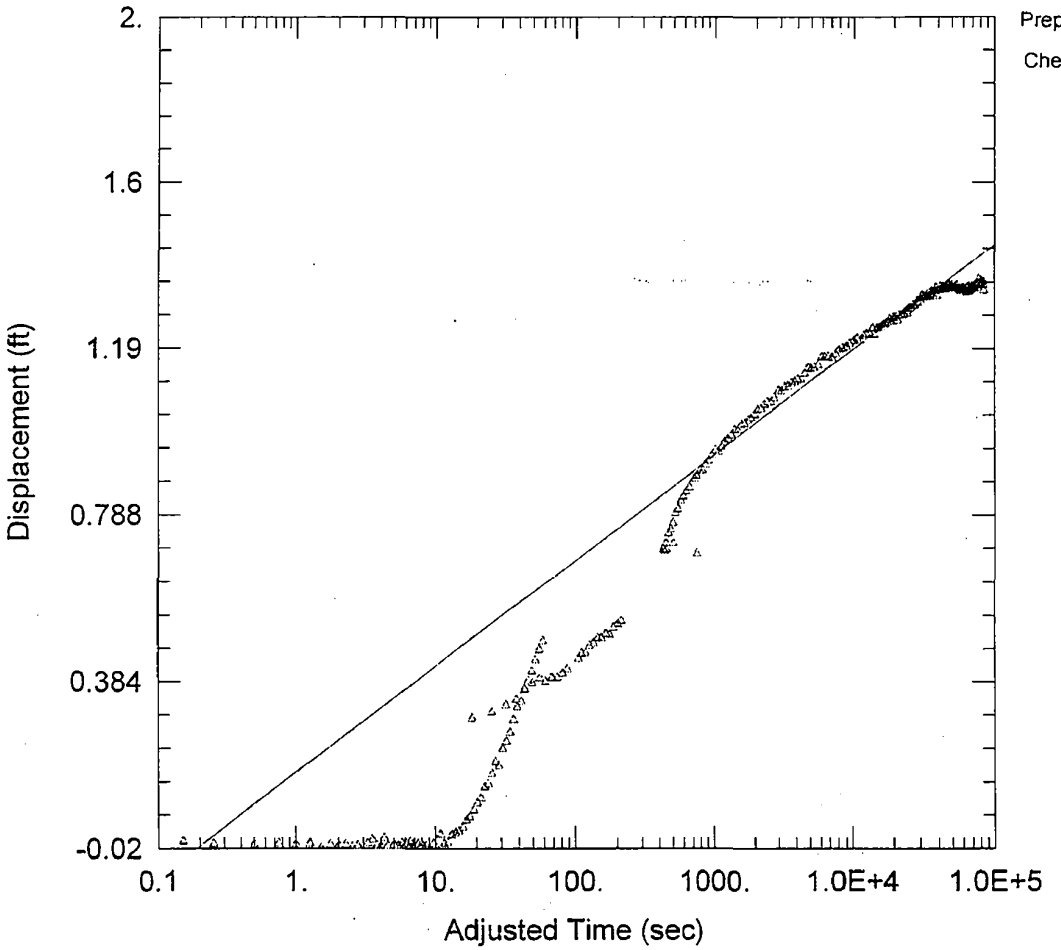
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 1402.8 ft^2/day

S = 0.0007498

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

Well Name	X (ft)	Y (ft)
△ OW-2359 L2	2605433.37	13417259.76

SOLUTION

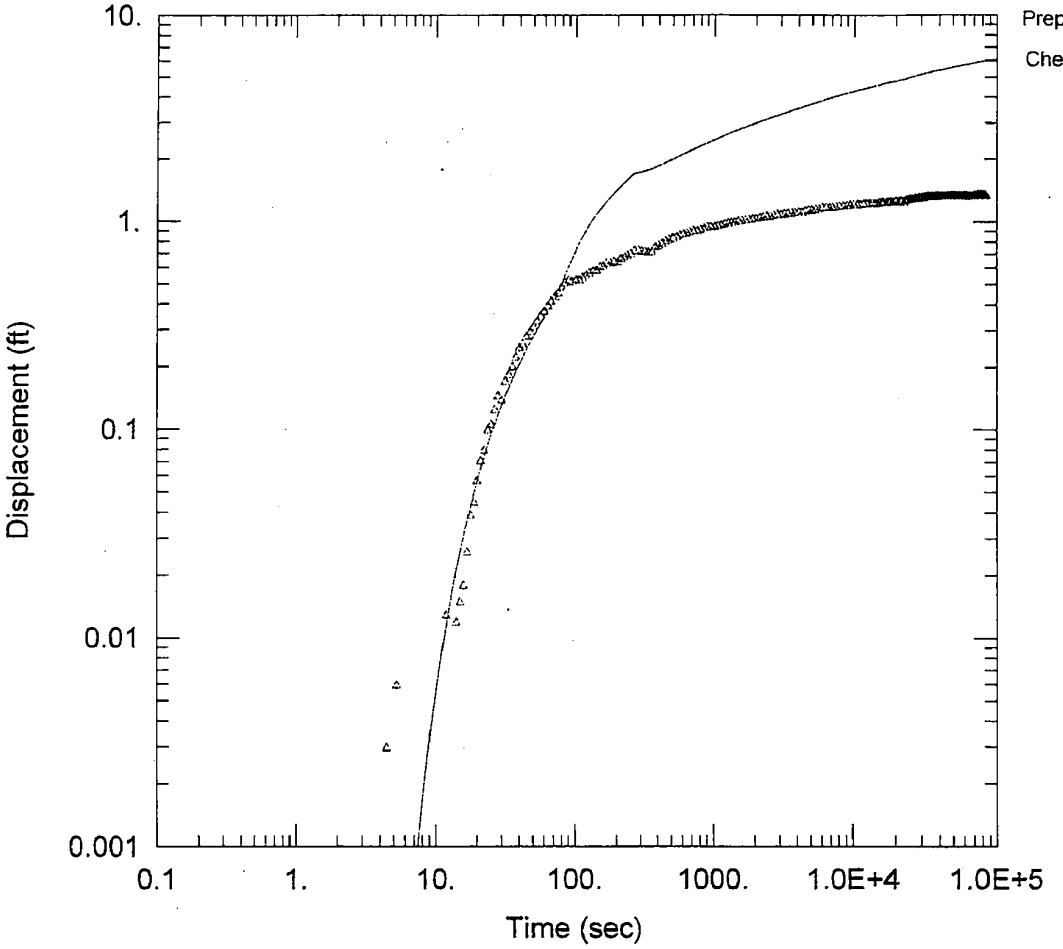
Aquifer Model: Confined

Solution Method: Cooper-Jacob

T = 2919.5 ft^2/day

S = 2.755E-5

Prepared by: CHB Date: 4-4-08
Checked by: BWJ Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

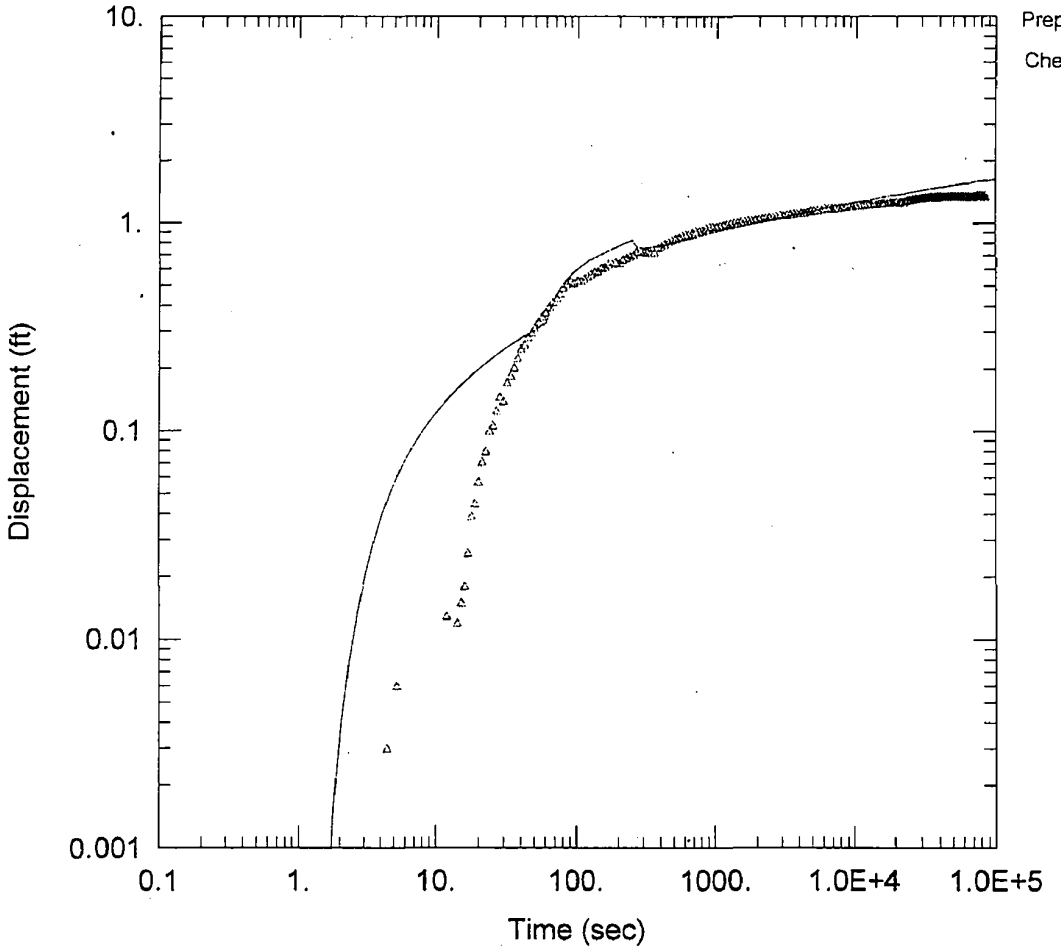
Well Name	X (ft)	Y (ft)
△ OW-2359 L2	2605433.37	13417259.76

SOLUTION

Aquifer Model: Confined
T = 400.3 ft^2/day
Kz/Kr = 1.

Solution Method: Theis
S = 0.0008779
b = 20. ft

Prepared by: CHB Date: 4-4-08
Checked by: BLJ Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (LATE TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

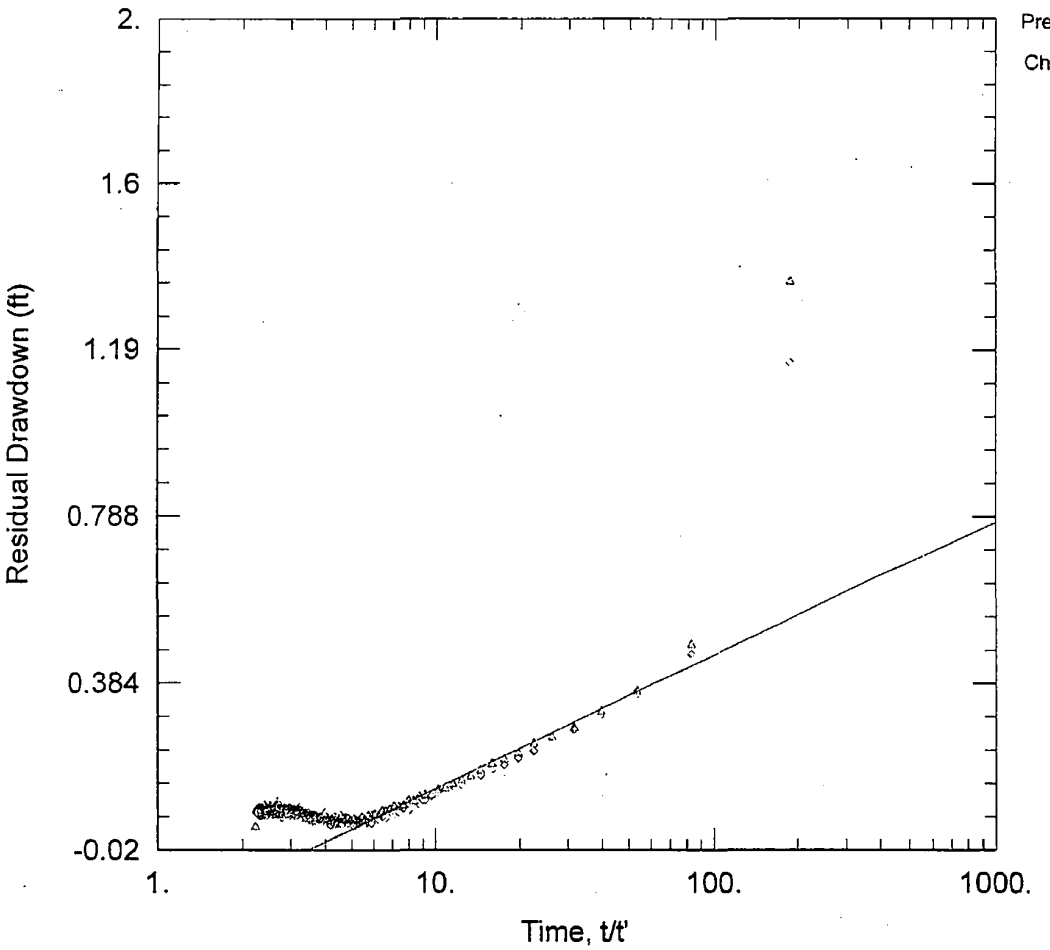
Well Name	X (ft)	Y (ft)
△ OW-2359 L2	2605433.37	13417259.76

SOLUTION

Aquifer Model: Confined
T = 2006.3 ft^2/day
Kz/Kr = 1.

Solution Method: Theis
S = 0.000361
b = 20. ft

Prepared by: CAB Date: 4-4-08
Checked by: BLA Date: 4/4/08



TW-2359 24 HOUR AQUIFER PUMP TEST (COMBINED EARLY TIME MATCH)

PROJECT INFORMATION

Company: Exelon
Client: Bechtel
Project: 6468-07-1777
Location: Victoria, Tx
Test Well: TW-2359
Test Date: 2/13/08

AQUIFER DATA

Saturated Thickness: 20. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-2359	2605450.48	13417241.41

Observation Wells

Well Name	X (ft)	Y (ft)
△ OW-2359 L2	2605433.37	13417259.76
OW-2359 L3	2605416.18	13417278.58

SOLUTION

Aquifer Model: Confined

Solution Method: Theis (Recovery)

T = 2311.6 ft^2/day

S/S' = 4.024

Checked by: [illegible] Date: 4/8/08

MACTEC

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: TW-2359
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 2/2/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	feet
Total Well Depth	184.75 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	2/2/08 4:21 pm	2/3/08 9:27 Am	2/4/08 1200 pm	See drawdown
End time	2/3/08 9:01 Am	2/4/08 9:00 Am	2/6/08 7:38 Am	See drawdown
Flow Rate	NA	See file	See File	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	150
Length of Well Screen (L)	30 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (reg)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	101719

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	TW-2359 Background CHG 2/3/08 101719	TW-2359 step test	TW-2359 Draw Down Test	See drawdown
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

Pumping well

Recent probe during step test (7.32') down @ 12:20 step 2

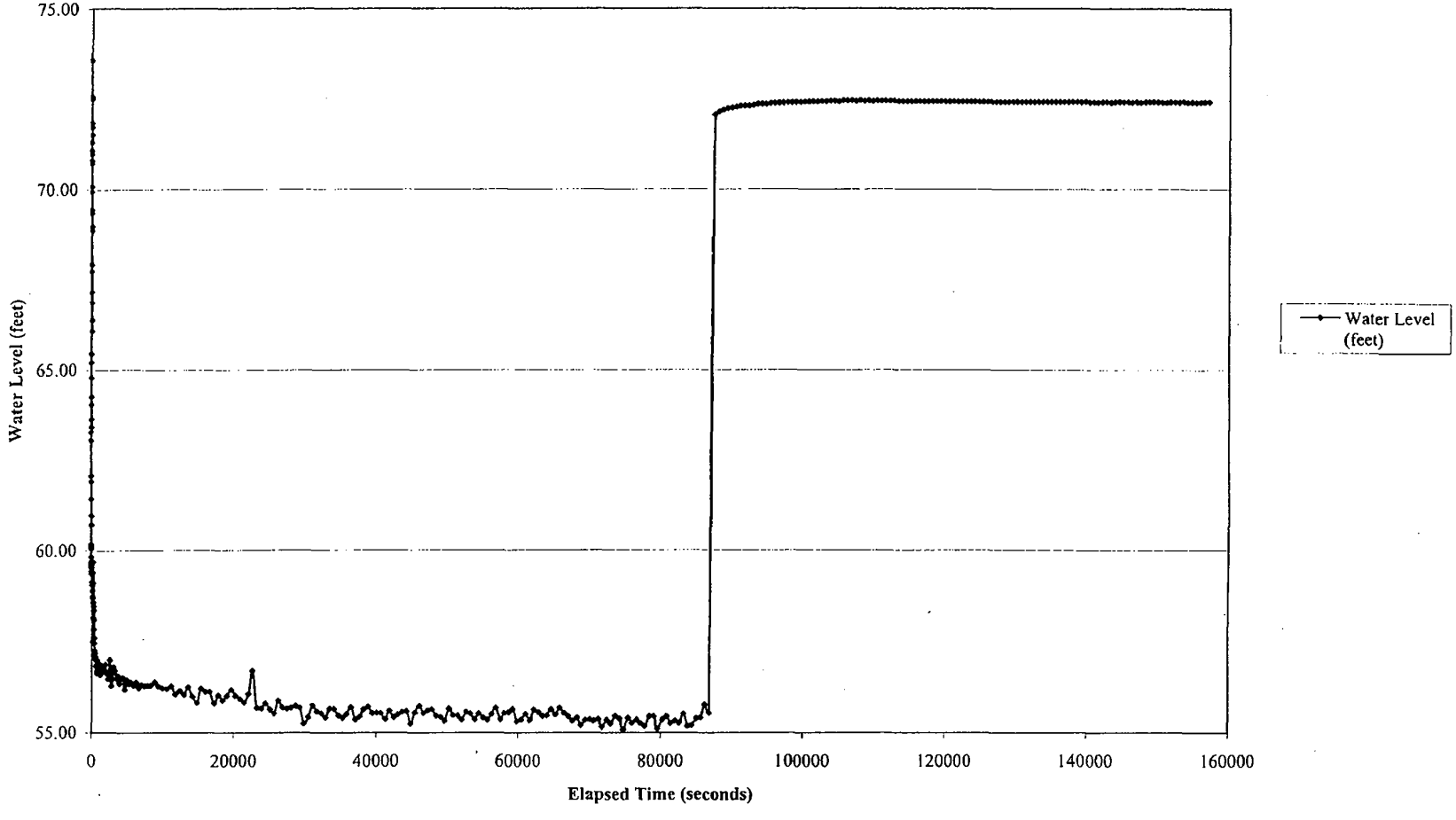
Water @ 7.49 @ Start of step 2

Rev 0

Prepared by: WSL Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2359 Aquifer Pump Test
TW-2359 Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: CH-B Date: 4/18/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2359 U1
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: G Brice	Date: 1.24.08	

UNITS	
Length	Feet
Time	Minutes
Well Data	54.91 ICR 2.17.08
Static Water Level	~~48.05~~ feet
Total Well Depth	98.05 feet
Static Water Column Height (H)	43.14 feet

	Background	Step Test	Draw Down	Recovery
Start time	1.24.08 3:37pm	2.3.08 9:00am	2.4.08 12:00pm	see drawdown
End time	2.3.08 7:37am	2.4.08 8:58am	2.6.08 7:30am	see drawdown
Flow Rate	NA	See file	See file	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	85 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	102426

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2359 U1 Background	OW-2359 U1 Step Test	OW-2359 U1 24 hour	NA
Start Time	NA	NA	NA	NA.
End Time	NA	NA	NA	NA

Notes

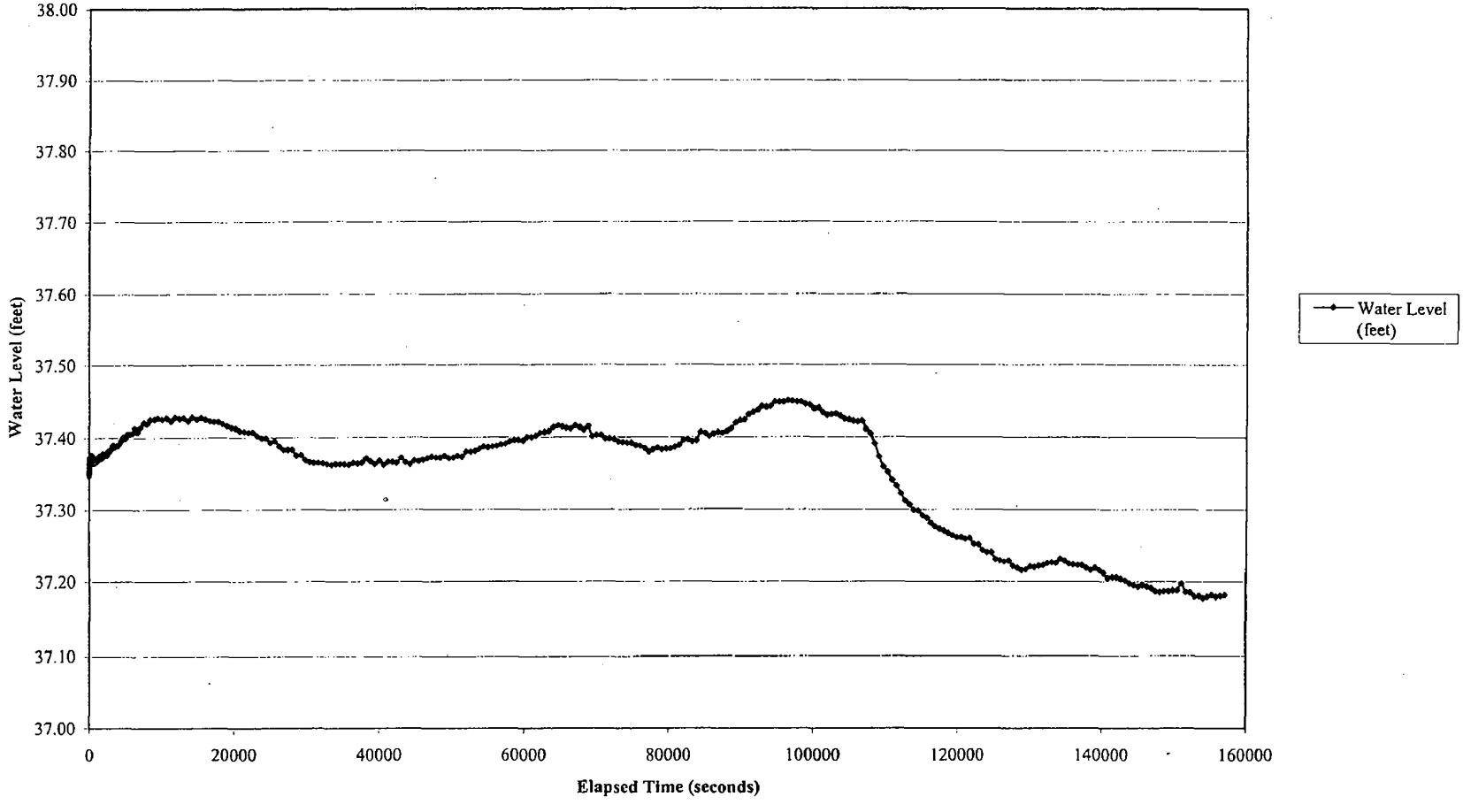
downloaded on 2.17.08

Rev 0

Prepared by: MSC Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-2359 U1 Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: CLB Date: 4/8/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2359 L1
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: C. Bruce	Date: 1/24/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	54.50 feet
Total Well Depth	178.1 feet
Static Water Column Height (H)	123.6 feet

	Background	Step Test	Draw Down	Recovery
Start time	1.24.08 3:31 pm	2.3.08 9:00am	2.4.08 12:00 pm ~~to 7:30am~~	KR 2.17.08 NA
End time	2.3.08 7:30am	2.4.08 9:02am	2.~~4~~6.08 7:30 am ~~12:00 pm~~	NA
Flow Rate	NA	See file	KR 2.17.08 NA	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	155
Length of Well Screen (L)	20 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	119305

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2359 L1 Background	OW-2359 L1 StepTest	OW-2359 L1 24 hr	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

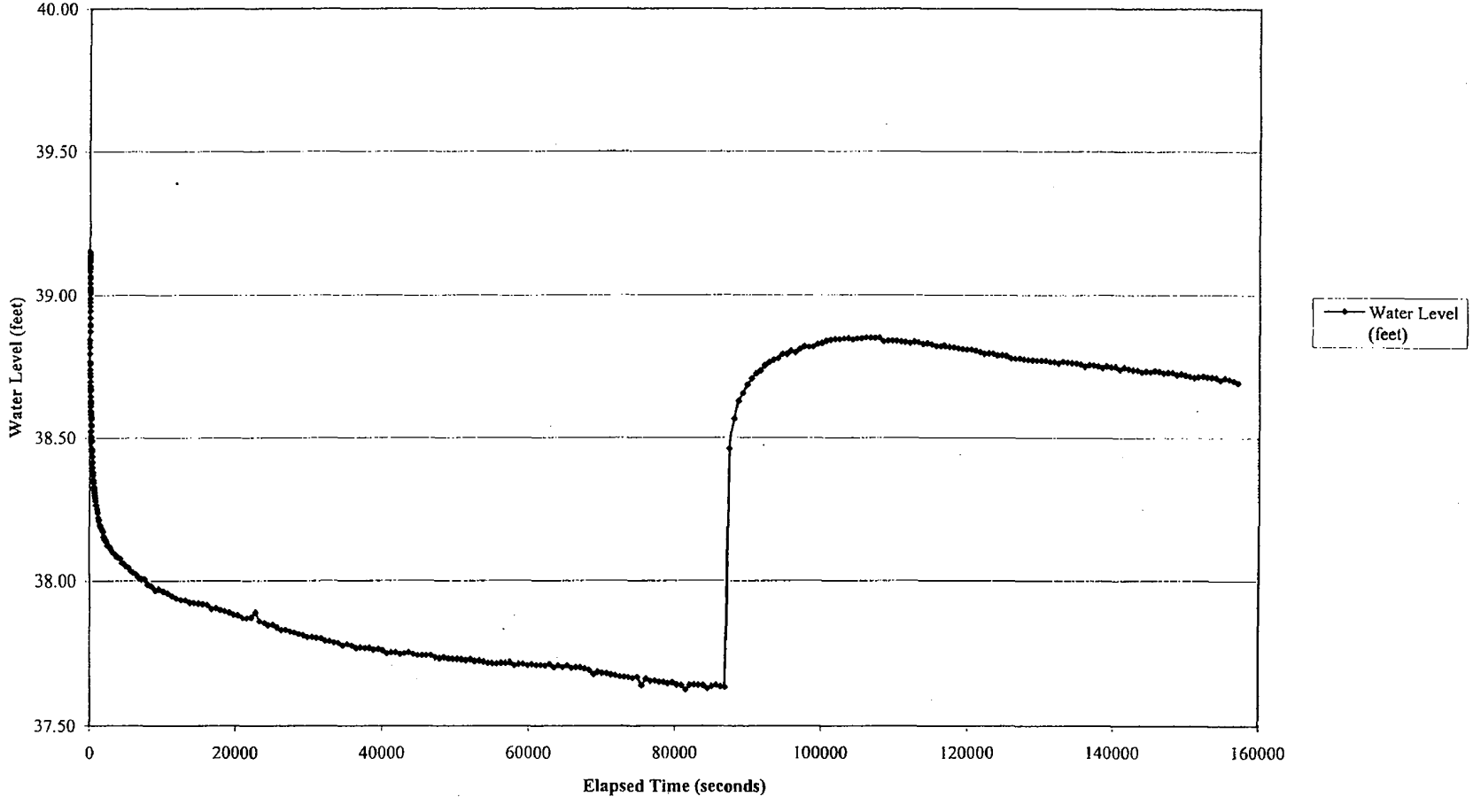
downloaded on 2-17-08

Rev 0

Prepared by: LSV Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-2359 L1 Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: CHG Date: 4/8/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2359 L2
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 1/24/08	

UNITS				
Length	Feet			
Time	Minutes			
Well Data				
Static Water Level	54 feet			
Total Well Depth	178.3 feet			
Static Water Column Height (H)	feet			
	Background	Step Test	Draw Down KR 2-16-08	Recovery
Start time	1.24.08 3:45pm	2.3.08 9:00am	2.4.08 ~~10:30am~~ 12:00 pm	See drawdown
End time	2.3.08 7:45am	2.4.08 8:55am	2.6.08 7:38am	See drawdown
Flow Rate	NA	see file	see file	see drawdown
Saturated Thickness (b)	See Log feet			
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1			
Depth to Top of Well Screen (d)	155 feet			
Length of Well Screen (L)	20 feet			
Radius of Well Casing (rc)	0.083 feet			
Radius of Screen (rw)	0.083 feet			
Radius of Probe (req)	0.060 feet			
Radius of Boring (rsk) Skin Effect	0.083 feet			
Probe Serial Number	119286			

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-2954 L2 Background			
Start Time	NA			
End Time	NA			

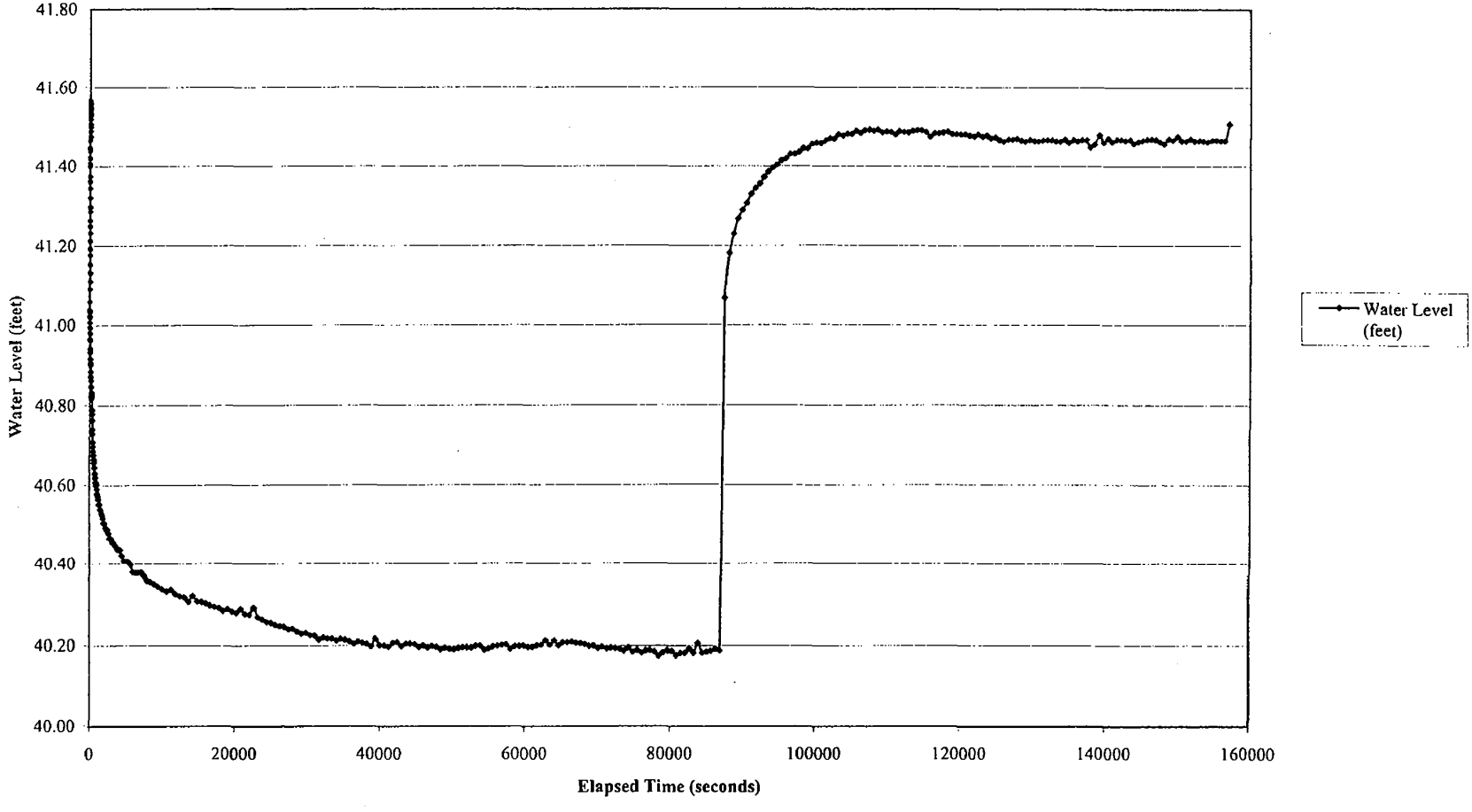
Notes: Background file name was improperly named

Rev 0

Prepared by: WSO Date: 4-4-08

Checked by: BWD Date: 4/4/08

TW-2358 Aquifer Pump Test
OW-2359 L2 Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: [illegible] Date: 4/9/08

PUMP TEST REPORT

roject Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-2359 L3
lient: Bechtel	Contractor: MACTEC		
ocation: Victoria	MACTEC Rep:	Date: 2/2/08	

NITS	
ength	Feet
ime	Minutes
Vell Data	
tatic Water Level	53.82 feet
otal Well Depth	178.02 feet
tatic Water Column Height (H)	124.20 feet

	Background	Step Test	Draw Down	Recovery
tart time	2/2/08 4:50 PM	2/3/08 5:00AM	2/4/08 12:00 AM	See Drawdown
nd time	2/3/08 8:00 AM	2/4/08 8:52AM	2/6/08 7:28AM	See Drawdown
low Rate	NA	see file	see file	NA

aturated Thickness (b)	See Log feet
onductivity Anisotropy (Kv/Kh)	Assume 1 to 1
epth to Top of Well Screen (d)	155 Ft.
ength of Well Screen (L)	20 feet
adius of Well Casing (rc)	0.083 feet
adius of Screen (rw)	0.083 feet
adius of Probe (req)	0.060 feet
adius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	42335

Slug Test File	Background	Step Test	Draw Down	Recovery
ile Name	OW-2359 L3 Background	OW-2359 L3 Step Test	OW-2359 24 Hr-Test	See drawdown
tart Time	NA	NA	NA	NA
nd Time	NA	NA	NA	NA

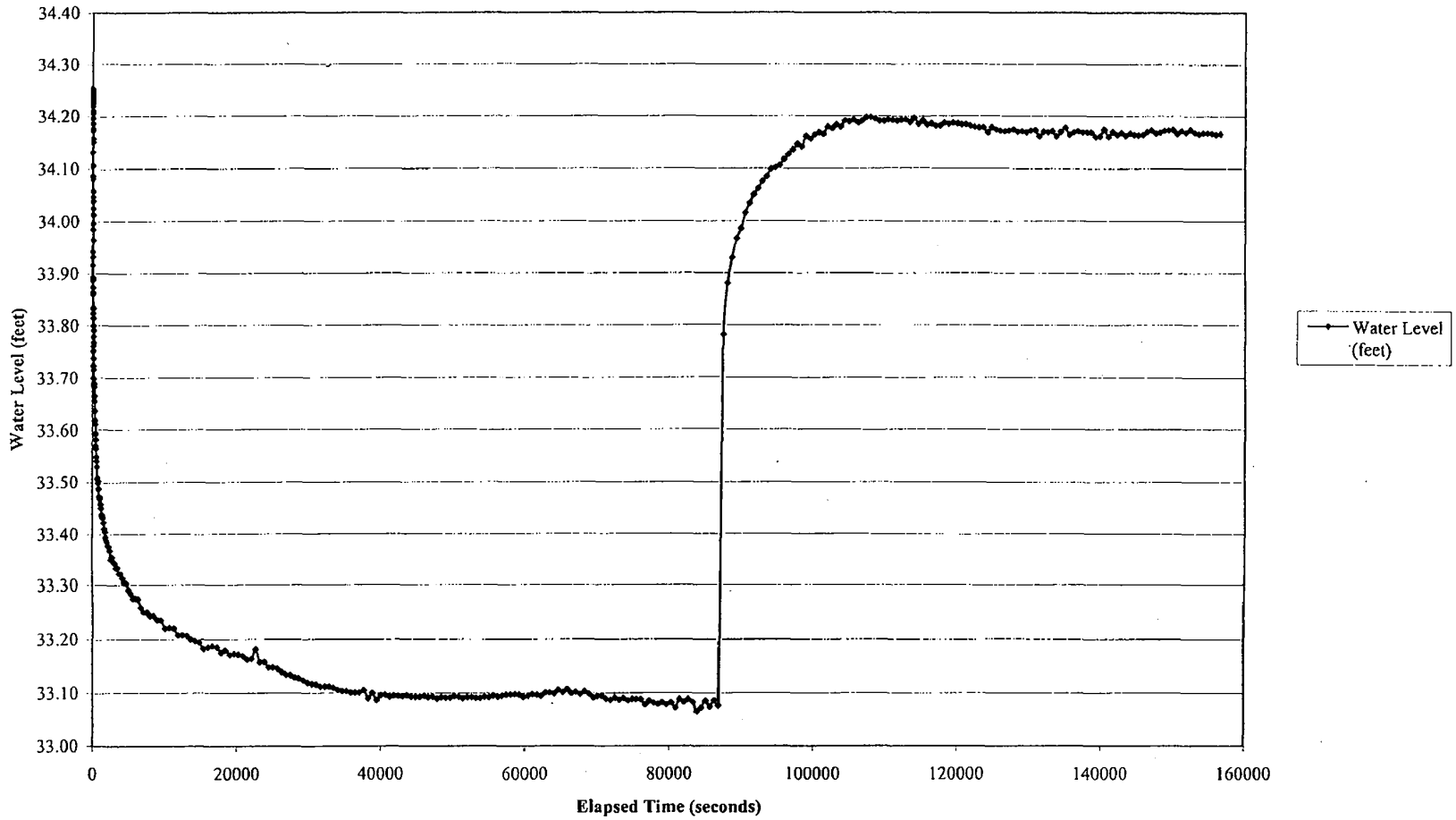
Notes

Rev 0

Prepared by: [illegible] Date: 9-4-08

Checked by: BWS Date: 9/4/08

TW-2359 Aquifer Pump Test
OW-2359 L3 Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: RHB Date: 4/12/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-06U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: C. Bruce	Date: 1/24/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	54.22 feet
Total Well Depth	66 feet
Static Water Column Height (H)	11.78 feet

	Background	Step Test	Draw Down	Recovery
Start time	1·24·08 4:07pm	2·3·08 9:00am	2·4·08 12:00pm	see drawdown
End time	2·3·08 8:07am	2·4·08 8:20am	2·6·08 8:20am	see drawdown
Flow Rate	NA	see file	see file	see drawdown

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	53 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	117929

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-06U Background	OW-06U Step Rst	OW-06U 24hr	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

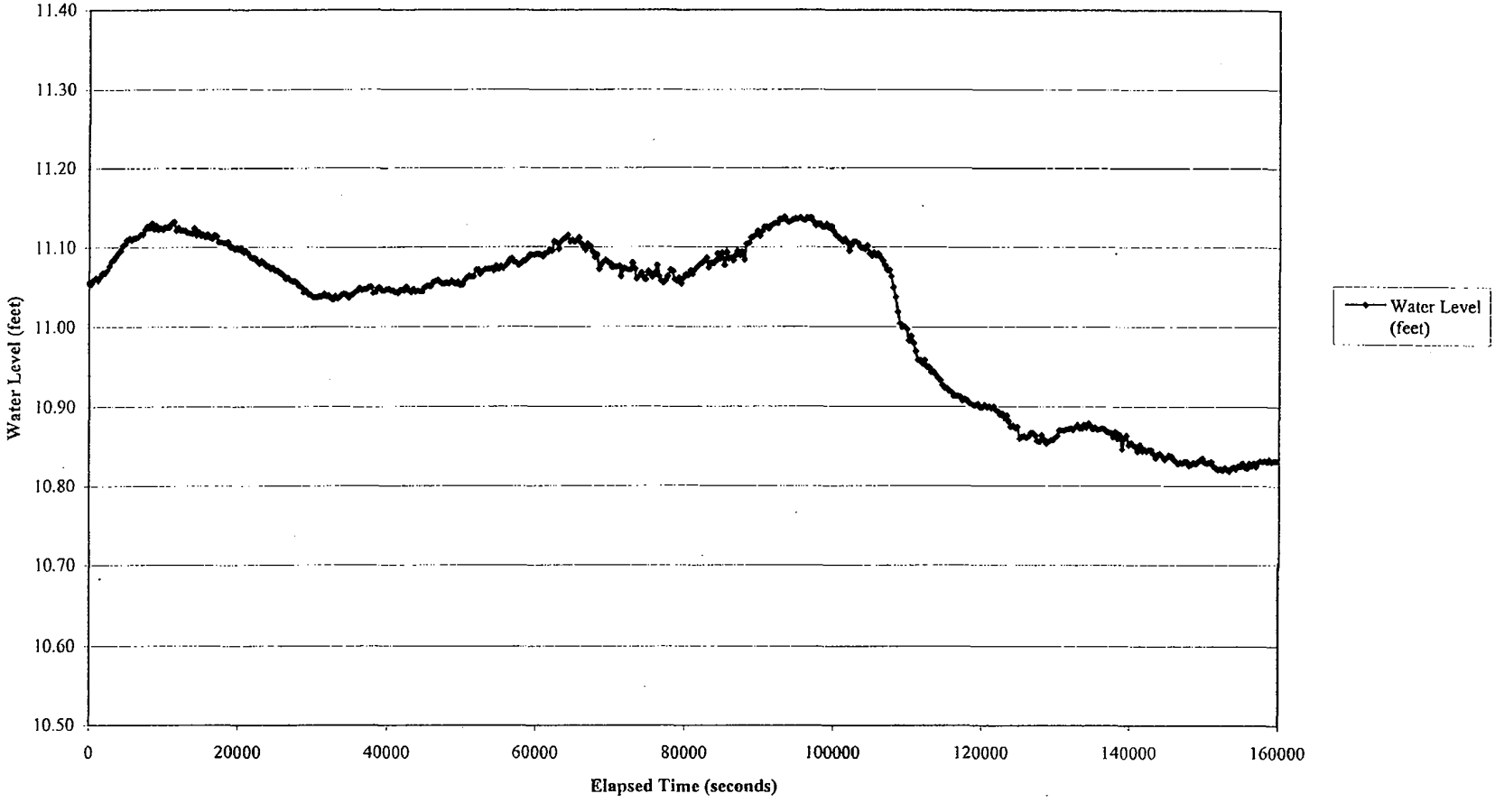
downloaded on 2·17·08

Rev 0

Prepared by: WG Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-06U Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: CLB Date: 4/15/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-06 L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: C. Bruce	Date: 1/24/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	53.28 feet
Total Well Depth	99 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	1.24.08 4:02 pm	2.3.08 9:00am	2.4.08 12:00pm	see download
End time	2.3.08 8:02am	2.4.08 8:25am	2.6.08 8:20am	see download
Flow Rate	NA	see file	See file	see download

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	85
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	103078

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-06 L Background	OW-06 L Step Test	OW-06 L 24 hr Test	NA (24-hr)
Start Time	NA	NA	NA	NA (24-hr)
End Time	NA	NA	NA	NA (24-hr)

Notes

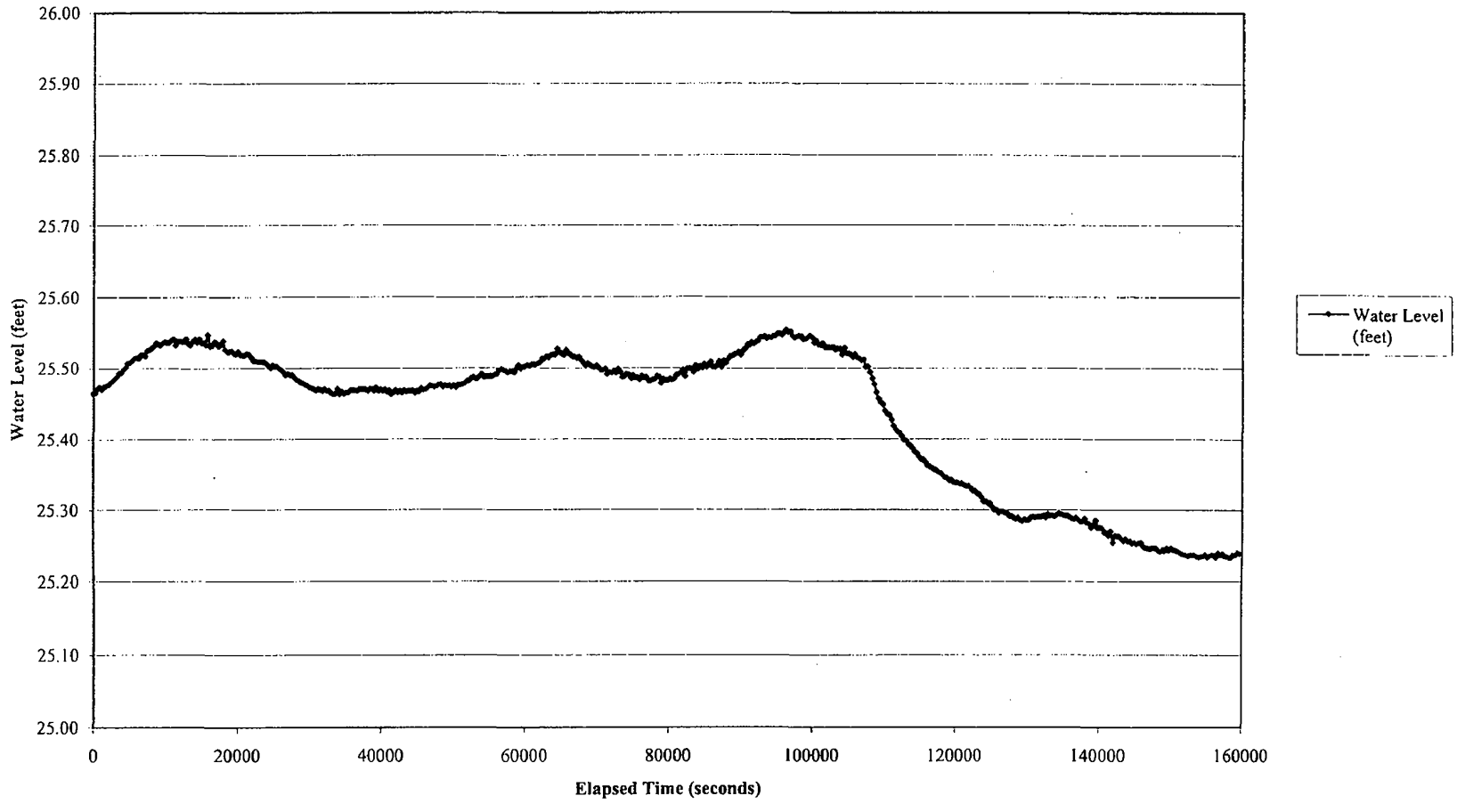
downloaded 2.16.08

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-06L Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: EHB Date: 4/8/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-07U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: C. Bruce	Date: 1/24/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	58.27 feet
Total Well Depth	66 feet
Static Water Column Height (H)	7.73 feet

	Background	Step Test	Draw Down	Recovery
Start time	1·24·08 4:46 pm	2·3·08 9:00am	~~2·4·08 9:30am~~	See drawdown
End time	2·3·08 7:35 am	2·4·08 8:10am	~~2·4·08 11:15am~~	see drawdown
Flow Rate	NA	See file	KR 2·17·08	see drawdown
Saturated Thickness (b)	See Log feet		2·4·08 12:00pm	
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1		2·6·08 8:30am	
Depth to Top of Well Screen (d)	53			
Length of Well Screen (L)	10 feet			
Radius of Well Casing (rc)	0.083 feet			
Radius of Screen (rw)	0.083 feet			
Radius of Probe (req)	0.060 feet			
Radius of Boring (rsk) Skin Effect	0.083 feet			
Probe Serial Number	106546			

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-07U Background	OW-07U StepTest	OW-07U 24 hour	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes: transducer was moved during background for field burning

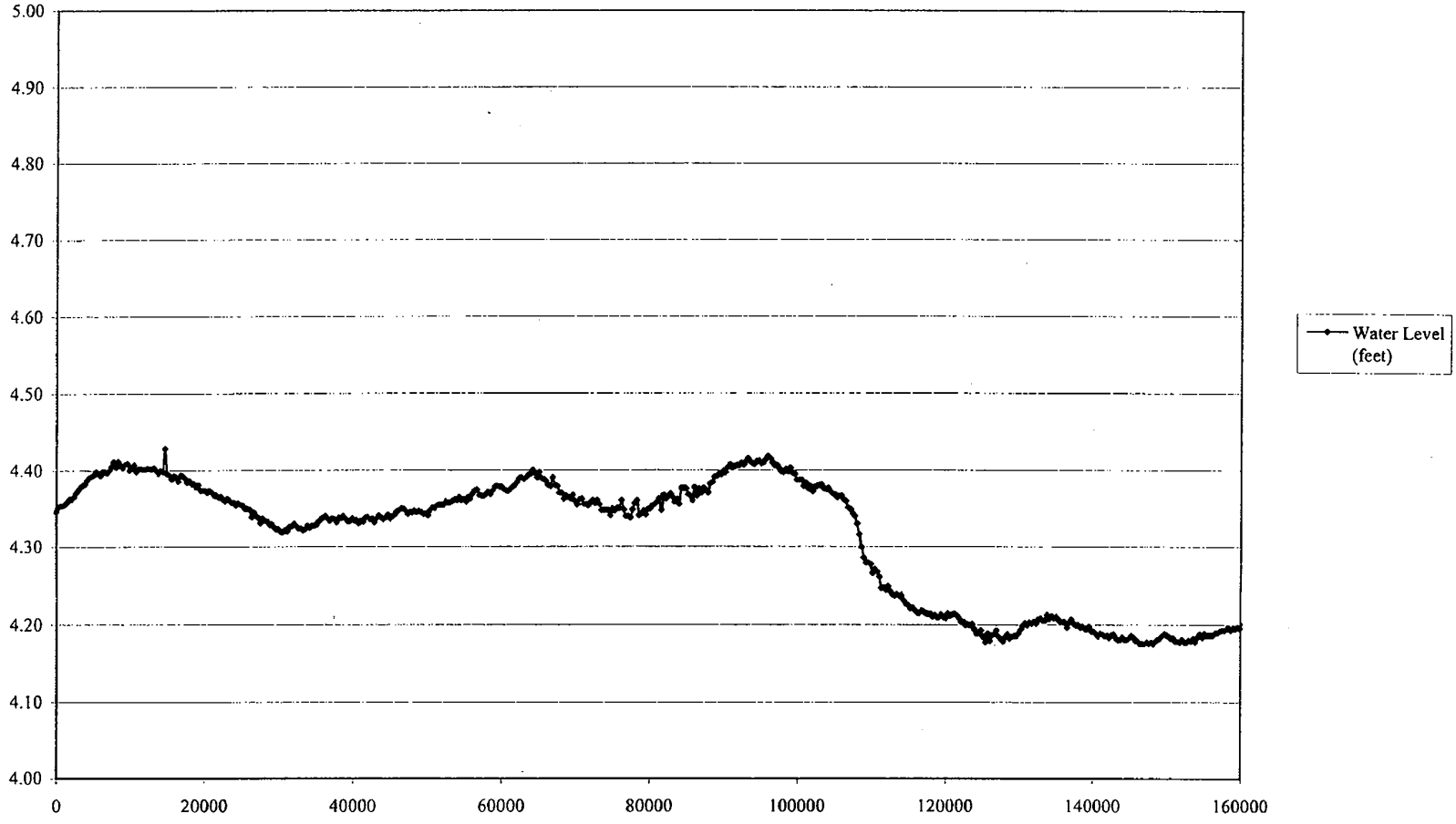
~~downloaded on 2.17.08~~

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: [illegible] Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-07U Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

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Checked by: CHB Date: 4/8/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-7L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 1/24/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	54.92 feet
Total Well Depth	126.30 feet
Static Water Column Height (H)	71.38 feet

	Background	Step Test	Draw Down	Recovery
Start time	1/24/08 4:40PM	2/3/08 9:00AM	2/4/08 12:00pm	see drawdown
End time	2/3/08 7:25AM	2/4/08 8:05AM	2/6/08 8:30AM	see drawdown
Flow Rate	NA	see File	see File	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	113
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	116799

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-7L Background	OW-7L step test	OW-7L 24 Hour test	see drawdown
Start Time	NA	NA	NA	see drawdown
End Time	NA	NA	NA	NA

Notes

~~NA~~ CHB 7/31/08

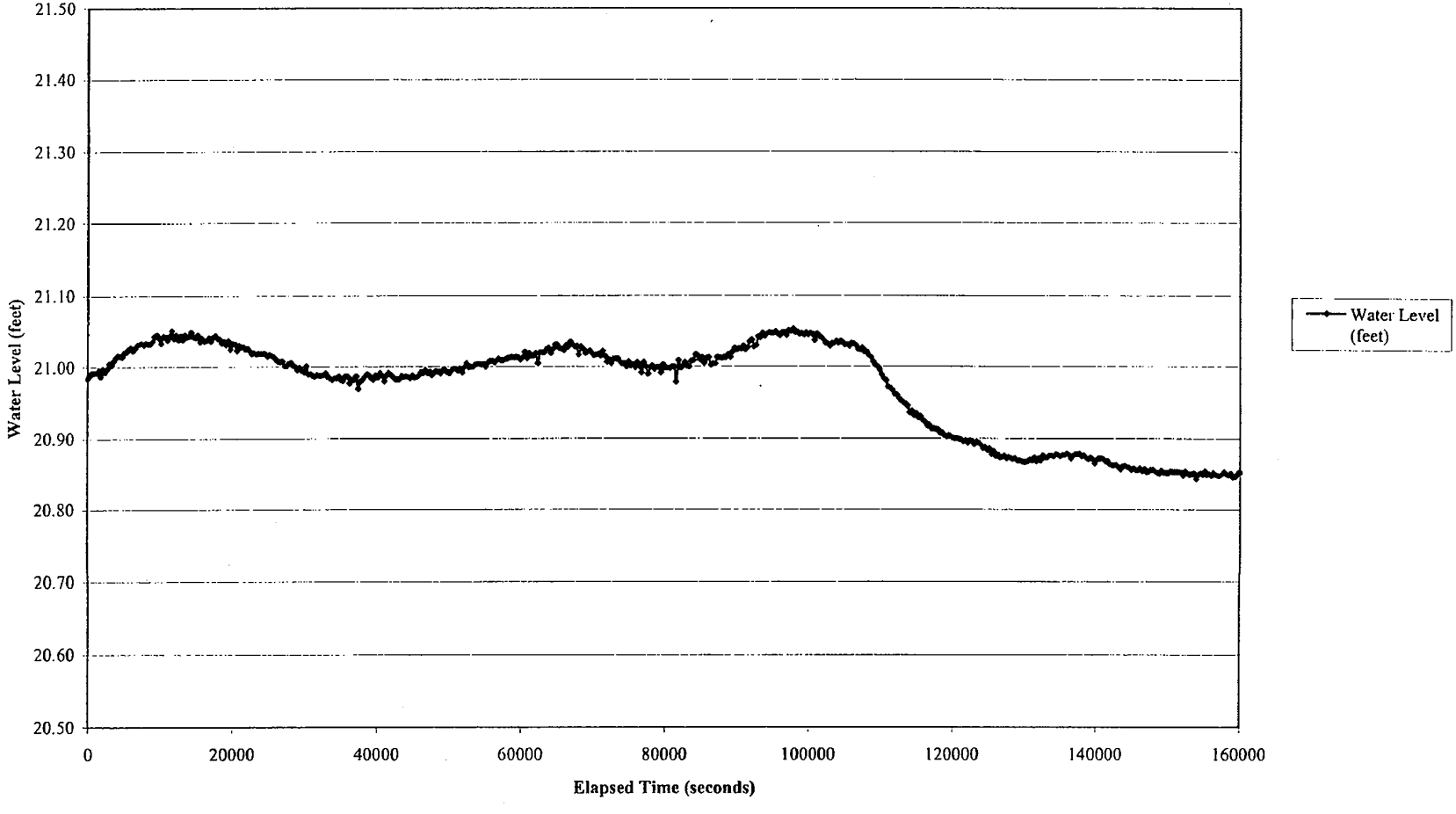
Move probe due to Burning of Field

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: [illegible] Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-07L Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: CHB Date: 4/18/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-09U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep: C Bruce	Date: 1/24/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	~~62.85~~ feet 51.91
Total Well Depth	~~51.91~~ feet 62.85
Static Water Column Height (H)	feet 10.94

	Background	Step Test	Draw Down	Recovery
Start time	1/24/08 4:18 Pm	NA	NA	NA
End time	2/6/08 7:18AM	NA	NA	NA
Flow Rate		NA	NA	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	50
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	109183

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-09U Background	NA	NA	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

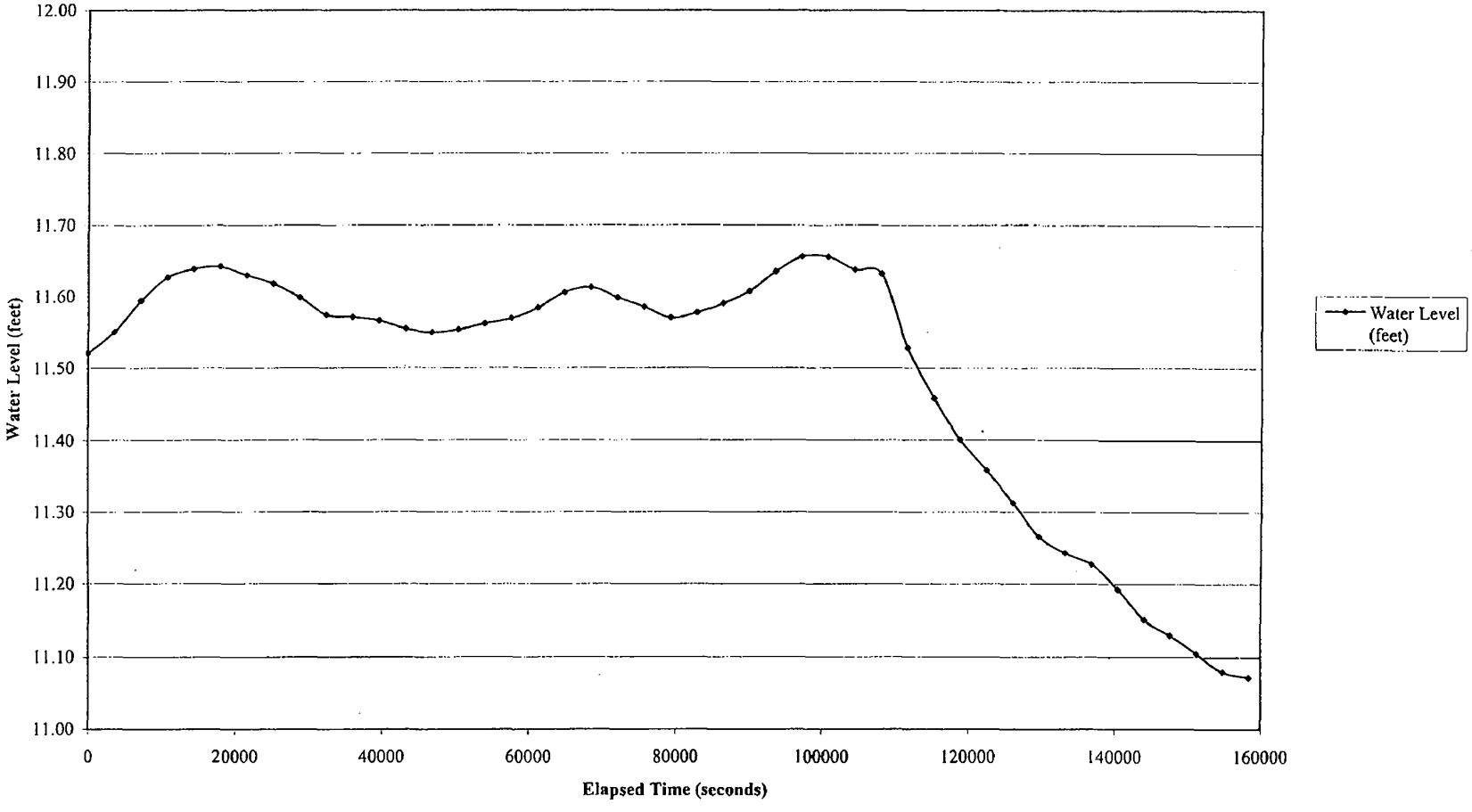
Run As Background for TW-2359 Test

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: BLW Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-09U Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: CAB Date: 4/18/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-09L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 1/17/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	51.91 feet
Total Well Depth	125 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	1/24/08 ~~9:55~~ 2m	NA	NA	NA
End time	1/26/08 7:24 AM	NA	NA	NA
Flow Rate	see File	NA	NA	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	110
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	117812

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-09L Background	NA	NA	NA
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

RAN as Background Well During TW-2355 pump test

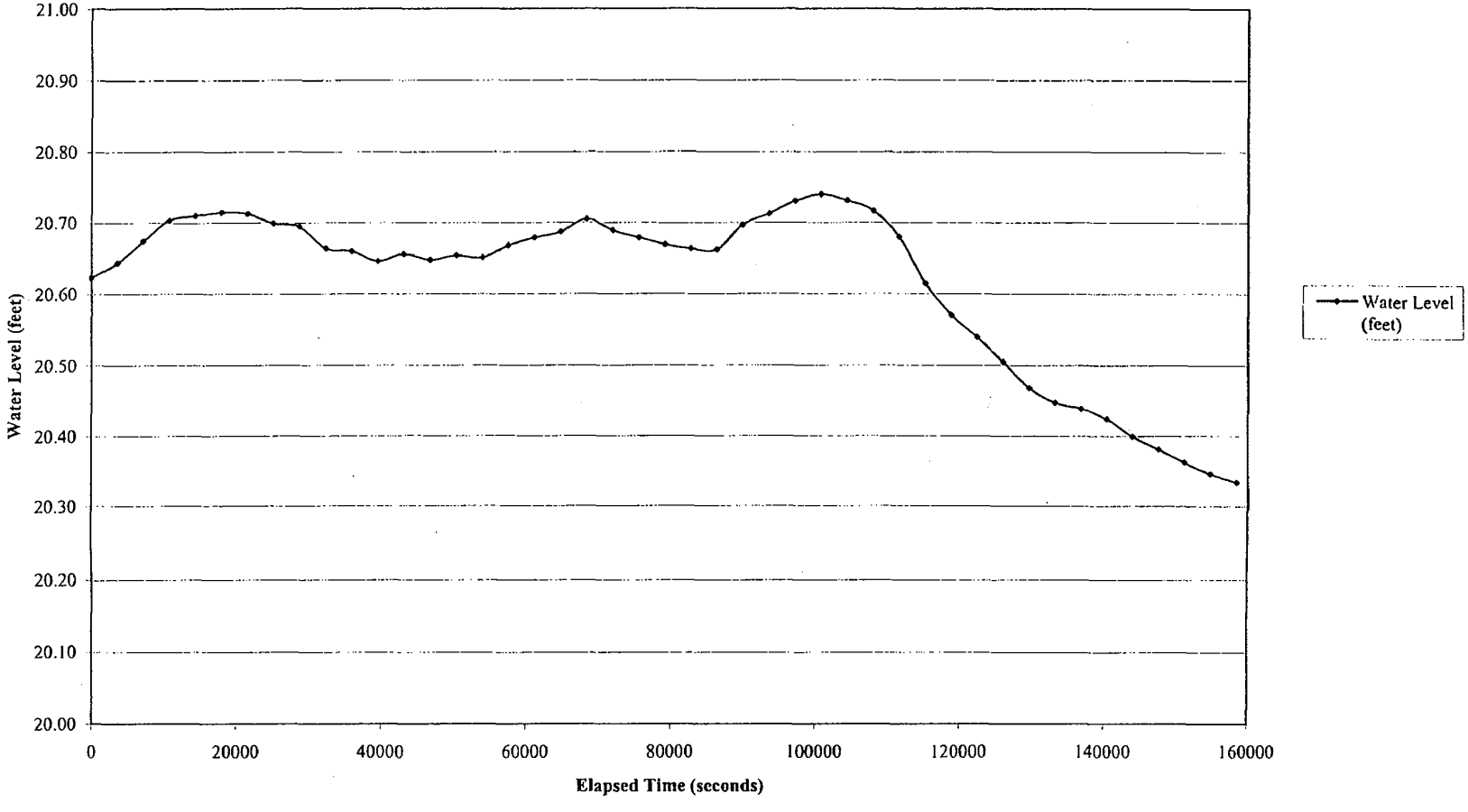
Rev 0

Down loaded 2/17/08

Prepared by: WG Date: 4-4-08

Checked by: BWS Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-09L Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: CHB Date: 4/8/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-10 U
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 1/24/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	56.9 feet
Total Well Depth	62 feet
Static Water Column Height (H)	feet

	Background	Step Test	Draw Down	Recovery
Start time	1.24.08 5:04 pm	2.3.08 9:00am	2.4.08 12:00 pm	See download
End time	2.3.08 8:04 am	2.4.08 8:00am	2.6.08 8:40am	See download
Flow Rate	NA	see file	See File	See download

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	48 feet
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	109172

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-10 U Background	OW-10U Step test	OW-10U 24 HOUR	NA (See 24 HOUR)
Start Time	NA	NA	NA	NA (See 24 Hour
End Time	NA	NA	NA	NA

Notes

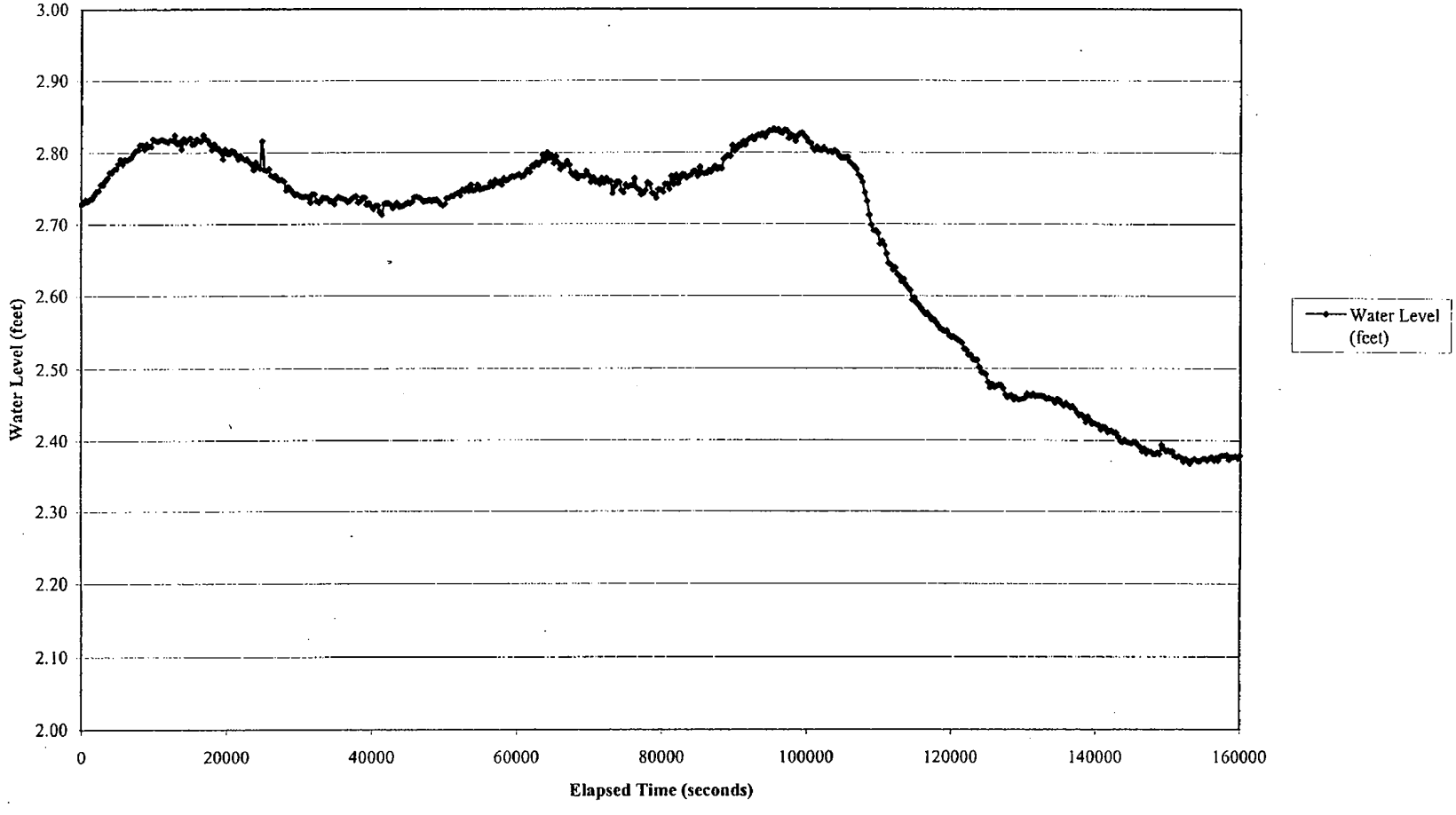
downloaded 2.16.08

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: BWJ Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-10U Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

MACTEC

Checked by: CHB Date: 4/18/08

PUMP TEST REPORT

Project Name: Exelon COL	Project Number: 6468-07-1777	Page 1 of 1	Well ID: OW-10L
Client: Bechtel	Contractor: MACTEC		
Location: Victoria	MACTEC Rep:	Date: 1/24/08	

UNITS	
Length	Feet
Time	Minutes
Well Data	
Static Water Level	54.92 feet
Total Well Depth	140.66 feet
Static Water Column Height (H)	85.74 feet

	Background	Step Test	Draw Down	Recovery
Start time	1/24/08 4:59 AM	2/3/08 9:00 AM	2/24/08 12:00 PM	see drawdown
End time	2/3/08 7:59 AM	2/4/08 7:55 AM	2/6/08 8:35 AM	see drawdown
Flow Rate	NA	See File	See File	NA

Saturated Thickness (b)	See Log feet
Conductivity Anisotropy (Kv/Kh)	Assume 1 to 1
Depth to Top of Well Screen (d)	127
Length of Well Screen (L)	10 feet
Radius of Well Casing (rc)	0.083 feet
Radius of Screen (rw)	0.083 feet
Radius of Probe (req)	0.060 feet
Radius of Boring (rsk) Skin Effect	0.083 feet
Probe Serial Number	11227-99

Slug Test File	Background	Step Test	Draw Down	Recovery
File Name	OW-10L Background	OW-10L Stepteat	OW-10L 24 Hour Test	See drawdown
Start Time	NA	NA	NA	NA
End Time	NA	NA	NA	NA

Notes

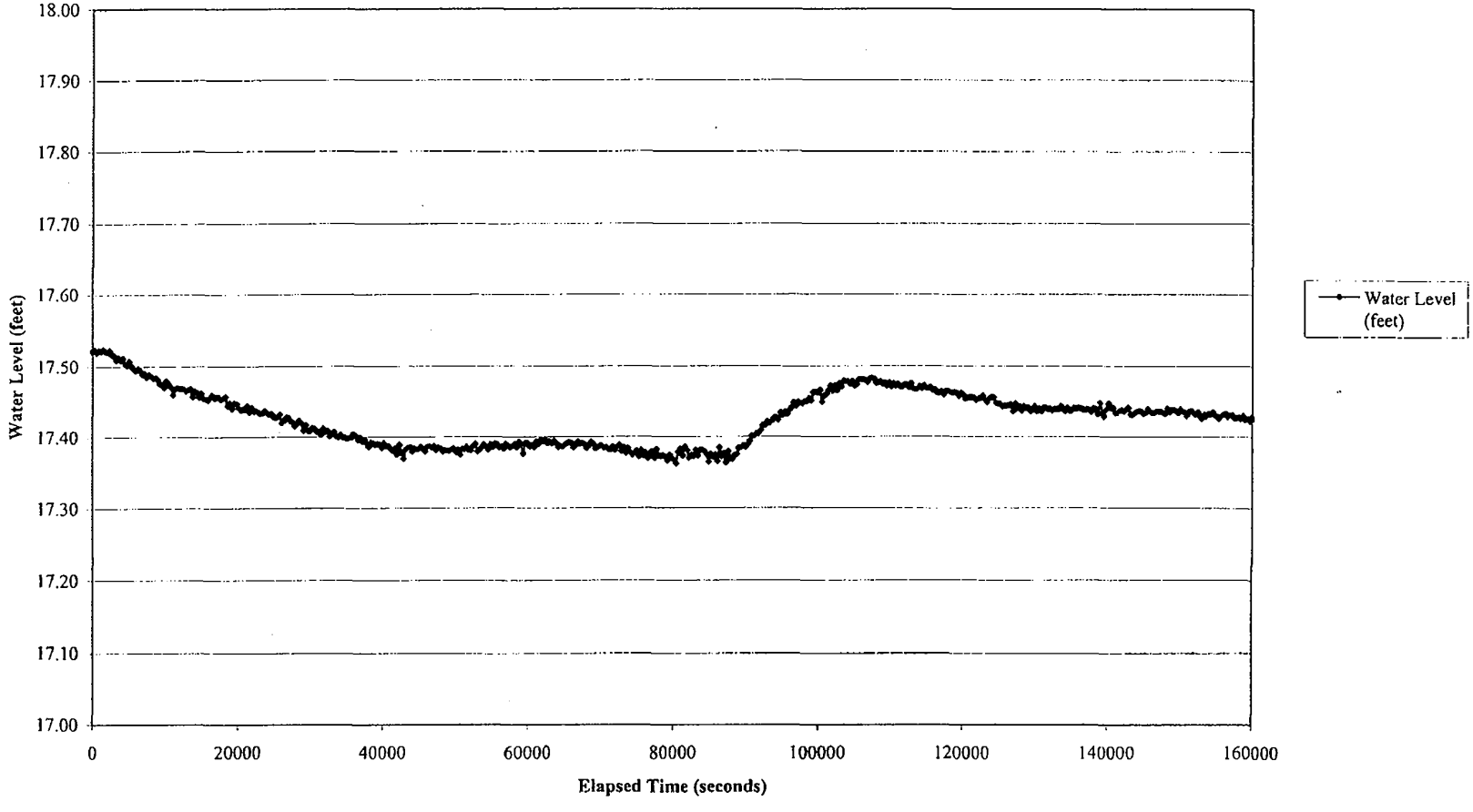
None

Rev 0

Prepared by: [illegible] Date: 4-4-08

Checked by: BWD Date: 4/4/08

TW-2359 Aquifer Pump Test
OW-10L Water Level vs. Time
Exelon COL Project
Victoria, Texas
MACTEC Project Number 6468-07-1777



MACTEC Engineering and Consulting, Inc.
Raleigh, NC

Borehole Permeameter Data Forms

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2309P-U
Date: 02/17/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2): 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (h:m:s)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2309PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 76.3 ft (NAVD88)	NORTHING 13,405,492 US ft (NAD83)	EASTING 2,600,435 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/17/08	COMPLETED 2/17/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
76.3					Ground Surface				76.3 0.0
									Clayey SAND (SC), very dark grayish brown (10YR3/2), moist, fine grained sand, little fines, organics 1.2ft: dark gray (2.5Y4/1) 3.4ft: light yellowish brown (2.5Y6/3), moist to dry 71.3 5.0
									See B-2309PL for strata 5.0 to 10.0ft Boring Terminated at Elevation 71.3 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CEG Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2309P-L
Date: 02/17/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 35.22 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	1607	—	20.4	—	—
1	1612	5	21.2	0.8	0.16
2	1617	5	22.0	0.8	0.16
3	1622	5	22.8	0.8	0.16
4	1627	5	23.6	0.8	0.16
5	1632	5	24.4	0.8	0.16
6	1637	5	25.2	0.8	0.16
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (h:m:s)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_2, (cm/min)
0	1702	—	26.3	—	—
1	1707	5	27.2	0.9	0.18
2	1712	5	28.1	0.9	0.18
3	1717	5	29.0	0.9	0.18
4	1722	5	29.8	0.8	0.16
5	1727	5	30.7	0.9	0.18
6	1732	5	31.6	0.9	0.18
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 2.7E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 3.0E-03 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = -7.4E-05 *cm/sec*

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)H^2 + (Pi)a^2C + 2(Pi)(H/a^*)}$$

K_{fs} = 1.44E-06 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777		GROUND WATER (ft)
BORING NO. B-2309PL	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 76.1 ft (NAVD88)	NORTHING 13,405,492 US ft (NAD83)	EASTING 2,600,445 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/17/08	COMPLETED 2/17/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
76.1					Ground Surface				76.1 / 0.0
									Clayey SAND (SC), very dark grayish brown (10YR3/2), moist, fine grained sand, little fines, organics 1.2ft: dark gray (2.5Y4/1) 3.4ft: light yellowish brown (2.5Y6/3), moist to dry
									69.1 / 7.0
									POORLY GRADED SAND with clay (SP-SC), pale yellow (5Y8/2), moist to dry, fine grained sand, few fines
									66.1 / 10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2309PU Boring Terminated at Elevation 66.1 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CG Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2311P-U
Date: 02/15/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 35.22 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval (min)	Water Level in Reservoir (cm)	Water Level Change (cm)	Rate of Water Level Change, R (cm/min)
0	0815	—	24.6	—	—
1	0840	25	24.8	0.2	0.01
2	0905	25	25.0	0.2	0.01
3	0930	25	25.2	0.2	0.01
4	0955	25	25.4	0.2	0.01
5	1020	25	25.6	0.2	0.01
6	1045	25	25.8	0.2	0.01
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval (min)	Water Level in Reservoir (cm)	Water Level Change (cm)	Rate of Water Level Change, R (cm/min)
0	1108	—	26.3	—	—
1	1118	10	26.5	0.2	0.02
2	1208	50	26.7	0.2	0.00
3	1228	20	27.0	0.3	0.02
4	1238	10	27.1	0.1	0.01
5	1258	20	27.3	0.2	0.01
6	1318	20	27.5	0.2	0.01
7	1338	20	27.7	0.2	0.01
8	1358	20	27.9	0.2	0.01
9	1418	20	28.1	0.2	0.01
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-}bar}$ = $R_{1\text{-}bar}$ / 60 = 1.3E-04 cm/sec
For the second set of readings $R_{2\text{-}bar}$ = $R_{2\text{-}bar}$ / 60 = 1.17E-04 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-}bar}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-}bar}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = -1.3E-06 *cm/sec*

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)H^2 + (Pi)a^2C + 2(Pi)(H/\alpha^*)}$$

K_{fs} = 6.94E-08 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBA Date 5-12-08
Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2311PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 75.7 ft (NAVD88)	NORTHING 13,407,706 US ft (NAD83)	EASTING 2,602,288 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/14/08	COMPLETED 2/14/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
75.7					Ground Surface				75.7	0.0
									Clayey SAND (SC), very dark gray (10YR3/1), moist, fine grained sand, little fines, organics 1.5ft: dark gray (10YR4/1)	
									70.7 4.0ft: light brownish gray (2.5Y6/2), some fines, strong HCl reaction	5.0
									See B-2311PL for strata 5.0 to 10.0ft Boring Terminated at Elevation 70.7 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2311P-L
Date: 02/15/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-}bar}$ = $R_{1\text{-}bar}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-}bar}$ = $R_{2\text{-}bar}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-}bar}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-}bar}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5·13·08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** M. Harvey
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**
BORING NO. B-2311PL / **DRILL METHOD:** Auger	**SAMPLE METHODS:** Hand	**0 HR.** ND
GROUND SURFACE ELEV. 75.3 ft (NAVD88) / **NORTHING** 13,407,703 US ft (NAD83)	**EASTING** 2,602,297 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 10.0 ft / **DRILL MACHINE** Bobcat	**DRILLER:** J. Fox	**HAMMER (ID)** NA
DATE STARTED 2/14/08 / **COMPLETED** 2/14/08	**CASING DEPTH:** N/A	**BITS USED:** Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
75.3					Ground Surface				75.3	0.0
									Clayey SAND (SC), very dark gray (10YR3/1), moist, fine grained sand, little fines, organics 1.5ft: dark gray (10YR4/1) 4.0ft: light brownish gray (2.5Y6/2), some fines, strong HCl reaction	
									68.3	7.0
									Sandy FAT CLAY (CH), brownish yellow (10YR6/6), mottled light gray (2.5YR7/2), moist, some fine grained sand, carbonate nodules, black staining	
									65.3	10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2311PU Boring Terminated at Elevation 65.3 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CEG Date: 4/4/08
Checked by: dcS Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2312P-U
Date: 02/16/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 35.22 cm^2
Note : In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	0856	—	36.5	—	—
1	0911	15	36.9	0.4	0.03
2	0926	15	37.1	0.2	0.01
3	0941	15	37.3	0.2	0.01
4	0956	15	37.5	0.2	0.01
5	1011	15	37.7	0.2	0.01
6	1026	15	38.0	0.3	0.02
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_2, (cm/min)
0	1040	—	38.9	—	—
1	1055	15	39.2	0.3	0.02
2	1110	15	39.2	0.0	0.00
3	1125	15	39.3	0.1	0.01
4	1140	15	39.5	0.2	0.01
5	1155	15	39.8	0.3	0.02
6	1210	15	40.1	0.3	0.02
7	1225	15	40.4	0.3	0.02
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 3.3E-04 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 3.3E-04 cm/sec

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(PI)\,H^2 + (PI)\,a^2C + 2(PI)\,(H/\alpha^*)}$$

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

K_{fs} = 1.76E-07 *cm/sec*

Calculated K_{fs}:
K_{fs} = -1.5E-05 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777		GROUND WATER (ft)
BORING NO. B-2312PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 75.5 ft (NAVD88)	NORTHING 13,410,700 US ft (NAD83)	EASTING 2,604,161 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/14/08	COMPLETED 2/14/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
75.5					Ground Surface				75.5	0.0
									74.3 POORLY GRADED SAND with clay (SP-SC), very dark gray (10YR3/2), moist, fine grained sand, few fines, ferrous staining	1.2
									Clayey SAND (SC), dark grayish brown (10YR4/2), moist, ferrous staining, lenses of sand and clay	
									70.5	5.0

Strata information for 0.0ft to 5.0ft adapted from B-2312PU

Boring Terminated at Elevation 70.5 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CG Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2312P-L
Date: 02/16/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	1028	—	18.1	—	—
1	1033	5	20.7	2.6	0.52
2	1035	2	21.9	1.2	0.60
3	1037	2	23.1	1.2	0.60
4	1039	2	24.3	1.2	0.60
5	1041	2	25.4	1.1	0.55
6	1043	2	26.5	1.1	0.55
7	1045	2	27.6	1.1	0.55
8	1047	2	28.7	1.1	0.55
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_2, (cm/min)
0	1119	—	23.7	—	—
1	1121	2	25.5	1.8	0.90
2	1123	2	27.3	1.8	0.90
3	1125	2	29.0	1.7	0.85
4	1127	2	31.0	2.0	1.00
5	1129	2	32.2	1.2	0.60
6	1131	2	34.2	2.0	1.00
7	1133	2	36.2	2.0	1.00
8	1135	2	38.2	2.0	1.00
9	1137	2	40.0	1.8	0.90
10	1139	2	41.5	1.5	0.75
11	1141	2	43.5	2.0	1.00
12	1143	2	45.0	1.5	0.75
13	1145	2	47.2	2.2	1.10
14	1147	2	49.2	2.0	1.00
15	1149	2	50.6	1.4	0.70
16	1151	2	52.6	2.0	1.00
17	1153	2	54.6	2.0	1.00
18	1155	2	56.6	2.0	1.00
19	1157	2	58.2	1.6	0.80
20	1159	2	60.1	1.9	0.95
21	1201	2	61.6	1.5	0.75
22	1203	2	63.4	1.8	0.90
23	1205	2	65.1	1.7	0.85
24	1207	2	67.2	2.1	1.05
25	1209	2	69.1	1.9	0.95
26	1211	2	71.1	2.0	1.00

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 9.2E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 1.7E-02 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = 4.0E-05 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5·13·08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**	
BORING NO. B-2312PL	**DRILL METHOD:** Auger	**SAMPLE METHODS:** Hand	**0 HR.** ND
GROUND SURFACE ELEV. 75.5 ft (NAVD88)	**NORTHING** 13,410,694 US ft (NAD83)	**EASTING** 2,604,153 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 10.0 ft	**DRILL MACHINE** Bobcat	**DRILLER:** J. Fox	**HAMMER (ID)** NA
DATE STARTED 2/14/08	**COMPLETED** 2/14/08	**CASING DEPTH:** N/A	**BITS USED:** Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
75.5					Ground Surface				75.5	0.0
									74.3 POORLY GRADED SAND with clay (SP-SC), very dark gray (10YR3/2), moist, fine grained sand, few fines, ferrous staining	1.2
									Clayey SAND (SC), dark grayish brown (10YR4/2), moist, ferrous staining, lenses of sand and clay	
									6.0ft: brown (10YR5/4), little fines, carbonate	
									66.5	9.0
									65.5 POORLY GRADED SAND with clay (SP-SC), brown (10YR5/4), moist, fine sand, few fines, carbonate	10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2312PU Boring Terminated at Elevation 65.5 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2313P-U
Date: 02/16/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2): 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST M. Harvey
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2313PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 77.9 ft (NAVD88)	NORTHING 13,412,117 US ft (NAD83)	EASTING 2,605,611 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/16/08	COMPLETED 2/16/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
77.9					Ground Surface				77.9	0.0
									76.9 POORLY GRADED SAND with clay (SP-SC), very dark grayish brown (10YR3/2), moist, fine grained sand, few fines, organics	1.0
									Clayey SAND (SC), dark grayish brown (10YR4/2), moist, little fines, fine grained sand, ferrous staining 3.5ft: light gray (5Y7/2), some fines	
									72.9	5.0
									See B-2313PL for strata 5.0ft to 10.0ft Boring Terminated at Elevation 72.9 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CGG Date: 4/4/08
Checked by: CRB Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2313P-L
Date: 02/16/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 35.22 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	1550	—	25.7	—	—
1	1555	5	27.3	1.6	0.32
2	1600	5	28.8	1.5	0.30
3	1605	5	30.4	1.6	0.32
4	1610	5	32.0	1.6	0.32
5	1615	5	33.6	1.6	0.32
6	1620	5	35.2	1.6	0.32
7	1625	5	36.7	1.5	0.30
8	1630	5	38.3	1.6	0.32
9	1635	5	39.8	1.5	0.30
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_2, (cm/min)
0	1449	—	27.0	—	—
1	1454	5	28.8	1.8	0.36
2	1459	5	30.8	2.0	0.40
3	15.4	5	32.6	1.8	0.36
4	1509	5	34.2	1.6	0.32
5	1514	5	36.0	1.8	0.36
6	1519	5	37.9	1.9	0.38
7	1524	5	39.7	1.8	0.36
8	1529	5	41.5	1.8	0.36
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 5.0E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 6.0E-03 cm/sec

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)H^2 + (Pi)a^2C + 2(Pi)(H/\alpha^*)}$$

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

K_{fs} = 2.67E-06 *cm/sec*

Calculated K_{fs}:
K_{fs} = -8.5E-05 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST M. Harvey
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2313PL	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 78.0 ft (NAVD88)	NORTHING 13,412,116 US ft (NAD83)	EASTING 2,605,606 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/16/08	COMPLETED 2/26/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
78.0					Ground Surface				78.0 / 0.0
									77.0 / 1.0 POORLY GRADED SAND with clay (SP-SC), very dark grayish brown (10YR3/2), moist, fine grained sand, few fines, organics
									Clayey SAND (SC), dark grayish brown (10YR4/2), moist, little fines, fine grained sand, ferrous staining 3.5ft: light gray (5Y7/2), some fines
									5.5ft: light yellowish brown (2.5Y6/4), little fines
									7.8ft: yellow (10YR7/6), carbonate nodules
									68.0 / 10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered
									Strata information for 0.0ft to 5.0ft adapted from B-2313PU
									Boring Terminated at Elevation 68.0 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CEL Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2314P-U
Date: 02/17/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{1i} (cm/min)
0	1019	—	21.8	—	—
1	1024	5	24.1	2.3	0.46
2	1026	2	25.1	1.0	0.50
3	1028	2	26.1	1.0	0.50
4	1030	2	27.1	1.0	0.50
5	1032	2	28.1	1.0	0.50
6	1034	2	29.1	1.0	0.50
7	1036	2	30.1	1.0	0.50
8	1038	2	31.1	1.0	0.50
9	1040	2	32.0	0.9	0.45
10	1042	2	32.9	0.9	0.45
11	1044	2	33.9	1.0	0.50
12	1046	2	34.9	1.0	0.50
13	1048	2	35.9	1.0	0.50
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{2i} (cm/min)
0	1112	—	37.0	—	—
1	1114	2	38.0	1.0	0.50
2	1116	2	39.0	1.0	0.50
3	1118	2	40.0	1.0	0.50
4	1120	2	41.2	1.2	0.60
5	1122	2	42.4	1.2	0.60
6	1124	2	43.2	0.8	0.40
7	1126	2	44.2	1.0	0.50
8	1128	2	45.2	1.0	0.50
9	1130	2	46.2	1.0	0.50
10	1132	2	47.2	1.0	0.50
11	1134	2	48.2	1.0	0.50
12	1136	2	48.2	0.0	0.00
13	1138	2	48.9	0.7	0.35
14	1140	2	49.9	1.0	0.50
15	1142	2	50.4	0.5	0.25
16	1144	2	51.0	0.6	0.30
17	1146	2	51.8	0.8	0.40
18	1148	2	52.5	0.7	0.35
19	1150	2	53.5	1.0	0.50
20	1152	2	54.5	1.0	0.50
21	1154	2	55.5	1.0	0.50
22	1156	2	56.5	1.0	0.50
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 8.3E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 8.3E-03 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = -2.3E-05 *cm/sec*

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)H^2 + (Pi)a^2C + 2(Pi)(H/\alpha^*)}$$

K_{fs} = 4.73E-06 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2314PU / DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 75.5 ft (NAVD88) / NORTHING 13,413,938 US ft (NAD83)	EASTING 2,607,776 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft / DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/15/08 / COMPLETED 2/15/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
75.5					Ground Surface				75.5	0.0
									Clayey SAND (SC), very dark grayish brown (10YR3/2), moist, fine grained sand, little fines 1.5ft: grayish brown (10YR5/2)	
									73.5	2.0
									Sandy FAT CLAY (CH), light yellowish brown (2.5Y6/4), moist, some fine grained sand, carbonate	
									70.5	5.0
									See B-2314PL for strata 5.0 to 10.0ft Boring Terminated at Elevation 70.5 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2314P-L
Date: 02/17/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2): 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = **N/A** ***cm/sec***

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5·13·08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2314PL	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 75.4 ft (NAVD88)	NORTHING 13,413,941 US ft (NAD83)	EASTING 2,607,783 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/15/08	COMPLETED 2/16/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
75.4					Ground Surface				75.4	0.0
									Clayey SAND (SC), very dark grayish brown (10YR3/2), moist, fine grained sand, little fines	
									73.4 1.5ft: grayish brown (10YR5/2)	2.0
									Sandy FAT CLAY (CH), light yellowish brown (2.5Y6/4), moist, some fine grained sand, carbonate	
									70.4	5.0
									FAT CLAY (CH), pale yellow (2.5Y7/3), moist, fine grained sand, carbonate nodules	
									7.5ft: brownish yellow (10YR6/6), dry to moist	
									65.4	10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered	
									Strata information for 0.0ft to 5.0ft adapted from B-2314PU	
									Boring Terminated at Elevation 65.4 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CEG Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2325P-U
Date: 02/06/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval (min)	Water Level in Reservoir (cm)	Water Level Change (cm)	Rate of Water Level Change R_1 (cm/min)
0	1242	—	36.4	—	—
1	1247	5	36.9	0.5	0.10
2	1252	5	37.2	0.3	0.06
3	1257	5	37.5	0.3	0.06
4	1302	5	38.8	1.3	0.26
5	1307	5	39.4	0.6	0.12
6	1312	5	40.3	0.9	0.18
7	1317	5	41.2	0.9	0.18
8	1322	5	42.1	0.9	0.18
9	1327	5	43.0	0.9	0.18
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval (min)	Water Level in Reservoir (cm)	Water Level Change (cm)	Rate of Water Level Change R_2 (cm/min)
0					
1					
2					
3	**Equipment Malfunction - Test did not run**				
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)H^2 + (Pi)a^2C + 2(Pi)(H/\alpha^*)}$$

K_{fs} = 1.71E-06 *cm/sec*

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5·13·08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777		GROUND WATER (ft)
BORING NO. B-2325PU	DRILL METHOD: Auger	SAMPLE METHODS: Grab	0 HR. ND
GROUND SURFACE ELEV. 73.8 ft (NAVD88)	NORTHING 13,401,288 US ft (NAD83)	EASTING 2,603,699 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/5/08	COMPLETED 2/5/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
73.8					Ground Surface				73.8 0.0
									Clayey SAND (SC), very dark gray (5YR3/1), moist, fine grained sand, little fines, organics 2.0ft: dark grayish brown (2.5Y4/2)
									68.9 4.9
									68.8 5.0 POORLY GRADED SAND with clay (SP-SC), yellow (10YR7/6), moist to dry, fine grained sand, few fines, clayey sand lense See B-2325PL for strata 5.0 to 10.0ft Boring Terminated at Elevation 68.8 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CEG Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2325P-L
Date: 02/14/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (Inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 35.22 cm^2
Note : In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	1402	—	17.9	—	—
1	1404	2	19.0	1.1	0.55
2	1405	1	19.6	0.6	0.60
3	1406	1	20.1	0.5	0.50
4	1407	1	20.6	0.5	0.50
5	1408	1	21.1	0.5	0.50
6	1409	1	21.6	0.5	0.50
7	1410	1	22.1	0.5	0.50
8	1411	1	22.6	0.5	0.50
9	1412	1	23.0	0.4	0.40
10	1413	1	23.5	0.5	0.54
11	1414	1	24.0	0.5	0.46
12	1415	1	24.4	0.4	0.40
13	1416	1	24.8	0.4	0.40
14	1417	1	25.2	0.4	0.40
15	1418	1	25.6	0.4	0.40
16	1419	1	26.0	0.4	0.40
17	1420	1	26.4	0.4	0.40
18	1421	1	26.8	0.4	0.40
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (h:m:s)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	1425	—	32.3	—	—
1	1426	1	33.2	0.9	0.90
2	1427	1	34.0	0.8	0.80
3	1428	1	34.7	0.7	0.70
4	1429	1	35.3	0.6	0.60
5	1430	1	36.1	0.8	0.80
6	1431	1	36.8	0.7	0.70
7	1432	1	37.5	0.7	0.70
8	1433	1	38.2	0.7	0.70
9	1434	1	39.0	0.8	0.80
10	1435	1	39.6	0.6	0.60
11	1436	1	40.3	0.7	0.70
12	1437	1	41	0.7	0.70
13	1438	1	41.7	0.7	0.70
14	1439	1	42.4	0.7	0.70
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 6.7E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 1.12E-02 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:

K_{fs} = 4.2E-04 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5/12/08

Checked By KAW Date 5·13·08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777		GROUND WATER (ft)
BORING NO. B-2325PL	DRILL METHOD: Auger	SAMPLE METHODS: Grab	0 HR. ND
GROUND SURFACE ELEV. 73.9 ft (NAVD88)	NORTHING 13,401,292 US ft (NAD83)	EASTING 2,603,697 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/5/08	COMPLETED 2/5/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
73.9					Ground Surface				73.9 — 0.0
									Clayey SAND (SC), very dark gray (5YR3/1), moist, fine grained sand, little fines, organics 2.0ft: dark grayish brown (2.5Y4/2)
									69.0 — 4.9
									POORLY GRADED SAND with clay (SP-SC), yellow (10YR7/6), moist to dry, fine grained sand, few fines, clayey sand lense
									64.4 — 9.5
									63.9 — 10.0
									Clayey SAND (SC), yellow (10YR7/6), moist, fine grained sand, little fines
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2325PU Boring Terminated at Elevation 63.9 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2326P-U
Date: 02/04/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = **N/A** ***cm/sec***

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST M. Harvey
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2326PU	DRILL METHOD: Auger	SAMPLE METHODS: Grab	0 HR. ND
GROUND SURFACE ELEV. 71.0 ft (NAVD88)	NORTHING 13,403,069 US ft (NAD83)	EASTING 2,605,616 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/5/08	COMPLETED 2/5/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
71.0					Ground Surface				71.0	0.0
									70.4 POORLY GRADED SAND with clay (SP-SC), brown (7.5YR4/2), moist, fine grained sand, few fines	0.6
									Clayey SAND (SC), brown (7.5YR4/2), moist, fine grained sand, little fines	
									66.0 3.9ft: light yellowish brown (2.5Y7/3), clay and sand lenses, carbonate nodules	5.0
									See B-2326PL for strata 5.0 to 10.0ft	
									Boring Terminated at Elevation 66.0 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CEG Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2326P-L
Date: 02/14/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 35.22 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	0804	—	14.4	—	—
1	0806	2	14.5	0.1	0.05
2	0808	2	14.7	0.2	0.10
3	0813	5	15.2	0.5	0.10
4	0818	5	15.9	0.7	0.14
5	0823	5	16.0	0.1	0.02
6	0828	5	16.0	0.0	0.00
7	0833	5	16.8	0.8	0.16
8	0838	5	17.1	0.3	0.06
9	0843	5	17.5	0.4	0.08
10	0848	5	18.3	0.8	0.16
11	0853	5	18.9	0.6	0.12
12	0900	7	19.2	0.3	0.04
13	0907	7	19.5	0.3	0.04
14	0914	7	20.0	0.5	0.07
15	0921	7	20.4	0.4	0.06
16	0935	7	20.8	0.4	0.06
17	0942	7	21.2	0.4	0.06
18	0949	7	21.6	0.4	0.06
19	0956	7	22.0	0.4	0.06
20	1003	7	22.4	0.4	0.06
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_2, (cm/min)
0	1012	—	23.3	—	—
1	1022	10	23.9	0.6	0.06
2	1032	10	24.7	0.8	0.08
3	1042	10	25.5	0.8	0.08
4	1052	10	26.3	0.8	0.08
5	1102	10	26.9	0.6	0.06
6	1112	10	27.5	0.6	0.06
7	1122	10	28.2	0.7	0.07
8	1132	10	29.0	0.8	0.08
9	1142	10	29.7	0.7	0.07
10	1152	10	30.4	0.7	0.07
11	1202	10	31.0	0.6	0.06
12	1212	10	31.7	0.7	0.07
13	1222	10	32.4	0.7	0.07
14	1232	10	33.1	0.7	0.07
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 2.7E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 1.2E-03 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = -3.4E-04 *cm/sec*

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)H^2 + (Pi)a^2C + 2(Pi)(H/a^*)}$$

K_{fs} = 1.44E-06 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2326PL / DRILL METHOD: Auger	SAMPLE METHODS: Grab	0 HR. ND
GROUND SURFACE ELEV. 70.8 ft (NAVD88) / NORTHING 13,403,075 US ft (NAD83)	EASTING 2,605,620 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft / DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/5/08 / COMPLETED 2/5/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
70.8					Ground Surface				70.8 / 0.0
									70.2 / 0.6 POORLY GRADED SAND with clay (SP-SC), brown (7.5YR4/2), moist, fine grained sand, few fines
									Clayey SAND (SC), brown (7.5YR4/2), moist, fine grained sand, little fines
									3.9ft: light yellowish brown (2.5Y7/3), clay and sand lenses, carbonate nodules
									6.0ft: Carbonate
									60.8 / 10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered
									Strata information for 0.0ft to 5.0ft adapted from B-2326PU
									Boring Terminated at Elevation 60.8 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2327P-U
Date: 02/05/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-}bar}$ = $R_{1\text{-}bar}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-}bar}$ = $R_{2\text{-}bar}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-}bar}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-}bar}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2327PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 71.2 ft (NAVD88)	NORTHING 13,404,711 US ft (NAD83)	EASTING 2,607,394 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/4/08	COMPLETED 2/4/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
71.2					Ground Surface				71.2	0.0
									POORLY GRADED SAND (SP), very dark grayish brown (10YR3/2), moist, fine grained sand, trace fines, organics	
									69.7	1.5
									Clayey SAND (SC), grayish brown (10YR5/2), moist, fine grained sand, little fines	
									66.2	5.0
									4.5ft to 5.0ft: carbonate nodules	
									See B-2327PL for strata 5.0ft to 10.0ft	
									Boring Terminated at Elevation 66.2 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CL Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2327P-L
Date: 02/13/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	1422	—	21.3	—	—
1	1427	5	21.3	0.0	0.00
2	1432	5	21.3	0.0	0.00
3	1437	5	21.3	0.0	0.00
4	1442	5	21.3	0.0	0.00
5	1447	5	21.3	0.0	0.00
6	1452	5	35.3	14.0	2.80
7	1456	4	36.9	1.6	0.40
8	1500	4	39.0	2.1	0.53
9	1502	2	39.8	0.8	0.40
10	1504	2	40.9	1.1	0.55
11	1506	2	41.7	0.8	0.40
12	1508	2	42.6	0.9	0.45
13	1510	2	43.5	0.9	0.45
14	1512	2	44.4	0.9	0.45
15	1514	2	45.3	0.9	0.45
16	1516	2	46.2	0.9	0.45
17	1518	2	47.1	0.9	0.45
18	1520	2	48.0	0.9	0.45
19	1522	2	48.9	0.9	0.45
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	1601	—	40.0	—	—
1	1603	2	41.5	1.5	0.75
2	1605	2	43.0	1.5	0.75
3	1607	2	44.5	1.5	0.75
4	1609	2	45.9	1.4	0.70
5	1611	2	47.2	1.3	0.65
6	1613	2	48.7	1.5	0.75
7	1615	2	50.0	1.3	0.65
8	1617	2	51.5	1.5	0.75
9	1619	2	53.0	1.5	0.75
10	1621	2	54.4	1.4	0.70
11	1623	2	55.8	1.4	0.70
12	1625	2	56.9	1.1	0.55
13	1627	2	58.6	1.7	0.85
14	1629	2	60.0	1.4	0.70
15	1631	2	61.4	1.4	0.70
16	1633	2	62.8	1.4	0.70
17	1635	2	64.2	1.4	0.70
18	1637	2	65.6	1.4	0.70
19	1639	2	67.0	1.4	0.70
20	1641	2	68.4	1.4	0.70
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 7.5E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 1.2E-02 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = 1.6E-05 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2327PL	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 70.8 ft (NAVD88)	NORTHING 13,404,712 US ft (NAD83)	EASTING 2,607,384 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/4/08	COMPLETED 2/4/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
70.8					Ground Surface				70.8	0.0
									69.3 POORLY GRADED SAND (SP), very dark grayish brown (10YR3/2), moist, fine grained sand, trace fines, organics	1.5
									Clayey SAND (SC), grayish brown (10YR5/2), moist, fine grained sand, little fines	
									5.0ft: yellow (10YR7/6)	
									62.8	8.0
									61.4 POORLY GRADED SAND with clay (SP-SC), moist, fine grained sand, few fines, carbonate nodules	9.4
									60.8 Clayey SAND (SC), brownish yellow (10YR6/8), moist, fine grained sand, little fines, carbonate nodules, black staining	10.0

Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered
Strata information for 0.0ft to 5.0ft adapted from B-2327PU
Boring Terminated at Elevation 60.8 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CEG Date: 4/4/08
Checked by: HC Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2328P-U
Date: 02/04/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note : In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{1i} (cm/min)
0	1548	---	23.6	---	---
1	1553	5	23.7	0.1	0.02
2	1558	5	24.7	1.0	0.20
3	1603	5	26.1	1.4	0.28
4	1608	5	27.8	1.7	0.34
5	1613	5	28.8	1.0	0.20
6	1618	5	30.0	1.2	0.24
7	1623	5	31.1	1.1	0.22
8	1628	5	31.8	0.7	0.14
9	1633	5	32.5	0.7	0.14
10	1638	5	33.4	0.9	0.18
11	1643	5	34.2	0.8	0.16
12	1648	5	35.2	1.0	0.20
13	1653	5	36.4	1.2	0.24
14	1658	5	37.6	1.2	0.24
15	1703	5	38.8	1.2	0.24
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{1i} (cm/min)
0	0843	—	40.6	---	---
1	0848	5	45.7	5.1	1.02
2	0853	5	46.7	1.0	0.20
3	0858	5	48.8	2.1	0.42
4	0903	5	50.8	2.0	0.40
5	0908	5	52.8	2.0	0.40
6	0913	5	54.8	2.0	0.40
7	0918	5	56.7	1.9	0.38
8	0923	5	58.5	1.8	0.36
9	0928	5	60.7	2.2	0.44
10	0933	5	64.0	3.3	0.66
11	0938	5	66.7	2.7	0.54
12	0943	5	68.9	2.2	0.44
13	0948	5	70.9	2.0	0.40
14	0953	5	73.1	2.2	0.44
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-}bar}$ = $R_{1\text{-}bar}$ / 60 = 4.0E-03 cm/sec
For the second set of readings $R_{2\text{-}bar}$ = $R_{2\text{-}bar}$ / 60 = 7.1E-03 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-}bar}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-}bar}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:

K_{fs} = **1.6E-05** ***cm/sec***

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2328PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 68.1 ft (NAVD88)	NORTHING 13,406,233 US ft (NAD83)	EASTING 2,609,021 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/4/08	COMPLETED 2/4/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
68.1					Ground Surface				68.1 0.0
									Clayey SAND (SC), very dark gray (7.5Y3/1), moist, some fines, organics to 3.0ft
									63.1 4.0ft: yellow (10YR7/6), little fines, carbonate nodules 5.0
									See B-2328PL for strata 5.0ft to 10.0ft Boring Terminated at Elevation 63.1 ft

EXELON COL BORE EXELON~2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CG Date: 4/4/08
Checked by: KP Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2328P-L
Date: 02/13/08
Field Personnel: D. Atkinson, K. Charles-Smith
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 35.22 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1 (cm/min)
0	1117	—	22.3	—	—
1	1118	1	22.5	0.2	0.20
2	1120	2	23.4	0.9	0.45
3	1122	2	24.6	1.2	0.60
4	1124	2	25.3	0.7	0.35
5	1126	2	26.0	0.7	0.35
6	1128	2	26.6	0.6	0.30
7	1130	2	27.3	0.7	0.35
8	1132	2	27.8	0.5	0.25
9	1134	2	28.4	0.6	0.30
10	1136	2	29.0	0.6	0.30
11	1138	2	29.6	0.6	0.30
12	1140	2	30.2	0.6	0.30
13	1142	2	30.8	0.6	0.30
14	1144	2	31.3	0.5	0.25
15	1146	2	31.8	0.5	0.25
16	1148	2	32.4	0.6	0.30
17	1150	2	33.0	0.6	0.30
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1 (cm/min)
0	1200	—	42.3	—	—
1	1202	2	44.1	1.8	0.90
2	1204	2	46.0	1.9	0.95
3	1205	1	46.7	0.7	0.70
4	1206	1	47.7	1.0	1.00
5	1207	1	48.4	0.7	0.70
6	1208	1	49.1	0.7	0.70
7	1209	1	49.9	0.8	0.80
8	1210	1	50.7	0.8	0.80
9	1211	1	51.5	0.8	0.80
10	1212	1	52.3	0.8	0.80
11	1213	1	53.1	0.8	0.80
12	1214	1	53.9	0.8	0.80
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 5.0E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 1.3E-02 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:

K_{fs} = 9.7E-04 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST M. Harvey
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2328PL	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 68.4 ft (NAVD88)	NORTHING 13,406,223 US ft (NAD83)	EASTING 2,609,021 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/4/08	COMPLETED 2/4/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
68.4					Ground Surface				68.4	0.0
									Clayey SAND (SC), very dark gray (7.5Y3/1), moist, some fines, organics to 3.0ft 4.0ft: yellow (10YR7/6), little fines, carbonate nodules	
									61.1	7.3
									POORLY GRADED SAND with clay (SP-SC), yellow (10YR7/6), moist, fine grained sand, few fines	
									58.4	10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2328PU Boring Terminated at Elevation 58.4 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2329P-U
Date: 02/03/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2329PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 68.1 ft (NAVD88)	NORTHING 13,407,878 US ft (NAD83)	EASTING 2,610,792 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: J. Fox	HAMMER (ID) NA
DATE STARTED 2/3/08	COMPLETED 2/3/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
68.1					Ground Surface				68.1	0.0
									Sandy FAT CLAY (CH), dark gray (2.5Y4/1 to 7.5YR4/1), moist, some fine grained sand, organics	
									63.9	4.2
									63.1 Clayey SAND (SC), light gray (5Y7/1), moist, fine grained sand, little fines	5.0
									See B-2329PL for strata 5ft to 10ft Boring Terminated at Elevation 63.1 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2329P-L
Date: 02/03/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WFD Date 5-12-08

Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** M. Harvey	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**	
BORING NO. B-2329PL	**DRILL METHOD:** Auger	**SAMPLE METHODS:** Hand	**0 HR.** ND
GROUND SURFACE ELEV. 68.1 ft (NAVD88)	**NORTHING** 13,407,871 US ft (NAD83)	**EASTING** 2,610,785 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 10.0 ft	**DRILL MACHINE** Bobcat	**DRILLER:** J. Fox	**HAMMER (ID)** NA
DATE STARTED 2/3/08	**COMPLETED** 2/3/08	**CASING DEPTH:** N/A	**BITS USED:** Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
68.1					Ground Surface				68.1	0.0
									Sandy FAT CLAY (CH), dark gray (2.5Y4/1 to 7.5YR4/1), moist, some fine grained sand, organics	
									63.9	4.2
									Clayey SAND (SC), light gray (5Y7/1), moist, fine grained sand, little fines	
									62.3	5.8
									POORLY GRADED SAND (SP), light gray (5Y7/1), moist, fine grained sand, trace fines	
									61.1	7.0
									60.6	7.5
									Clayey SAND (SC), light gray (5Y7/1), moist, fine grained sand, little fines, ferrous staining	
									59.8	8.3
									Sandy FAT CLAY (CH), light gray (2.5Y7/2), dry to moist, some fine grained sand, carbonate nodules	
									58.1	10.0
									Clayey SAND (SC), pale yellow (2.5Y7/3), dry to moist, fine grained sand, some fines, carbonate nodules, sand lenses	
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2329PU Boring Terminated at Elevation 58.1 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CEG Date: 4/4/08
Checked by: TEG Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2330P-U
Date: 02/03/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{1i} (cm/min)
0	1025	—	24.1	—	—
1	1030	5	24.8	0.7	0.14
2	1035	5	25.9	1.1	0.22
3	1040	5	27.1	1.2	0.24
4	1045	5	28.3	1.2	0.24
5	1050	5	29.7	1.4	0.28
6	1055	5	30.9	1.2	0.24
7	1100	5	31.9	1.0	0.20
8	1105	5	33.0	1.1	0.22
9	1110	5	34.2	1.2	0.24
10	1115	5	35.2	1.0	0.20
11	1120	5	36.3	1.1	0.22
12	1125	5	37.3	1.0	0.20
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (h:m:s)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{2i} (cm/min)
0	1135	—	25.3	—	—
1	1140	5	29.7	4.4	0.88
2	1145	5	31.0	1.3	0.26
3	1150	5	32.4	1.4	0.28
4	1155	5	33.6	1.2	0.24
5	1200	5	35.0	1.4	0.28
6	1205	5	36.3	1.3	0.26
7	1210	5	37.5	1.2	0.24
8	1215	5	38.8	1.3	0.26
9	1220	5	40.0	1.2	0.24
10	1225	5	41.3	1.3	0.26
11	1230	5	42.3	1.0	0.20
12	1235	5	43.5	1.2	0.24
13	1240	5	44.8	1.3	0.26
14	1245	5	46.1	1.3	0.26
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 3.3E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 4.2E-03 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = -2.4E-05 *cm/sec*

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)H^2 + (Pi)a^2C + 2(Pi)(H/a^*)}$$

K_{fs} = 1.88E-06 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST C. Gandy
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2330PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 67.9 ft (NAVD88)	NORTHING 13,410,096 US ft (NAD83)	EASTING 2,613,184 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: D. Atkinson	HAMMER (ID) NA
DATE STARTED 2/2/08	COMPLETED 2/2/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
67.9					Ground Surface				67.9 0.0
									Sandy FAT CLAY (CH), brown (10YR4/3), moist, some sand 0.5ft: little sand 2.5ft: light brownish gray (2.5Y6/2), some sand 3.0ft: carbonate nodules, ferrous staining, organics 62.9 5.0
									See B-2330PL for strata 5.0ft to 10.0ft Boring Terminated at Elevation 62.9 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CG Date: 4/4/08
Checked by: PCP Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2330P-L
Date: 02/03/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 35.22 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{1i} (cm/min)
0	0903	—	34.7	—	—
1	0908	5	36.0	1.3	0.26
2	0913	5	36.4	0.4	0.08
3	0918	5	37.0	0.6	0.12
4	0923	5	37.3	0.3	0.06
5	0928	5	37.5	0.2	0.04
6	0933	5	37.7	0.2	0.04
7	0938	5	38.2	0.5	0.10
8	0943	5	38.4	0.2	0.04
9	0948	5	38.7	0.3	0.06
10	0953	5	39.1	0.4	0.08
11	0958	5	39.4	0.3	0.06
12	1003	5	39.7	0.3	0.06
13	1008	5	40.0	0.3	0.06
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{2i} (cm/min)
0	1020	—	41.1	—	—
1	1025	5	41.5	0.4	0.08
2	1030	5	41.7	0.2	0.04
3	1035	5	42.1	0.4	0.08
4	1040	5	42.3	0.2	0.04
5	1045	5	42.6	0.3	0.06
6	1050	5	43.0	0.4	0.08
7	1055	5	43.2	0.2	0.04
8	1100	5	43.5	0.3	0.06
9	1105	5	43.8	0.3	0.06
10	1110	5	44.0	0.2	0.04
11	1115	5	44.3	0.3	0.06
12	1120	5	44.5	0.2	0.04
13	1125	5	44.9	0.4	0.08
14	1130	5	45.1	0.2	0.04
15	1135	5	45.4	0.3	0.06
16	1140	5	45.6	0.2	0.04
17	1145	5	45.9	0.3	0.06
18	1150	5	46.1	0.2	0.04
19	1155	5	46.3	0.2	0.04
20	1200	5	46.5	0.2	0.04
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-}bar}$ = $R_{1\text{-}bar}$ / 60 = 1.0E-03 cm/sec
For the second set of readings $R_{2\text{-}bar}$ = $R_{2\text{-}bar}$ / 60 = 6.7E-04 cm/sec

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)\,H^2 + (Pi)\,a^2C + 2(Pi)\,(H/\alpha^*)}$$

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-}bar}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-}bar}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

K_{fs} = 5.34E-07 *cm/sec*

Calculated K_{fs}:
K_{fs} = -9.4E-05 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2330PL	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 68.2 ft (NAVD88)	NORTHING 13,410,089 US ft (NAD83)	EASTING 2,613,185 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: D. Atkinson	HAMMER (ID) NA
DATE STARTED 2/2/08	COMPLETED 2/2/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
68.2					Ground Surface				68.2 — 0.0
									Sandy FAT CLAY (CH), brown (10YR4/3), moist, some sand 0.5ft: little sand 2.5ft: light brownish gray (2.5Y6/2), some sand 3.0ft: carbonate nodules, ferrous staining, organics 5.0ft: very pale brown (10YR7/4)
									60.7 — 7.5
									Clayey SAND (SC), very pale brown (10YR7/4), moist, some fines, fine grained sand, ferrous staining 9.0ft: little fines
									58.2 — 10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2330PU Boring Terminated at Elevation 58.2 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CG Date: 4/4/08
Checked by: TCG Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2339P-U
Date: 01/17/08
Field Personnel: C. Pruneau, D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{1i} (cm/min)
0	1045	—	25.0	—	—
1	1050	5	26.9	1.9	0.38
2	1055	5	28.6	1.7	0.34
3	1100	5	30.3	1.7	0.34
4	1105	5	31.9	1.6	0.32
5	1110	5	33.2	1.3	0.26
6	1115	5	34.5	1.3	0.26
7	1120	5	35.9	1.4	0.28
8	1125	5	37.1	1.2	0.24
9	1130	5	38.2	1.1	0.21
10	1135	5	39.2	1.1	0.21
11	1140	5	40.3	1.1	0.22
12	1145	5	41.4	1.1	0.22
13	1150	5	42.5	1.1	0.21
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{1i} (cm/min)
0	1730	—	12.1	—	—
1	1739	9	13.0	0.9	0.10
2	1744	5	13.8	0.8	0.15
3	1749	5	14.3	0.6	0.11
4	1754	5	15.1	0.8	0.16
5	1759	5	15.9	0.8	0.16
6	1804	5	16.6	0.7	0.14
7	1809	5	17.3	0.7	0.14
8	1814	5	17.9	0.6	0.12
9	1819	5	18.6	0.7	0.14
10	1824	5	19.4	0.8	0.15
11	1829	5	20.1	0.7	0.14
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 3.5E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 2.4E-03 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = -2.0E-05 *cm/sec*

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)\,H^2 + (Pi)\,a^2C + 2(Pi)\,(H/a^*)}$$

K_{fs} = 1.99E-06 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy/ D. Atkinson
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2339PU	DRILL METHOD: Auger / SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 68.8 ft (NAVD88)	NORTHING 13,399,916 US ft (NAD83) / EASTING 2,608,670 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat / DRILLER: D. Atkinson	HAMMER (ID) NA
DATE STARTED 1/17/08	COMPLETED 1/17/08 / CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
68.8					Ground Surface				68.8 — 0.0
									FAT CLAY with sand (CH), dark brown (7.5YR3/3), moist, little sand, roots 1.2ft: brown (7.5Y4/2), few sand, ferrous staining 2.6ft: light gray (10YR7/2), little sand 3.7ft: light brownish gray (10YR6/2), few sand, carbonate nodules 4.7ft: very pale brown (10YR7/3), little sand, rounded gravel
									63.8 — 5.0
									See B-2339PL for strata 5.0ft to 10.0ft Boring Terminated at Elevation 63.8 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CG Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2339P-L
Date: 01/18/08
Field Personnel: C. Pruneau, D. Atkinson, C. Gandy
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	1125	---	34.2	---	---
1	1305	100	35.2	1.0	0.01
2	1405	60	58.1	22.9	0.38
3	1415	10	60.2	2.1	0.21
4	1425	10	62.4	2.2	0.22
5	1425	10	64.6	2.2	0.22
6	1445	10	66.6	2.0	0.20
7	1455	10	68.6	2.0	0.20
8	1505	10	70.8	2.2	0.22
9	1515	10	72.8	2.0	0.20
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0	1547	---	40.6	---	---
1	1627	40	45.7	5.1	0.13
2	1632	5	46.7	1.0	0.20
3	1637	5	48.8	2.1	0.42
4	1642	5	50.8	2.0	0.40
5	1647	5	52.8	2.0	0.40
6	1652	5	54.8	2.0	0.40
7	1657	5	56.7	1.9	0.38
8	1702	5	58.5	1.8	0.36
9	1707	5	60.7	2.2	0.44
10	1712	5	64.0	3.3	0.66
11	1717	5	66.7	2.7	0.54
12	1722	5	68.9	2.2	0.44
13	1727	5	70.9	2.0	0.40
14	1732	5	73.1	2.2	0.44
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-}bar}$ = $R_{1\text{-}bar}$ / 60 = 3.3E-03 cm/sec
For the second set of readings $R_{2\text{-}bar}$ = $R_{2\text{-}bar}$ / 60 = 7.1E-03 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-}bar}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-}bar}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = 2.4E-05 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy/ D. Atkinson
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2339PL / DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 68.6 ft (NAVD88) / NORTHING 13,399,911 US ft (NAD83)	EASTING 2,608,675 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft / DRILL MACHINE Bobcat	DRILLER: S. Criscenzo	HAMMER (ID) NA
DATE STARTED 1/17/08 / COMPLETED 1/17/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
68.6					Ground Surface				68.6	0.0
									67.4 Clayey SAND (SC), brown (2.5YR4/3), moist, fine grained sand, little fines, roots	1.2
									FAT CLAY with sand (CH), brown (7.5Y4/2), little sand, roots, ferrous staining 3.0ft: light gray (10YR7/2), carbonate nodules 4.3ft: pale brown (10YR6/3) 5.4ft: rounded gravel	
									58.6	10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2339PU Boring Terminated at Elevation 58.6 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CG Date: 4/4/08
Checked by: [illegible] Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2341P-U
Date: 01/18/08
Field Personnel: C. Pruneau, D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1 (cm/min)
0	1251	---	37.0	---	---
1	1256	5	38.6	1.6	0.31
2	1301	5	40.2	1.7	0.33
3	1306	5	41.9	1.7	0.34
4	1311	5	43.6	1.7	0.34
5	1316	5	45.3	1.7	0.34
6	1321	5	46.9	1.6	0.32
7	1326	5	48.5	1.6	0.31
8	1331	5	50.0	1.6	0.31
9	1336	5	51.6	1.6	0.32
10	1341	5	53.2	1.6	0.32
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (H:m:s)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1 (cm/min)
0	1413	---	54.0	---	---
1	1418	5	56.4	2.4	0.48
2	1423	5	57.9	1.5	0.30
3	1428	5	60.4	2.5	0.50
4	1433	5	62.5	2.1	0.42
5	1438	5	64.9	2.4	0.48
6	1443	5	67.1	2.2	0.44
7	1448	5	69.2	2.1	0.42
8	1453	5	71.3	2.1	0.42
9	1503	5	73.5	2.1	0.42
10	1508	5	75.6	2.2	0.44
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 5.3E-03 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 7.3E-03 cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:

K_{fs} = **2.7E-06** ***cm/sec***

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2341PU / DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 65.0 ft (NAVD88)	NORTHING 13,401,611 US ft (NAD83) / EASTING 2,610,947 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft / DRILL MACHINE Bobcat	DRILLER: D. Atkinson	HAMMER (ID) NA
DATE STARTED 1/18/08 / COMPLETED 1/18/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
65.0					Ground Surface				65.0	0.0
									Clayey SAND (SC), very dark brown (7.5YR2.5/2), moist, fine grained sand, little fines	
									63.5	1.5
									FAT CLAY with sand (CH), pale brown (10YR6/3), moist, little sand, ferrous staining	
									4.0ft: pale brown (10YR6/3), carbonate nodules 4.5ft: some sand	
									60.0	5.0
									See B-2341PL for strata 5.0ft to 10.0ft Boring Terminated at Elevation 60.0 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Prepared by: CEG Date: 4/4/08
Checked by: KCP Date: 4/4/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2341P-L
Date: 01/19/08
Field Personnel: C. Pruneau, D. Atkinson, C. Gandy
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{1i} (cm/min)
0	1044	---	45.7	---	---
1	1047	3	46.3	0.6	0.20
2	1049	2	47.1	0.8	0.40
3	1059	10	48.6	1.5	0.15
4	1109	10	52.5	3.9	0.39
5	1111	2	54.8	2.3	1.15
6	1113	2	57.5	2.7	1.35
7	1115	2	59.8	2.3	1.15
8	1117	2	62.0	2.2	1.10
9	1119	2	64.3	2.3	1.15
10	1121	2	66.6	2.3	1.15
11	1123	2	68.9	2.3	1.15
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_{1i} (cm/min)
0	1439	---	11.2	---	---
1	1441	2	13.5	2.3	1.15
2	1443	2	15.7	2.2	1.10
3	1445	2	17.6	1.9	0.95
4	1447	2	20.1	2.5	1.25
5	1449	2	22.4	2.3	1.15
6	1451	5	24.8	2.4	0.48
7	1453	2	27.2	2.4	1.20
8	1455	5	29.7	2.5	0.50
9	1457	2	32.2	2.5	1.25
10	1459	2	34.7	2.5	1.25
11	1501	2	37.3	2.6	1.30
12	1503	2	39.8	2.5	1.25
13	1505	2	42.3	2.5	1.25
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = 1.9E-02 cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = 2.1E-02 cm/sec

Single-Head Calculation (5cm)

$$K_{fs} = \frac{CAR}{2(Pi)\,H^2 + (Pi)\,a^2C + 2(Pi)\,(H/\alpha^*)}$$

K_{fs} = 1.08E-05 *cm/sec*

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,
K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = -3.9E-05 *cm/sec*

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBC Date 5-12-08

Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2341PL	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 65.5 ft (NAVD88)	NORTHING 13,401,618 US ft (NAD83)	EASTING 2,610,954 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: D. Atkinson	HAMMER (ID) NA
DATE STARTED 1/19/08	COMPLETED 1/19/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
65.5					Ground Surface				65.5	0.0
									64.0 Clayey SAND (SC), very dark brown (7.5YR2.5/2), moist, fine grained sand, little fines	1.5
									FAT CLAY with sand (CH), pale brown (10YR6/3), moist, little sand, ferrous staining	
									4.0ft: pale brown (10YR6/3), carbonate nodules 4.5ft: some sand	
									57.5 7.0ft: light yellowish brown (10YR6/4)	8.0
									56.5 Clayey SAND (SC), very pale brown (10YR7/4), moist, little fines, fine grained sand, carbonate nodules	9.0
									56.0	9.5
									55.5	10.0
									Sandy FAT CLAY (CH), pale brown (10YR6/3), moist, some sand	
									Clayey SAND (SC), light yellowish brown (10YR6/4), fine grained sand, some fines, ferrous staining, carbonate nodules	
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2341PU Boring Terminated at Elevation 55.5 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2342P-U
Date: 01/20/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBd Date 5-12-08

Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777		GROUND WATER (ft)
BORING NO. B-2342PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 67.6 ft (NAVD88)	NORTHING 13,402,789 US ft (NAD83)	EASTING 2,612,523 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: D. Atkinson	HAMMER (ID) NA
DATE STARTED 1/19/08	COMPLETED 1/19/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
67.6					Ground Surface				67.6 — 0.0
									FAT CLAY (CH), very dark gray (2.5Y3/1), moist, few sand
									62.6 — 5.0
									4.0ft: little sand, carbonate nodules 4.5ft: light brownish gray (10YR6/2)
									See B-2342PL for strata 5.0ft to 10.0ft Boring Terminated at Elevation 62.6 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2342P-L
Date: 01/19/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBC Date 5-12-08

Checked By KAW Date 5-13-08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST C. Gandy
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2342PL	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 67.3 ft (NAVD88)	NORTHING 13,402,761 US ft (NAD83)	EASTING 2,612,526 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: D. Atkinson	HAMMER (ID) NA
DATE STARTED 1/19/08	COMPLETED 1/19/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
67.3					Ground Surface				67.3	0.0
									66.1 Clayey SAND (SC), very dark brown (7.5YR2.5/2), moist, fine grained sand, little fines	1.2
									FAT CLAY (CH), light brownish gray (10YR6/3), moist, few to little sand, carbonate nodules	
									4.5ft: light brownish gray (10YR6/2)	
									6.0ft: very pale brown (10YR8/2), little sand	
									8.0ft: pale brown (10YR6/3)	
									9.5ft: very pale brown (10YR8/2), ferrous staining	
									57.3 9.8ft: pale brown (10YR6/3), few sand, organics	10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered	
									Strata information for 0.0ft to 5.0ft adapted from B-2342PU	
									Boring Terminated at Elevation 57.3 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2343P-U
Date: 01/20/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** C. Gandy/ D. Atkinson
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**
BORING NO. B-2343PU / **DRILL METHOD:** Auger	**SAMPLE METHODS:** Hand	**0 HR.** ND
GROUND SURFACE ELEV. 64.6 ft (NAVD88) / **NORTHING** 13,404,159 US ft (NAD83)	**EASTING** 2,614,387 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 5.0 ft / **DRILL MACHINE** Bobcat	**DRILLER:** C. Gandy	**HAMMER (ID)** NA
DATE STARTED 1/20/08 / **COMPLETED** 1/20/08	**CASING DEPTH:** N/A	**BITS USED:** Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
64.6					Ground Surface				64.6	0.0
									FAT CLAY (CH), very dark gray (7.5YR3/1), moist, trace sand 2.5ft: dark gray (7.5YR4/1) 4.0ft: dark gray (10YR4/1), few sand	
									59.6	5.0
									See B-2343PL for strata 5.0ft to 10.0ft Boring Terminated at Elevation 59.6 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2343P-L
Date: 01/20/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2
Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** G. Gandy/D. Atkinson
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**
BORING NO. B-2343PL / **DRILL METHOD:** Auger	**SAMPLE METHODS:** Hand	**0 HR.** ND
GROUND SURFACE ELEV. 65.0 ft (NAVD88) / **NORTHING** 13,404,159 US ft (NAD83)	**EASTING** 2,614,396 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 10.0 ft / **DRILL MACHINE** Bobcat	**DRILLER:** G. Gandy	**HAMMER (ID)** NA
DATE STARTED 1/20/08 / **COMPLETED** 1/20/08	**CASING DEPTH:** N/A	**BITS USED:** Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
65.0					Ground Surface				65.0 / 0.0
									FAT CLAY (CH), very dark gray (7.5YR3/1), moist, trace sand 2.5ft: dark gray (7.5YR4/1) 4.0ft: dark gray (10YR4/1), few sand 5.0ft: light gray (10YR7/2), organics, carbonate nodules 6.0ft: very pale brown (10YR7/3), few sand 7.0ft: light gray (10YR7/2), ferrous staining 9.0ft: mottled brownish yellow (10YR6/6), trace sand
									55.0 / 10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2343PU Boring Terminated at Elevation 55.0 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2345P-U
Date: 02/01/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 60
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = N/A *cm/sec*

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST C. Gandy
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2345PU	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 67.9 ft (NAVD88)	NORTHING 13,405,835 US ft (NAD83)	EASTING 2,616,663 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 5.0 ft	DRILL MACHINE Bobcat	DRILLER: D.Atkinson	HAMMER (ID) NA
DATE STARTED 2/1/08	COMPLETED 2/1/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
67.9					Ground Surface				67.9	0.0
									FAT CLAY with sand (CH), very dark gray (10YR3/1), moist, little sand, organics 0.5ft: dark gray (10YR4/1), trace carbonate nodules 1.5ft: gray (10YR6/1) 2.5ft: pinkish gray (7.5YR6/2), few sand, organics 4.0ft: light gray (10YR7/2)	
									62.9	5.0
									See B-2345PL for strata 5.0ft to 10.0ft Boring Terminated at Elevation 62.9 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08

Guelph Permeameter Field Data Sheet

Standard Procedure for Permeameter Readings and Calculations

Job Name: Exelon COL-Victoria
Job Number: 6468-07-1777
Location ID: B-2345P-L
Date: 02/01/08
Field Personnel: D. Atkinson, C. Gandy
Well Hole Depth, (inches): 120
Field Notes:
Combined Reservoirs X, (cm^2) 35.22
Inner Reservoir Y, (cm^2): 2.15
Reservoir Constant: 2.15 cm^2

Note: In standardized procedure the radius of the well hole is always 3.0 cm.

1st set of readings with height of water in well (H_1) set at 5 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

2nd set of readings with height of water in well (H_2) set at 10 cm.

Reading Number	Time	Time Interval, (min)	Water Level in Reservoir, (cm)	Water Level Change, (cm)	Rate of Water Level Change, R_1, (cm/min)
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

For the first set of readings $R_{1\text{-bar}}$ = $R_{1\text{-bar}}$ / 60 = N/A cm/sec
For the second set of readings $R_{2\text{-bar}}$ = $R_{2\text{-bar}}$ / 60 = N/A cm/sec

K_{fs} = [(0.0041)*(Res. Const)*($R_{2\text{-bar}}$)] - [(0.0054)*(Res. Const)*($R_{1\text{-bar}}$)] *cm/sec*

where,

K_{fs} = field sat'd hydraulic conductivity

Calculated K_{fs}:
K_{fs} = **N/A** ***cm/sec***

No Infiltration

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBO Date 5-12-08

Checked By KAW Date 5.13.08

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2345PL	DRILL METHOD: Auger	SAMPLE METHODS: Hand	0 HR. ND
GROUND SURFACE ELEV. 67.8 ft (NAVD88)	NORTHING 13,405,831 US ft (NAD83)	EASTING 2,616,657 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 10.0 ft	DRILL MACHINE Bobcat	DRILLER: D. Atkinson	HAMMER (ID) NA
DATE STARTED 1/21/08	COMPLETED 2/1/08	CASING DEPTH: N/A	BITS USED: Auger Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
67.8					Ground Surface				67.8 0.0
									FAT CLAY with sand (CH), very dark gray (10YR3/1), moist, little sand, organics 0.5ft: dark gray (10YR4/1), trace carbonate nodules 1.5ft: gray (10YR6/1) 2.5ft: pinkish gray (7.5YR6/2), few sand, organics 4.0ft: light gray (10YR7/2) 5.0ft: pale yellow (2.5Y7/4), little sand
									57.8 10.0
									Upper 9.5ft machine augered by Bobcat, lower 0.5ft hand augered Strata information for 0.0ft to 5.0ft adapted from B-2345PU Boring Terminated at Elevation 57.8 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 5/12/08