APPENDIX A

SITE PHOTOGRAPHS

Looking West across landfill area from atop the landfill plateau seen in the foreground and on the right. Former large debris pile is visible at center. (Photo from DEC Site visit circa 2000).

Looking southwest. Part of the former, large debris pile (foreground), part of the former pallet pile (left) and part of the former creosote tie pile (right). (Photo from DEC Site visit, circa 2000).

Dumpster Staging Area (Photo from DEC Site visit, circa 2000).

Tire pile located southwest of the Chapin property. (Photo from TtEC circa 2002).

Battery Wall behind Chapin property prior to cleanup. (Photo from DEC Site visit, circa 2000).

View looking southeast of former structures on site. (Photo from DEC Site visit circa 2000).

Looking east on top of the plateau at landfill material and ponded water. Cape Avenue is to the upper left. (Photo from DEC Site visit circa 2000)

Looking southeast at debris piles. From right to left: (near) creosote tie pile, (far center) piles of wooden pallets, (far left) large debris pile with brush pile behind it. (Photo from DEC Site visit, circa 2000).

Landfill embankment looking northeast, access road to right (Photo from TtEC, circa 2002)

Upper plateau of the Site, post removal (Photo from TtEC files, October 2005)

Compactor Excavation (Photo from TtEC files, October 2005)

Lower portion of site, looking north at access road post removal (Photo from TtEC files, October 2005).

Background Soil Sample BG-08, sampled on December 6, 2007 (Photo from TtEC files, October 2007).

Background Soil Sample BG-06, sampled on December 6, 2007, lead concentration exceeded Residential SCO (Photo from TtEC files, October 2007)

Residential Soil Sample RSS-01 Location, sampled on December 12, 2007, Lead concentration exceeds Residential SCO (Photo from TtEC files, October 2007)

Residential Soil Sample RSS-02 Location, sampled on December 5, 2007, Lead and PCB concentrations exceed Residential SCOs) (Photo from TtEC files, October 2007)

Residential Soil Sample – RSS-18, sample collected on April 18, 2008, lead is an order of magnitude above the Residential SCO (Photo from TtEC files 2008).

Soil Gas Sampling points near MW-02, soil gas sampled in October-November 2007 (photo from TtEC files 2007)

Video logging pre-existing wells, November 2007 (Photo from TtEC files, 2007)

Test Pit TP-02, excavated November 5, 2007, black staining, sulfide odor noted (Photo from TtEC files, 2007)

Test Pit TP-03, excavated November 5, 2007, black staining noted (Photo from TtEC files, 2007)

Test Pit TP-04, excavated November 6, 2007, (Photo from TtEC files, 2007)

Test Pit TP-05, excavated November 6, 2007, staining noted (Photo from TtEC files, 2007)

Test Pit TP-06, excavated November 6, 2007, (Photo from TtEC files, 2007)

Leachate Pond, February 2008 (Photo from TtEC files, 2008)

Leachate, February 2008 (Photo from TtEC files, 2008)

Site Drainage from Leachate Pond, February 2008 (Photo from TtEC files, 2008)

Soil core from Direct Push boring DP-24, boring advanced December 12, 2007 (Photo from TtEC files, 2007)

Looking south toward the Beer Kill from the upland plateau post cleanup, HDR Site visit, February, 2010

Battery Wall behind Chapin property as of February 2010, HDR Site visit, February 2010

Frozen surface water at the former compactor area as observed during HDR site visit in February, 2009.

Remaining debris on the lower plateau as observed during HDR site visit in December, 2009.

APPENDIX B

TEST PIT LOGS

FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG

Page 1 of 1

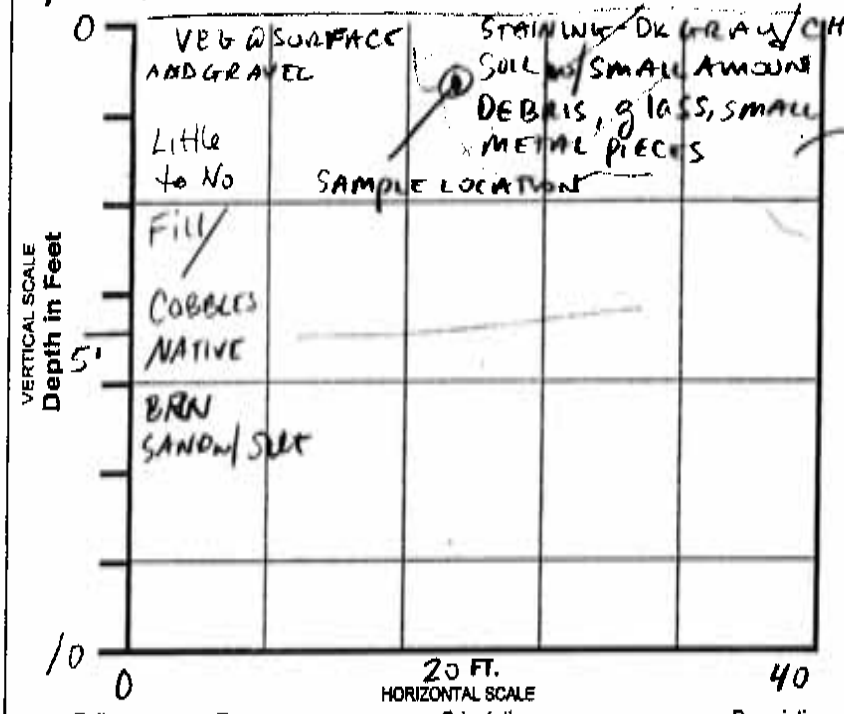
Project: ELLENVILLE RIFS
Test Pit No.: 01
Date: 11-05-07
Geologist: CJDBLON
Pit Orientation: E to W

Start Time: 1030
Final Length: 40'
Final Depth: 10'
Final Width: 5'

End Time: 1200

Weather: SUN, 40°
Surface Conditions: VEG

E SG-01 SG-03 W



Description of Material	H_2S/LEL	PID/FID ppm	Sample Taken
			—
	0/0	6.5	ESI-TS01-0204-01 @ 1110
	0/0	0	—
	0/0	0	—
	0/0	0	—
	0/0	0	—
	0/0	0	—
	0/0	0	—

Roll	Exposure	Orientation	Description

Water Influx:
Seepage at: NO Ft.

Static at: _____ Ft.

NOTES:
PULLED SAMPLE FROM EASTERN END OF TEST PIT, BUT NO STAINING OF HEADSPACE READING ON PID- DISCARD HEADSPACE ESI-TS01-0204-01 @ 0 ppm, SOME STAINING/ODOR FULL TCL/TAL

FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG

Page 1 of 1

Project: ELLENVILLE NY
Test Pit No.: TP-02
Date: 11-05-07
Geologist: CJDBLON
Pit Orientation:

Start Time: 1245
Final Length: 20'
Final Depth: 10'
Final Width: 5'

End Time: 1345

Weather: SUN, 40°
Surface Conditions: VEG, LITTLE SURFACE DEBRIS

S SG,08 — N

Depth in Feet (Vertical Scale)	Description of Material	H_2S/LEL	PID/~~FID~~	Sample Taken
0'	SMALL DEBRIS AND VEG @ SURFACE	0/0	0	
	CHUNKS/UNCONTIUOUS LAYERS w/ SOIL (SAMPLE) BLACK STAINED, GROUND-UP COMPOSTED TRASH (WOOD, METAL, GLASS)	4/0	0	ESI-TS02-0204-01 @1300
	IN SOIL MATRIX PETROLEUM ODOR - NOT ALL STAINED	1.2/0	0	
5'		0/0	0	
	NATIVE BRN SAND AND SILT SOME COBBLES	0/0	0	
		0/0	0	
10'		0/0	0	

Horizontal Scale: 0' — 10 FT. — 20'

Roll	Exposure	Orientation	Description

Water Influx:
Seepage at: No Ft.
Static at: ______ Ft.

NOTES:
H_2S ODOR FAIRLY STRONG - TRANSIENT READING - EXCAVATED MINIMUM SIZE - THEN BACKFILLED B/C OF H_2S CONCERNS
HEADSPACE ESI-TS02-0204-01 @ 1.9 ppm (PID), NO H_2S
FULL TCL/TAL DK GRAY STAINING

FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG

Page 1 of 1

Project: ELLENVILLE NY
Test Pit No.: TP-03
Date: 11-05-07
Geologist: CJOBLON
Pit Orientation: S TO N

Start Time: 1345
Final Length: 20'
Final Depth: 12'
Final Width: 5'

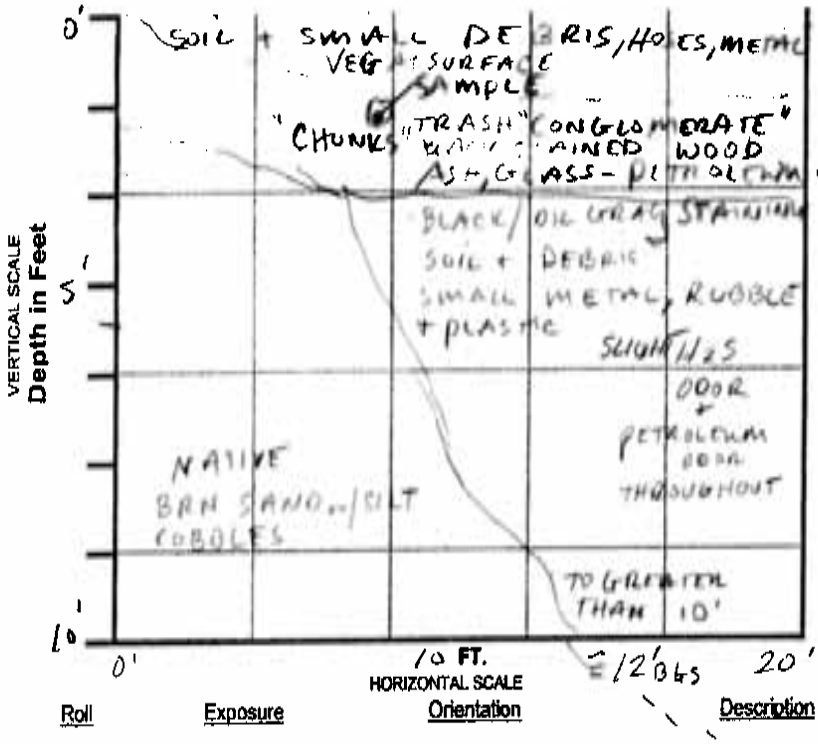
End Time: 1500

Weather: SUN, 40°
Surface Conditions: VEG + SMALL DEBRIS

N

S to S

S



Description of Material	H_2S/LEL	PID/FID	Sample Taken
	0/0	0	
	0/0	0	ESI-TS03-0204-01 @ 140
	0/0	0	
	0/0	0	
	0/0	0	
	0/0	0	
	0/0	0	

Roll | Exposure | Orientation | Description

Water Influx:
Seepage at: No Ft.

Static at: _____ Ft.

NOTES:

HEADSPACE ESI-TS03-0204-01 0.6 ppm, BLACK COMPOSTED TRASH STAINING/ODOR
FULL TOTAL

FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG

Page 1 of 1

Project: Ellenville
Test Pit No.: 04
Date: 11/14/07
Geologist: C. Jordan
Pit Orientation: NORTH TO SOUTH

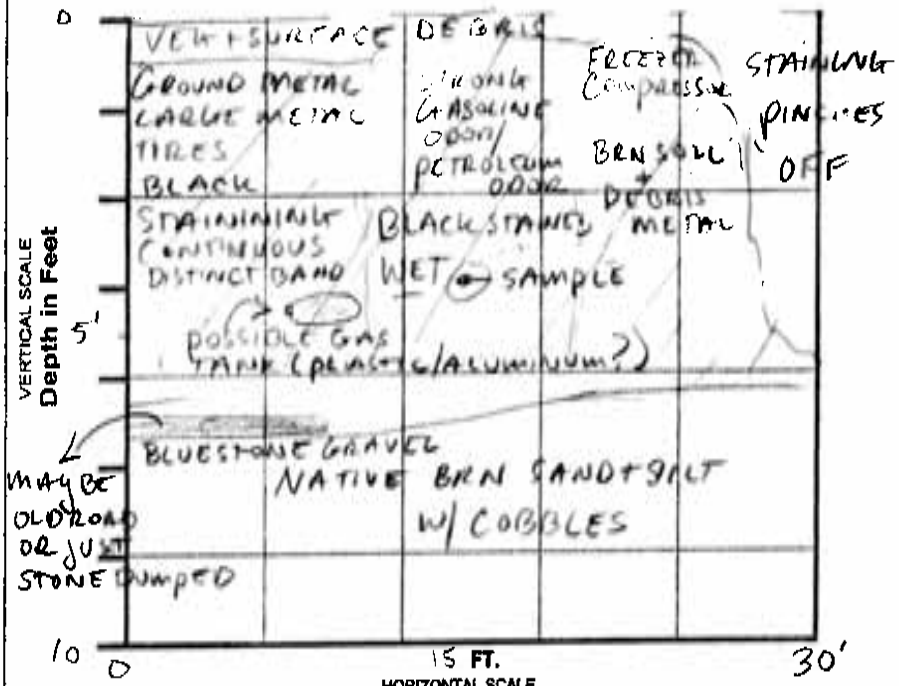
Start Time: 0850
Final Length: 30
Final Depth: 10'
Final Width: 5'

End Time: 1000

Weather: SUN, 40°
Surface Conditions: VEG AND LARGE DEBRIS

N — S

S6-13



Description of Material	H_2S/LEL	PID/FID	Sample Taken
		0	
		0.7	
		9	
		1.7	ESI-TS04-0406-01 @ 930
		0.7	
		0	
		0	

Roll | Exposure | Orientation | Description

Water Influx:
Seepage at: 6.7' Ft. BLS CENTER EXCAVATION
Static at: _____ Ft.

NOTES:
WATER INFILTRATION JUST BELOW CONTINUOUS STAINED LAYER

HEADSPACE ESI-TS04-0406-01 46.0 ppm (PID) STAINED, WET GASOLINE PETROLEUM ODOR
FULL TCL/TAL

FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG

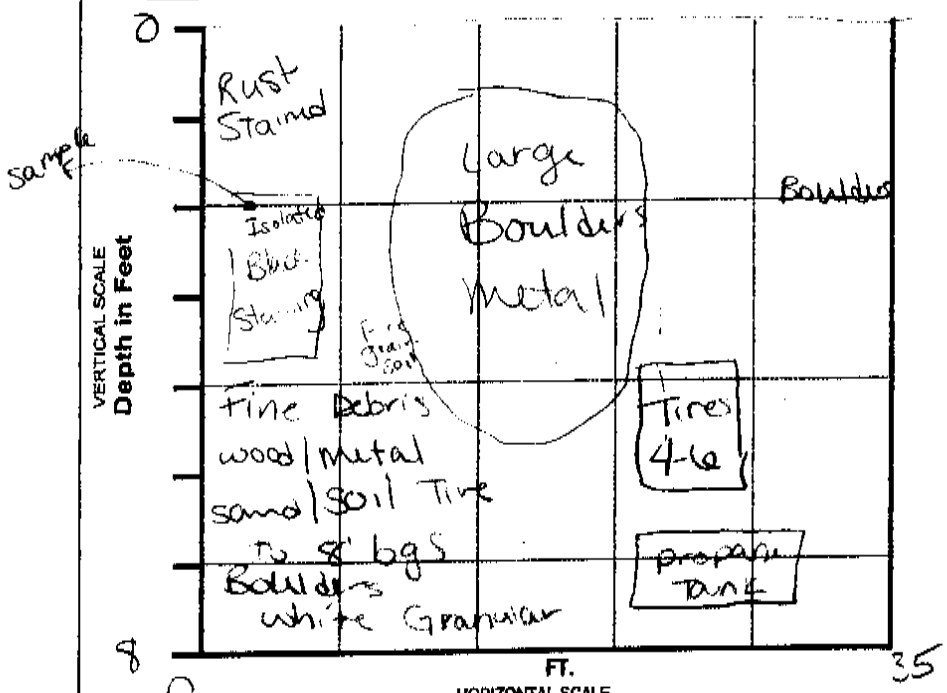
Page 1 of 1

Project: Ellenville
Test Pit No.: TP05
Date 11/7/07
Geologist: C. Jobson
Pit Orientation:

Start Time: 1100
Final Length:
Final Depth:
Final Width:

End Time: 1150

Weather:
Surface Conditions:



Description of Material	PID/FID	Sample Taken
• Sand	0	
	0	
	0	1150: ESI-TP05-0204-01
	0	
	0	
	0	
	0	

Roll	Exposure	Orientation	Description

Water Influx:
Seepage at: ND Ft.

Static at: _____ Ft.

NOTES:
No water infiltration and No Staining

FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG

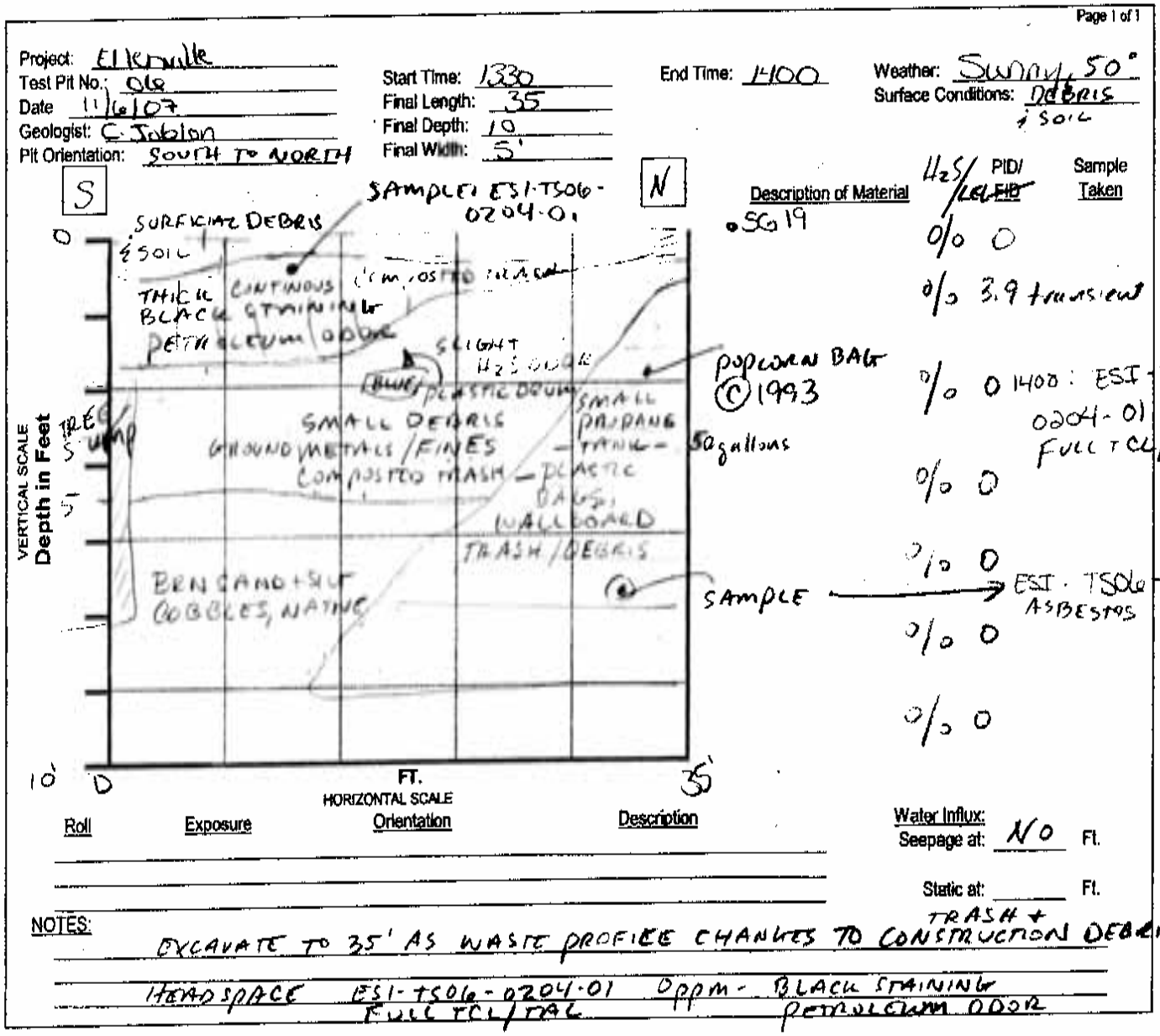


FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG

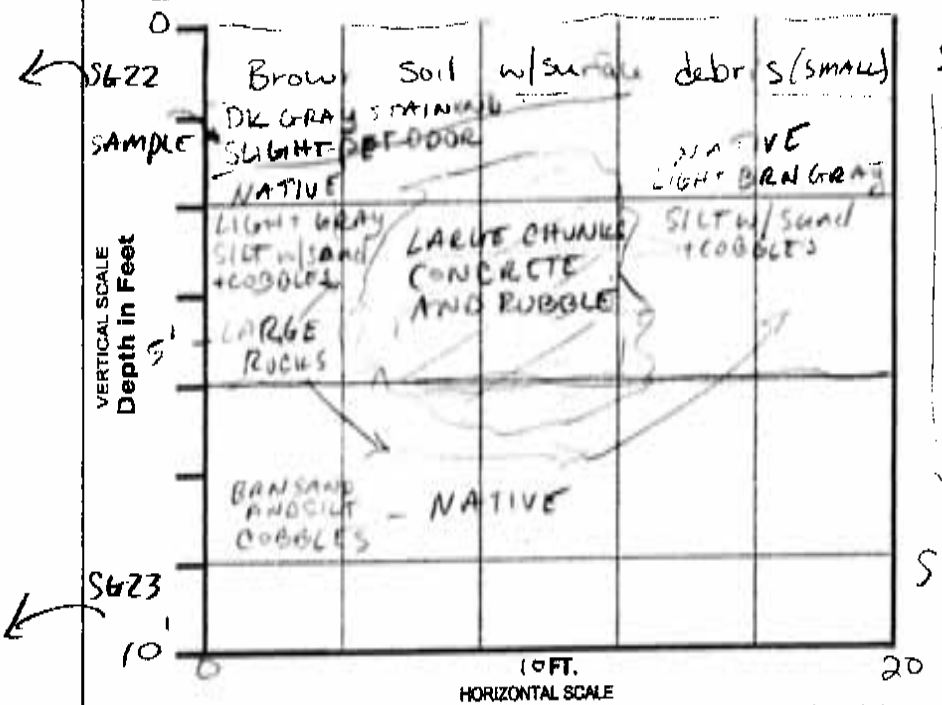
Page 1 of 1

Project: Ellenville
Test Pit No.: TP03
Date 11/3/07
Geologist: C. Jablon
Pit Orientation: EAST TO WEST

Start Time: 0730
Final Length: 20'
Final Depth: 10'
Final Width: 5'

End Time: 0800

Weather: Overcast
Surface Conditions:



Description of Material	H_2S/LEL	PID/FID	Sample Taken
	%	0	
	%	0	0800: ESI-TS07-0102-01
	%	0	
	%	0	
	%	0	
	%	0	
	%	0	

Roll	Exposure	Orientation	Description

EXCAVATED TO 5' @ E END / 10' BGS @ W END

Water Influx:
Seepage at: No Ft.
Static at: ____ Ft.

NOTES:

HEADSPACE ESI-TS07-0102-01 : 0 PPM, SLIGHT STAINING & PETROLEUM ODOR.
FULL TCL/TAL

FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG

Page 1 of 1

Project: Ellenville
Test Pit No.: TP01
Date: 4/7/05
Geologist: S. HILL
Pit Orientation: NORTH TO SOUTH

Start Time: 0840
Final Length: 25'
Final Depth: 10' [illegible]
Final Width: 5'

End Time: 0910

Weather: Overcast
Surface Conditions: Veg / Mulch Road

N — MULCH ROAD — S

SOIL + vegetation on surface

SG 09

Vertical scale: Depth in Feet (0, 5', 10)

- SOIL, VEG | SURFACE — BRN SOIL, LITTLE FINE DEBRIS / SOME LARGE
- RED BRICK
- [illegible] PETROLEUM [illegible] DEBRIS LARGE TRUCK PARTS
- DARK GRAY SILT/SAND
- SAMPLE
- NATIVE GRAY BRN SAND/SILT
- NATIVE BRN ORANGE SAND/SILT [illegible]

Horizontal scale: 0 — FT. — 25'

Depth	Description of Material	H₂S/CO (%/ppm)	PID/FID	Sample Taken
0		0/0	1.5	
		0/0	0	
		0/0	0	
		0/0	0	
		0/0	0	0915 ESI-TS08-04
5'		0/0	0	
		0/0	0	
		0/0	0	
		0/0	0	
10		0/0	0	

Roll	Exposure	Orientation	Description

Water Influx:
Seepage at: 5' Ft.
Static at: NA Ft.

NOTES:
Water infiltration @ ~5' horizontal and 4' bgs/@ MULCH ROAD
minor PID readings [illegible] but not sustained
Sample Pulled from west wall Headspace of ESI-TS08-0406-01 = 0 ppm
ESI-TS08-0406-01 analysis - TCL + TAL STAINED, ODOR
+ DUPLICATE ESI-TR08-0406-01

- NOTE STAINING TO DEPTH OF APPROX 5' @ SOUTH END
- LENGTH OF 25' TO EXCAVATE FROM SG-09 TO START OF MOUND/DEBRIS TO SOUTH

FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG

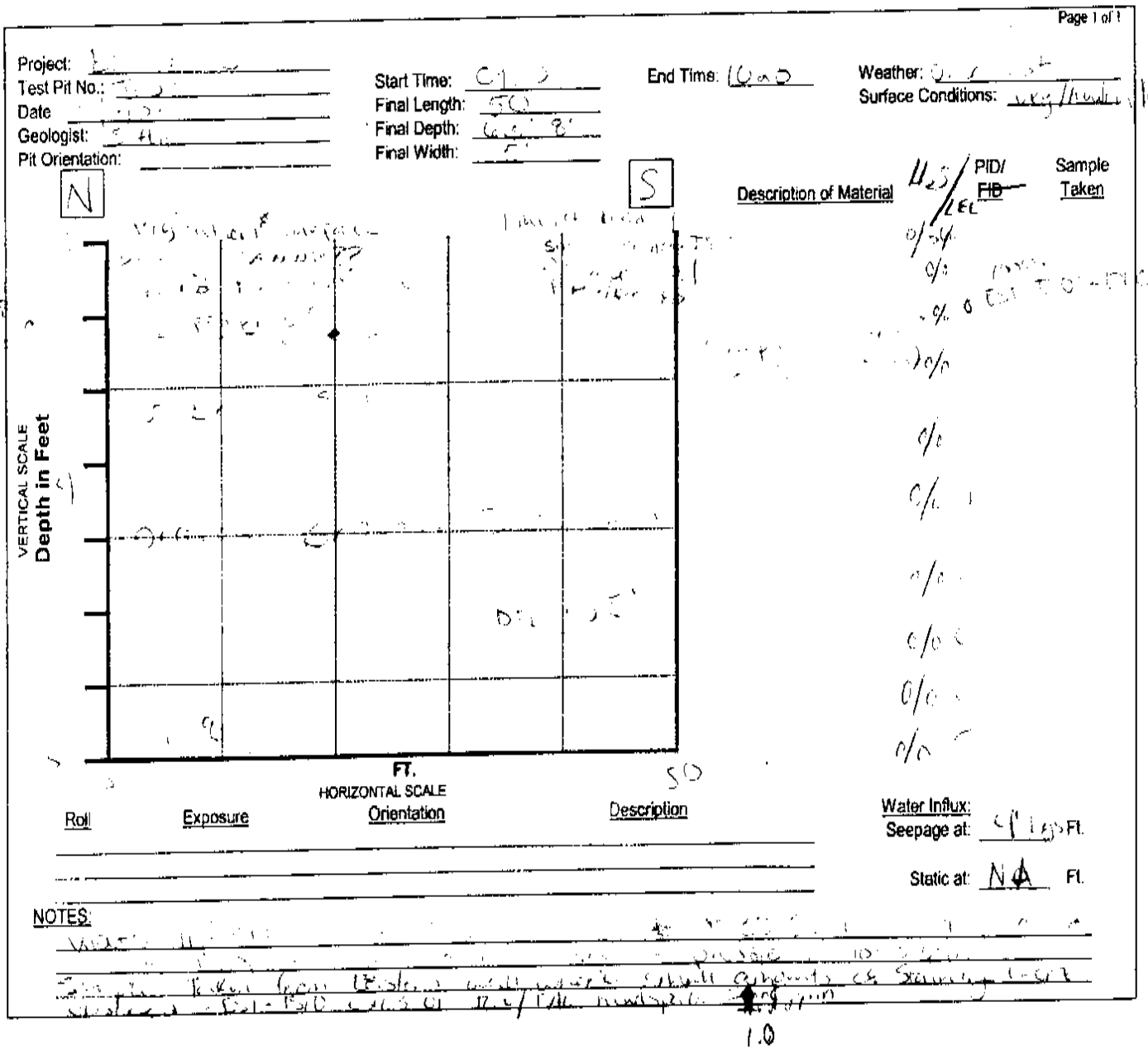
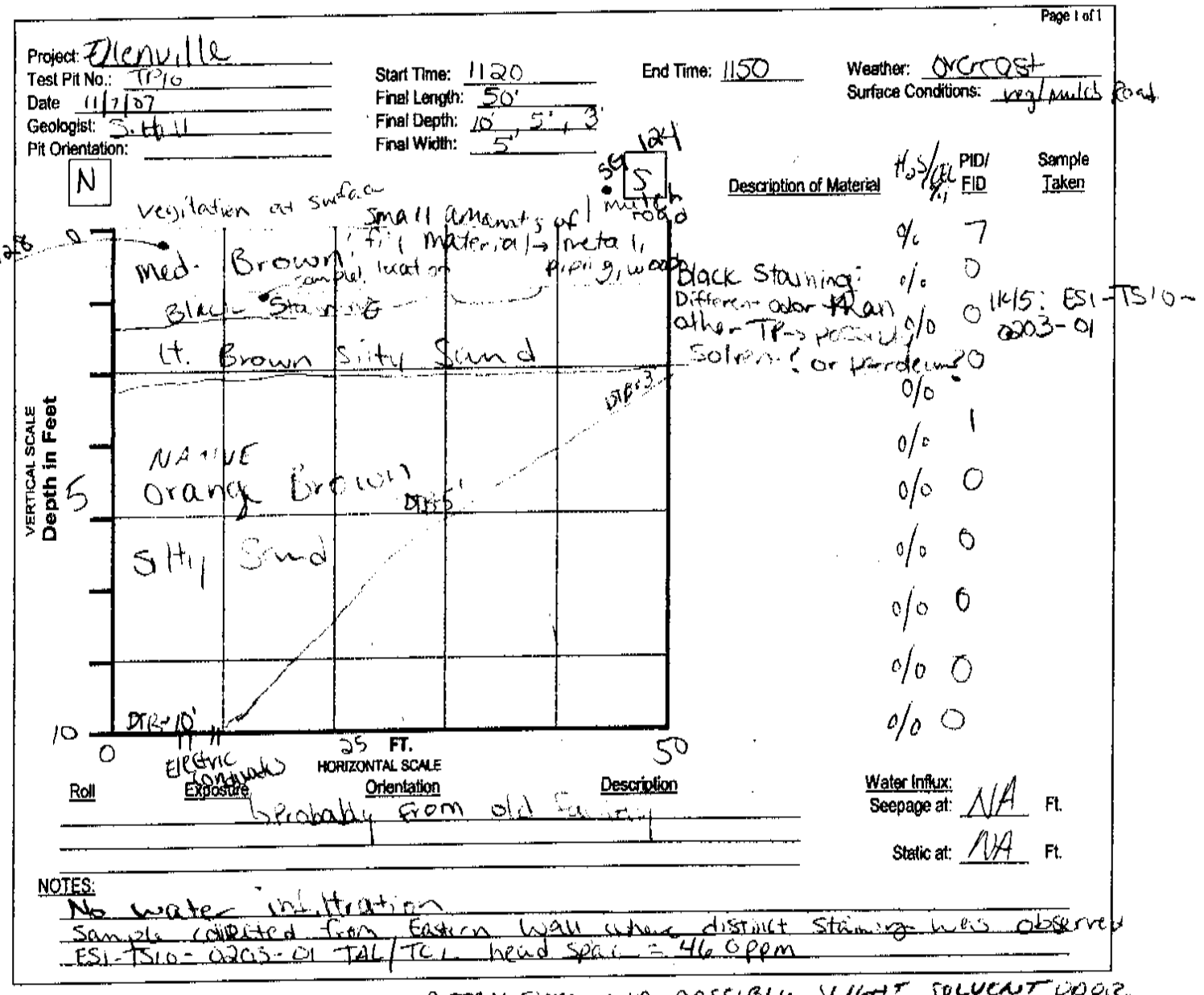


FIGURE 5-4
TEST PIT/TRENCH LOG (TYPICAL)
ELLENVILLE SCRAP IRON AND METAL SITE

TETRA TECH EC, INC.
TEST PIT/TRENCH LOG



APPENDIX C

DIRECT PUSH BORING LOGS

Project Name: Ellenville Scrap Iron		Site Id: DP-001
Township/Range:		Coordinate X: 518177.96
Logged By: S. Hill		Coordinate Y: 1052804.65
Drilling Method: Geoprobe		Total Depth: 10.00'
		Date Started: 11/12/07
Remarks: Soil sample was taken from 2-4' because of rock in the soil core. Driller advanced to 15' bgs to collect groundwater sample. 1500 (11/12/07) and 0730 (11/13/07) collect water sample ESI-HW01-006-01. Soil Sample Headspace = 0.0 ppm.		Date Completed: 11/12/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	70	OL		0-0.5': Dark brown Organic soil, dry.	11/12/2007	0 ppm		
1		SM		0.5-1': Medium brown Silty SAND, organics, moist.		0 ppm		
2				1-2': Dark brown Silty SAND with cobbles, dry.		0 ppm		2-4.5': 14:15 collect soil sample ESI-DP01-02-04-01 (MS/MSD).
3		SP		2-4.5': Dark brown poorly graded SAND, dry.		0 ppm		
4				4.5-5': Gray GRAVEL, dry.				
5	60	GW		5-6.5': Gray GRAVEL, dry.		0 ppm		
6						0 ppm		
7		SP		6.5-8': Brown poorly graded SAND with gravel, wet.		0 ppm		Approximate groundwater level @ 6.5' bgs.
8				8-10': Brown Silty SAND.				
9		SM						
10				End of Boring				
11								
12								
13								
14								

	Project Name: Eilenville Scrap Iron	Site Id: DP-002
	Township/Range:	Coordinate X: 518268.28
	Logged By: S. Hill	Coordinate Y: 1052732.17
	Drilling Method: Geoprobe	Total Depth: 10.00'
		Date Started: 11/13/07
Remarks: Advanced 5' to place temporary well point. 10:00 collect water sample ESI-HW02-0010-01. Soil Sample Headspace = 0.0 ppm.		Date Completed: 11/13/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	40	SM		0-1': Dark brown Organic Silty SAND, some root material, glass pieces, moist.	11/13/2007	0 ppm 0 ppm 0 ppm 0 ppm 0 ppm		1-5': 09:30 collect sample ESI-DP02-0305-01.
2				1-5': Light brown SAND with gravel, dry.				
3		SP				0 ppm		
4						0 ppm		
5	70			5-10': Gray brown Silty SAND, saturated.		0 ppm		Approximate groundwater level @ 5' bgs.
6						0 ppm		
7		SM						
8						0 ppm		
9						0 ppm		
10				End of Boring		0 ppm		
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-003
Township/Range:	Coordinate X: 518101.53
Logged By: S. Hill	Coordinate Y: 1052837.78
Drilling Method: Geoprobe	Total Depth: 10.00'
	Date Started: 11/13/07
Remarks: Advanced to 13' bgs and set temporary well point. 14:30 collect aqueous sample ESI-HW03-0013-01. Soil Sample Headspace = 0.0 ppm.	Date Completed: 11/13/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	80	SM		0-1.5': Dark brown Silty SAND with organics, moist.	11/13/2007	0 ppm 0 ppm		
2		GW		1.5-2.2': White / light gray Gravel, dry. 2.2-2.7': Reddish brown SAND with Gravel, dry.		0 ppm 0 ppm		
3				2.7-5: Brown / light brown poorly graded SAND, with gravel, dry.				
4								
5	70			5-7': Brown / light brown well-sorted SAND with gravel, dry.		0 ppm		5-10': 14:00 collect soil sample ESI-DP03-0608-01.
6		SP						
7				7-8: Brown Silty SAND, moist.		0 ppm		
8				8-10: Brown Silty SAND, saturated.		0 ppm		Approximate groundwater level @ 8' bgs.
9								
10				End of Boring		0 ppm		
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-004
	Township/Range:	Coordinate X: 518056.53
	Logged By: S. Hill	Coordinate Y: 1052394.83
	Drilling Method: Geoprobe	Total Depth: 6.00'
		Date Started: 11/14/07
Remarks: No temporary well point installed or aqueous sample collected from this location because refusal was hit before groundwater was encountered. Soil Sample Headspace = 0.0 ppm.		Date Completed: 11/14/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	40	OH		0–1': Dark brown Silty SAND, organics.	11/14/2007	0 ppm 0 ppm		
				1–5': Medium brown Silty SAND with gravel, dry.		0 ppm 0 ppm		1–5': 8:50 collect sample ESI–DP04–0204–01.
3		SM						
5	100			5–6': Medium brown Silty SAND with gravel, dry.		0 ppm 0 ppm		5–6': 6' bgs hit refusal.
6				End of Boring		0 ppm 0 ppm		
7								
8								
9								
10								
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-005
	Township/Range:	Coordinate X: 517283.00
	Logged By: S. Hill	Coordinate Y: 1053249.14
	Drilling Method: Geoprobe	Total Depth: 10.00'
		Date Started: 11/14/07
Remarks: Advanced to 13' bgs and set temporary well point. 15:30 collect aqueous sample ESI-HW05-0012-01 (MS/MSD). Soil Sample Headspace = 0.0 ppm.		Date Completed: 11/14/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	60	OL		0-0.5': Dark brown Organic soil, silty SAND, moist.	11/14/2007	0 ppm		
1		SP		0.5-2': Medium brown poorly graded SAND with gravel, moist.		0 ppm		
2				2-5': Tan GRAVEL with sand, dry.		0 ppm		
3						0 ppm		
4		GP						
5	60			5-6': Tan GRAVEL with sand, dry.		0 ppm		5-6': 10:50 collect soil sample ESI-DP05-0507-01.
6				6-8': Medium brown poorly graded SAND, with gravel, moist to wet.		0 ppm		
7		SP						Approximate groundwater level @ 7' bgs.
8				8-10': Brown Silty SAND, with gravel, saturated.				
9		SM						
10				End of Boring				
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-006
Township/Range:	Coordinate X: 517317.02
Logged By: S. Hill	Coordinate Y: 1053157.81
Drilling Method: Geoprobe	Total Depth: 7.00'
	Date Started: 11/14/07
Remarks: No temporary well point installed or aqueous sample collected from this location because refusal was hit before groundwater was encountered. Soil Sample Headspace = 0.0 ppm	Date Completed: 11/14/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	60	SM		0-0.5': Dark brown Silty SAND, some organics.	11/14/2007	0 ppm		
1				0.5-3.5': Medium brown (some reds) poorly graded SAND with Gravel.		0 ppm		
2		SP				0 ppm		
3						0 ppm		
4		GP		3.5-4': Tan GRAVEL with some Sand.				
		SP		4-5': Medium brown (some reds) poorly graded SAND with Gravel.				
5	100			5-5.5': Medium brown (some reds) poorly graded SAND with Gravel.		0 ppm		
6		GP		5.5-6': Tan GRAVEL with some Sand.		0 ppm		5.5-6': 12:05 collect soil sample ESI-DP06-0507-01.
7		SP		6-7': Medium brown (some reds) poorly graded SAND with Gravel.		0 ppm		6-7': 2 attempts hit refusal at 7' bgs.
8				End of Boring				
9								
10								
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-007
	Township/Range:	Coordinate X: 517238.21
	Logged By: S. Hill	Coordinate Y: 1053169.92
	Drilling Method: Geoprobe	Total Depth: 7.00'
		Date Started: 11/14/07
Remarks: No temporary well point installed or aqueous sample collected from this location because refusal was hit before groundwater was encountered. Soil Sample Headspace = 0.0 ppm.		Date Completed: 11/14/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	60	SM		0–1': Dark brown Silty SAND with organics.	11/14/2007	0 ppm 0 ppm 0 ppm 0 ppm		
2		SP		1–2': Medium to dark brown poorly graded SAND with little Gravel, trace silt.				
3		GP		2–3.5': Tan GRAVEL with some Sand.				
4				3.5–5': Yellow brown Silty poorly graded SAND with Gravel.				
5	100	SM		5–7': Medium brown (some reds) Silty poorly graded SAND with Gravel.		0 ppm 0 ppm 0 ppm		5–7': Refusal at 7' bgs; 14:10 collect soil sample ESI-DP07-0507-01.
7				End of Boring		0 ppm		
8								
9								
10								
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-008
	Township/Range:	Coordinate X: 517316.33
	Logged By: S. Hill	Coordinate Y: 1053066.28
	Drilling Method: Geoprobe	Total Depth: 9.50'
		Date Started: 11/14/07
Remarks: No temporary well point installed or aqueous sample collected from this location because refusal was hit before groundwater was encountered. Soil Sample Headspace = 0.0 ppm.		Date Completed: 11/14/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	50	SM		0-1.5': Medium brown Silty SAND with some Organics, little gravel, moist.	11/14/2007	0 ppm 0 ppm		
2				1.5-4': Medium brown poorly graded SAND with little Gravel.		0 ppm 0 ppm		
3		SP						
4				4-5': Poorly graded SAND with gravel.				
5	44			5-5.5': Medium brown poorly graded SAND with Gravel.		0 ppm		5.5-9.5': Refusal at 9.5' bgs; 14:20 collect soil sample ESI-DP08-0709-01.
6				5.5-6': Reddish GRAVEL with some Sand.				
7				6-7': Tan GRAVEL with some Sand.		0 ppm		
8		GP		7-9.5': Medium brown poorly graded SAND with some Gravel.		0 ppm		
9				End of Boring		0 ppm		
10								
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-009
	Township/Range:	Coordinate X: 517462.88
	Logged By: S. Hill	Coordinate Y: 1053094.16
	Drilling Method: Geoprobe	Total Depth: 7.00'
		Date Started: 11/14/07
Remarks: No temporary well point installed or aqueous sample collected from this location because refusal was hit before groundwater was encountered. Soil Sample Headspace = 0.0 ppm.		Date Completed: 11/14/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	50	SM		0-0.5': Dark brown Silty SAND with Organics.	11/14/2007	0 ppm 0 ppm 0 ppm 0 ppm		
2				0.5-5': Well graded SAND with Gravel.				
3		SW						
4								
5	100			5-7': Medium brown poorly graded SAND with little Gravel.		0 ppm		5-7': Refusal at 7' bgs; 15:40 Collect soil sample ESI-DP09-0507-01.
6		SP				0 ppm		
7				End of Boring				
8								
9								
10								
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-010
	Township/Range:	Coordinate X: 517372.24
	Logged By: S. Hill	Coordinate Y: 1052932.18
	Drilling Method: Geoprobe	Total Depth: 7.00'
		Date Started: 11/14/07
Remarks: No temporary well point installed or aqueous sample collected from this location because refusal was hit before groundwater was encountered. Soil Sample Headspace = 0.0 ppm.		Date Completed: 11/14/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	75	SM		0-0.5': Dark brown Silty SAND with Organics. 0.5-5': Medium brown poorly graded SAND with some Gravel.	11/14/2007	0 ppm 0 ppm 0 ppm 0 ppm		
2								
3								
4		SP						
5	100			5-7': Medium brown poorly graded SAND with some Gravel.		0 ppm		5-7': Refusal at 7' bgs; 1720 Collect soil sample ESI-DP10-0507-01.
6						0 ppm		
7				End of Boring				
8								
9								
10								
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-011
	Township/Range:	Coordinate X: 517496.54
	Logged By: S. Hill	Coordinate Y: 1052990.93
	Drilling Method: Geoprobe	Total Depth: 10.00'
		Date Started: 11/14/07
Remarks: Advanced to 15' bgs and set a temporary well point. At 17:40 collected aqueous sample ESI-HW11-07 09-01. Soil Sample Headspace = 0.0 ppm.		Date Completed: 11/14/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	100	SM		0-1': Dark brown Silty SAND, moist.	11/14/2007	0 ppm 0 ppm 0 ppm 0 ppm		
2				0.5-5': Medium brown poorly graded SAND with some Gravel, moist.				
3								
4								
5	40	SP		5-10': Medium brown poorly graded SAND with some Gravel, moist, wet at 9.5' bgs.		0 ppm		5-10': 17:40 Collect soil sample ESI-DP11-0709-01.
6								
7						0 ppm		
8						0 ppm		
9								Approximate groundwater level @ 9.5' bgs.
10				End of Boring		0 ppm		
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-012
	Township/Range:	Coordinate X: 517633.02
	Logged By: S. Hill	Coordinate Y: 1052996.42
	Drilling Method: Geoprobe	Total Depth: 7.00'
		Date Started: 11/15/07
Remarks: No temporary well point set or aqueous sample collected from this location because refusal was hit before groundwater was encountered.		Date Completed: 11/15/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	50	SM		0–0.8': Dark brown Silty SAND with Organics.	11/15/2007	0 ppm 0 ppm 0 ppm 0 ppm		
		GP		0.8–1.2': Ton GRAVEL with some Sand.				
2				1.2–1.4': Reddish GRAVEL with some Sand.				
3				1.4–5': Medium brown poorly graded SAND with some Gravel.				
4		SP						
5	100			5–7': Medium brown poorly graded SAND with some Gravel.		0 ppm		5–7': Refusal at 7' bgs; 11:45 collect soil sample ESI-DP12-0507-01.
6						0 ppm		
7				End of Boring				
8								
9								
10								
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-013
Township/Range:	Coordinate X: 517592.35
Logged By: S. Hill	Coordinate Y: 1052919.16
Drilling Method: Geoprobe	Total Depth: 15.00'
	Date Started: 11/15/07
Remarks: Advanced boring to 19' bgs. 11/19/07 at 12:45 collect aqueous sample ESI-HW13-0019-01.	Date Completed: 11/15/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	50	SM		0-0.5': Dark brown Organic silty SAND, moist.	11/15/2007	0 ppm 0 ppm 0 ppm 0 ppm		
1								
2		GP		0.5-3': Gray brown GRAVEL with some Sand, moist.				
3				3-5': Medium brown poorly graded SAND, with some Gravel, little silt, moist.				
4								
5	90			5-10': Medium brown poorly graded SAND, with some Gravel, little silt, moist.		0 ppm		
6								
7		SP				0 ppm		
8						0 ppm		
9						0 ppm		
10	90			10-11': Medium brown poorly graded SAND, with some Gravel, little silt, moist.		0 ppm 0 ppm 0 ppm 0 ppm		10-11': 12:10 collect soil sample ESI-DP13-0911-01. Approximate groundwater level @ 11' bgs.
11				11-13': Red brown Silty SAND with Gravel, saturated.				
12		SM						
13				13-13.5: Dark brown poorly graded SAND with little Silt, very hard, wet.				
14		SP		13.5-14': Green brown poorly graded SAND,				

Project Name: Ellenville Scrap Iron	Site Id: DP-013
Township/Range:	Coordinate X: 517592.35
Logged By: S. Hill	Coordinate Y: 1052919.16
Drilling Method: Geoprobe	Total Depth: 15.00'
	Date Started: 11/15/07
Remarks: Advanced boring to 19' bgs. 11/19/07 at 12:45 collect aqueous sample ESI-HW13-0019-01.	Date Completed: 11/15/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15		ML		hard, wet. 14-15': Medium brown Sandy SILT, saturated. End of Boring				
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								

Project Name: Ellenville Scrap Iron	Site Id: DP-014
Township/Range:	Coordinate X: 0.00
Logged By: S. Hill	Coordinate Y: 0.00
Drilling Method: Geoprobe	Total Depth: 10.00'
	Date Started: 11/14/07
Remarks: Advanced borehole to 15' bgs and set temporary well point at 15' bgs. On 11/19/07 at 11:55 collected aqueous sample ESI-HW14-0015-01.	Date Completed: 11/14/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	70			0-1': Dark brown Silty SAND with organics, and little Gravel.	11/14/2007	0 ppm		
1				1-5': Medium brown Silty SAND with little Gravel, moist.				
2						0 ppm		
3						0 ppm		
4		SM				0 ppm		
5	60			5-8.5': Medium brown Silty SAND with little Gravel, moist.		0 ppm		5-8.5': 1550 Collect soil sample ESI-DP14-0608-01.
6						0 ppm		
7						0 ppm		
8								Approximate groundwater level @ 8.5' bgs.
9		ML		8.5-10': Light brown Sandy SILT, saturated.		0 ppm		
10				End of Boring				
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-015
Township/Range:	Coordinate X: 517898.43
Logged By: S. Hill	Coordinate Y: 1052700.25
Drilling Method: Geoprobe	Total Depth: 10.00'
	Date Started: 11/16/07
Remarks: Advanced borehole to 15' bgs and set temporary well point at 15' bgs. On 11/19/07 at 13:15 collected aqueous sample ESI-HW15-0015-01.	Date Completed: 11/16/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	60	SP		0-2.5': Medium brown poorly graded SAND with some Gravel, moist.	11/16/2007	0 ppm 0 ppm 0 ppm		
2								
3		GP		2.5-3': Gray GRAVEL, dry. 3-5': Medium brown poorly graded SAND with little Silt and some gravel, moist.		0 ppm		
4		SM/SP						
5	70			5-8.5': Medium brown poorly graded SAND with little Silt and some Gravel, moist.		0 ppm		5-8.5': 0905: Collect soil sample ESI-DP15-0709-01.
6						0 ppm		
7		SP				0 ppm		
8								Approximate groundwater level @ 9' bgs.
9		GP		8.5-9': Gray GRAVEL, dry. 9-10': Gray GRAVEL with some Sand and little Silt, saturated.		0 ppm		
10				End of Boring				
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-016
	Township/Range:	Coordinate X: 517984.64
	Logged By: S. Hill	Coordinate Y: 1052845.90
	Drilling Method: Geoprobe	Total Depth: 10.00'
		Date Started: 11/15/07
Remarks: Advanced borehole to 15' bgs and set temporary well point at 15' bgs. On 11/19/07 at 12:30 collected aqueous sample ESI-HW16-0015-01.		Date Completed: 11/15/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	40	OL		0-1.5': Brown Organic Soil, moist.	11/15/2007	0 ppm 0 ppm 0 ppm		
2		GP		1.5-2': Gray GRAVEL, dry.		0 ppm		
		SP		2-3': Light brown poorly graded SAND with little Gravel.				
3		GP		3-4': Gray GRAVEL with some poorly graded Sand.				
4				4-5': Medium brown poorly graded SAND with little Gravel, dry.				
5	80			5-7': Medium brown poorly graded SAND with little Gravel, dry.		0 ppm		5-7.5': 1615: collect soil sample ESI-DP16-0507-01.
6		SP				0 ppm		
7				7-7.5': Medium brown poorly graded SAND with little Silt.		0 ppm 0 ppm		Approximate groundwater level @ 7.5' bgs.
8				7.5-10': Brown SILT with little Sand, saturated.				
9		ML						
10				End of Boring				
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-017
	Township/Range:	Coordinate X: 0.00
	Logged By: S. Hill	Coordinate Y: 0.00
	Drilling Method: Geoprobe	Total Depth: 15.00'
		Date Started: 11/16/07
Remarks: Advanced borehole to 20' bgs and set temporary well point at 20' bgs. On 11/16/07 at 14:00 collected aqueous sample ESI-HW17-0020-01.		Date Completed: 11/16/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	70	FI		0-0.5': Dark brown Mulch.	11/16/2007	0 ppm		
1		SM/SP		0.5-1': Dark brown Organic SAND with		0 ppm		
				little Silt and Gravel, moist.		0 ppm		
2		GP		1-2.5': Light brown / gray GRAVEL with		0 ppm		
				some Sand, dry.				
3		SM		2.5-3.5': Medium brown Silty poorly graded				
				SAND, moist.				
4				3.5-5': Light brown / gray GRAVEL with some				
				poorly graded Sand, dry.				
5	90			5-10': Light brown / gray GRAVEL with some		0 ppm		5-10': 1350: collect
				poorly graded Sand, dry.				soil sample ESI-DP17-
6								0911-01.
7		GP				0 ppm		
8						0 ppm		
9						0 ppm		
10	90			10-11': Light brown / gray GRAVEL with some		0 ppm		
				poorly graded Sand, dry.		0 ppm		
						0 ppm		
11				11-15': Brown poorly graded SAND with little		0 ppm		Approximate
				Silt and gravel.				groundwater level
12								@ 11' bgs.
13		SP						
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-017
Township/Range:	Coordinate X: 0.00
Logged By: S. Hill	Coordinate Y: 0.00
Drilling Method: Geoprobe	Total Depth: 15.00'
	Date Started: 11/16/07
Remarks: Advanced borehole to 20' bgs and set temporary well point at 20' bgs. On 11/16/07 at 14:00 collected aqueous sample ESI-HW17-0020-01.	Date Completed: 11/16/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15				End of Boring				
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								

	Project Name: Ellenville Scrap Iron	Site Id: DP-018
	Township/Range:	Coordinate X: 517799.84
	Logged By: S. Amrozowicz	Coordinate Y: 1052925.30
	Drilling Method: Geoprobe	Total Depth: 15.00'
		Date Started: 12/03/07
Remarks: Temporary well point set at 15' bgs. On 12/05/07 at 0945 collect aqueous sample ESI-HW18-0015-01.		Date Completed: 12/03/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	68			0-4': Brown to tan brown Silty SAND, no structure, glass, trace cs, moist.	12/3/2007	0 ppm		0-4': No staining, no odor.
1						0 ppm		
2		SM						
3						0 ppm		
4				4-5': Gray brown poorly graded GRAVEL, moist to dry.		0 ppm		4-5': No staining, no odor.
5	68	GP		5-10': Light brown poorly graded SAND with Gravel, max. grain size = 2" angular, moist; gravel lense from 8-9.1' bgs.		0 ppm		
6								
7						0 ppm		
8						0 ppm		
9						0 ppm		
10	78	SP		10-11': Light brown / brown poorly graded SAND with Gravel, max. grain size = 2" angular, moist.		0 ppm 0 ppm 0 ppm 0 ppm		10-11': 13:20 Collect Soil Sample ESI-DP18-1114-01 for VOC, SVOC, metal, pesticide.
11				11-15': Brown fine-medium SAND, homogenous, occasional silt and clay lense, wet.				Approximate groundwater level @ 11.7' bgs.
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-018
Township/Range:	Coordinate X: 517799.84
Logged By: S. Amrozowicz	Coordinate Y: 1052925.30
Drilling Method: Geoprobe	Total Depth: 15.00'
	Date Started: 12/03/07
Remarks: Temporary well point set at 15' bgs. On 12/05/07 at 0945 collect aqueous sample ESI-HW18-0015-01.	Date Completed: 12/03/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15				End of Boring				
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								

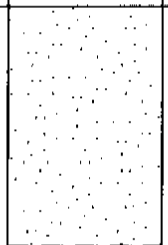
	Project Name: Ellenville Scrap Iron	Site Id: DP-019
	Township/Range:	Coordinate X: 517962.33
	Logged By: S. Hill	Coordinate Y: 1052929.95
	Drilling Method: Geoprobe	Total Depth: 8.00'
		Date Started: 11/16/07
Remarks: No temporary well point set or aqueous sample collected from this location because refusal was hit before groundwater was encountered.		Date Completed: 11/16/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	100			0-2.5': Dark brown Silty SAND, little organics.	11/16/2007	0 ppm		
1						0 ppm		
2		SM				0 ppm		
3				2.5-3.5': Medium brown Silty SAND with some Gravel, moist.		0 ppm		
4		GP		3.5-4.5': Gray GRAVEL, dry.				
5	100			4.5-5': Medium brown Silty SAND with some Gravel, dry.		0 ppm		5-8': 13:15 Collect soil sample ESI-DP19-0608-01; Refusal at 8' bgs. Made 2 attempts.
6		SM		5-7': Medium brown Silty SAND with some Gravel, dry.		0 ppm		
7				7-8': Silty poorly graded SAND, little Gravel.		0 ppm		
8				End of Boring		0 ppm		
9								
10								
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-020
	Township/Range:	Coordinate X: 0.00
	Logged By: S. Amrozowicz	Coordinate Y: 0.00
	Drilling Method: Geoprobe	Total Depth: 10.00'
		Date Started: 12/03/07
Remarks: No temporary well point set or aqueous sample collected from this location because refusal was hit before groundwater was encountered.		Date Completed: 12/03/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	40	ML		0–0.3': Dark Brown organic SILT.	12/3/2007	0 ppm		
				0.3–5': Brown poorly graded (medium–fine)		0 ppm		
1				SAND with coarse Gravel (60% sand, 40% gravel),		0 ppm		
				moist.	12/3/2007	0 ppm		
2								
3								
4								
5	45	SP		5–8': Tan Brown poorly graded (medium–fine)	12/3/2007	0 ppm		5–10': 14:00 Soil
				SAND with some coarse Gravel, moist.				Sample ESI-DP20-0710-01
6								collected. Refusal at
7						0 ppm		10' bgs. 2 attempts.
								No temporary well
8				8–10': Gray poorly graded (medium–fine) SAND		0 ppm		installed.
				with some coarse Gravel, moist.				
9								
10				End of Boring		0 ppm		
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-021
	Township/Range:	Coordinate X: 518332.14
	Logged By: S. Amrozowicz	Coordinate Y: 1052871.98
	Drilling Method: Geoprobe	Total Depth: 3.00'
		Date Started: 12/03/07
Remarks: No temporary well point set or aqueous sample collected from this location because refusal was hit before groundwater was encountered.		Date Completed: 12/03/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	50	SP		0-2.5': Brown Silty SAND with some Gravel, wet at 1.5' bgs.	12/3/2007	0 ppm 0 ppm		0-2.5': 14:45 Soil Sample ESI-DP21-0103-01 collected, MS/MSD.
2						0 ppm		
3		ML		2.5-3': Gray SILT with Gravel, some black organic staining, dry.		0 ppm		2.5-3': Three refusals 3', 3.4', 3.2'.
4				End of Boring				
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-022
Township/Range:	Coordinate X: 518136.29
Logged By: S. Amrozowicz	Coordinate Y: 1053146.79
Drilling Method: Geoprobe	Total Depth: 15.00'
	Date Started: 12/03/07
Remarks: No temporary well point set or aqueous sample collected from this location because refusal was met before groundwater was encountered.	Date Completed: 12/03/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	43	ML		0–5': Dark brown Sandy SILT with some Gravel, moist, increasing gravel at 4.5–5' bgs.	12/3/2007	5.2 ppm		0–5': 15:45 Soil Sample collected ESI–DP22–0204–01. Sweet odor.
2						8.1 ppm		
3						22.3 ppm		
4						12.4 ppm		
5	50			5–10': Brown poorly graded SAND with Gravel, some silt, max. grain size = 2", no structure, moist then moist to dry.		8.3 ppm		
6								
7						2.1 ppm		
8						0.8 ppm		
9						0.7 ppm		
10		SP		10–14.7': Red brown / gray alternating poorly graded SAND with Gravel and Silt; total sleeve moist to dry, gravel at bottom of sleeve.		1.1 ppm		10–14.7': 16:00 Soil Sample ESI–DP22–1315–01 at 1600 and duplicate ESI–DR22–1315–01 collected at 16:05. Refusal at 15'.
11						0.3 ppm		
12						0.2 ppm		
13						0.3 ppm		
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-022
Township/Range:	Coordinate X: 518136.29
Logged By: S. Amrozowicz	Coordinate Y: 1053146.79
Drilling Method: Geoprobe	Total Depth: 15.00'
	Date Started: 12/03/07
Remarks: No temporary well point set or aqueous sample collected from this location because refusal was met before groundwater was encountered.	Date Completed: 12/03/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15		GP		14.7–15': Gray GRAVEL (fractured cobbles). End of Boring		0.1 ppm		
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								

	Project Name: Ellenville Scrap Iron	Site Id: DP-023
	Township/Range:	Coordinate X: 517872.98
	Logged By: S. Amrozowicz	Coordinate Y: 1053206.20
	Drilling Method: Geoprobe	Total Depth: 7.50'
		Date Started: 12/04/07
Remarks: No temporary well point set or aqueous sample collected from this location because refusal was hit before groundwater was encountered.		Date Completed: 12/04/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	56	ML		0–0.9': Dark brown Gravelly SILT, some medium–fine Sand, maximum grain size = 0.5" rounded, wet.	12/4/2007	0 ppm		0–0.9': Sweet odor.
1						0 ppm		
2				0.9–5': Tan brown / dark brown mottled poorly graded SAND (medium–fine), some Silt, gravel (beginning around 4.5' bgs), no structure.		0 ppm		
3						0 ppm		
4		SP						
5	80			5–6: Brown poorly graded SAND (medium–fine), homogenous, wet.		0 ppm		
6				6–7.5': Red– Brown / Brown poorly graded SAND (coarse–fine) with silt and gravel, mps: 2", cobble fragments, moist to dry, trace black ash–like material around 7' bgs.		0 ppm		6–7.5': Sample ESI–DP23–0608–01 collected.
7						8.7 ppm		7–7.5': Slight odor. 7.5': Refusal.
8				End of Boring				
9								
10								
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-024
	Township/Range:	Coordinate X: 517780.81
	Logged By: S. Amrozowicz	Coordinate Y: 1053147.06
	Drilling Method: Geoprobe	Total Depth: 20.00'
		Date Started: 12/04/07
Remarks: Advanced borehole to 22' bgs and set temporary well point. On 12/5/07 at 1030 collect aqueous sample ESI-HW24-0020-01 for VOCs and Metals and Cyanide.		Date Completed: 12/04/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	20	ML		0-5': Dark Brown gravelly SILT with medium-fine Sand, some organics, slag, brick, plastic, no structure, moist.	12/4/2007	0 ppm		
1								
2						0 ppm		
3						0 ppm		
4								
5	0			5-10': No recovery, wood in tip of spoon.	12/4/2007	0 ppm		
6								
7								
8								
9								
10	22			10-15': Tan to Brown gravelly SAND, no structure, moist (40% gravel, 60% sand).	12/4/2007	0 ppm		
11						0 ppm		
12						0 ppm		
13		SP				0 ppm		
14						0 ppm		

Project Name: Ellenville Scrap Iron	Site Id: DP-024
Township/Range:	Coordinate X: 517780.81
Logged By: S. Amrozowicz	Coordinate Y: 1053147.06
Drilling Method: Geoprobe	Total Depth: 20.00'
	Date Started: 12/04/07
	Date Completed: 12/04/07

Remarks:
Advanced borehole to 22' bgs and set temporary well point. On 12/5/07 at 1030 collect aqueous sample ESI-HW24-0020-01 for VOCs and Metals and Cyanide.

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15	83			15-17': Tan to Brown gravelly SAND, no structure, moist.	12/4/2007	0 ppm		15-17': Sample ESI-DP24-1517-01 and duplicate ESI-DR24-1517-01 collected. Approximate groundwater level @ 17' bgs.
16						0 ppm		
17				17-20': Poorly graded SAND, increasing fine gravel from 19-20' bgs, wet.		0 ppm		
18								
19								
20				End of Boring				
21								
22								
23								
24								
25								
26								
27								
28								

Project Name: Ellenville Scrap Iron	Site Id: DP-025
Township/Range:	Coordinate X: 517659.09
Logged By: S. Amrozowicz	Coordinate Y: 1053300.08
Drilling Method: Geoprobe	Total Depth: 6.00'
	Date Started: 12/04/07
	Date Completed: 12/04/07

Remarks:
No temporary well point set or aqueous sample collected from this location because refusal was hit before groundwater was encountered.

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	16	ML		0-5': Black / brown mottled Sandy SILT with Gravel, scrap metal and debris, moist to wet, black ash material.	12/4/2007	0.2 ppm		0-5': Odor.
2						4.7 ppm		
3								
4								4-6': Sample ESI-DP25-0406-01 collected.
5	100			5-6': Sandy SILT, with black ash, some clay, moist.		12.1 ppm		5-6': Odor.
6				End of Boring				
7								
8								
9								
10								
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-026
Township/Range:	Coordinate X: 517621.41
Logged By: S. Amrozowicz	Coordinate Y: 1053322.21
Drilling Method: Geoprobe	Total Depth: 1.50'
	Date Started: 12/04/07
	Date Completed: 12/04/07

Remarks:
No temporary well point set or aqueous sample collected from this location because refusal was hit before groundwater was encountered.

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	67	ML		0–1.5': Black / brown SILT with ash-like material, brick, metal, and other debris, moist to wet.	12/4/2007	0.2 ppm		0–1': Collect sample ESI-DP26-0001-01. 1.5': 3rd attempt refusal.
2				End of Boring				
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: DP-027
Township/Range:	Coordinate X: 517607.54
Logged By: S. Amrozowicz	Coordinate Y: 1053357.81
Drilling Method: Geoprobe	Total Depth: 9.50'
	Date Started: 12/04/07
	Date Completed: 12/04/07

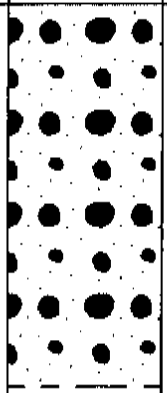
Remarks:
Set temporary well point at 9.5' bgs due to refusal. On 12/5/07 at 1115 aqueous sample ESI-HW-27-0010-01 was collected.

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	55	ML		0-1.2': Brown Gravelly SILT, with some organics, trace clay, little sand.	12/4/2007	0 ppm 0 ppm 0 ppm 0 ppm		
2				1.2-5': Gray to orange brown medium-fine SAND with pockets of gravel at 4-4.5', wet to 1' then moist.				
3		SP						
4								
5	70			5-5.5': Gray to orange brown medium-fine SAND, moist.		0 ppm 0 ppm 0 ppm 0 ppm		
6				5.5-9.5': Gray to brown Sandy GRAVEL, wet at 8' bgs.				
7		GP						7-9': ESI-DP27-0709-01.
8								Approximate groundwater level @ 8' bgs.
9				End of Boring				9.5': Third attempt refusal.
10								
11								
12								
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-028
	Township/Range:	Coordinate X: 517640.25
	Logged By: S. Amrozowicz	Coordinate Y: 1053366.67
	Drilling Method: Geoprobe	Total Depth: 13.00'
		Date Started: 12/04/07
Remarks: Set temporary well point at 13' bgs due to refusal. On 12/5/07 at 1215 aqueous sample ESI-HW28-00 13-01 was collected.		Date Completed: 12/04/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	65	ML		0-0.3': Brown SILT with organics, wet.	12/4/2007	0 ppm		
				0.3-5': Brown / gray / light brown poorly graded fine to medium SAND, Gravel.		0 ppm		
2						0 ppm		
3		SP				0 ppm		
4								
5	80			5-10': Brown poorly graded GRAVEL with Sand, some gray and red gravel, wet at 9.4' bgs.		0 ppm		
6								
7						0 ppm		
8						0 ppm		8-10': Sample ESI-DP28-0810-01 collected.
9		GP						Approximate groundwater level @ 9.4' bgs.
10	72			10-13': Brown poorly graded GRAVEL with Sand, some gray and red gravel.		0 ppm		
11						0 ppm		
12						0 ppm		
13				End of Boring		0 ppm		13': Refusal.
14								

	Project Name: Ellenville Scrap Iron	Site Id: DP-029
	Township/Range:	Coordinate X: 517672.22
	Logged By: S. Amrozowicz	Coordinate Y: 1053346.01
	Drilling Method: Geoprobe	Total Depth: 4.00'
		Date Started: 12/04/07
Remarks: No temporary well point set or aqueous sample collected from this location because refusal was hit before groundwater was encountered.		Date Completed: 12/04/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1	81	GP		0-4': Brown / gray Silty GRAVEL, to sandy GRAVEL with silt, glass, plastic, brick, wet zone at 3.4' bgs	12/4/2007	0 ppm		1.3': Slight sweet odor at bgs.
2						34.2 ppm		1-3': Sample ESI-DP29-0103-01 collected.
3						27 ppm		
4				End of Boring		0.2 ppm		4': Second attempt refusal.
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: DP 030
Township/Range:	Coordinate X: 517695.94
Logged By: S. Amrozowicz	Coordinate Y: 1053316.21
Drilling Method: Geoprobe	Total Depth: 9.00'
	Date Started: 12/04/07
Remarks: No temporary well point set or aqueous sample collected from this location because refusal was hit before groundwater was encountered.	Date Completed: 12/04/07

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
0	33	ML		0–0.4': Brown gravelly SILT, wet.	12/4/2007	0 ppm		
1				0.4–3.8': Tan / brown medium–fine SAND, moist.		0.1 ppm		
						0.3 ppm		
2		SP				0 ppm		
3				3.8–5': Sandy GRAVEL, moist to dry, plastic.				
4								
5	65			5–9': Brown / gray poorly graded GRAVEL with		0 ppm		
				Sand and silt, sand lense at 8.2–8.6', moist to				
6				dry, moist sand lense.		0 ppm		
		GP						
7								7–9': Sample ESI–DP30–0709–01 collected.
8						0 ppm		
9				End of Boring		0 ppm		9': Second attempt refusal.
10								
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: EPA-01
Township/Range:	Coordinate X: 517743.27
Logged By: C.Joblon	Coordinate Y: 1053229.87
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/08/08
Remarks:	Date Completed: 04/08/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0-21.5': Fine-coarse SAND some Gravel and silt. Subrounded Gravel, till, moist to 10' wet at 10'.	4/8/2008	0 ppm	0	
2								
3								
4								
5								
6								
7								
8								
9								
10								
11		SW/SW						
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: EPA-01
Township/Range:	Coordinate X: 517743.27
Logged By: C.Joblon	Coordinate Y: 1053229.87
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/08/08
Remarks:	Date Completed: 04/08/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16								
17								
18								
19								
20								
21								
22				21.5–27': Competent bedrock.		0 ppm	0	
23								
24		BE						
25								
26								
27				End of Boring				
28								

	Project Name: Ellenville Scrap Iron	Site Id: EPA-02
	Township/Range:	Coordinate X: 518132.27
	Logged By: C.Joblon	Coordinate Y: 1053143.06
	Drilling Method: Hollow Stem Auger	Total Depth: 19.00'
		Date Started: 04/08/08
Remarks: Air Rotary to 19' (seal up to 16') competent bedrock, HSA and Air Rotary to 16' BGS. ~~Well construction over.~~		Date Completed: 04/08/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0–10': Brown fine–medium SAND with some Gravel and silt.	4/8/2008	0 ppm	0	
2								
3								
4								
5								
6								
7								
8		SM/SW						
9								
10				10–16': Gray weathered Shale, moist.	4/8/2008	0 ppm	0	10–16': Wet at 11–12'.
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: EPA-02
Township/Range:	Coordinate X: 518132.27
Logged By: C.Joblon	Coordinate Y: 1053143.06
Drilling Method: Hollow Stem Auger	Total Depth: 19.00'
	Date Started: 04/08/08
Remarks: Air Rotary to 19' (seal up to 16') competent bedrock, HSA and Air Rotary to 16' BGS. ~~Well construction over.~~	Date Completed: 04/08/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16				16-19': Gray Sandstone.	4/8/2008	0 ppm	0	
17		BE						
18								
19				End of Boring				
20								
21								
22								
23								
24								
25								
26								
27								
28								

Project Name: Ellenville Scrap Iron	Site Id: EPA-03
Township/Range:	Coordinate X: 518294.59
Logged By: R.McPherson	Coordinate Y: 1052781.68
Drilling Method: Hollow Stem Auger	Total Depth: 22.00'
	Date Started: 04/15/08
Remarks:	Date Completed: 04/16/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0-4': Dark brown fine-medium SAND some silt.	4/15/2008	0 ppm	0	
4				4-12': Fine-medium SAND with some Silt and medium-coarse rounded gravel.		0 ppm	0	4-12': Air Rotary 4-12'.
9		SM/SW						
12				12-18': Brown medium-coarse SAND and some Silt.		0 ppm	0	12-18': HSA 12-18'.

Project Name: Ellenville Scrap Iron	Site Id: EPA-03
Township/Range:	Coordinate X: 518294.59
Logged By: R.McPherson	Coordinate Y: 1052781.68
Drilling Method: Hollow Stem Auger	Total Depth: 22.00'
	Date Started: 04/15/08
Remarks:	Date Completed: 04/16/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16								
17								
18				18-20': Weathered Bedrock.		0 ppm	0	18-20': Air Rotary 18-22'.
19								
20		BE		20-22': Bedrock.		0 ppm	0	
21								
22				End of Boring				
23								
24								
25								
26								
27								
28								

Project Name: Ellenville Scrap Iron	Site Id: EPA-04
Township/Range:	Coordinate X: 518106.71
Logged By: R.McPherson	Coordinate Y: 1052479.34
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/15/08
Remarks:	Date Completed: 04/15/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1		FI		0–3': Dark brown fine–medium Sand with some Silt, trace fill (glass fragments).	4/15/2008	0 ppm	0	
2								
3				3–12': Fine–coarse rounded GRAVEL.		0 ppm	0	3–12': Air Rotary to 12'. Water at 12'.
4								
5								
6								
7								
8		GW						
9								
10								
11								
12				12–19.5': Brown medium–coarse SAND with some Silt.		0 ppm	0	
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: EPA-04
	Township/Range:	Coordinate X: 518106.71
	Logged By: R.McPherson	Coordinate Y: 1052479.34
	Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
		Date Started: 04/15/08
Remarks:		Date Completed: 04/15/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16		SM/SW						
17								
18								
19								
20				19.5–20.5': Weathered Bedrock.		0 ppm	0	
21				20.5–27': Bedrock.		0 ppm	0	20.5–27': Air Rotary to 27'. Total depth at 27'.
22								
23		BE						
24								
25								
26								
27				End of Boring				
28								

Project Name: Ellenville Scrap Iron	Site Id: EPA-05
Township/Range:	Coordinate X: 517770.56
Logged By: C.Joblon	Coordinate Y: 1052439.40
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/10/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0–17': COBBLES, subrounded Gravel and fine sands.	4/10/2008	0 ppm	0	
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14		SW/SW						

Project Name: Ellenville Scrap Iron	Site Id: EPA-05
Township/Range:	Coordinate X: 517770.56
Logged By: C.Joblon	Coordinate Y: 1052439.40
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/10/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16								
17				17-27': SAND and cobbles.		0 ppm	0	
18								
19								
20								
21								
22								
23								
24								
25								
26								
27		BE		27-35': Competent Bedrock.		0 ppm	0	
28				End of Boring				

Project Name: Ellenville Scrap Iron	Site Id: EPA-06
Township/Range:	Coordinate X: 517435.84
Logged By: R.McPherson	Coordinate Y: 1052769.78
Drilling Method: Hollow Stem Auger	Total Depth: 35.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0-15': Dark brown fine-coarse SAND with some Gravel and silt. Subrounded Gravel, till, moist to 10' wet at 10'.	4/9/2008	0 ppm	0	
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: EPA-06
Township/Range:	Coordinate X: 517435.84
Logged By: R.McPherson	Coordinate Y: 1052769.78
Drilling Method: Hollow Stem Auger	Total Depth: 35.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15		SW/SW		15-30': Fine-medium SAND with some Cobbles.		0 ppm	0	
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								

Project Name: Ellenville Scrap Iron	Site Id: EPA-06
Township/Range:	Coordinate X: 517435.84
Logged By: R.McPherson	Coordinate Y: 1052769.78
Drilling Method: Hollow Stem Auger	Total Depth: 35.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
29								
30				30-35': Bedrock.	04/10/08	0 ppm	0	
31								
32								
33		BE						
34								
35				End of Boring				
36								
37								
38								
39								
40								
41								
42								

Project Name: Ellenville Scrap Iron	Site Id: EPA-07
Township/Range:	Coordinate X: 517402.53
Logged By: R.McPherson	Coordinate Y: 1053492.77
Drilling Method: Hollow Stem Auger	Total Depth: 33.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/09/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0–8': Brown fine–coarse SAND with little Gravel and some silt, till.	4/9/2008	0 ppm	0	0–8': Refusal at 5'.
8				8–15': Boulders.		0 ppm	0	8–15': Air Rotary through boulders.
14		SM/SP						

Project Name: Ellenville Scrap Iron	Site Id: EPA-07
Township/Range:	Coordinate X: 517402.53
Logged By: R.McPherson	Coordinate Y: 1053492.77
Drilling Method: Hollow Stem Auger	Total Depth: 33.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/09/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15				15-27.5': Brown fine-coarse SAND with some subrounded Gravel and some silt, till, wet		0 ppm	0	
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28				27.5-33': Competent Bedrock.		0 ppm	0	27.5-33': Air Rotary to 33'.

Project Name: Ellenville Scrap Iron	Site Id: EPA-07
Township/Range:	Coordinate X: 517402.53
Logged By: R.McPherson	Coordinate Y: 1053492.77
Drilling Method: Hollow Stem Auger	Total Depth: 33.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/09/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
29								
30		BE						
31								
32								
33				End of Boring				
34								
35								
36								
37								
38								
39								
40								
41								
42								

APPENDIX D

MONITORING WELL BORING LOGS

Project Name: Ellenville Scrap Iron	Site Id: EPA-01
Township/Range:	Coordinate X: 517743.27
Logged By: C.Joblon	Coordinate Y: 1053229.87
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/08/08
Remarks:	Date Completed: 04/08/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0-21.5': Fine-coarse SAND some Gravel and silt. Subrounded Gravel, till, moist to 10' wet at 10'.	4/8/2008	0 ppm	0	
2								
3								
4								
5								
6								
7								
8								
9								
10								
11		SW/SW						
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: EPA-01
Township/Range:	Coordinate X: 517743.27
Logged By: C.Joblon	Coordinate Y: 1053229.87
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/08/08
Remarks:	Date Completed: 04/08/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16								
17								
18								
19								
20								
21								
22				21.5–27': Competent bedrock.		0 ppm	0	
23								
24		BE						
25								
26								
27				End of Boring				
28								

	Project Name: Ellenville Scrap Iron	Site Id: EPA-02
	Township/Range:	Coordinate X: 518132.27
	Logged By: C.Joblon	Coordinate Y: 1053143.06
	Drilling Method: Hollow Stem Auger	Total Depth: 19.00'
		Date Started: 04/08/08
Remarks: Air Rotary to 19' (seal up to 16') competent bedrock, HSA and Air Rotary to 16' BGS. ~~Well construction over.~~		Date Completed: 04/08/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0–10': Brown fine–medium SAND with some Gravel and silt.	4/8/2008	0 ppm	0	
2								
3								
4								
5								
6								
7								
8		SM/SW						
9								
10				10–16': Gray weathered Shale, moist.	4/8/2008	0 ppm	0	10–16': Wet at 11–12'.
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: EPA-02
Township/Range:	Coordinate X: 518132.27
Logged By: C.Joblon	Coordinate Y: 1053143.06
Drilling Method: Hollow Stem Auger	Total Depth: 19.00'
	Date Started: 04/08/08
Remarks: Air Rotary to 19' (seal up to 16') competent bedrock, HSA and Air Rotary to 16' BGS. ~~Well construction over.~~	Date Completed: 04/08/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16				16-19': Gray Sandstone.	4/8/2008	0 ppm	0	
17		BE						
18								
19				End of Boring				
20								
21								
22								
23								
24								
25								
26								
27								
28								

Project Name: Ellenville Scrap Iron	Site Id: EPA-03
Township/Range:	Coordinate X: 518294.59
Logged By: R.McPherson	Coordinate Y: 1052781.68
Drilling Method: Hollow Stem Auger	Total Depth: 22.00'
	Date Started: 04/15/08
Remarks:	Date Completed: 04/16/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0-4': Dark brown fine-medium SAND some silt.	4/15/2008	0 ppm	0	
4				4-12': Fine-medium SAND with some Silt and medium-coarse rounded gravel.		0 ppm	0	4-12': Air Rotary 4-12'.
9		SM/SW						
12				12-18': Brown medium-coarse SAND and some Silt.		0 ppm	0	12-18': HSA 12-18'.

Project Name: Ellenville Scrap Iron	Site Id: EPA-03
Township/Range:	Coordinate X: 518294.59
Logged By: R.McPherson	Coordinate Y: 1052781.68
Drilling Method: Hollow Stem Auger	Total Depth: 22.00'
	Date Started: 04/15/08
Remarks:	Date Completed: 04/16/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16								
17								
18				18-20': Weathered Bedrock.		0 ppm	0	18-20': Air Rotary 18-22'.
19								
20		BE		20-22': Bedrock.		0 ppm	0	
21								
22				End of Boring				
23								
24								
25								
26								
27								
28								

Project Name: Ellenville Scrap Iron	Site Id: EPA-04
Township/Range:	Coordinate X: 518106.71
Logged By: R.McPherson	Coordinate Y: 1052479.34
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/15/08
Remarks:	Date Completed: 04/15/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1		FI		0–3': Dark brown fine–medium Sand with some Silt, trace fill (glass fragments).	4/15/2008	0 ppm	0	
2								
3				3–12': Fine–coarse rounded GRAVEL.		0 ppm	0	3–12': Air Rotary to 12'. Water at 12'.
4								
5								
6								
7								
8		GW						
9								
10								
11								
12				12–19.5': Brown medium–coarse SAND with some Silt.		0 ppm	0	
13								
14								

	Project Name: Ellenville Scrap Iron	Site Id: EPA-04
	Township/Range:	Coordinate X: 518106.71
	Logged By: R.McPherson	Coordinate Y: 1052479.34
	Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
		Date Started: 04/15/08
Remarks:		Date Completed: 04/15/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16		SM/SW						
17								
18								
19								
20				19.5–20.5': Weathered Bedrock.		0 ppm	0	
21				20.5–27': Bedrock.		0 ppm	0	20.5–27': Air Rotary to 27'. Total depth at 27'.
22								
23		BE						
24								
25								
26								
27				End of Boring				
28								

Project Name: Ellenville Scrap Iron	Site Id: EPA-05
Township/Range:	Coordinate X: 517770.56
Logged By: C.Joblon	Coordinate Y: 1052439.40
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/10/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0–17': COBBLES, subrounded Gravel and fine sands.	4/10/2008	0 ppm	0	
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14		SW/SW						

Project Name: Ellenville Scrap Iron	Site Id: EPA-05
Township/Range:	Coordinate X: 517770.56
Logged By: C.Joblon	Coordinate Y: 1052439.40
Drilling Method: Hollow Stem Auger	Total Depth: 27.00'
	Date Started: 04/10/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15								
16								
17				17-27': SAND and cobbles.		0 ppm	0	
18								
19								
20								
21								
22								
23								
24								
25								
26								
27		BE		27-35': Competent Bedrock.		0 ppm	0	
28				End of Boring				

Project Name: Ellenville Scrap Iron	Site Id: EPA-06
Township/Range:	Coordinate X: 517435.84
Logged By: R.McPherson	Coordinate Y: 1052769.78
Drilling Method: Hollow Stem Auger	Total Depth: 35.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0-15': Dark brown fine-coarse SAND with some Gravel and silt. Subrounded Gravel, till, moist to 10' wet at 10'.	4/9/2008	0 ppm	0	
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

Project Name: Ellenville Scrap Iron	Site Id: EPA-06
Township/Range:	Coordinate X: 517435.84
Logged By: R.McPherson	Coordinate Y: 1052769.78
Drilling Method: Hollow Stem Auger	Total Depth: 35.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15		SW/SW		15-30': Fine-medium SAND with some Cobbles.		0 ppm	0	
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								

Project Name: Ellenville Scrap Iron	Site Id: EPA-06
Township/Range:	Coordinate X: 517435.84
Logged By: R.McPherson	Coordinate Y: 1052769.78
Drilling Method: Hollow Stem Auger	Total Depth: 35.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/10/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
29								
30				30-35': Bedrock.	04/10/08	0 ppm	0	
31								
32								
33		BE						
34								
35				End of Boring				
36								
37								
38								
39								
40								
41								
42								

Project Name: Ellenville Scrap Iron	Site Id: EPA-07
Township/Range:	Coordinate X: 517402.53
Logged By: R.McPherson	Coordinate Y: 1053492.77
Drilling Method: Hollow Stem Auger	Total Depth: 33.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/09/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
1				0–8': Brown fine–coarse SAND with little Gravel and some silt, till.	4/9/2008	0 ppm	0	0–8': Refusal at 5'.
8				8–15': Boulders.		0 ppm	0	8–15': Air Rotary through boulders.
14		SM/SP						

Project Name: Ellenville Scrap Iron	Site Id: EPA-07
Township/Range:	Coordinate X: 517402.53
Logged By: R.McPherson	Coordinate Y: 1053492.77
Drilling Method: Hollow Stem Auger	Total Depth: 33.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/09/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
15				15-27.5': Brown fine-coarse SAND with some subrounded Gravel and some silt, till, wet		0 ppm	0	
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28				27.5-33': Competent Bedrock.		0 ppm	0	27.5-33': Air Rotary to 33'.

Project Name: Ellenville Scrap Iron	Site Id: EPA-07
Township/Range:	Coordinate X: 517402.53
Logged By: R.McPherson	Coordinate Y: 1053492.77
Drilling Method: Hollow Stem Auger	Total Depth: 33.00'
	Date Started: 04/09/08
Remarks:	Date Completed: 04/09/08

Depth	Recovery %	USCS Code	Graphic Log	Material Description	Date	PID	FID	Notes
29								
30		BE						
31								
32								
33				End of Boring				
34								
35								
36								
37								
38								
39								
40								
41								
42								

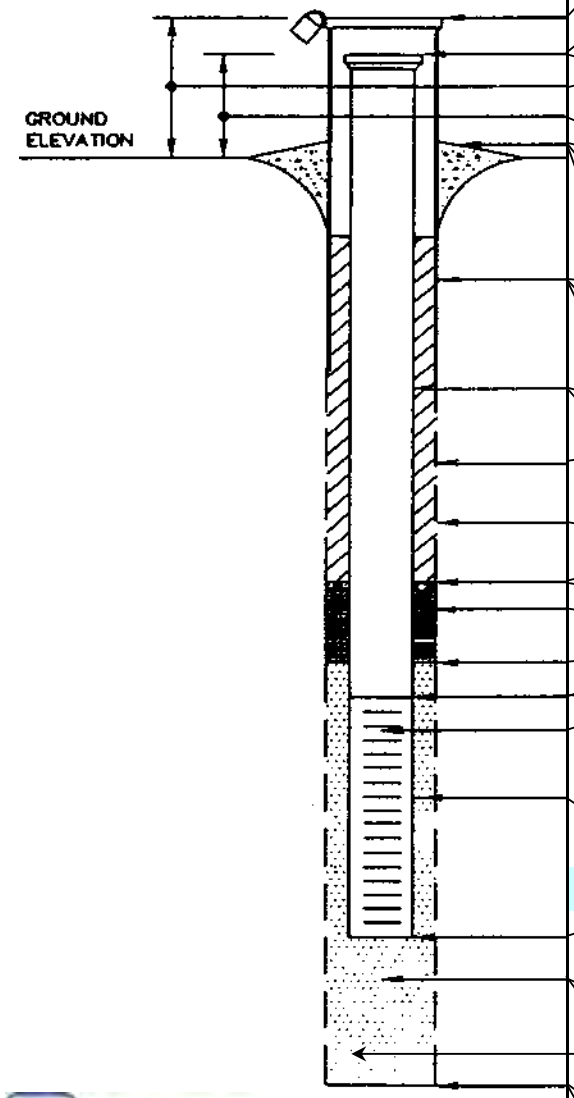
APPENDIX E

MONITORING WELL CONSTRUCTION DIAGRAMS

MONITORING WELL CONSTRUCTION DIAGRAM

UNCONSOLIDATED MONITORING WELL CONSTRUCTION DIAGRAM (STICK-UP)

PROJECT:	Ellenville RI/FS	**WELL NUMBER:**	**EPA-01**
PROJECT NO.:	106-1945	WELL LOCATION (STATION) ID:	EPA-01
BORING NUMBER:	EPA-01	DATE COMPLETED:	04/08/08
ELEVATION (FT):	445.5800	SURVEY DATE:	
FIELD GEOLOGIST:	C. Joblon	X COORDINATE:	517743.27000
DRILLER:	Aztech Technologies	Y COORDINATE:	1053229.87000
DRILLING METHOD:	Hollow Stem Auger	DATUM:	NAVD88
DEVELOPMENT METHOD:	Hand Bailing	START DEPTH (FT):	0.0
SUMP INSTALLED?(Y/N):	N SUMP LENGTH (FT): 0	METHOD TO MEASURE WELL DEPTH:	ground surface



Elevation of Top of Surface Casing	445.2200
Stick-up Riser Pipe:	
Elevation of Top of Riser Pipe (Ft)	445.5800
Stick-up of Surface Casing Above Ground Surface (Ft)	2.14
Height of Riser Pipe (Ft)	2.5
Type of Surface Plug	concrete
Depth of Surface Plug (bgs in feet)	2.2
Diameter of Surface Plug (Ft)	4.5
I.D. of Surface Casing (Inches)	6
Type of Surface Casing	steel
Depth of Surface Casing (Ft)	3
I.D. of Riser (Inches)	2
Type of Riser	PVC sch 40
Borehole Diameter (Inches)	8
Type of Backfill	bentonite slurry
Backfill - Tremied (Y or N)	Y
Depth of Top of Seal (Ft)	11
Elevation of Top of Seal	432.0800
Type of Seal:	bentonite-granular
Seal - Tremied (Y or N)	Y
Depth of Top of Filter Pack (Ft)	14
Depth of Top of Screen (Ft)	16
Elevation of Top of Screen	427.0800
Type of Screen:	PVC sch 40
I.D. of Screen (Inches)	2
Slot Size of Screen (Inches)	0.01
Length of Screen (Ft)	5
Type of Filter Pack:	sand pack
Filter Pack - Tremied (Y or N)	Y
Well Construction Remarks:	
Depth of Bottom of Screen (Ft)	21
Depth of Bottom of Filter Pack (Ft)	21.5
Elevation of Bottom of Filter Pack	421.5800
Type of Backfill Below Filter Pack	sand pack
Depth of Hole (Ft)	27
Elevation of Hole	416.0800

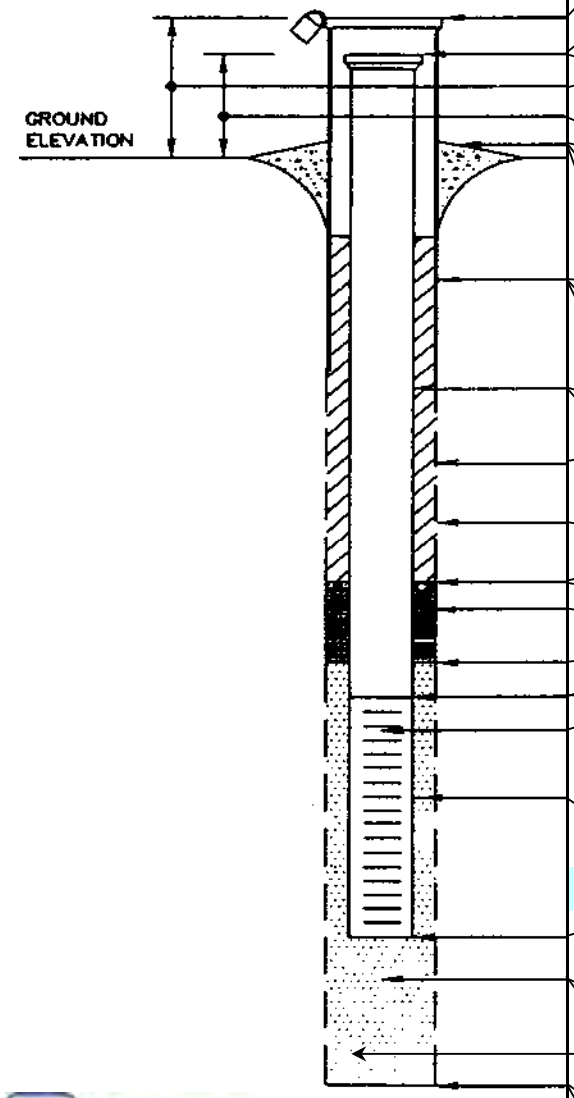
TETRA TECH

NOT TO SCALE

MONITORING WELL CONSTRUCTION DIAGRAM

UNCONSOLIDATED MONITORING WELL CONSTRUCTION DIAGRAM (STICK-UP)

PROJECT:	Ellenville RI/FS	**WELL NUMBER:**	**EPA-02**
PROJECT NO.:	106-1945	WELL LOCATION (STATION) ID:	EPA-02
BORING NUMBER:	EPA-02	DATE COMPLETED:	04/08/08
ELEVATION (FT):	442.3800	SURVEY DATE:	
FIELD GEOLOGIST:	C. Joblon	X COORDINATE:	518132.27000
DRILLER:	Aztech Technologies	Y COORDINATE:	1053143.06000
DRILLING METHOD:	Hollow Stem Auger	DATUM:	NAVD88
DEVELOPMENT METHOD:	Hand Bailing	START DEPTH (FT):	0.0
SUMP INSTALLED?(Y/N):	N SUMP LENGTH (FT): 0	METHOD TO MEASURE WELL DEPTH:	ground surface



TETRA TECH

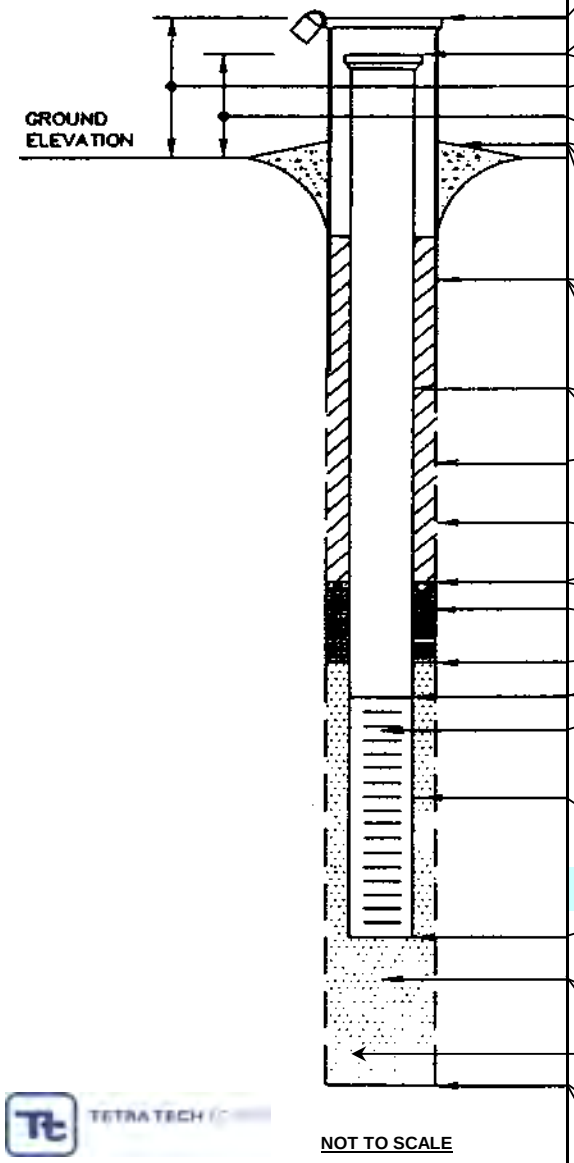
NOT TO SCALE

Elevation of Top of Surface Casing	442.2700
Stick-up Riser Pipe:	
Elevation of Top of Riser Pipe (Ft)	442.3800
Stick-up of Surface Casing Above Ground Surface (Ft)	2.39
Height of Riser Pipe (Ft)	2.5
Type of Surface Plug	concrete
Depth of Surface Plug (bgs in feet)	2.2
Diameter of Surface Plug (Ft)	4.5
I.D. of Surface Casing (Inches)	6
Type of Surface Casing	steel
Depth of Surface Casing (Ft)	3
I.D. of Riser (Inches)	2
Type of Riser	PVC sch 40
Borehole Diameter (Inches)	8
Type of Backfill	bentonite slurry
Backfill - Tremied (Y or N)	Y
Depth of Top of Seal (Ft)	6
Elevation of Top of Seal	433.8800
Type of Seal:	bentonite-granular
Seal - Tremied (Y or N)	Y
Depth of Top of Filter Pack (Ft)	9
Depth of Top of Screen (Ft)	11
Elevation of Top of Screen	428.8800
Type of Screen:	PVC sch 40
I.D. of Screen (Inches)	2
Slot Size of Screen (Inches)	0.01
Length of Screen (Ft)	5
Type of Filter Pack:	sand pack
Filter Pack - Tremied (Y or N)	Y
Well Construction Remarks:	
Depth of Bottom of Screen (Ft)	16
Depth of Bottom of Filter Pack (Ft)	16
Elevation of Bottom of Filter Pack	423.8800
Type of Backfill Below Filter Pack	sand pack
Depth of Hole (Ft)	19
Elevation of Hole	420.8800

MONITORING WELL CONSTRUCTION DIAGRAM

UNCONSOLIDATED MONITORING WELL CONSTRUCTION DIAGRAM (STICK-UP)

PROJECT:	Ellenville Scrap Iron and Metal	**WELL NUMBER:**	**EPA-03**
PROJECT NO.:	106-1945.2149	WELL LOCATION (STATION) ID:	EPA-03
BORING NUMBER:	EPA-03	DATE COMPLETED:	04/16/08
ELEVATION (FT):	400.5700	SURVEY DATE:	
FIELD GEOLOGIST:	C. Joblon	X COORDINATE:	518294.59000
DRILLER:	Aztech Technologies	Y COORDINATE:	1052781.68000
DRILLING METHOD:	Hollow Stem Auger	DATUM:	NAVD88
DEVELOPMENT METHOD:	Submersible Pump	START DEPTH (FT):	0.0
SUMP INSTALLED?(Y/N):	N SUMP LENGTH (FT): 0	METHOD TO MEASURE WELL DEPTH:	ground surface



TETRA TECH

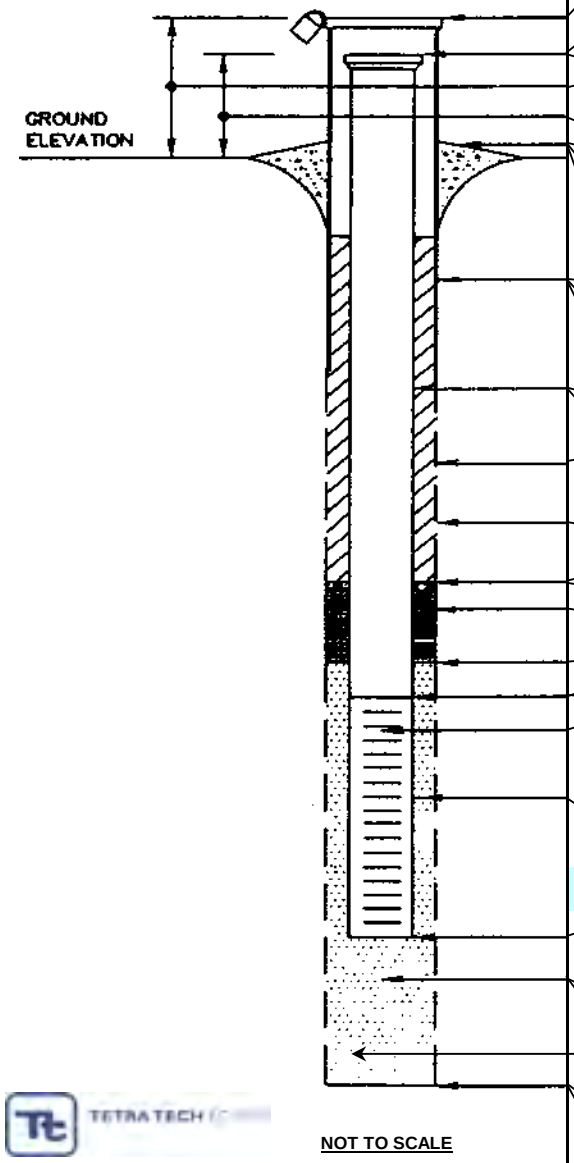
NOT TO SCALE

Elevation of Top of Surface Casing	400.9600
Stick-up Riser Pipe:	
Elevation of Top of Riser Pipe (Ft)	400.5700
Stick-up of Surface Casing Above Ground Surface (Ft)	2.89
Height of Riser Pipe (Ft)	2.5
Type of Surface Plug	concrete
Depth of Surface Plug (bgs in feet)	2.2
Diameter of Surface Plug (Ft)	4.5
I.D. of Surface Casing (Inches)	6
Type of Surface Casing	steel
Depth of Surface Casing (Ft)	3
I.D. of Riser (Inches)	2
Type of Riser	PVC sch 40
Borehole Diameter (Inches)	8
Type of Backfill	bentonite slurry
Backfill - Tremied (Y or N)	Y
Depth of Top of Seal (Ft)	8
Elevation of Top of Seal	390.0700
Type of Seal:	bentonite-granular
Seal - Tremied (Y or N)	Y
Depth of Top of Filter Pack (Ft)	11
Depth of Top of Screen (Ft)	13
Elevation of Top of Screen	385.0700
Type of Screen:	PVC sch 40
I.D. of Screen (Inches)	2
Slot Size of Screen (Inches)	0.01
Length of Screen (Ft)	5
Type of Filter Pack:	sand pack
Filter Pack - Tremied (Y or N)	Y
Well Construction Remarks:	
Depth of Bottom of Screen (Ft)	18
Depth of Bottom of Filter Pack (Ft)	18.5
Elevation of Bottom of Filter Pack	379.5700
Type of Backfill Below Filter Pack	sand pack
Depth of Hole (Ft)	22
Elevation of Hole	376.0700

MONITORING WELL CONSTRUCTION DIAGRAM

UNCONSOLIDATED MONITORING WELL CONSTRUCTION DIAGRAM (STICK-UP)

PROJECT:	Ellenville RI/FS	**WELL NUMBER:**	**EPA-04**
PROJECT NO.:	106-1945	WELL LOCATION (STATION) ID:	EPA-04
BORING NUMBER:	EPA-04	DATE COMPLETED:	04/15/08
ELEVATION (FT):	395.9900	SURVEY DATE:	
FIELD GEOLOGIST:	R. McPherson	X COORDINATE:	518106.71000
DRILLER:	Aztech Technologies	Y COORDINATE:	1052479.34000
DRILLING METHOD:	Hollow Stem Auger	DATUM:	NAVD88
DEVELOPMENT METHOD:	Hand Bailing	START DEPTH (FT):	0.0
SUMP INSTALLED?(Y/N):	N SUMP LENGTH (FT): 0	METHOD TO MEASURE WELL DEPTH:	ground surface



Elevation of Top of Surface Casing	395.3000
Stick-up Riser Pipe:	
Elevation of Top of Riser Pipe (Ft)	395.9900
Stick-up of Surface Casing Above Ground Surface (Ft)	1.81
Height of Riser Pipe (Ft)	2.5
Type of Surface Plug	concrete
Depth of Surface Plug (bgs in feet)	2.2
Diameter of Surface Plug (Ft)	4.5
I.D. of Surface Casing (Inches)	6
Type of Surface Casing	unknown
Depth of Surface Casing (Ft)	7.5
I.D. of Riser (Inches)	2
Type of Riser	PVC sch 40
Borehole Diameter (Inches)	8
Type of Backfill	bentonite slurry
Backfill - Tremied (Y or N)	Y
Depth of Top of Seal (Ft)	10
Elevation of Top of Seal	383.4900
Type of Seal:	bentonite-granular
Seal - Tremied (Y or N)	Y
Depth of Top of Filter Pack (Ft)	13
Depth of Top of Screen (Ft)	15.5
Elevation of Top of Screen	377.9900
Type of Screen:	stainless steel 316
I.D. of Screen (Inches)	2
Slot Size of Screen (Inches)	0.01
Length of Screen (Ft)	5
Type of Filter Pack:	sand pack
Filter Pack - Tremied (Y or N)	Y
Well Construction Remarks:	
Depth of Bottom of Screen (Ft)	20.5
Depth of Bottom of Filter Pack (Ft)	21
Elevation of Bottom of Filter Pack	372.4900
Type of Backfill Below Filter Pack	sand pack
Depth of Hole (Ft)	27
Elevation of Hole	366.4900

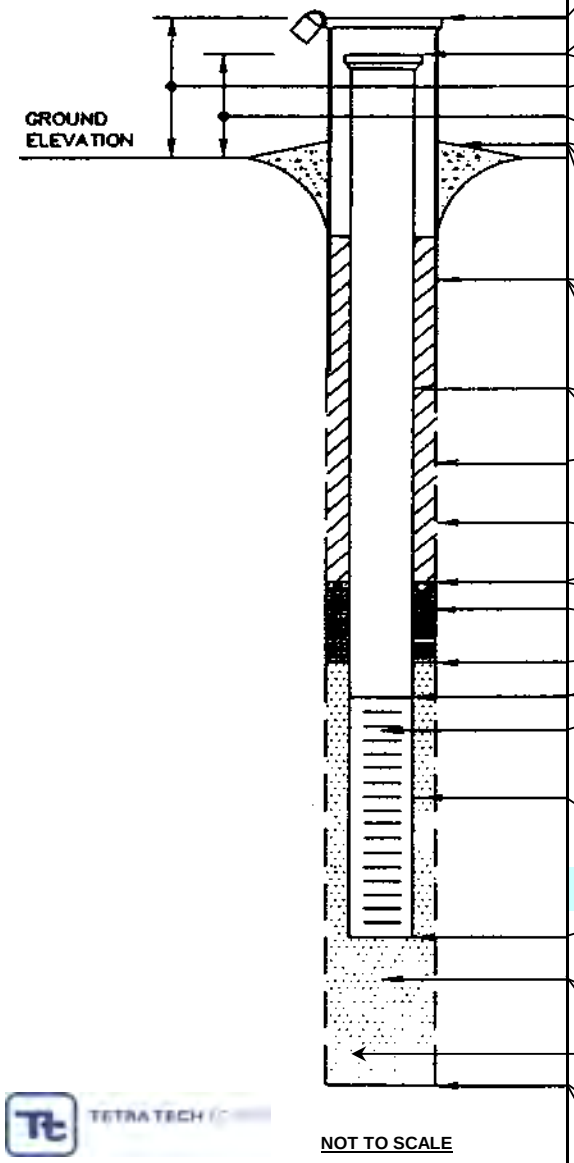
TETRA TECH

NOT TO SCALE

MONITORING WELL CONSTRUCTION DIAGRAM

UNCONSOLIDATED MONITORING WELL CONSTRUCTION DIAGRAM (STICK-UP)

PROJECT:	Ellenville RI/FS	**WELL NUMBER:**	**EPA-05**
PROJECT NO.:	106-1945	WELL LOCATION (STATION) ID:	EPA-05
BORING NUMBER:	EPA-05	DATE COMPLETED:	04/16/08
ELEVATION (FT):	402.3200	SURVEY DATE:	
FIELD GEOLOGIST:	C. Joblon	X COORDINATE:	517770.56000
DRILLER:	Aztech Technologies	Y COORDINATE:	1052439.40000
DRILLING METHOD:	Hollow Stem Auger	DATUM:	NAVD88
DEVELOPMENT METHOD:	Hand Bailing	START DEPTH (FT):	0.0
SUMP INSTALLED?(Y/N):	N SUMP LENGTH (FT): 0	METHOD TO MEASURE WELL DEPTH:	ground surface



TETRA TECH

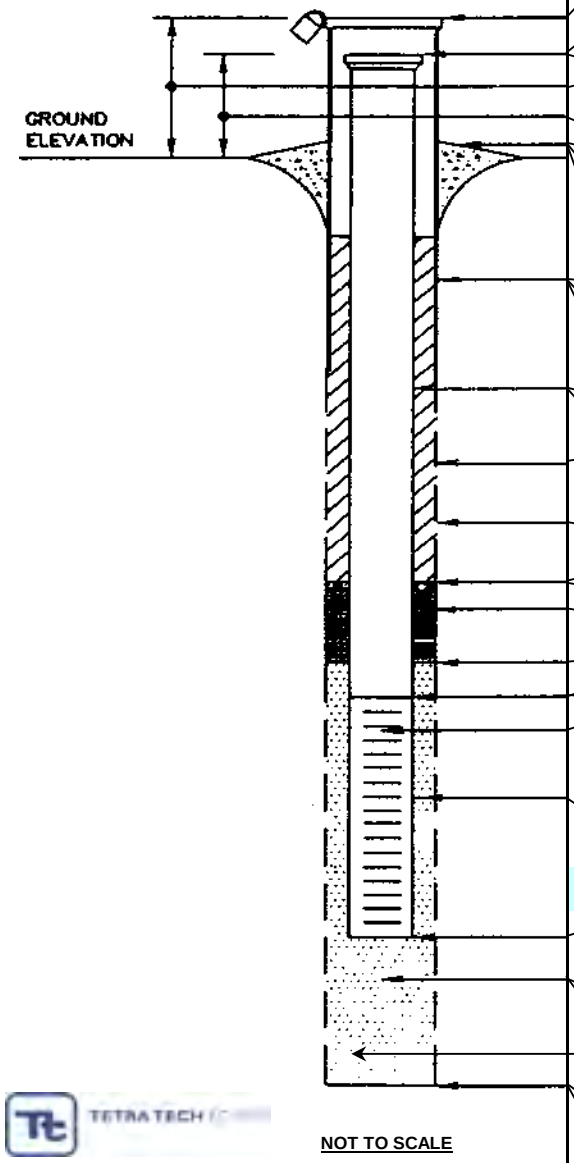
NOT TO SCALE

Elevation of Top of Surface Casing	402.3700
Stick-up Riser Pipe:	
Elevation of Top of Riser Pipe (Ft)	402.3200
Stick-up of Surface Casing Above Ground Surface (Ft)	2.55
Height of Riser Pipe (Ft)	2.5
Type of Surface Plug	concrete
Depth of Surface Plug (bgs in feet)	2.2
Diameter of Surface Plug (Ft)	4.5
I.D. of Surface Casing (Inches)	6
Type of Surface Casing	steel
Depth of Surface Casing (Ft)	3
I.D. of Riser (Inches)	2
Type of Riser	PVC sch 40
Borehole Diameter (Inches)	8
Type of Backfill	bentonite slurry
Backfill - Tremied (Y or N)	Y
Depth of Top of Seal (Ft)	8
Elevation of Top of Seal	391.8200
Type of Seal:	bentonite-granular
Seal - Tremied (Y or N)	Y
Depth of Top of Filter Pack (Ft)	11
Depth of Top of Screen (Ft)	22
Elevation of Top of Screen	377.8200
Type of Screen:	PVC sch 40
I.D. of Screen (Inches)	2
Slot Size of Screen (Inches)	0.01
Length of Screen (Ft)	5
Type of Filter Pack:	sand pack
Filter Pack - Tremied (Y or N)	Y
Well Construction Remarks:	
Depth of Bottom of Screen (Ft)	27
Depth of Bottom of Filter Pack (Ft)	18.5
Elevation of Bottom of Filter Pack	381.3200
Type of Backfill Below Filter Pack	sand pack
Depth of Hole (Ft)	22
Elevation of Hole	377.8200

MONITORING WELL CONSTRUCTION DIAGRAM

UNCONSOLIDATED MONITORING WELL CONSTRUCTION DIAGRAM (STICK-UP)

PROJECT:	Ellenville RI/FS	**WELL NUMBER:**	**EPA-06**
PROJECT NO.:	106-1945	WELL LOCATION (STATION) ID:	EPA-06
BORING NUMBER:	EPA-06	DATE COMPLETED:	04/10/08
ELEVATION (FT):	410.8000	SURVEY DATE:	
FIELD GEOLOGIST:	R.McPherson	X COORDINATE:	517435.84000
DRILLER:	Aztech Technologies	Y COORDINATE:	1052769.78000
DRILLING METHOD:	Hollow Stem Auger	DATUM:	NAVD88
DEVELOPMENT METHOD:	Hand Bailing	START DEPTH (FT):	0.0
SUMP INSTALLED?(Y/N):	N SUMP LENGTH (FT): 0	METHOD TO MEASURE WELL DEPTH:	ground surface



Elevation of Top of Surface Casing	408.3000
Stick-up Riser Pipe:	
Elevation of Top of Riser Pipe (Ft)	410.8000
Stick-up of Surface Casing Above Ground Surface (Ft)	
Height of Riser Pipe (Ft)	2.5
Type of Surface Plug	concrete
Depth of Surface Plug (bgs in feet)	2.2
Diameter of Surface Plug (Ft)	4.5
I.D. of Surface Casing (Inches)	6
Type of Surface Casing	steel
Depth of Surface Casing (Ft)	7.5
I.D. of Riser (Inches)	2
Type of Riser	stainless steel 304
Borehole Diameter (Inches)	8
Type of Backfill	bentonite slurry
Backfill - Tremied (Y or N)	Y
Depth of Top of Seal (Ft)	18
Elevation of Top of Seal	390.3000
Type of Seal:	bentonite-granular
Seal - Tremied (Y or N)	Y
Depth of Top of Filter Pack (Ft)	20
Depth of Top of Screen (Ft)	30
Elevation of Top of Screen	378.3000
Type of Screen:	stainless steel 316
I.D. of Screen (Inches)	2
Slot Size of Screen (Inches)	0.01
Length of Screen (Ft)	5
Type of Filter Pack:	sand pack
Filter Pack - Tremied (Y or N)	Y
Well Construction Remarks:	
Depth of Bottom of Screen (Ft)	35
Depth of Bottom of Filter Pack (Ft)	36
Elevation of Bottom of Filter Pack	372.3000
Type of Backfill Below Filter Pack	natural formation
Depth of Hole (Ft)	36
Elevation of Hole	372.3000

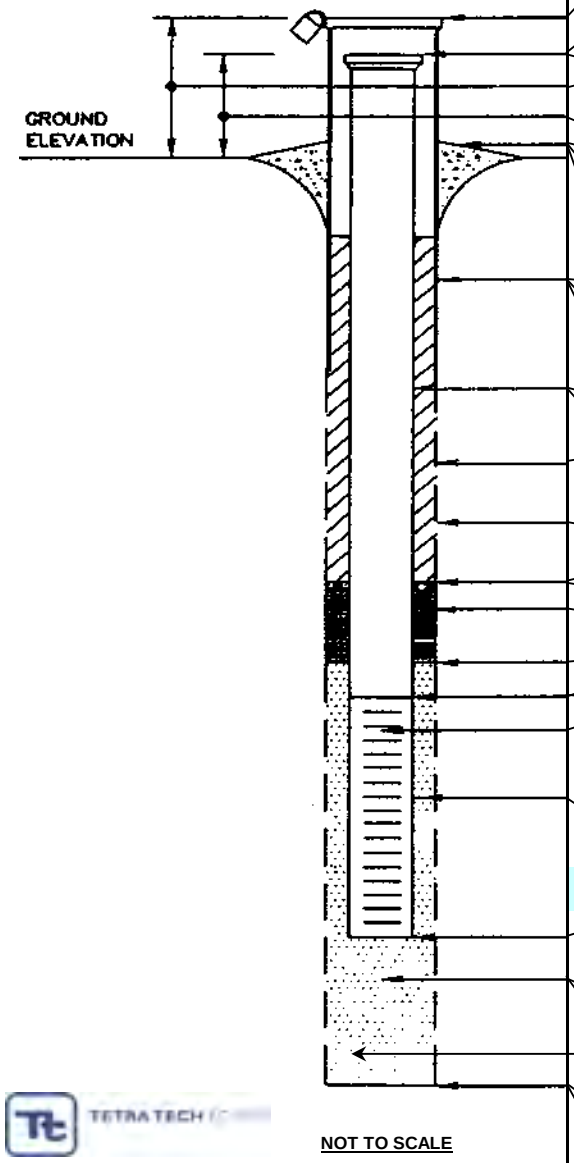
TETRA TECH

NOT TO SCALE

MONITORING WELL CONSTRUCTION DIAGRAM

UNCONSOLIDATED MONITORING WELL CONSTRUCTION DIAGRAM (STICK-UP)

PROJECT:	Ellenville RI/FS	**WELL NUMBER:**	**EPA-07**
PROJECT NO.:	106-1945	WELL LOCATION (STATION) ID:	EPA-07
BORING NUMBER:	EPA-07	DATE COMPLETED:	04/09/08
ELEVATION (FT):	457.9700	SURVEY DATE:	
FIELD GEOLOGIST:	R. McPherson	X COORDINATE:	517402.53000
DRILLER:	Aztech Technologies	Y COORDINATE:	1053492.77000
DRILLING METHOD:	Hollow Stem Auger	DATUM:	NAVD88
DEVELOPMENT METHOD:	Hand Bailing	START DEPTH (FT):	0.0
SUMP INSTALLED?(Y/N):	N SUMP LENGTH (FT): 0	METHOD TO MEASURE WELL DEPTH:	ground surface



TETRA TECH

NOT TO SCALE

Elevation of Top of Surface Casing	458.4700
Stick-up Riser Pipe:	
Elevation of Top of Riser Pipe (Ft)	457.9700
Stick-up of Surface Casing Above Ground Surface (Ft)	3
Height of Riser Pipe (Ft)	2.5
Type of Surface Plug	concrete
Depth of Surface Plug (bgs in feet)	3
Diameter of Surface Plug (Ft)	4.5
I.D. of Surface Casing (Inches)	6
Type of Surface Casing	steel
Depth of Surface Casing (Ft)	7.5
I.D. of Riser (Inches)	2
Type of Riser	PVC sch 40
Borehole Diameter (Inches)	8
Type of Backfill	bentonite slurry
Backfill - Tremied (Y or N)	Y
Depth of Top of Seal (Ft)	17
Elevation of Top of Seal	438.4700
Type of Seal:	bentonite-granular
Seal - Tremied (Y or N)	Y
Depth of Top of Filter Pack (Ft)	20
Depth of Top of Screen (Ft)	22.5
Elevation of Top of Screen	432.9700
Type of Screen:	PVC sch 40
I.D. of Screen (Inches)	2
Slot Size of Screen (Inches)	0.01
Length of Screen (Ft)	5
Type of Filter Pack:	sand pack
Filter Pack - Tremied (Y or N)	Y
Well Construction Remarks:	
Depth of Bottom of Screen (Ft)	27.5
Depth of Bottom of Filter Pack (Ft)	28
Elevation of Bottom of Filter Pack	427.4700
Type of Backfill Below Filter Pack	gravel pack
Depth of Hole (Ft)	33
Elevation of Hole	422.4700

APPENDIX F

TtEC HYDRAULIC TESTING ANALYSIS REPORT

Summary Memorandum – December 2008

October 2008 Slug Test Results – Ellenville Scrap Iron and Metal Site
34 Cape Ave, Ellenville, NY

Introduction

The purpose of this memorandum is to present the results of the analysis of falling and rising-head slug tests performed at five monitoring wells (EPA-03 through EPA-07) at the Ellenville Scrap Iron and Metal site (Site) on October 29 and 30, 2008. The objective of this analysis is to estimate horizontal hydraulic conductivity values for the unconfined hydrostratigraphic unit at the Site. Hydraulic conductivity values can be used to calculate the groundwater seepage velocity and assess the fate and transport potential of constituents of concern (COCs) affecting this hydrostratigraphic unit.

Monitoring wells EPA-03 through EPA-07 are constructed to obtain groundwater elevation measurements and collect groundwater samples from the unconfined hydrostratigraphic unit at the Site. Each monitoring well is constructed with 2-inch diameter PVC well screen and sufficient riser casing to reach ground surface. The monitoring wells were installed in a borehole approximately 8 inches in diameter. The screen interval of each monitoring well is 5 feet long and the screen interval is located at the bottom of the unconfined hydrostratigraphic unit. Groundwater elevations measured prior to the performance of the slug tests were above the screen interval at each monitoring well evaluated.

Boring logs from the advancement of boreholes at monitoring wells EPA-03 through EPA-07 generally describe the unconsolidated sediments of the unconfined hydrostratigraphic unit as a fine to coarse sand, some silt, with varying amounts of fine to coarse gravel. Bedrock was observed by the TtEC field geologist during advancement of the boreholes immediately below the depth of the bottom of the monitoring wells.

Two or three falling and rising-head slug tests were performed at each monitoring well in accordance with the procedures described in the June 2006 Final Remedial Investigation/Feasibility Study Workplan. The slug test data was entered into the AquiferTest Pro, Version 3.0 software package and the Hvorslev (1951) and Bouwer and Rice (1976, 1989) slug-test analysis methods were used to analyze the slug test data. These methods are appropriate for the analysis of slug test data for partially penetrating wells in unconfined hydrostratigraphic units.

The results of the slug test analysis indicate the geometric mean value for the horizontal hydraulic conductivity of the aquifer ranges from 4.68×10^{-4} to 5.11×10^{-4} centimeters per second or 1.33 to 1.45 feet per day. The minimum calculated horizontal hydraulic conductivity is 7.97×10^{-5} centimeters per second or 0.226 feet per day, found at monitoring well EPA-03. The maximum calculated horizontal hydraulic conductivity is 1.42×10^{-3} centimeters per second or 4.03 feet per day, found at monitoring well EPA-06. The Site-specific hydraulic conductivity

results compare favorably with documented literature values (Fetter, 1994; Domenico and Schwartz, 1998) for the unconsolidated sediments present within the hydrostratigraphic unit at the Site. The attached table summarizes the results of the falling and rising-head slug tests per type of slug test and analysis method.

References

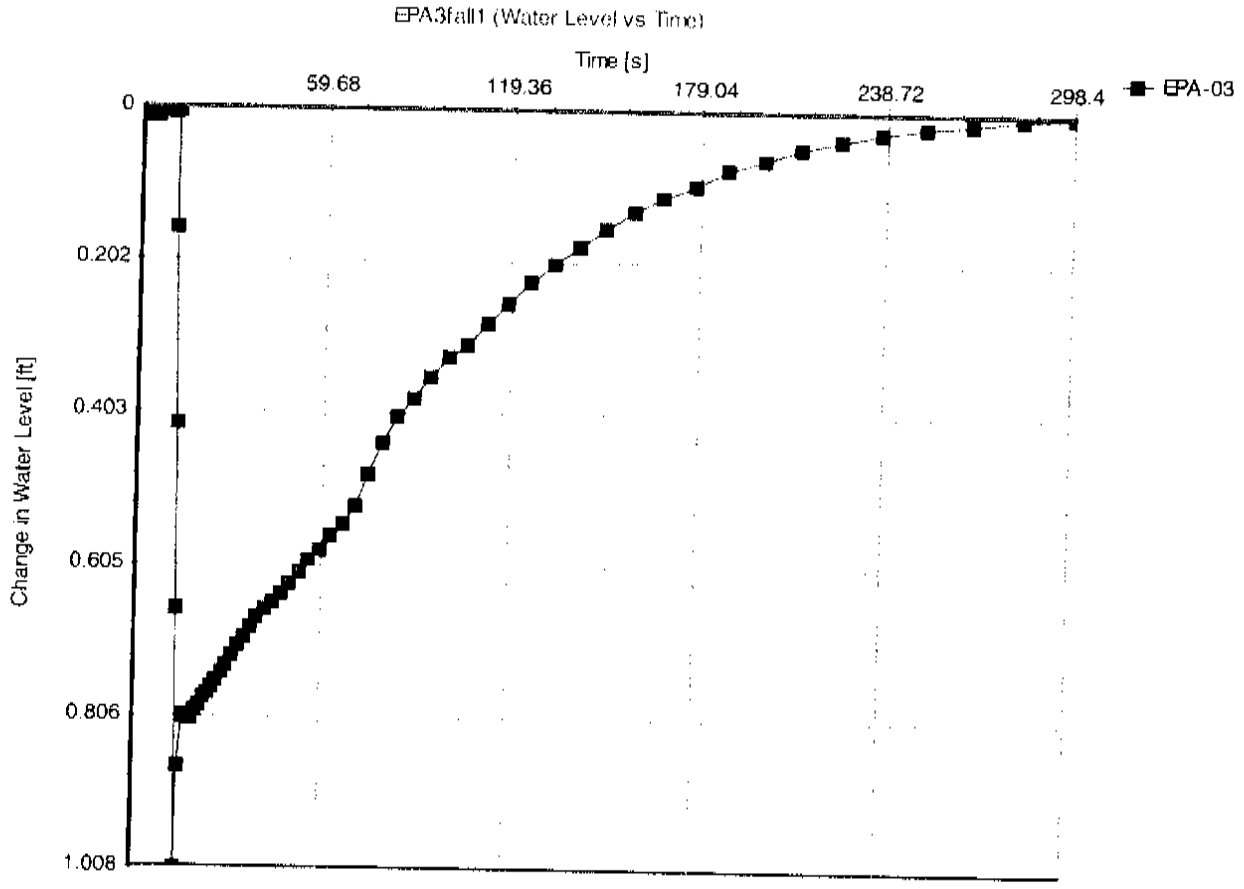
Domenico and Schwartz, 1998. Physical and Chemical Hydrogeology, 2nd Edition.

Fetter, 1994. Applied Hydrogeology, 3rd Edition.

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA3fall1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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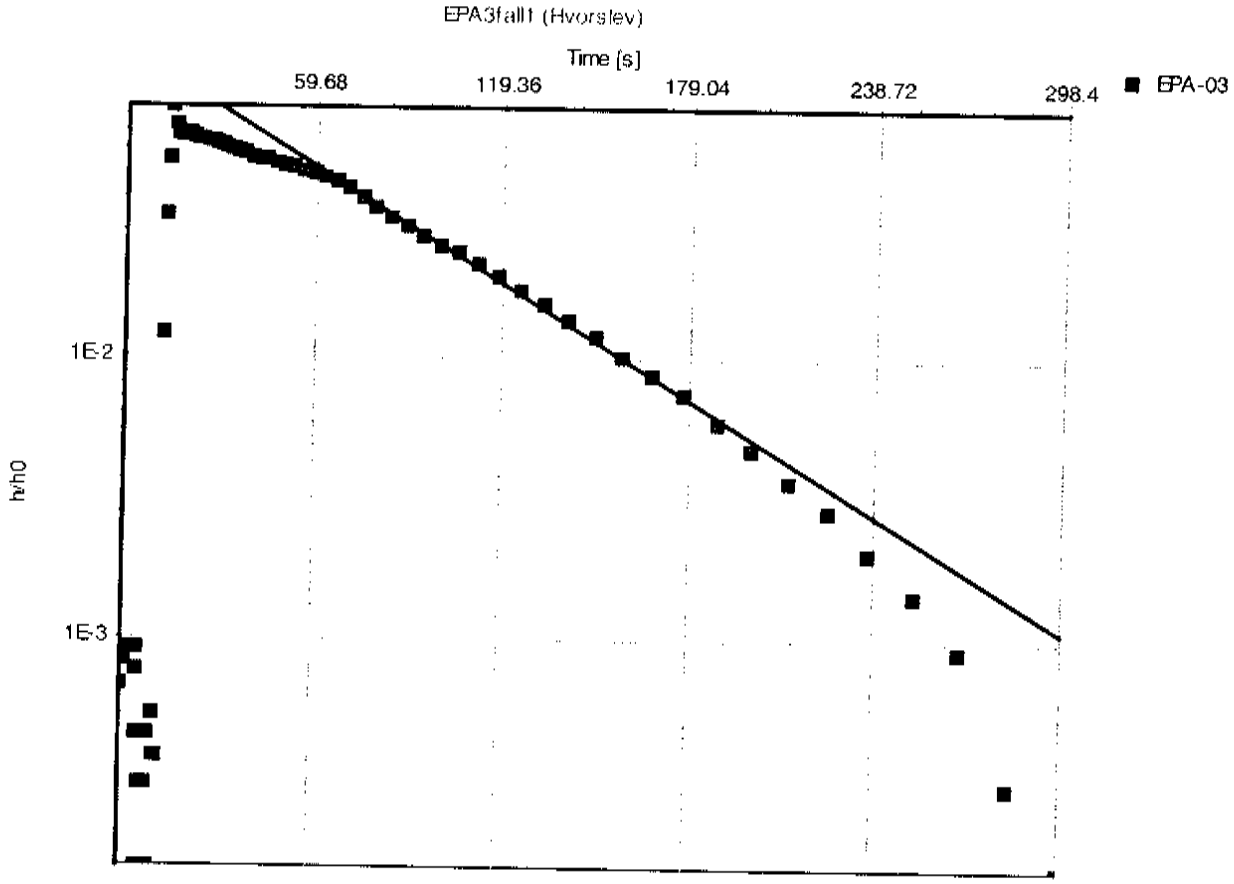

Test name: **EPA3fall1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 9.11E-4 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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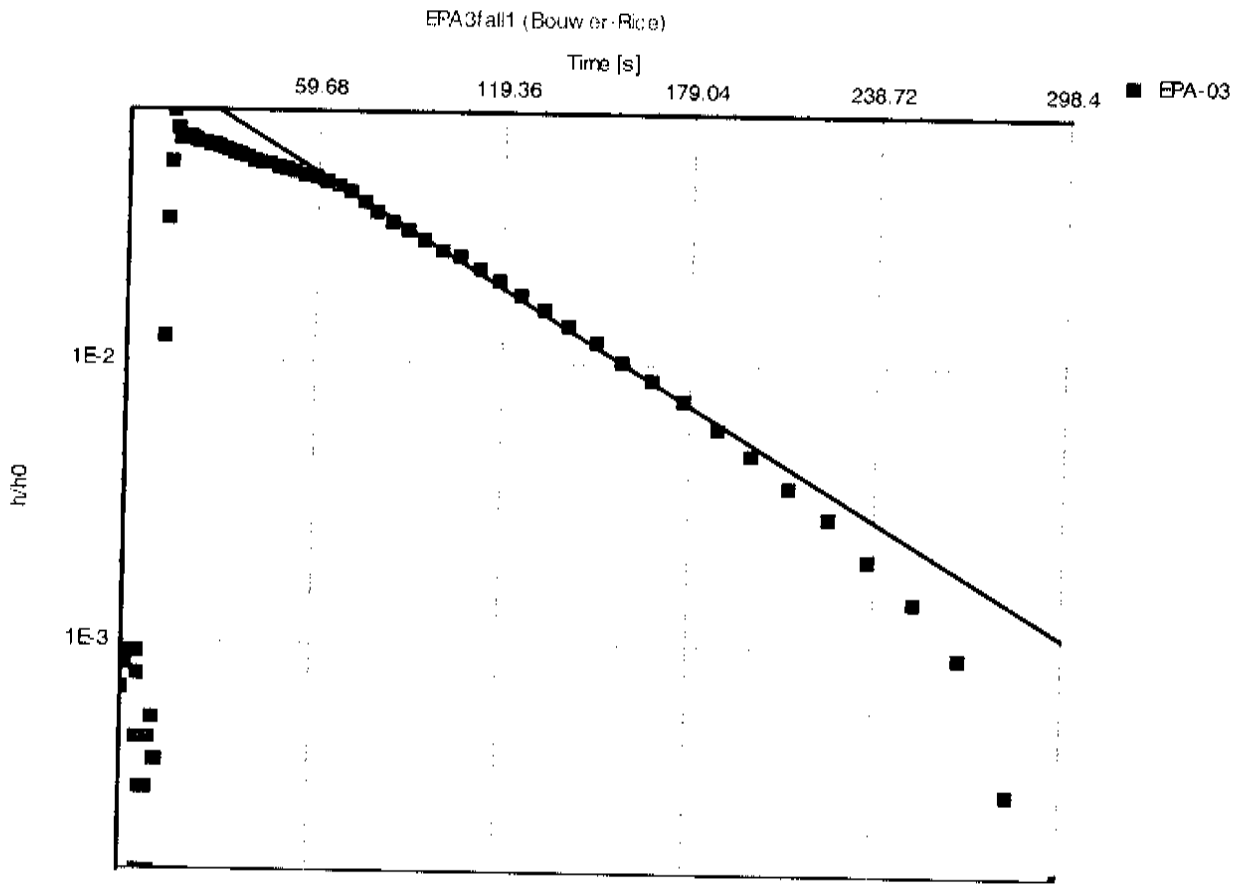

Test name: **EPA3fall1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 7.67E-4 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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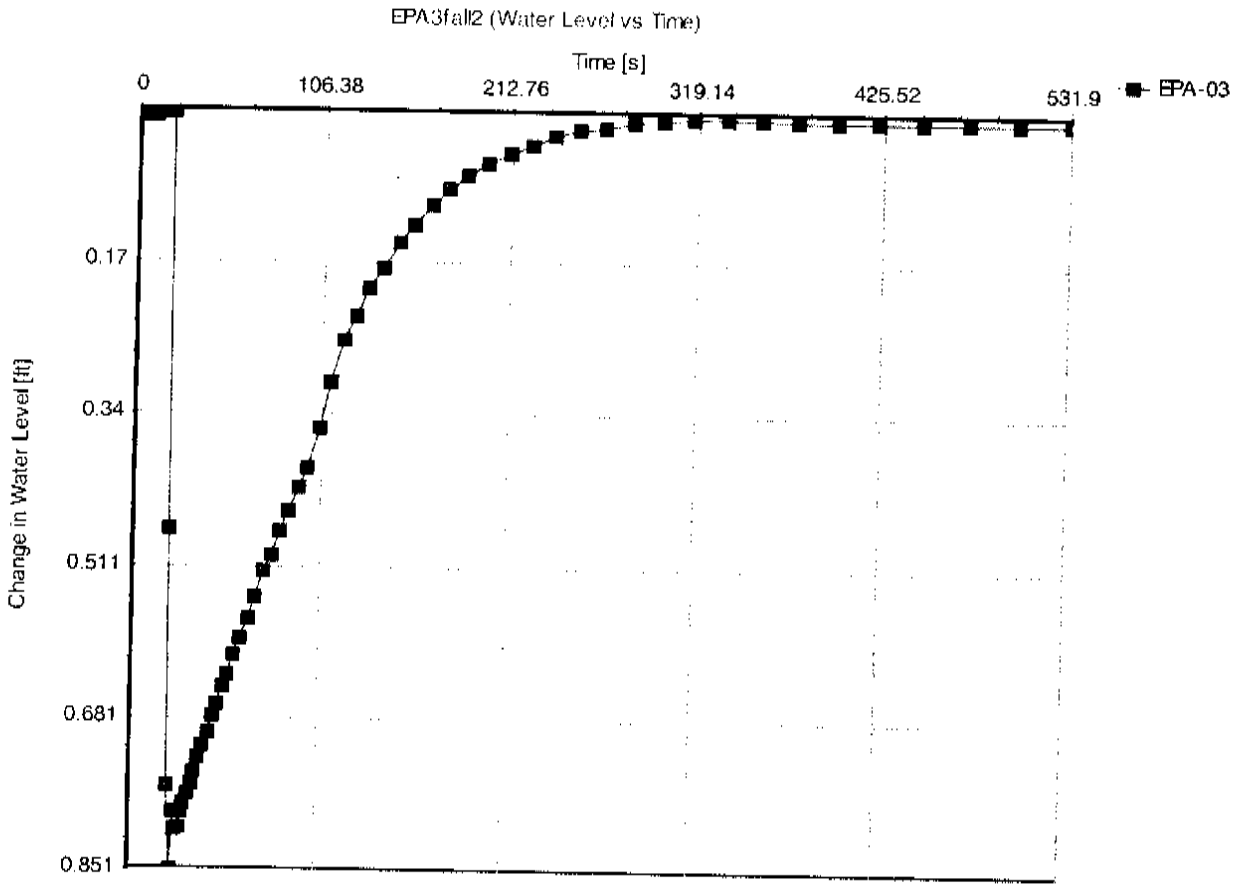

Test name: **EPA3fall2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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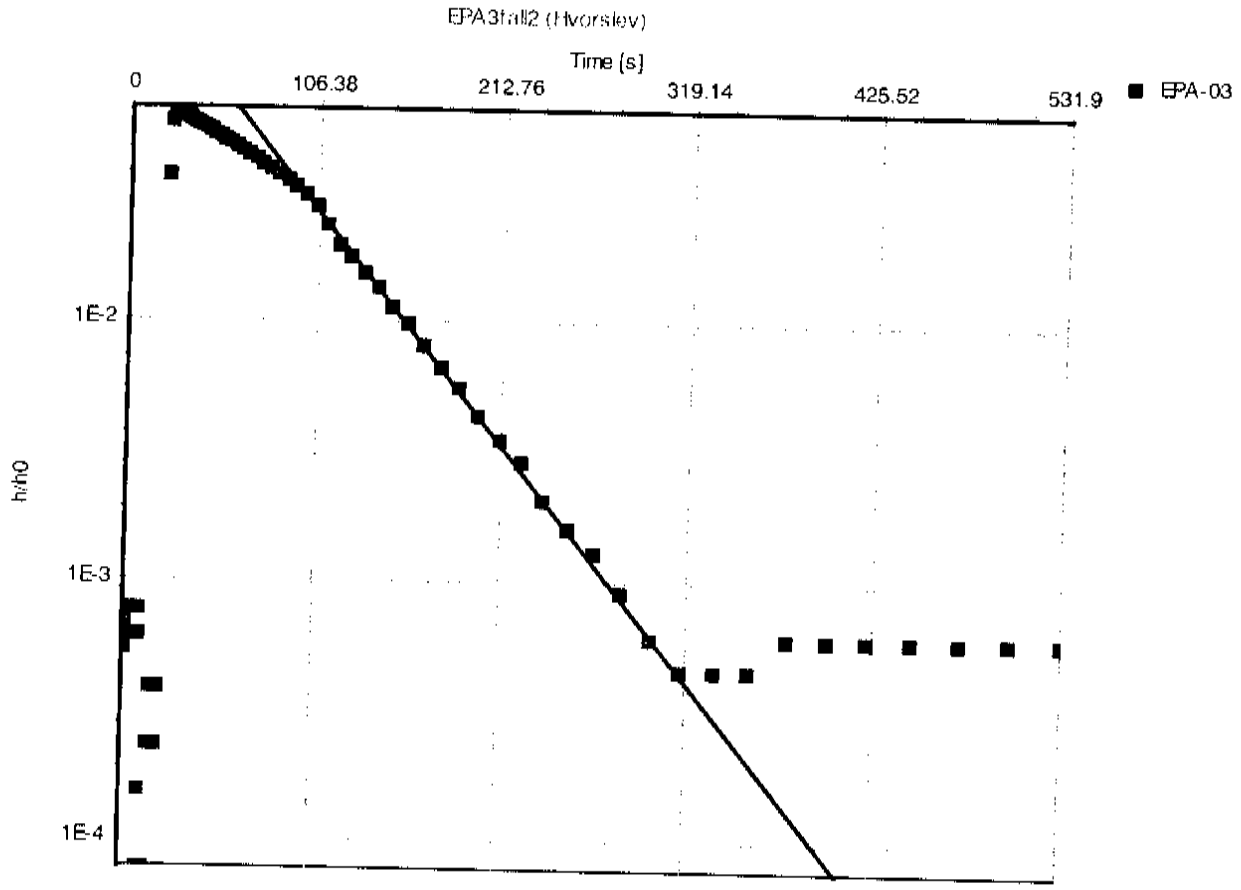
No: 106-1945.2149
Client: USEPA



Test name: **EPA3fall2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 1.12E-3 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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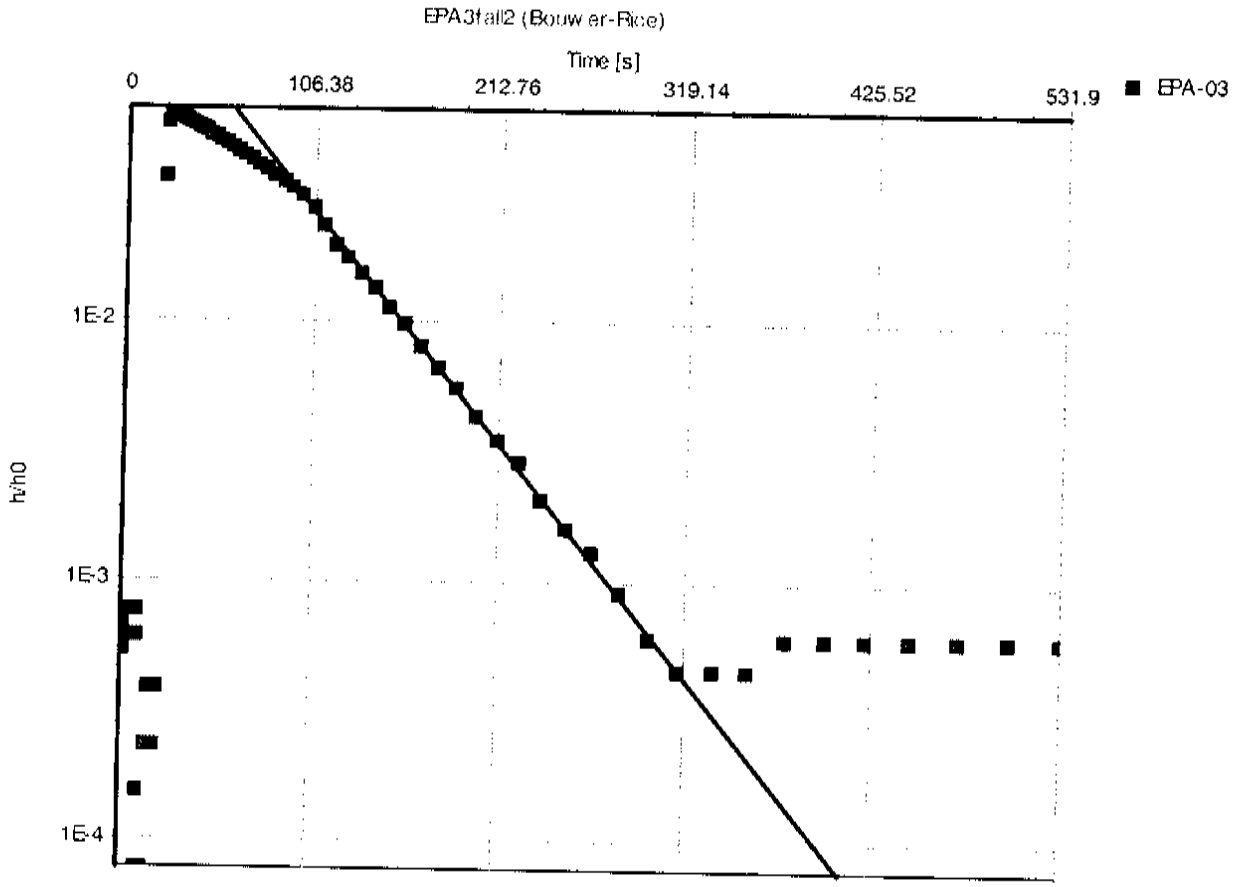
Client: USEPA



Test name: **EPA3fall2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 9.41E-4 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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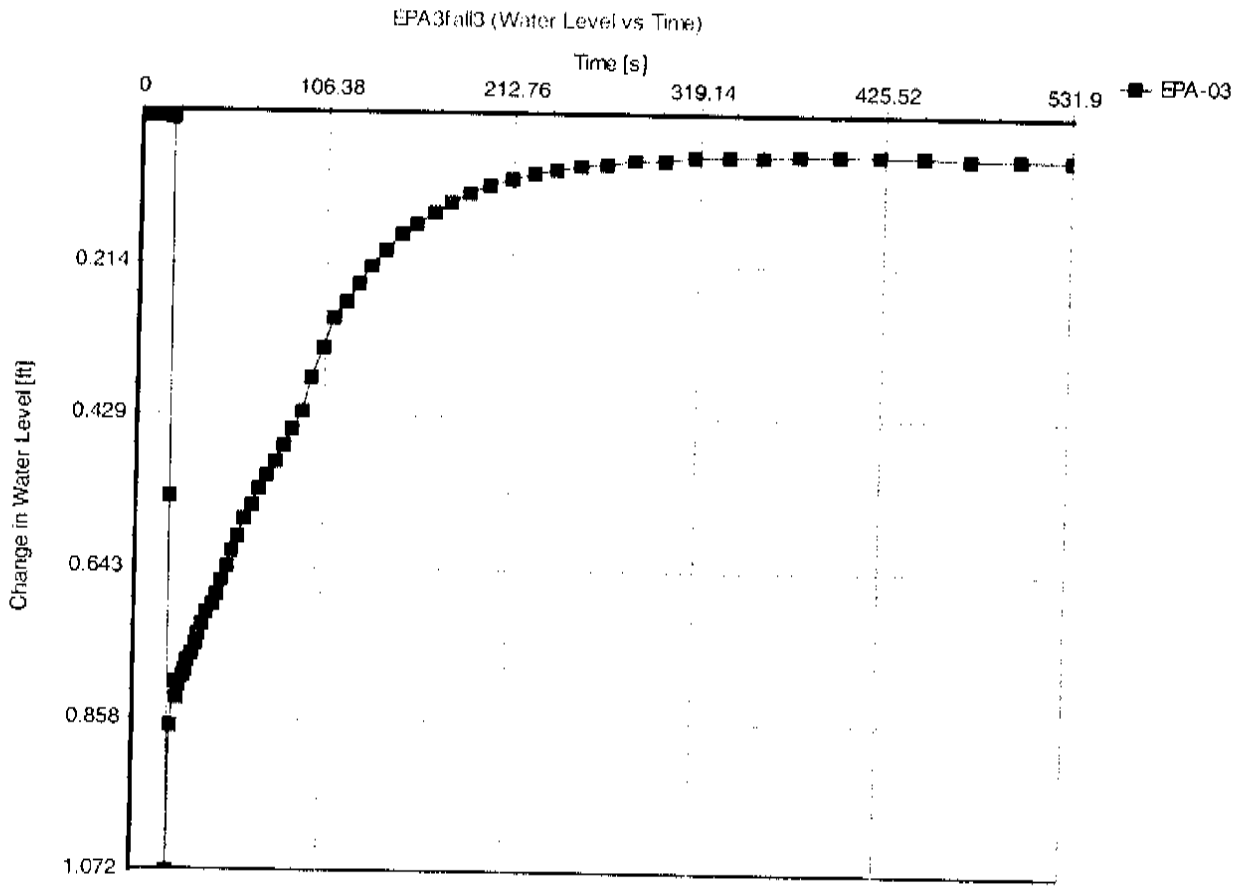

Test name: **EPA3fall3**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-03	Aquifer thickness:	8 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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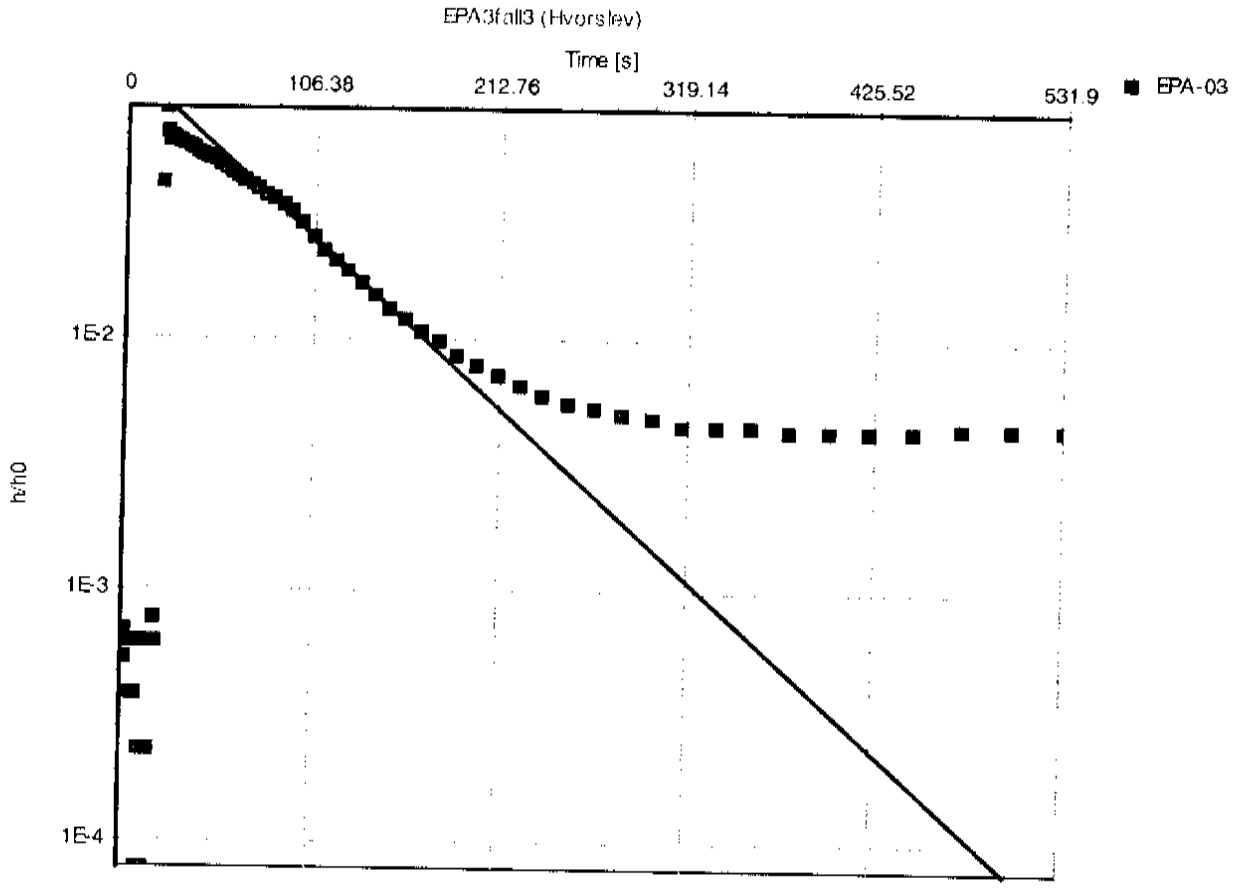

Test name: **EPA3fall3**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 8.42E-4 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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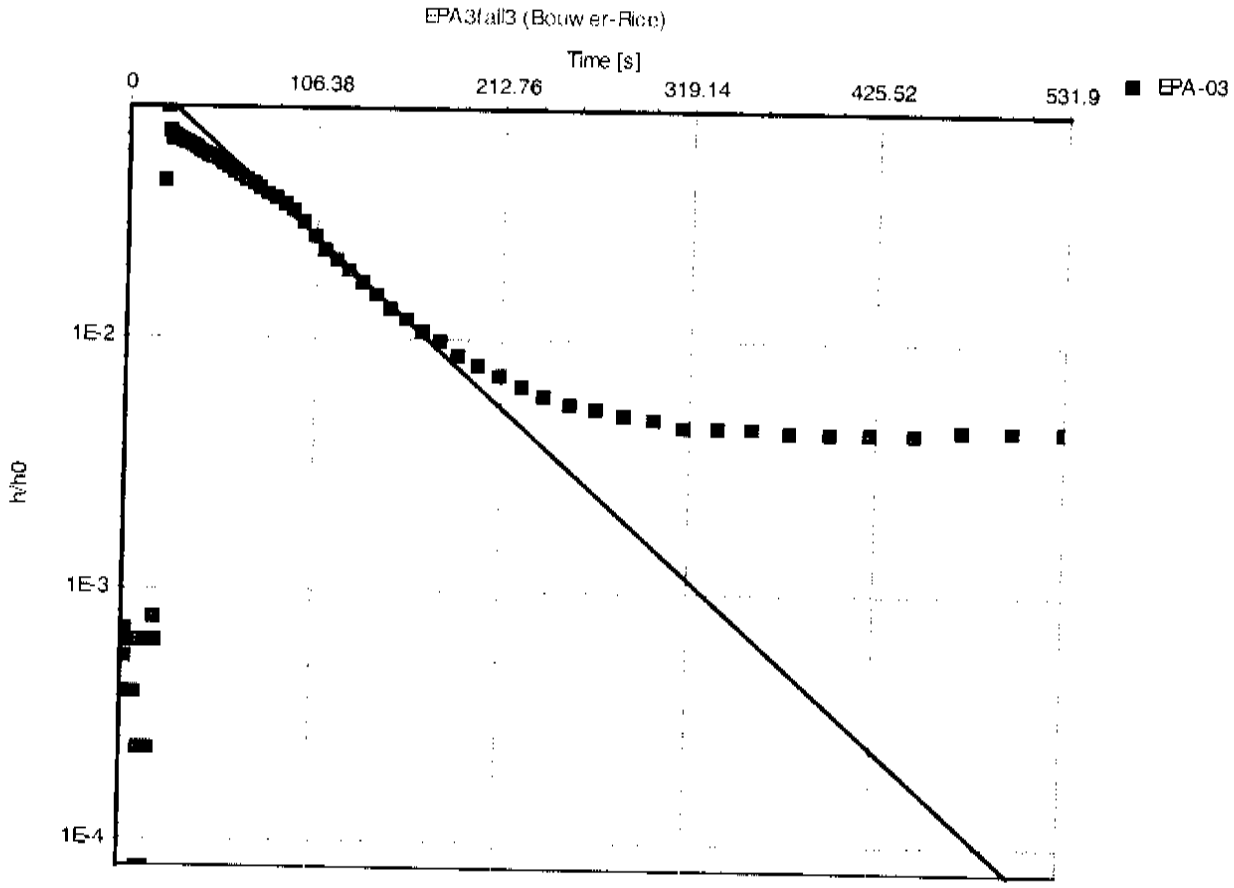

Test name: **EPA3fall3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 7.11E-4 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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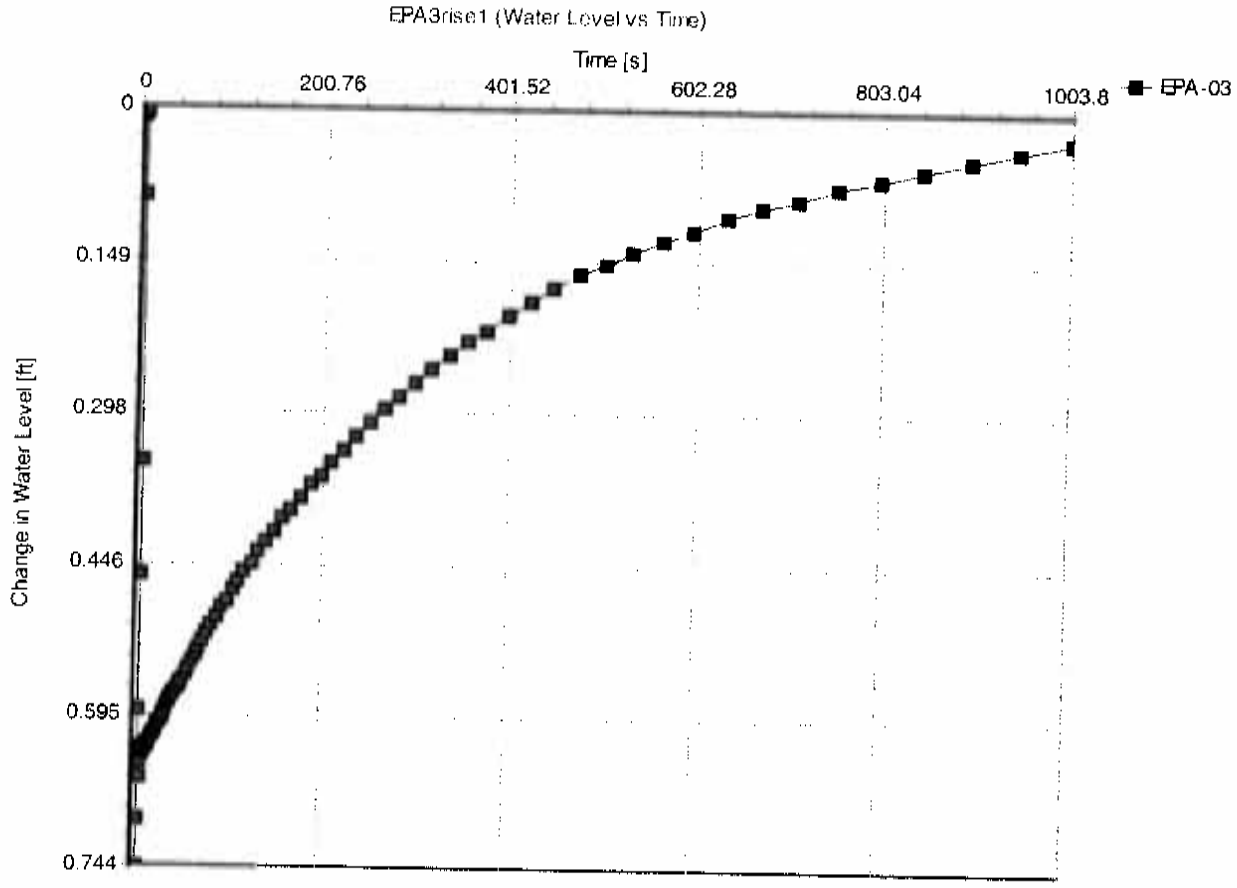

Test name: **EPA3rise1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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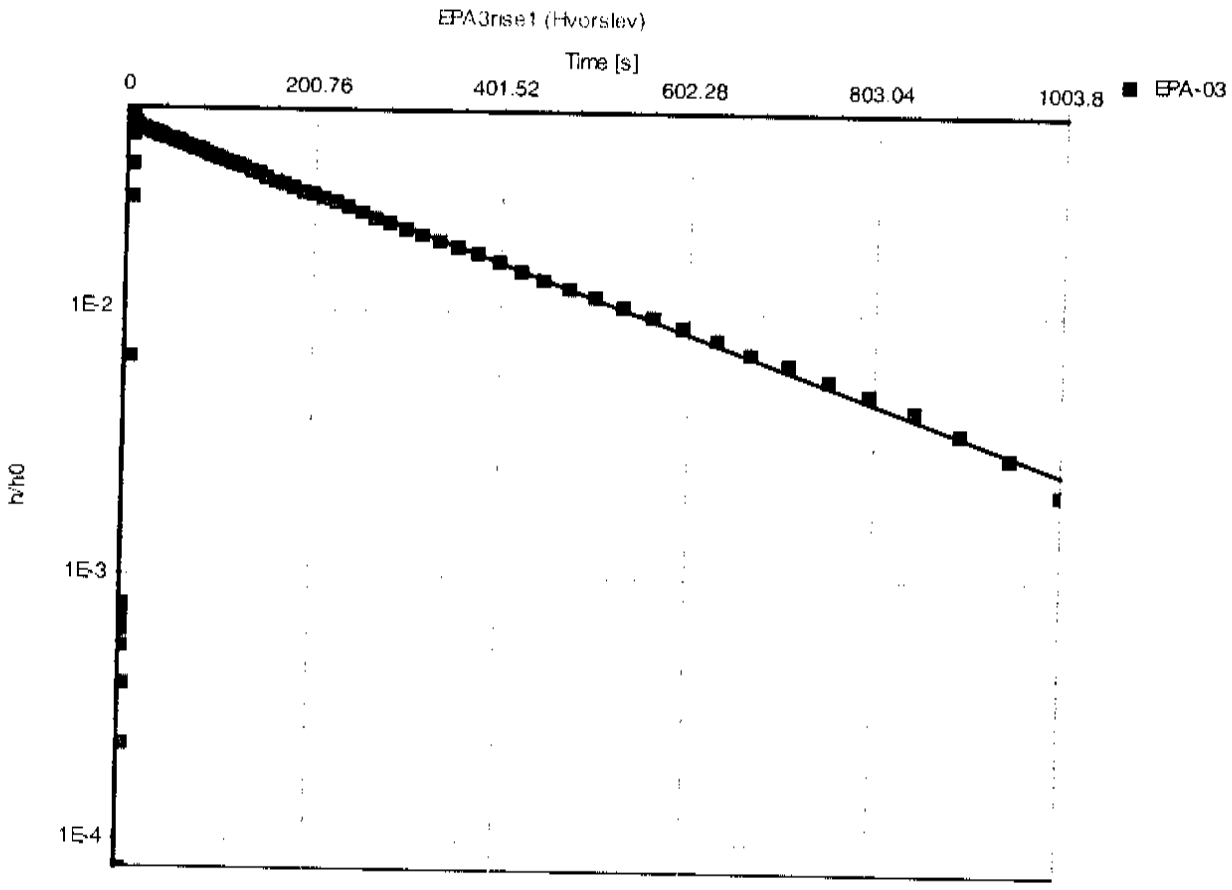

Test name: **EPA3rise1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 1.71E-4 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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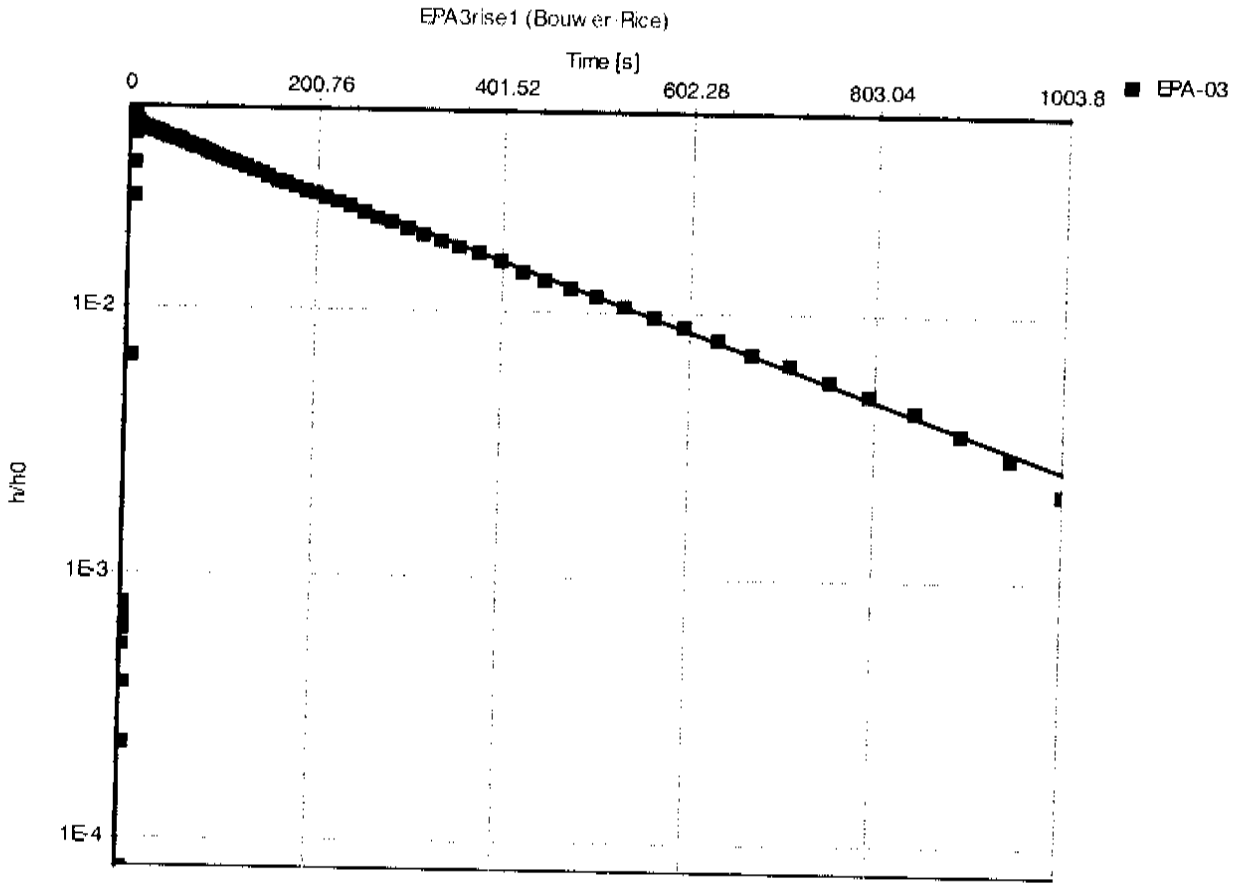

Test name: **EPA3rise1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.44E-4 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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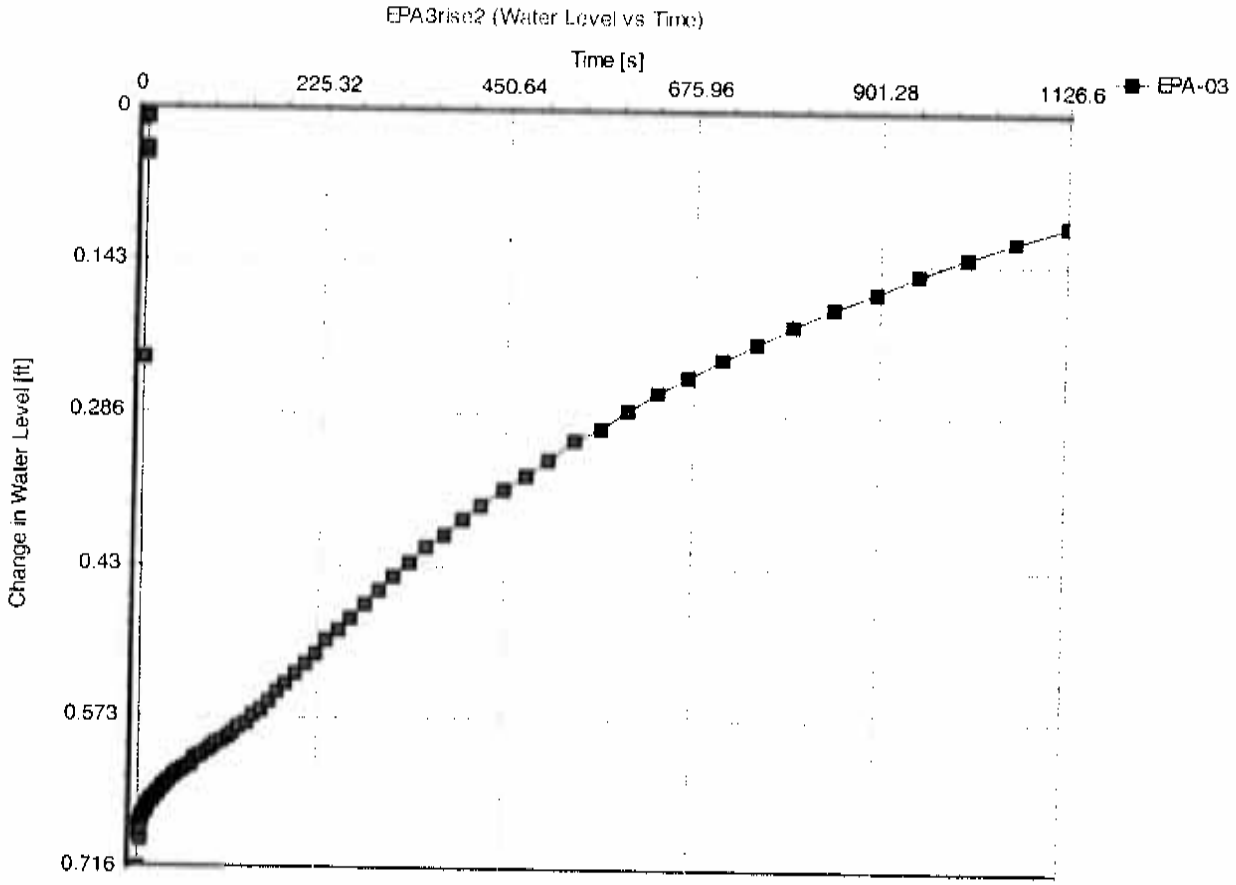

Test name: **EPA3rise2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2009

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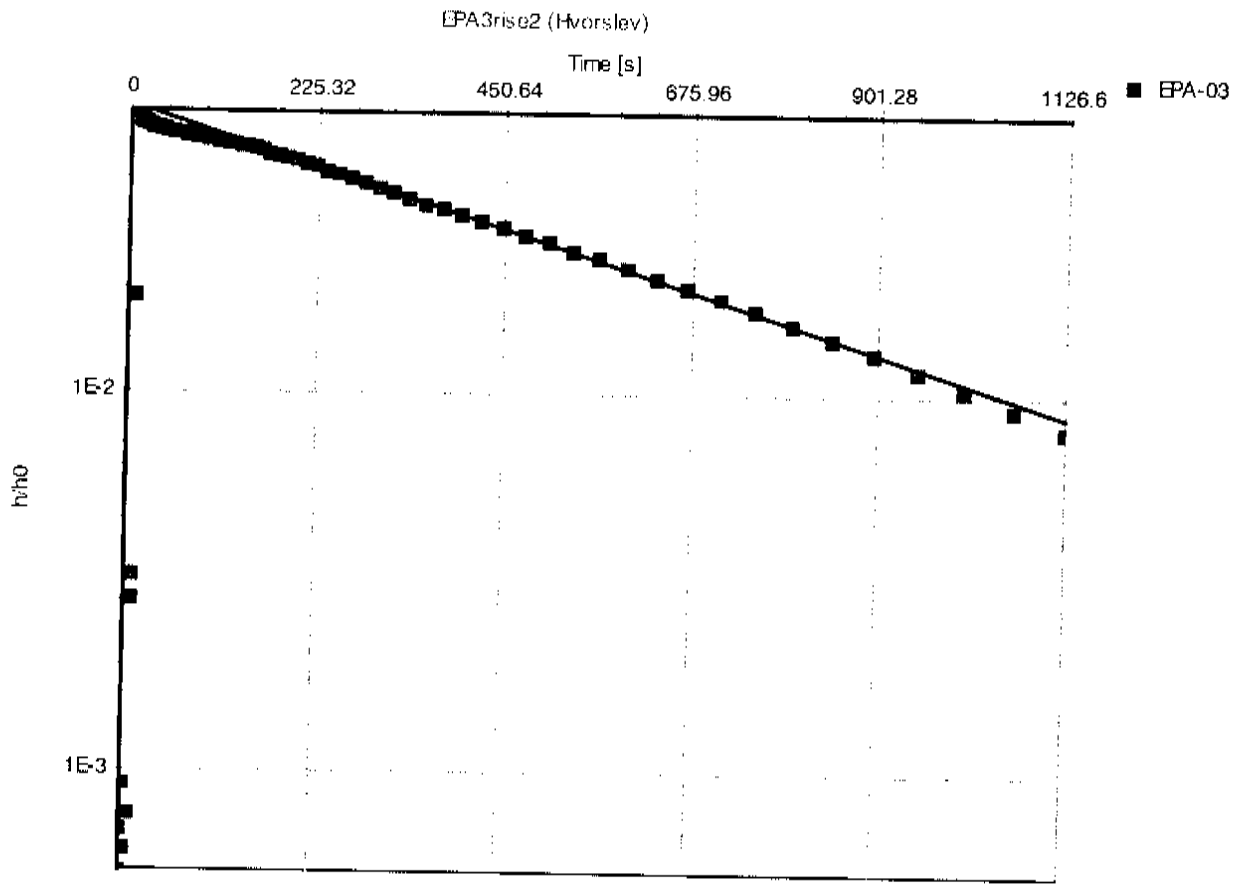
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA3rise2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 9.50E-5 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
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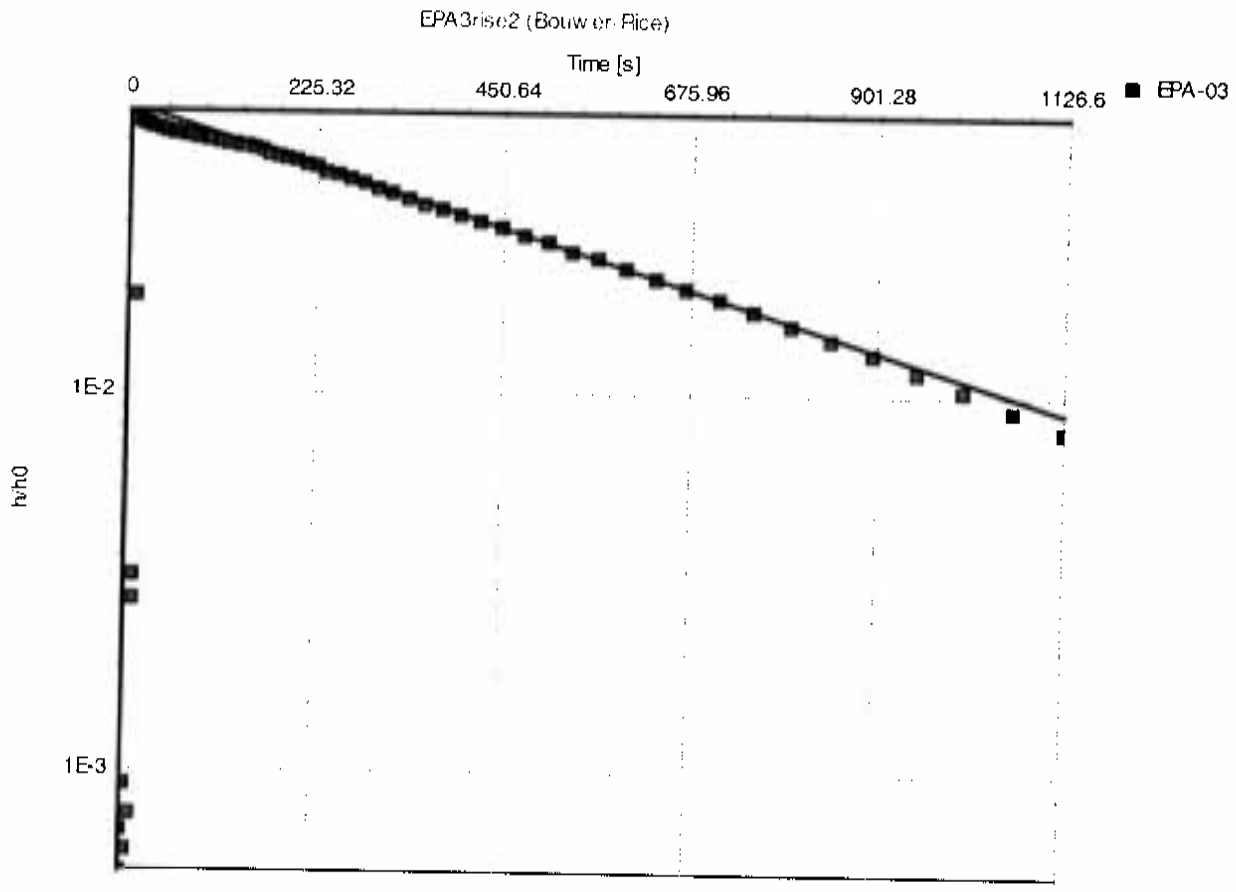

Test name: **EPA3rise2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 7.97E-5 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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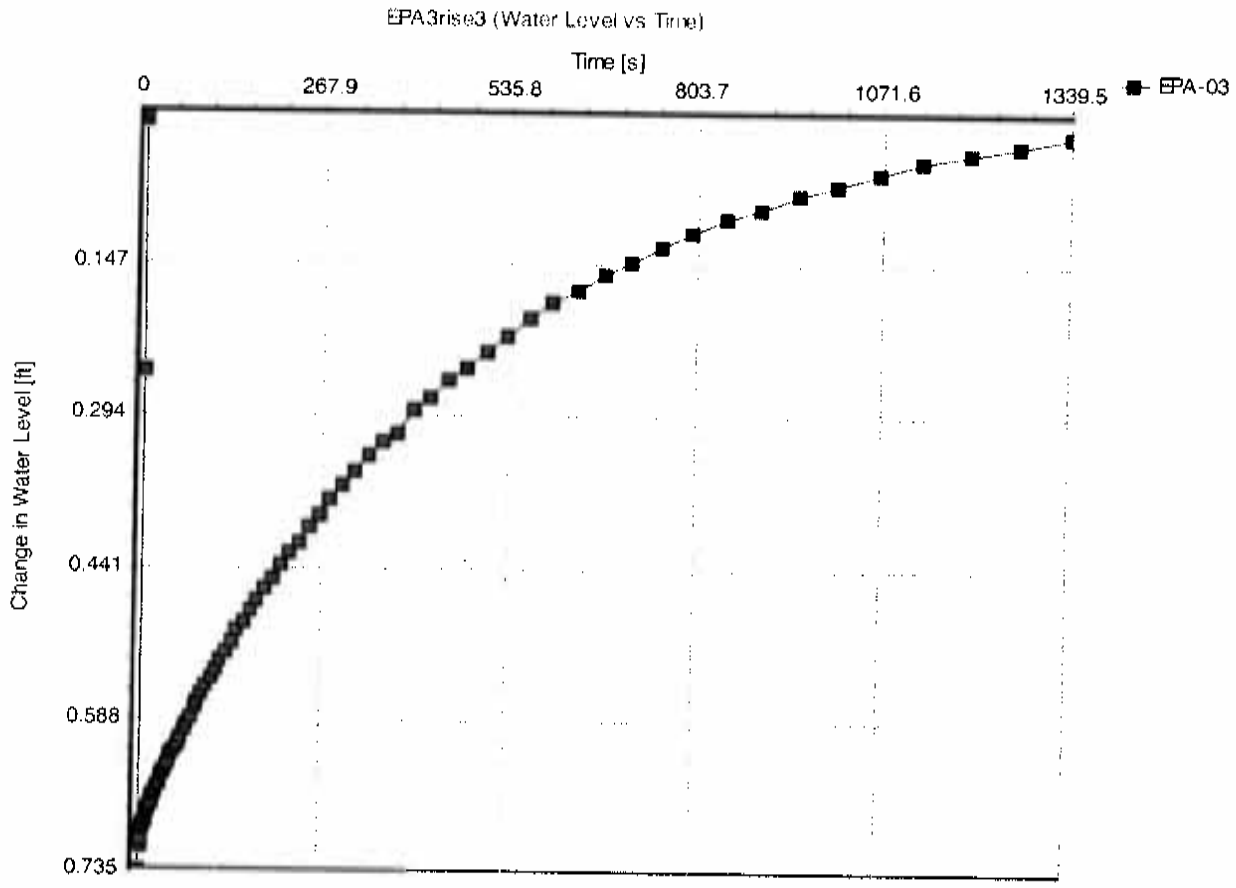
Client: USEPA



Test name: **EPA3rise3**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
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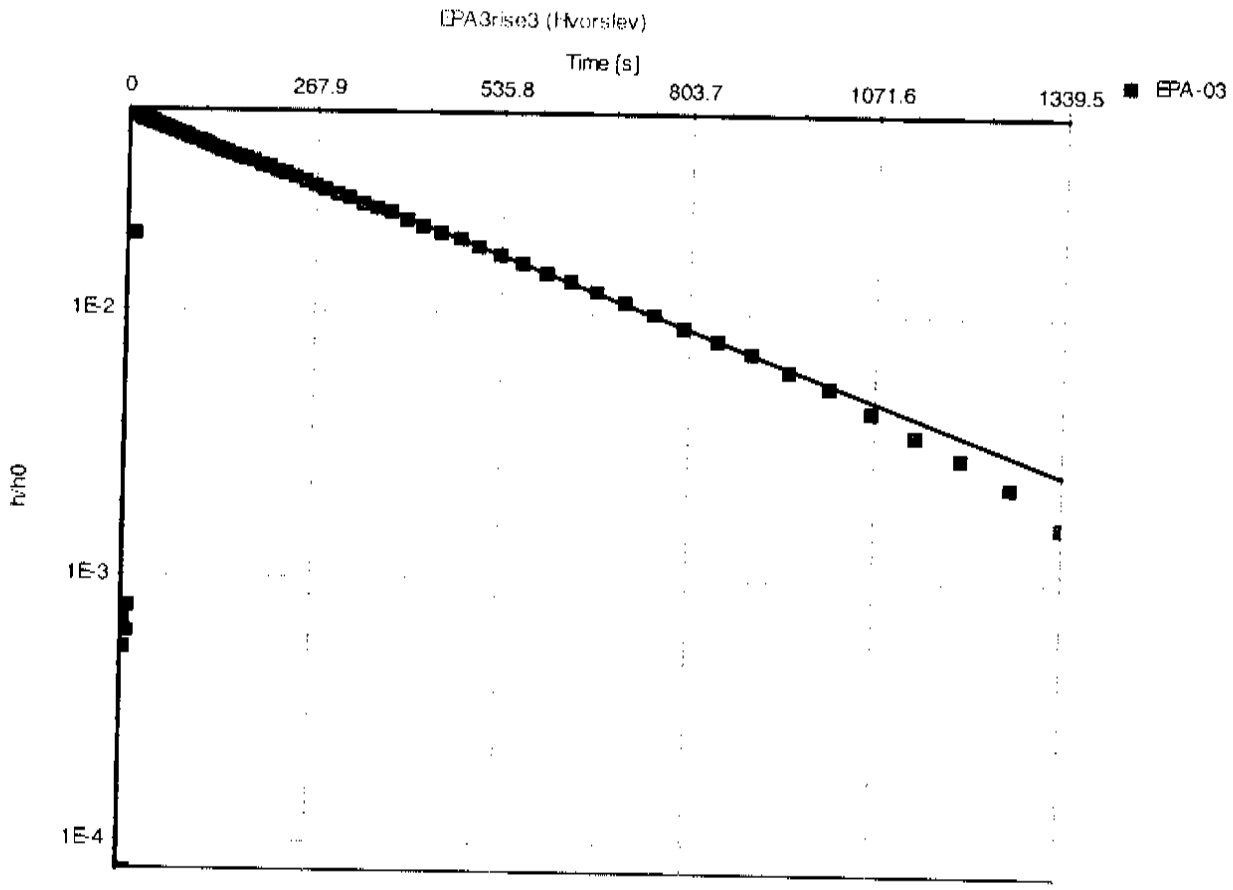

Test name: **EPA3rise3**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 1.33E-4 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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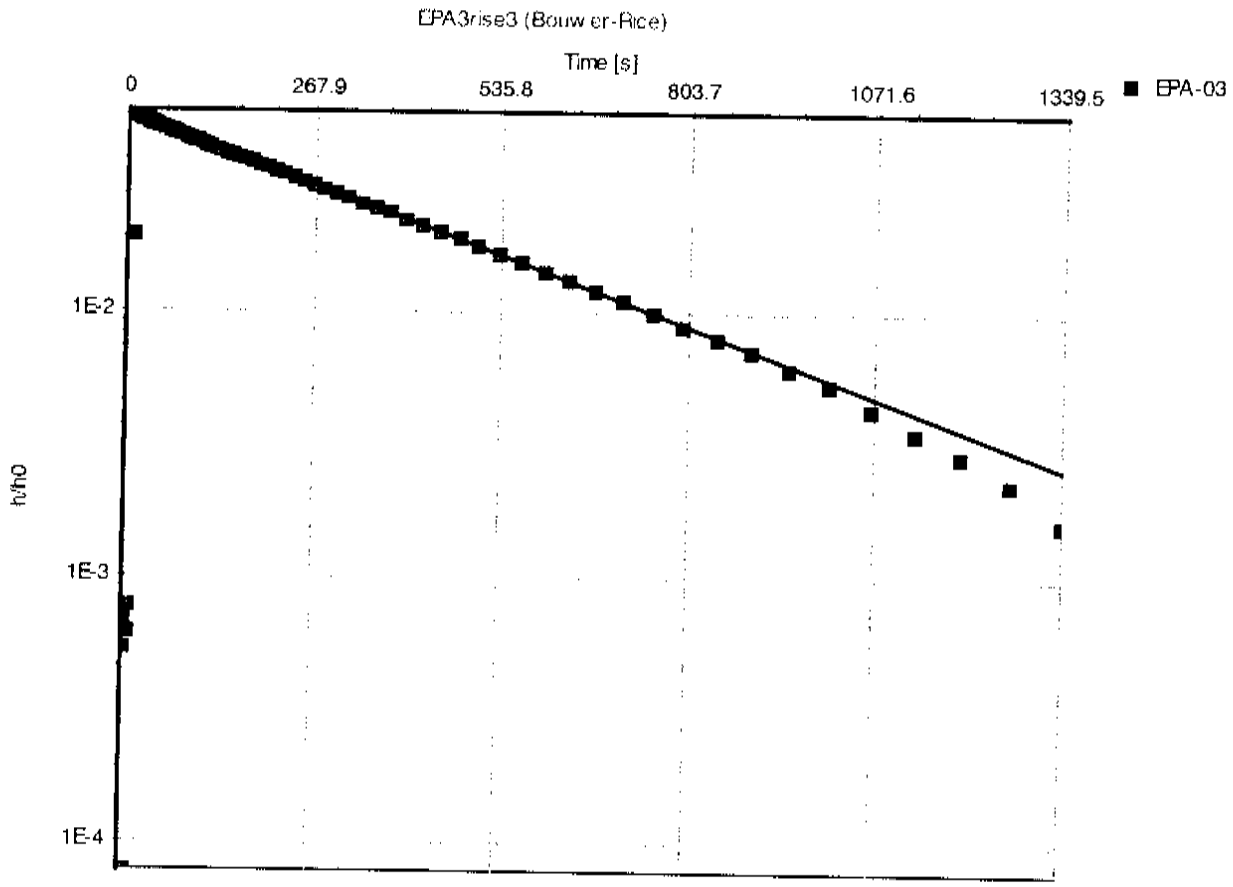
Client: USEPA



Test name: **EPA3rise3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.11E-4 [cm/s]

Test parameters:

Test well:	EPA-03	Aquifer thickness:	8 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/6/2008

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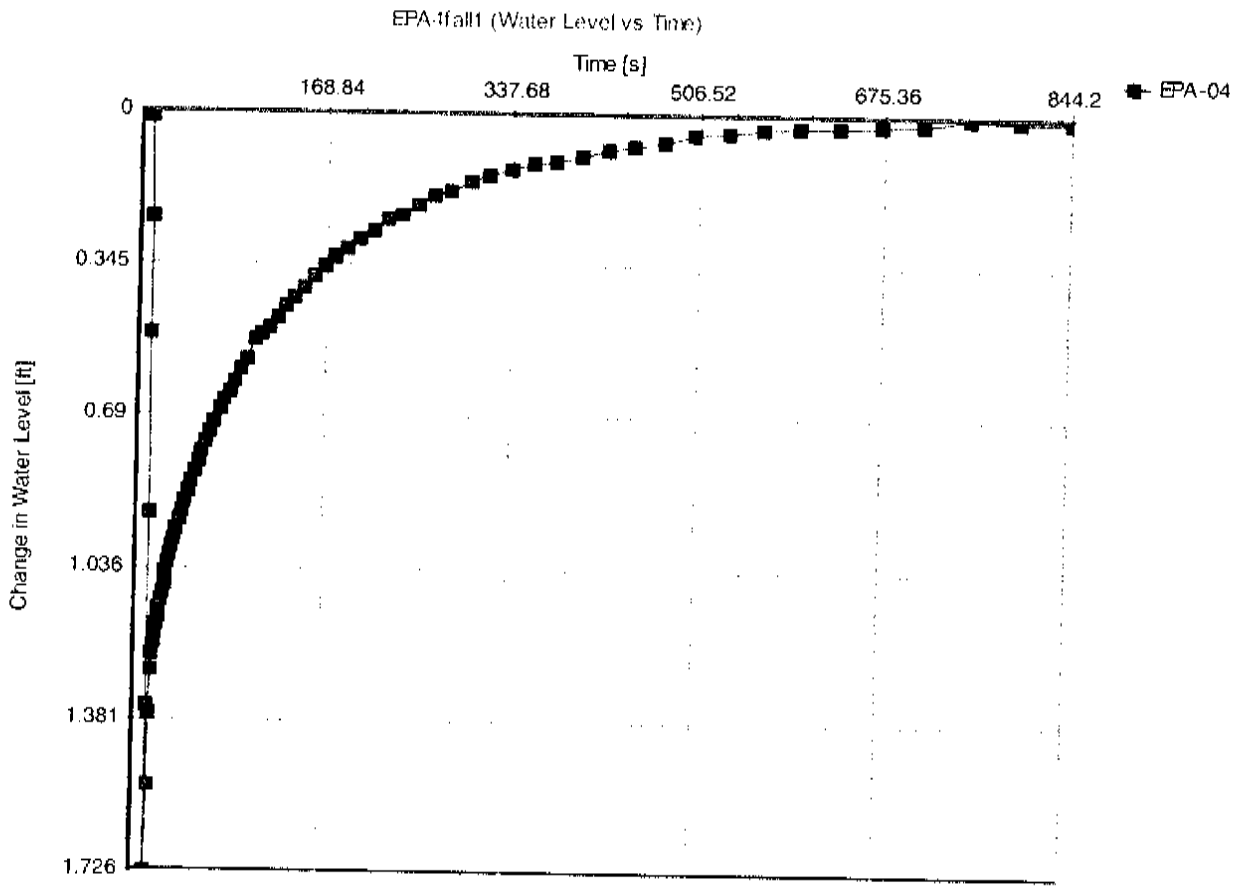
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4fall1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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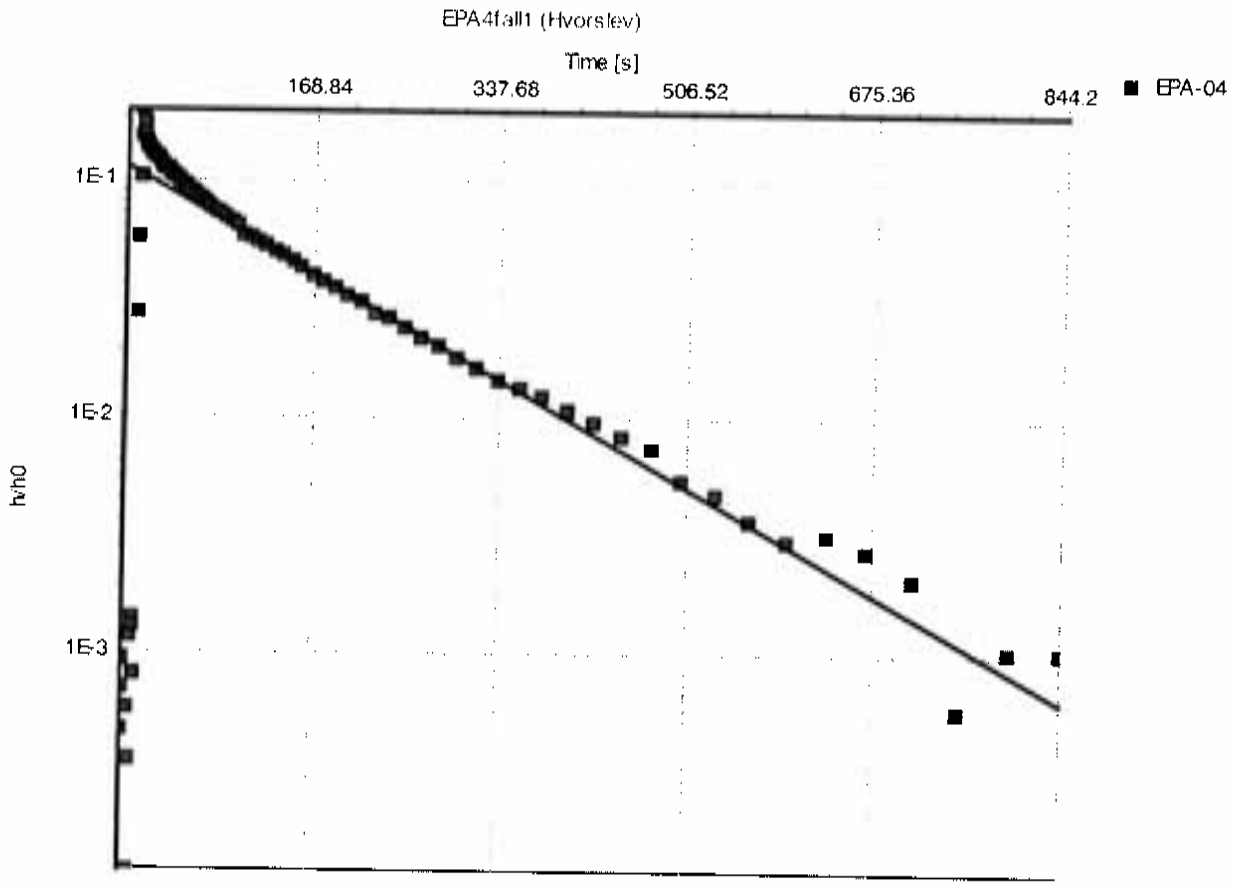
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4fall1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 3.55E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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1000 The American Road
Morris Plains, NJ 07950
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Slug Test Analysis Report

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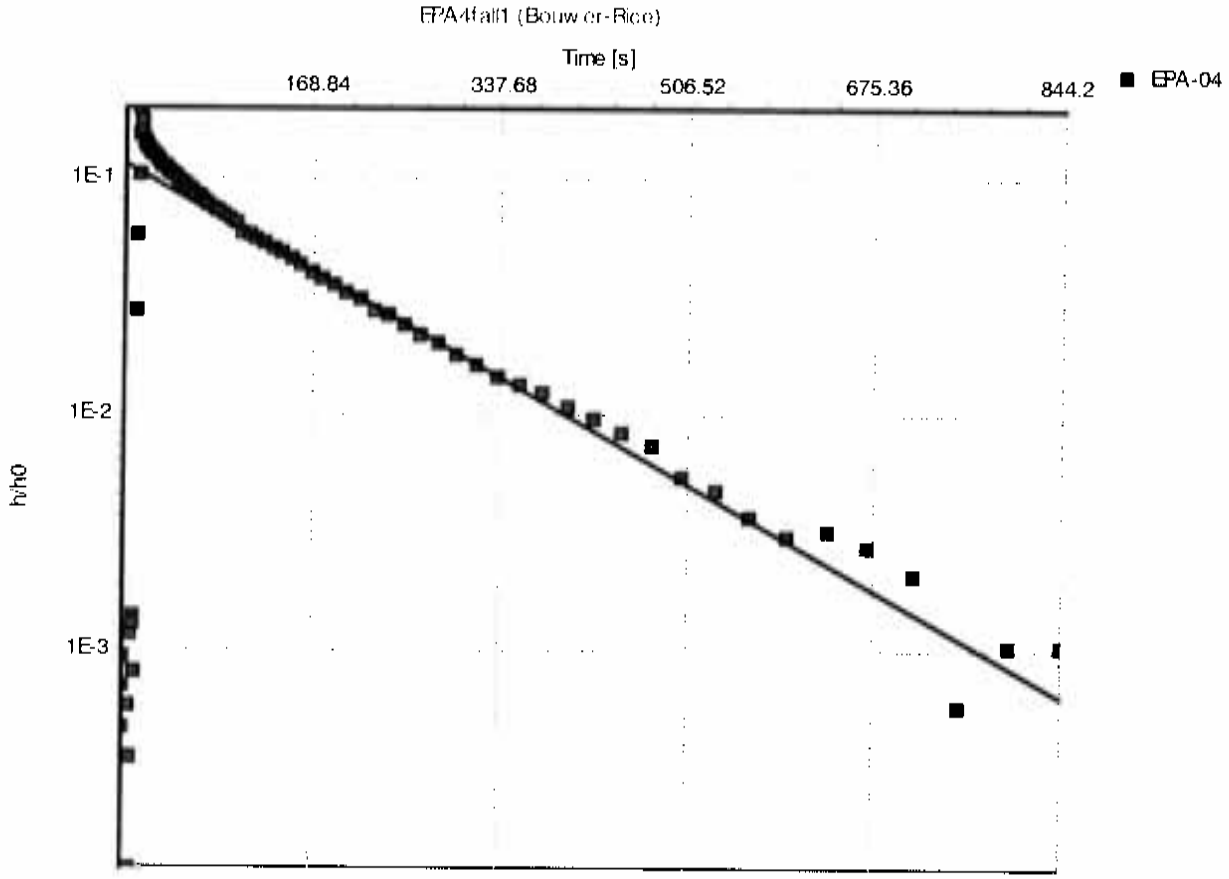
No: 106-1945.2149
Client: USEPA



Test name: **EPA4fall1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 3.39E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

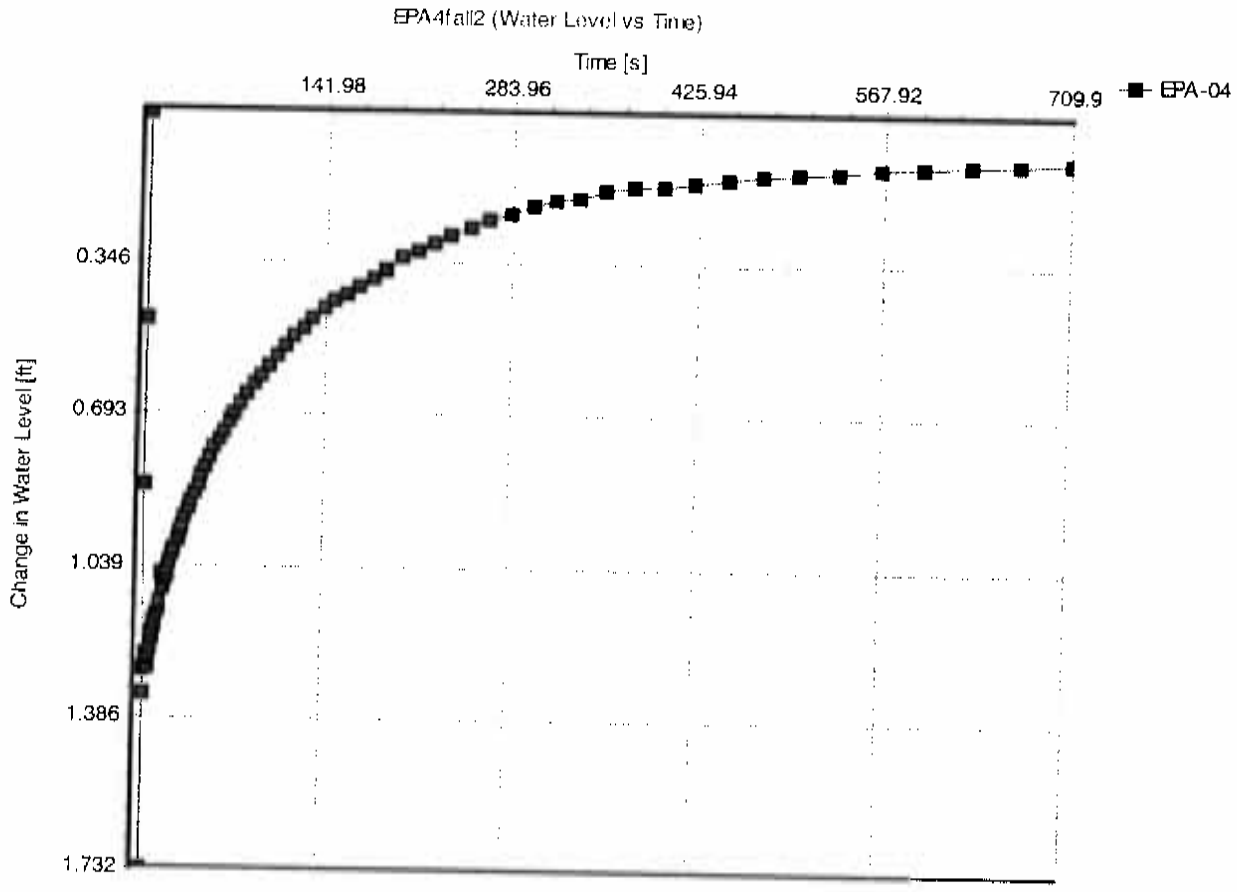
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4fall2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

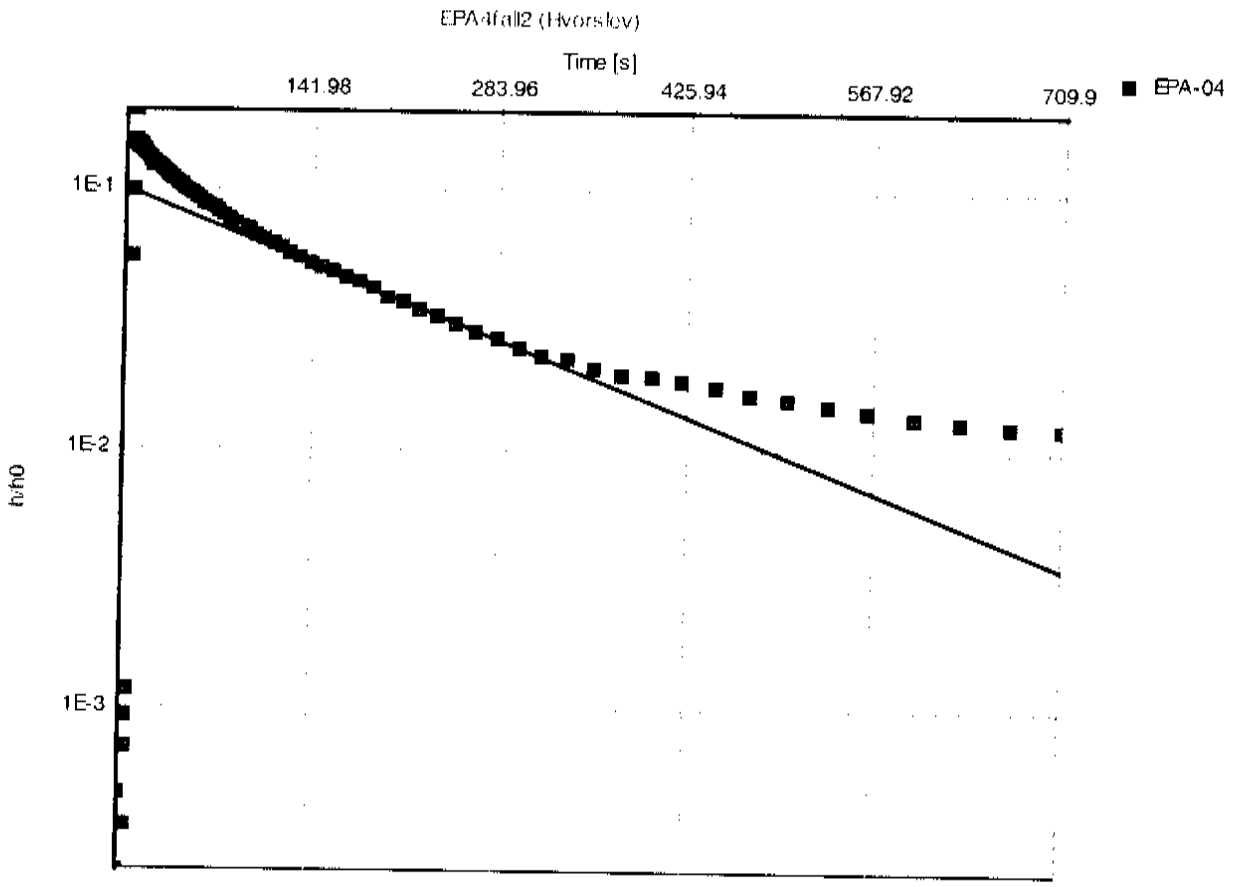
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4fall2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 2.71E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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1000 The American Road
Morris Plains, NJ 07950
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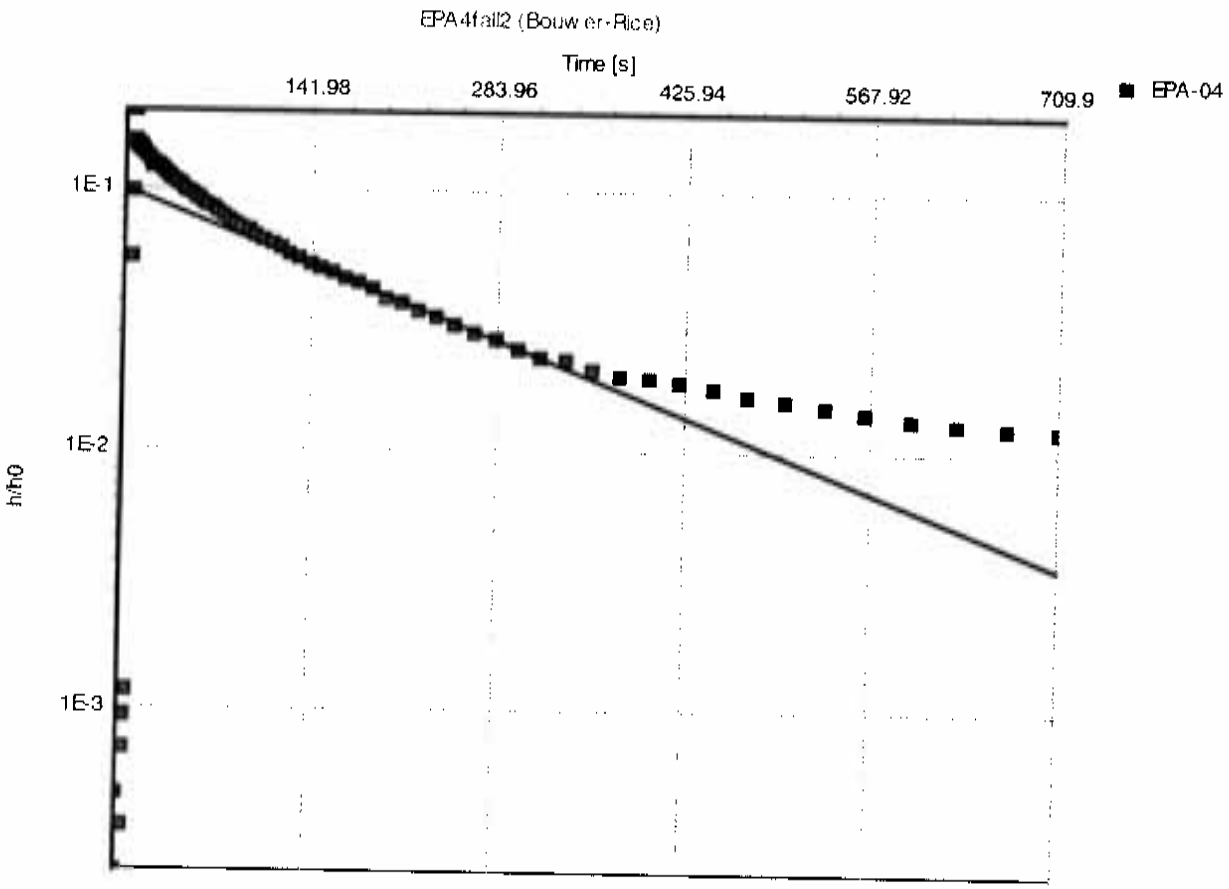
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4fall2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.57E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
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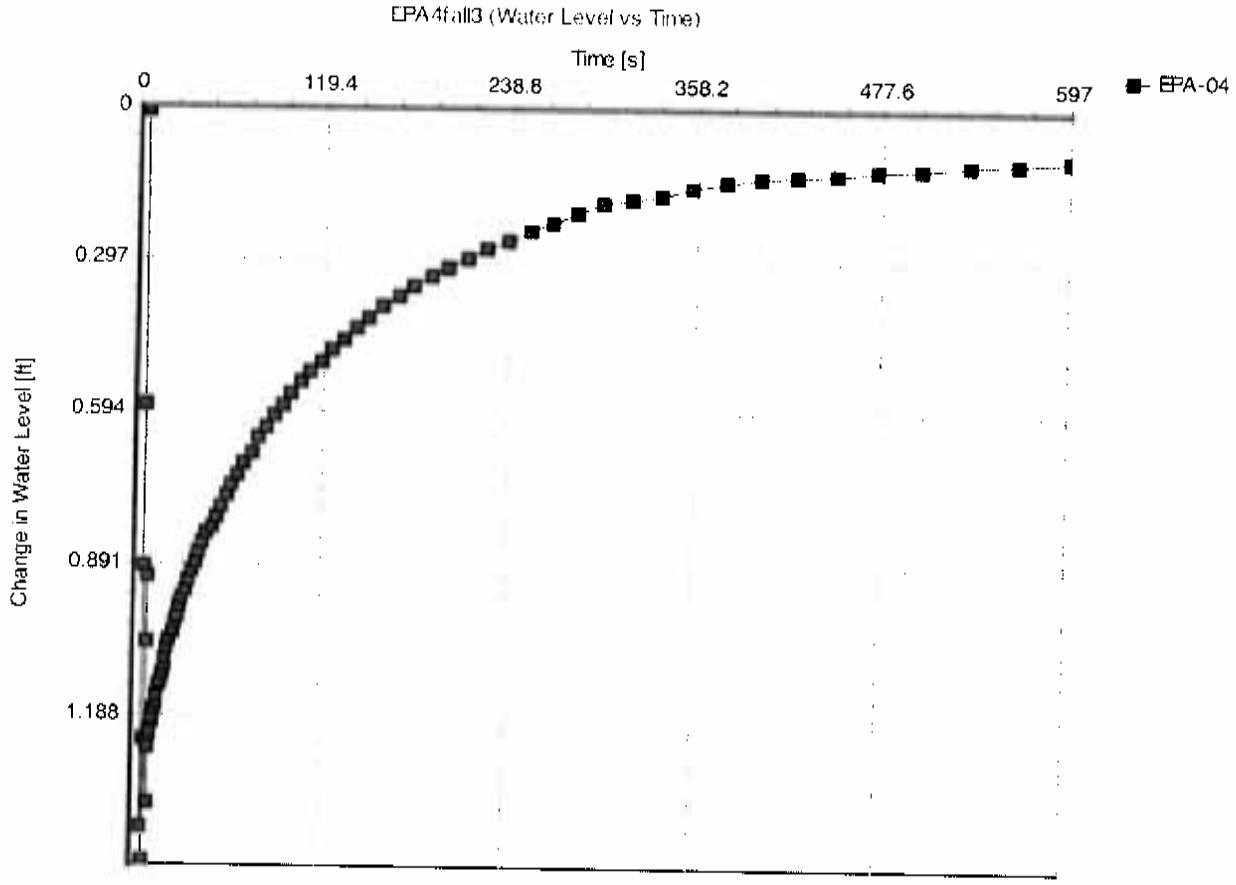

Test name: **EPA4fall3**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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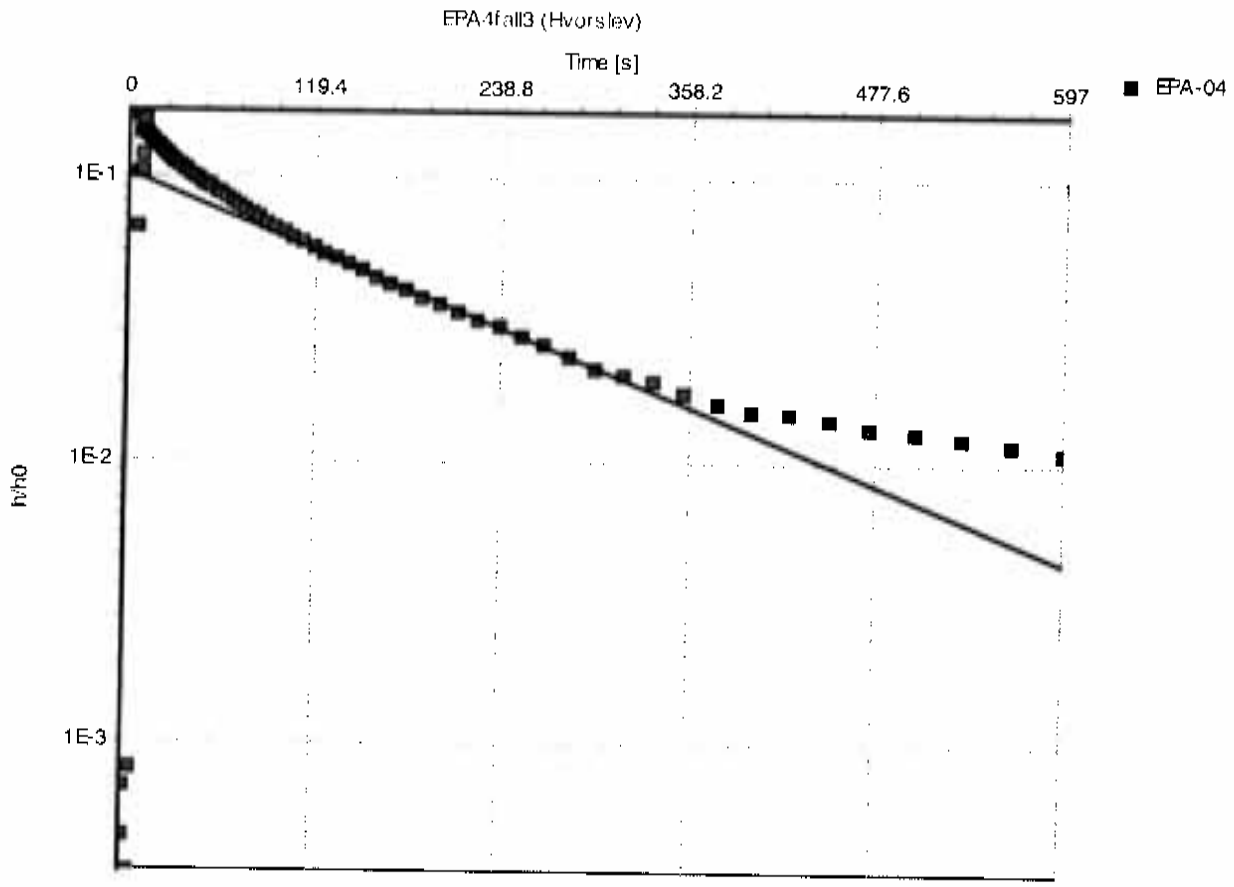
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4fall3**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 3.05E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

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Date: 12/5/2008

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Slug Test Analysis Report

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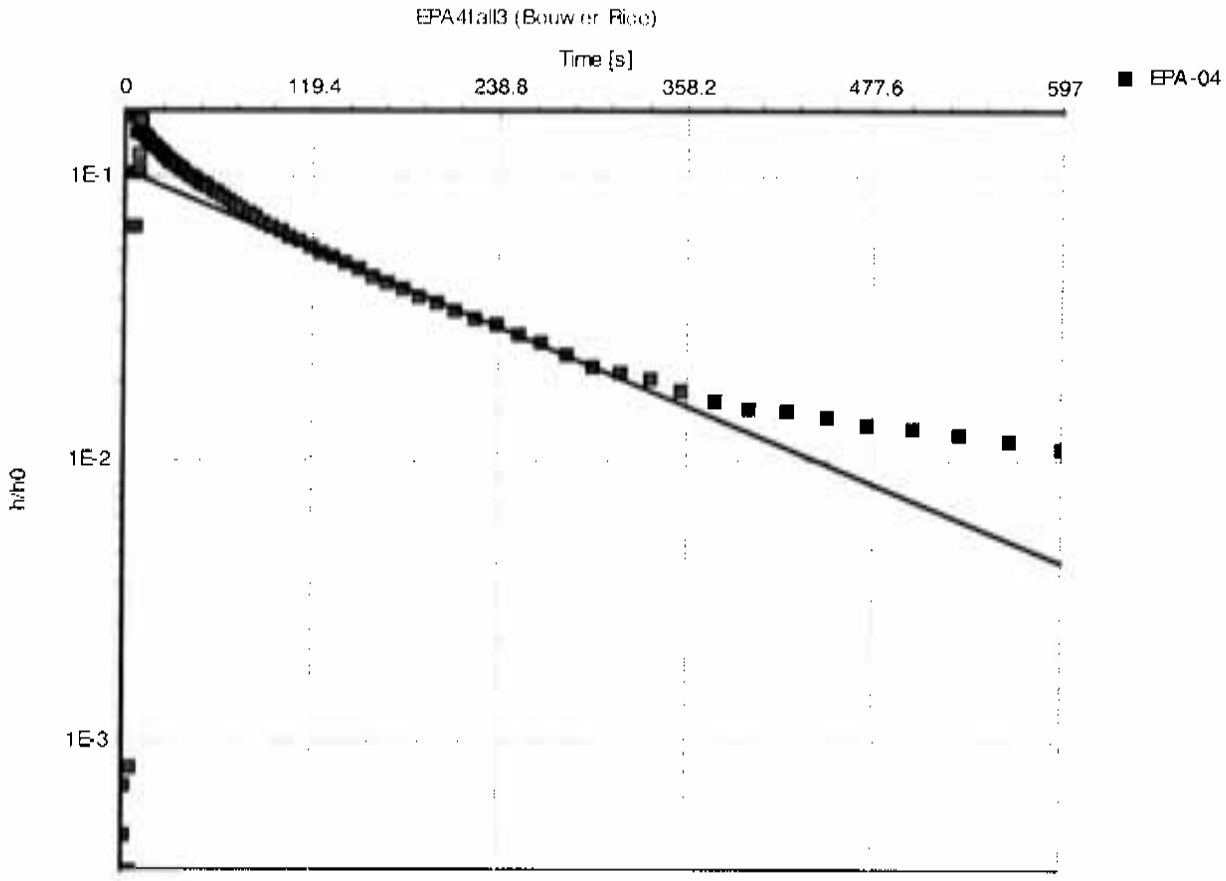
Client: USEPA



Test name: **EPA4fall3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.95E-4 [cm/s]

Test parameters:				
	Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
	Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		
	r(eff):	0.182 [ft]		

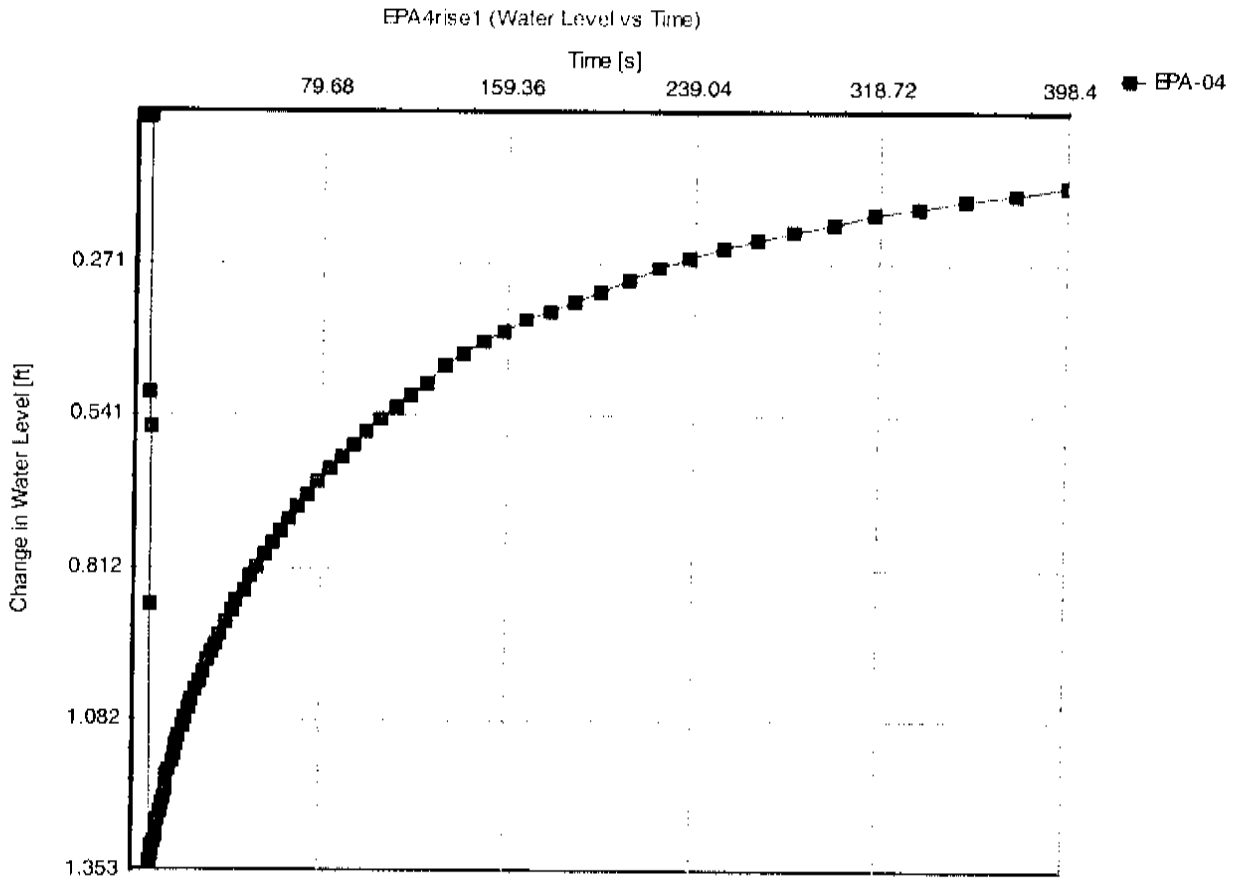
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4rise1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
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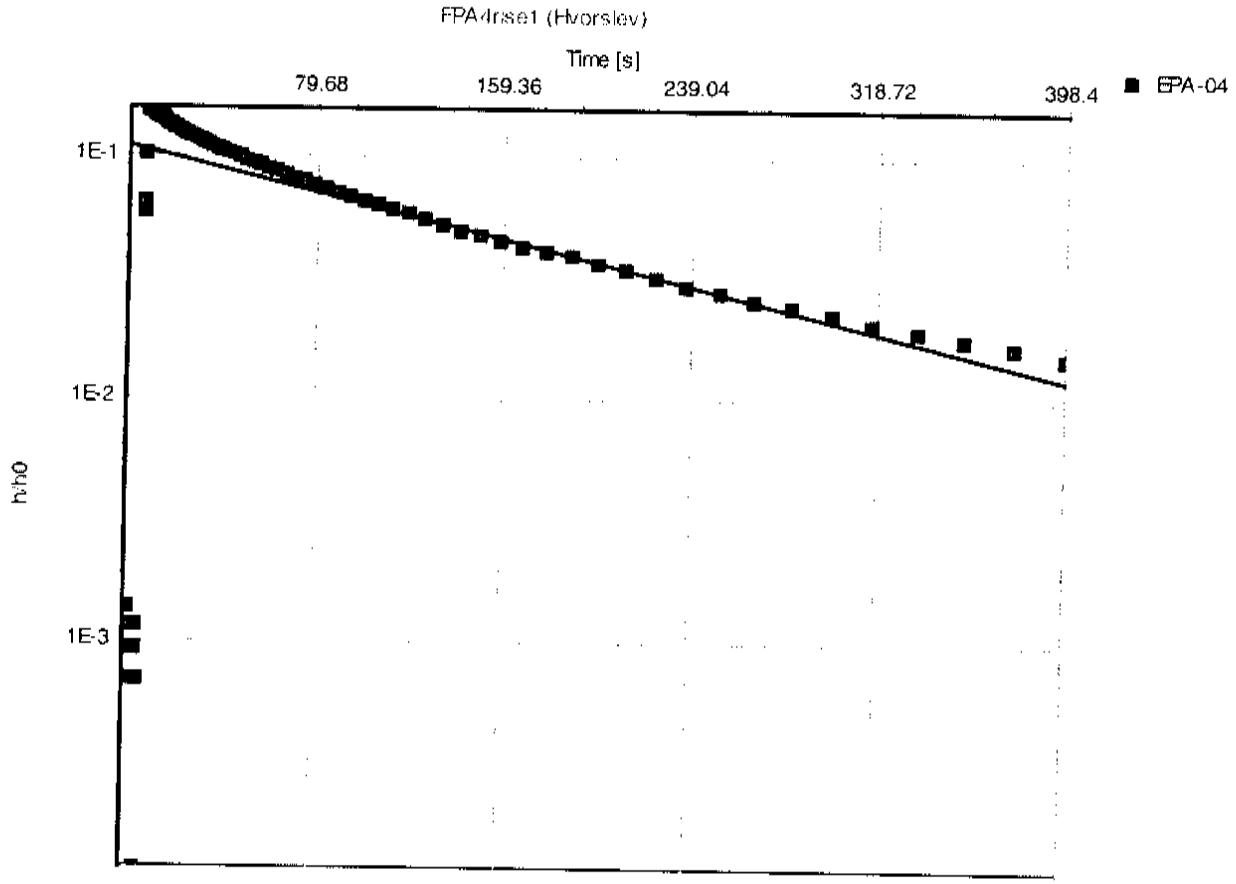
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4rise1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 3.18E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
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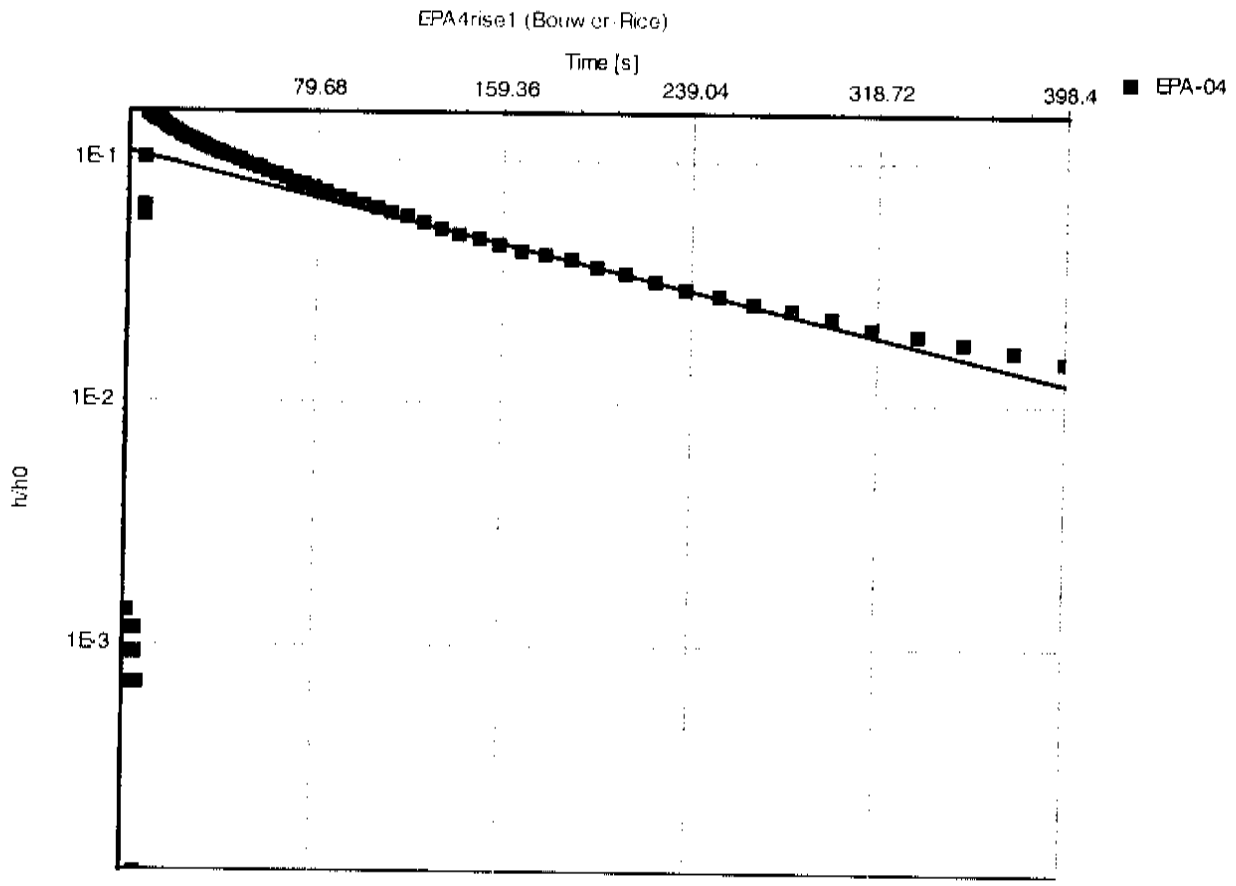
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4rise1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.99E-4 [cm/s]

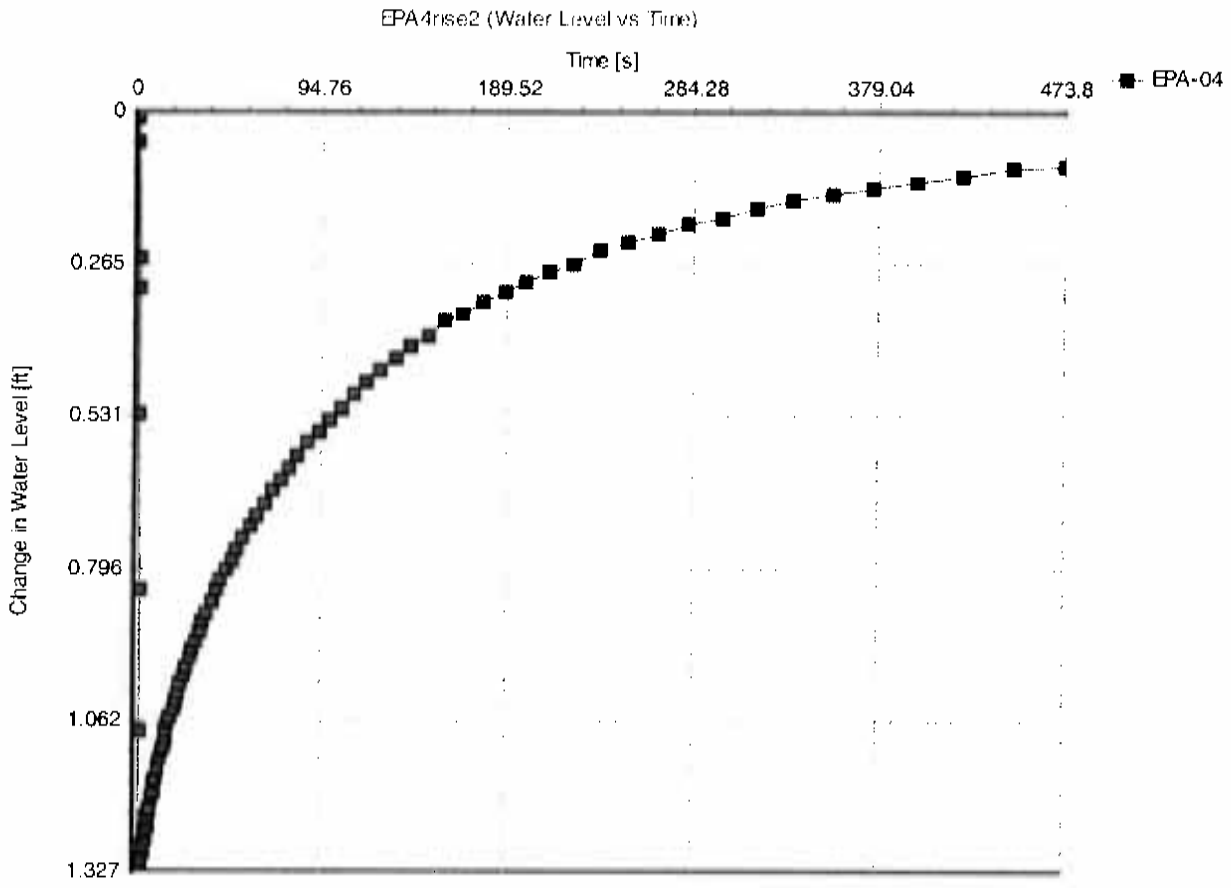
Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc. 1000 The American Road Morris Plains, NJ 07950 973-630-8000	**Slug Test Analysis Report** Project: Ellenville Scrap Iron and Metal Site No: 106-1945.2149 Client: USEPA



Test name: **EPA4rise2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

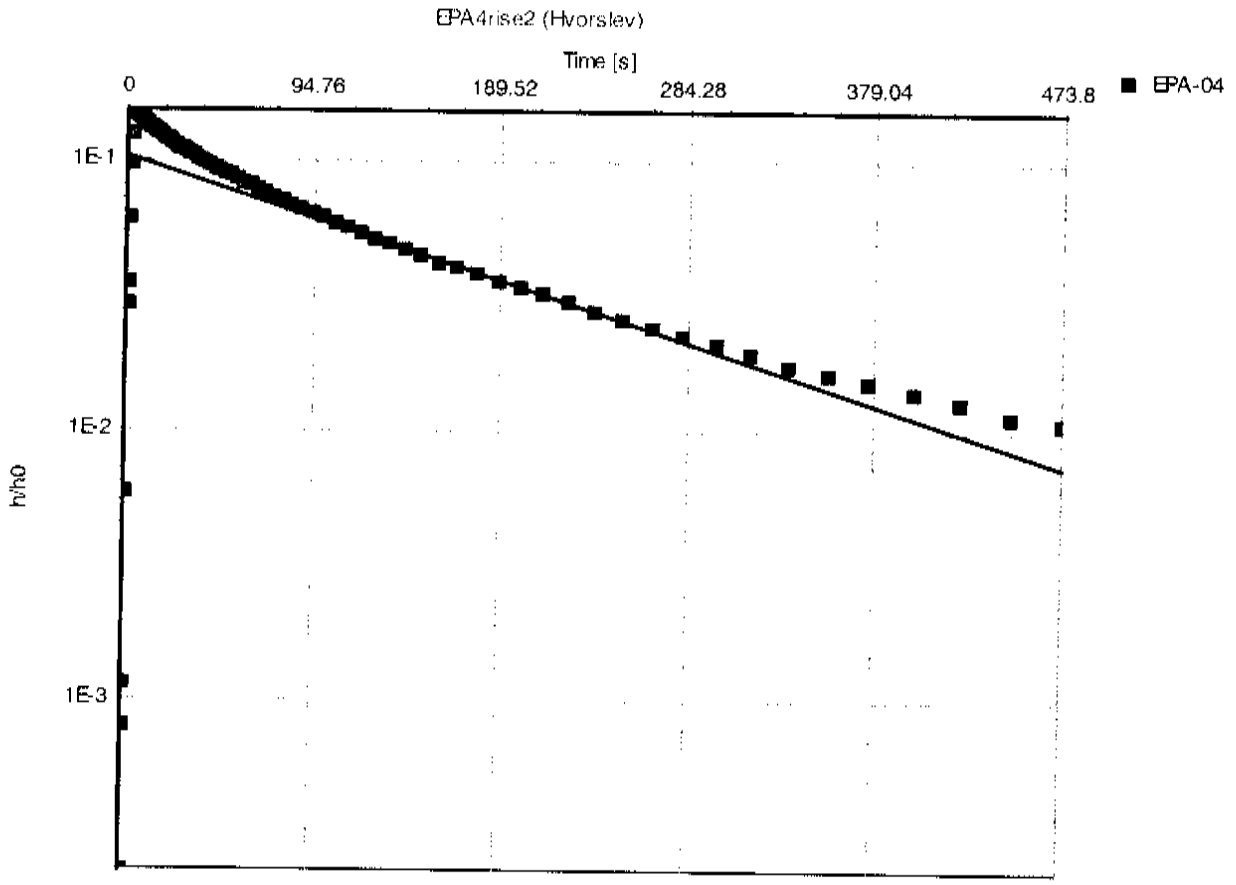
Evaluated by: MK

Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4rise2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 3.20E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
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Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
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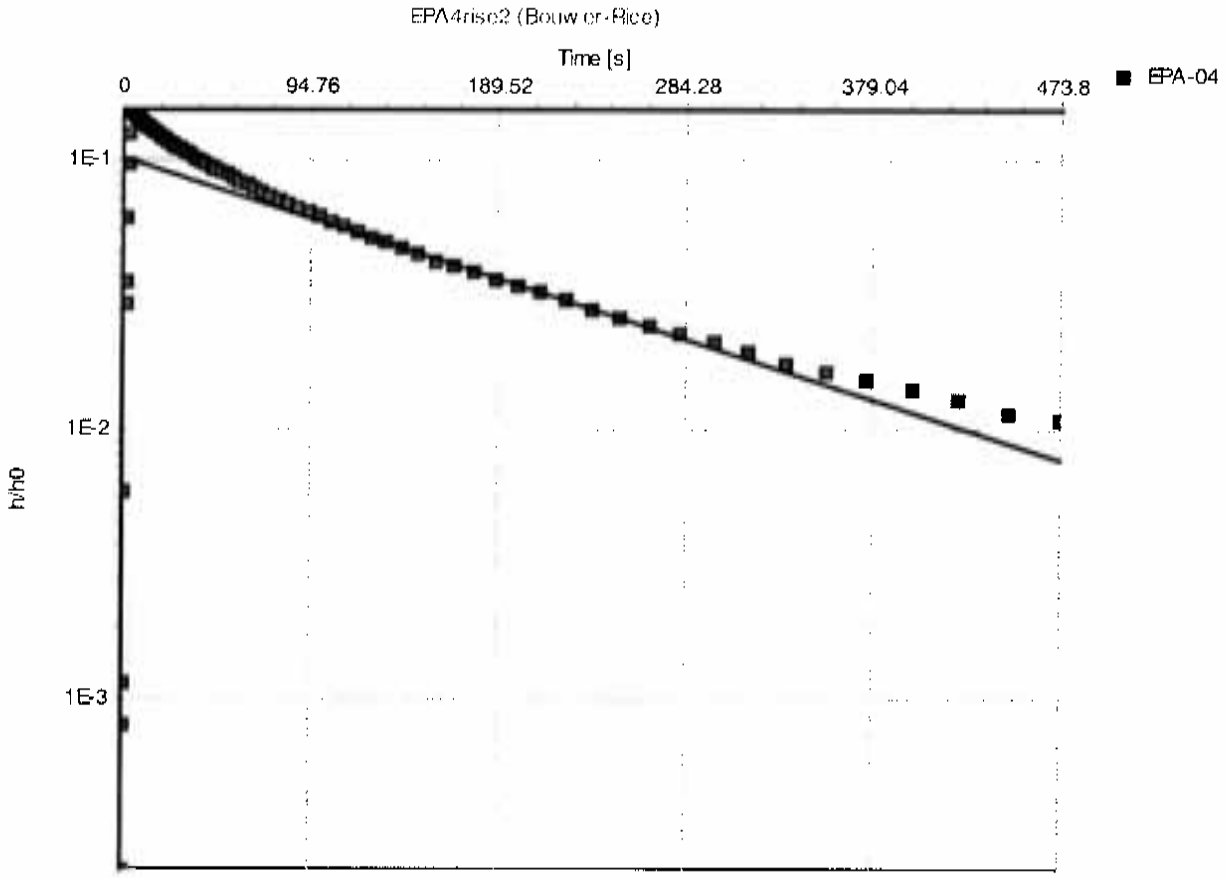
Client: USEPA



Test name: **EPA4rise2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.99E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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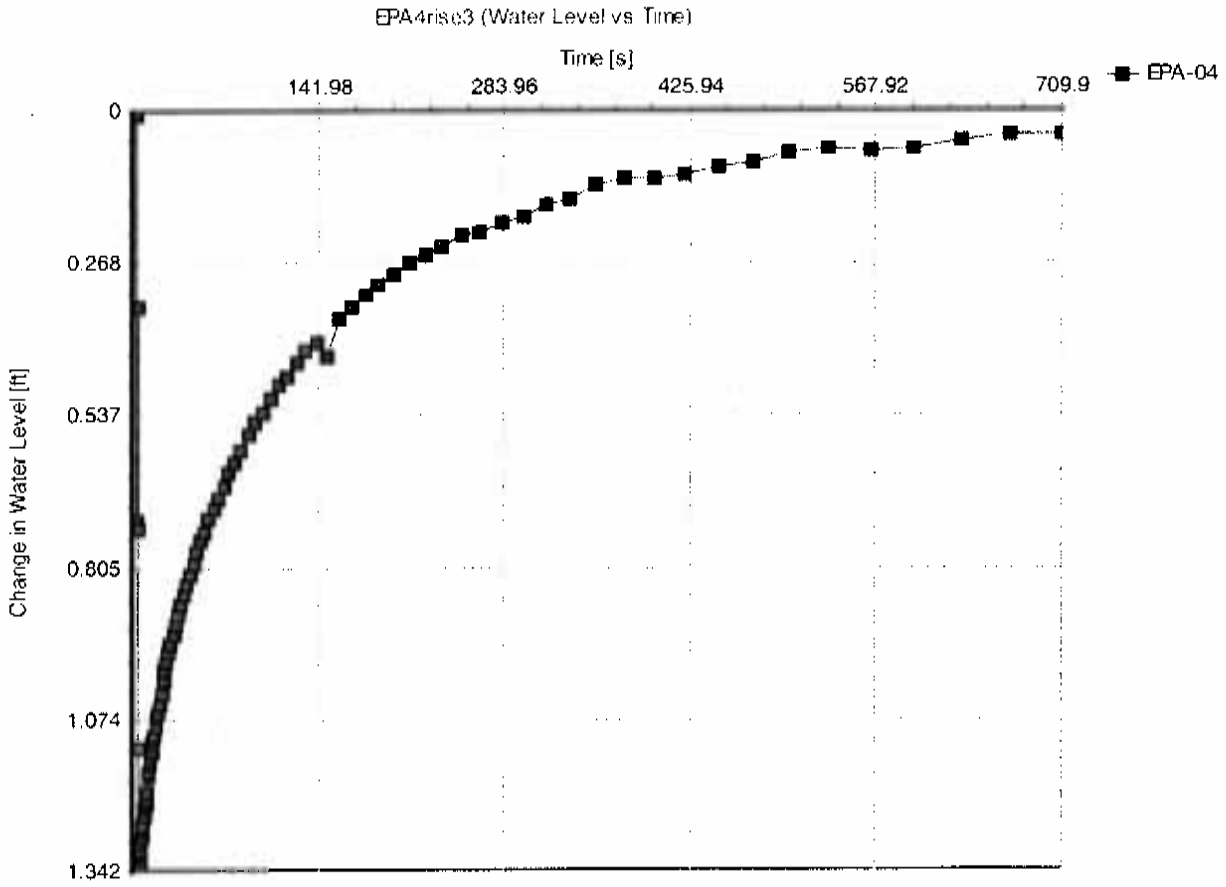
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4rise3**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Morris Plains, NJ 07950
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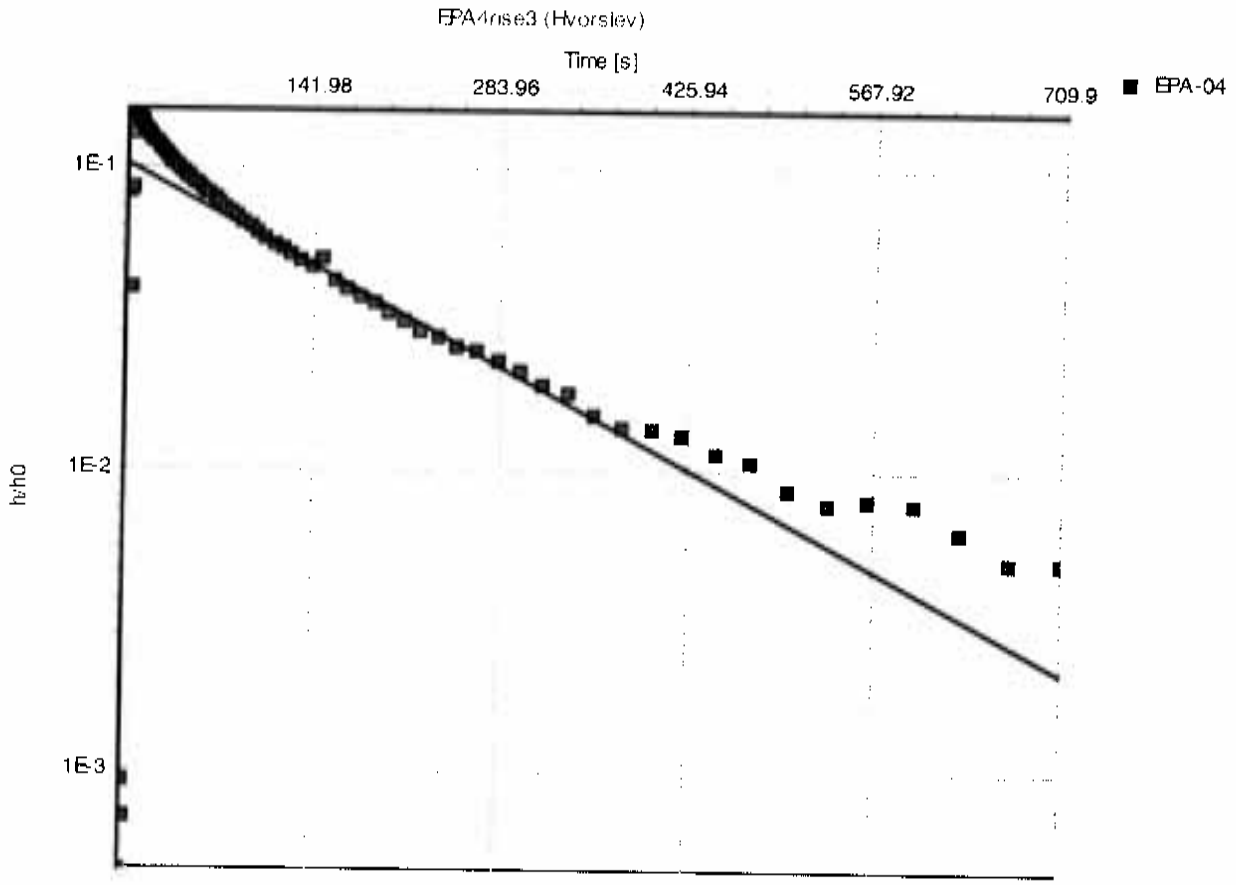
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA4rise3**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 3.13E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
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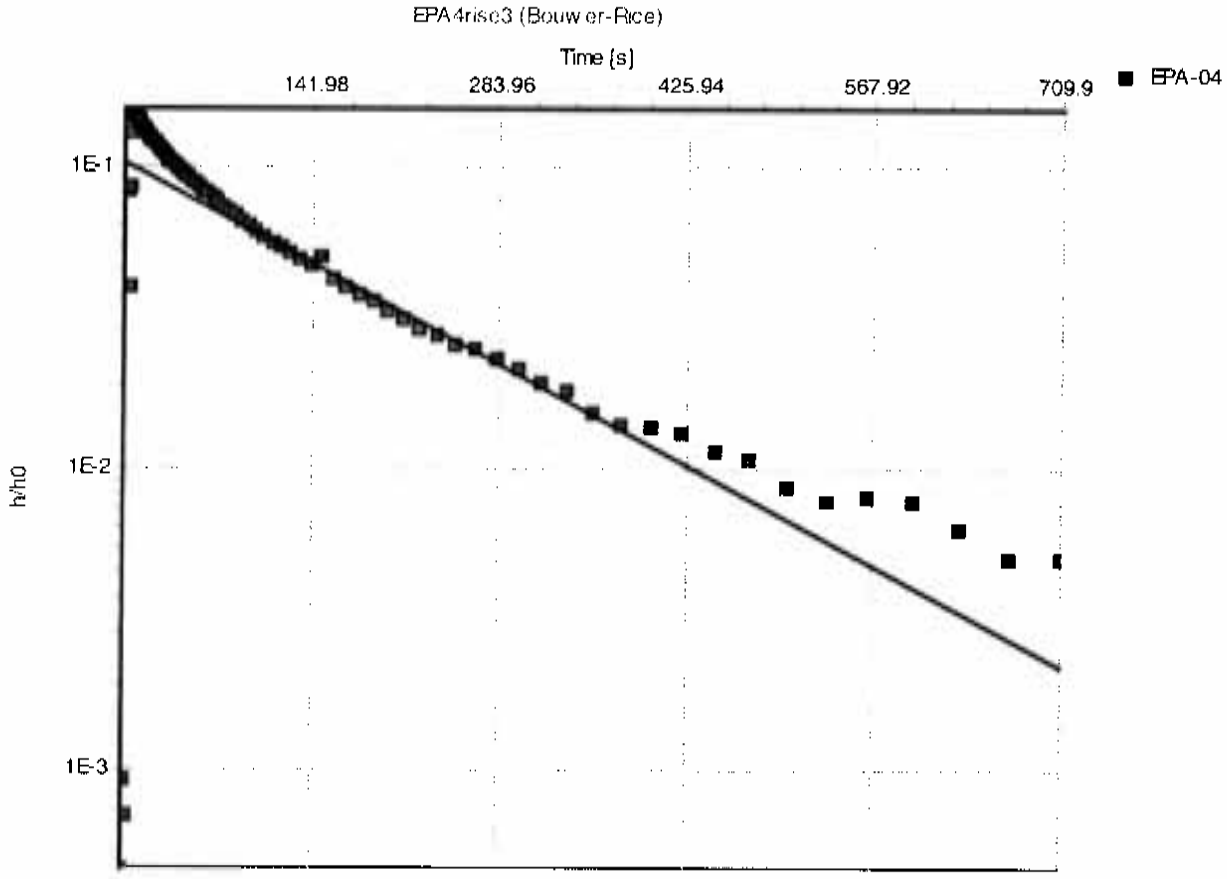

Test name: **EPA4rise3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.97E-4 [cm/s]

Test parameters:

Test well:	EPA-04	Aquifer thickness:	13.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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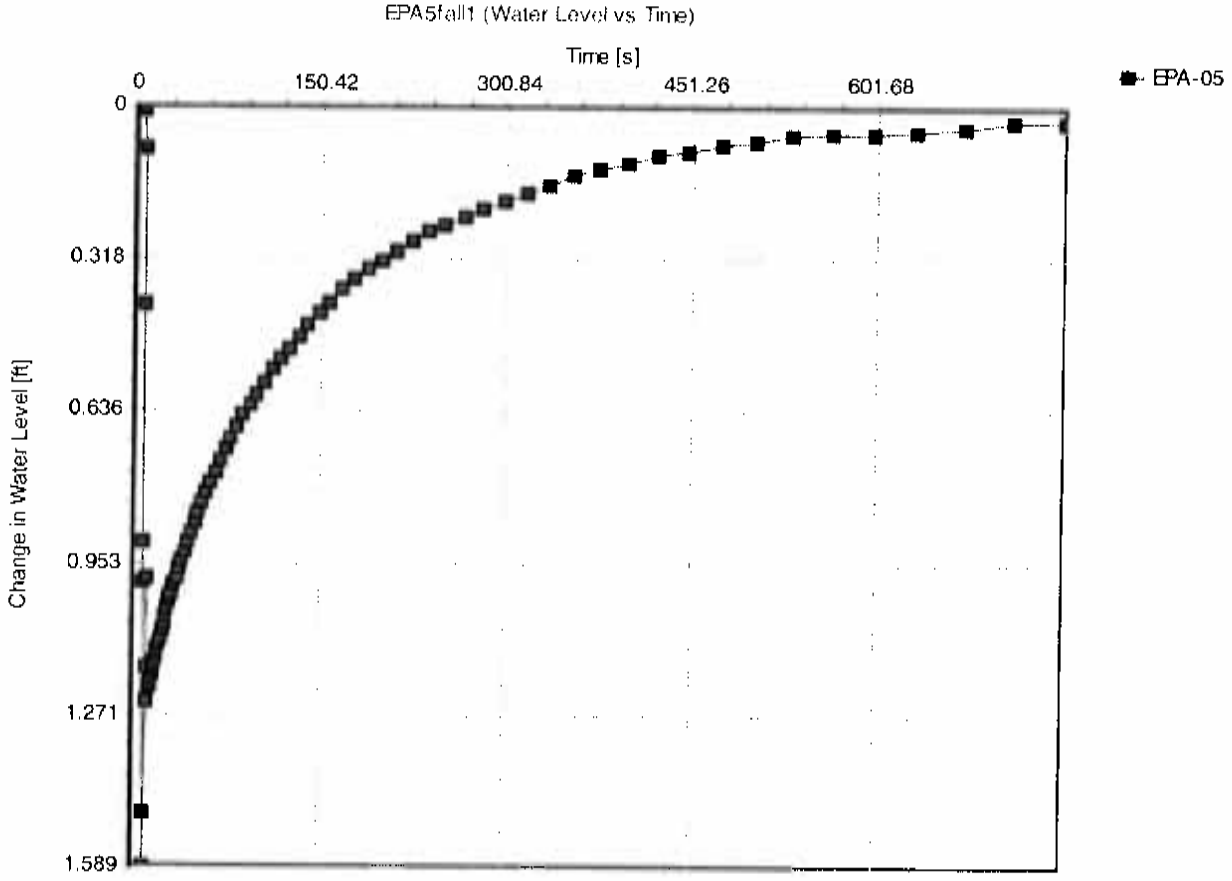
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5fall1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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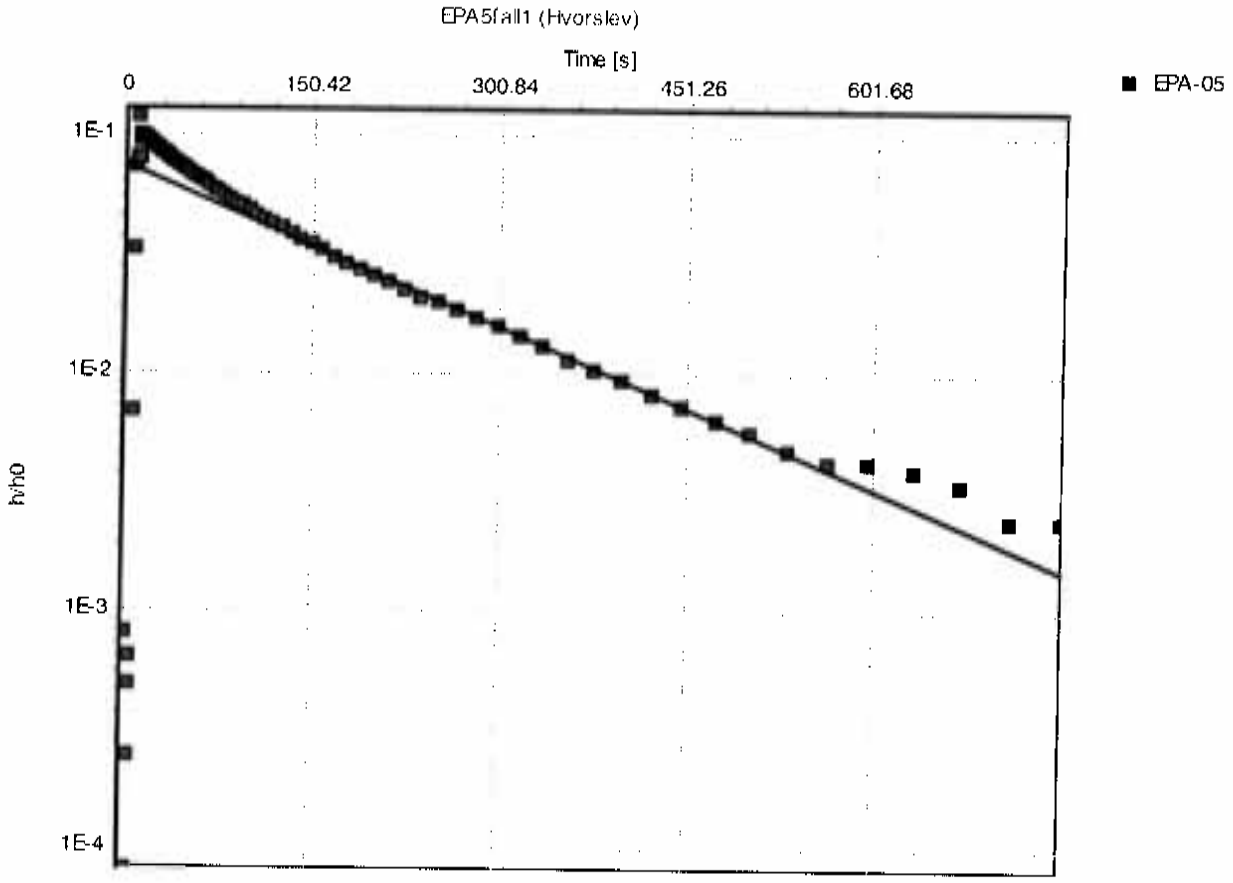
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5fall1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 2.98E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

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Slug Test Analysis Report

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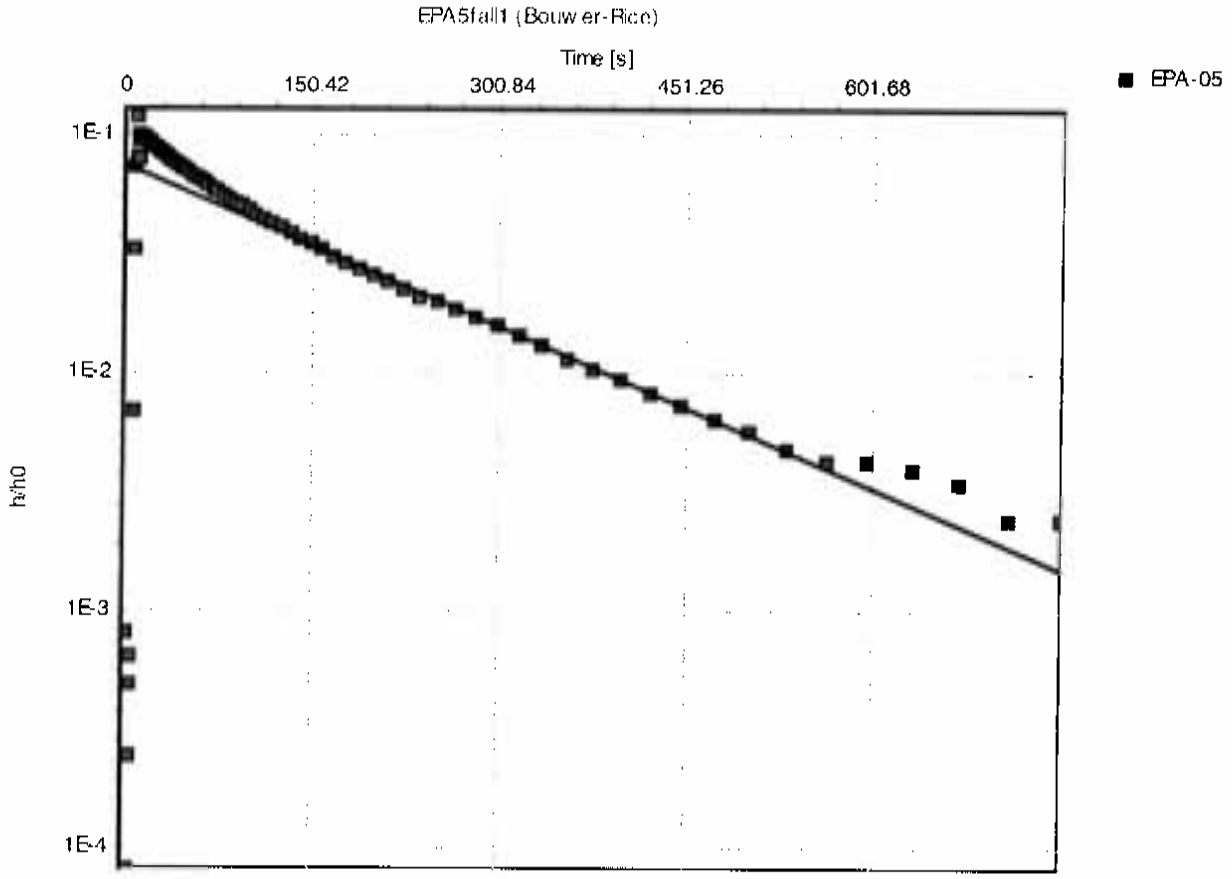

Test name: **EPA5fall1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.89E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
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Slug Test Analysis Report

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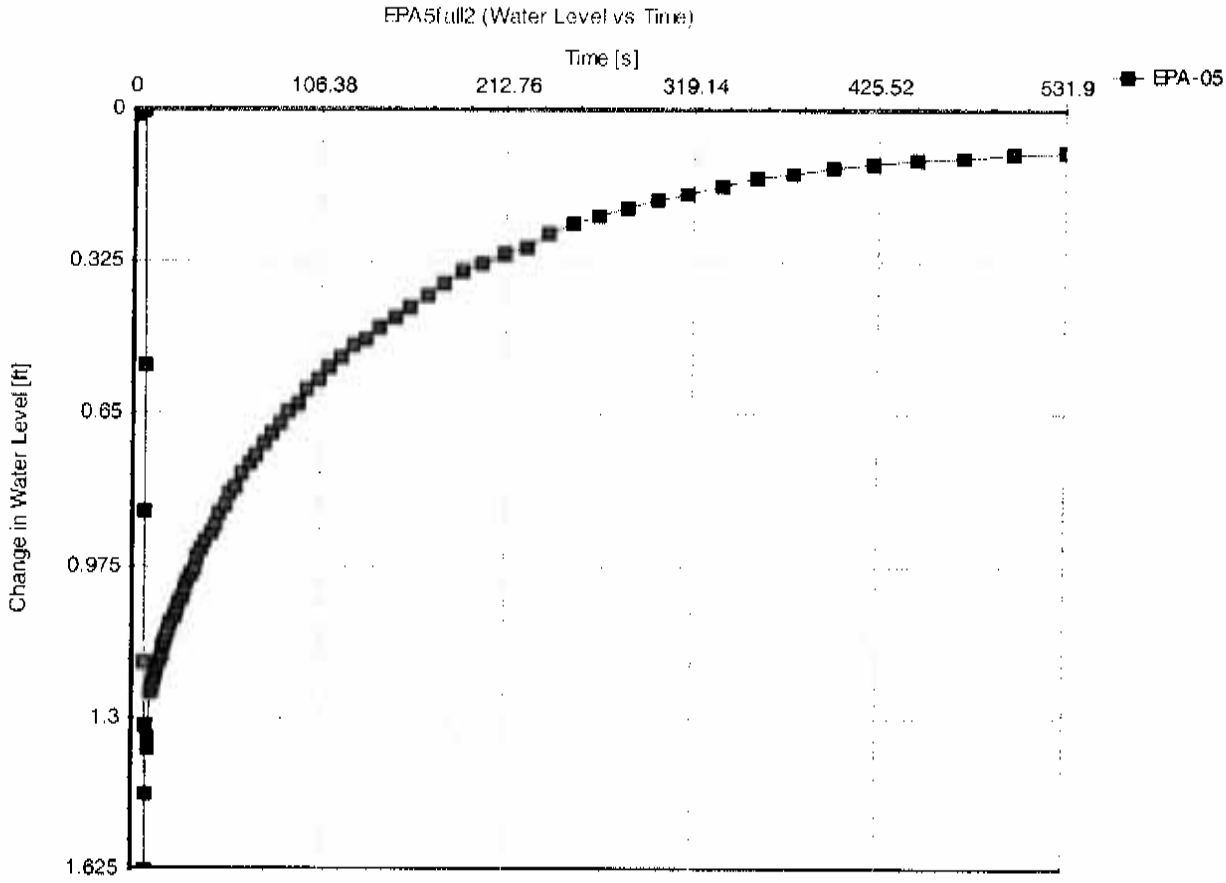

Test name: **EPA5fall2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
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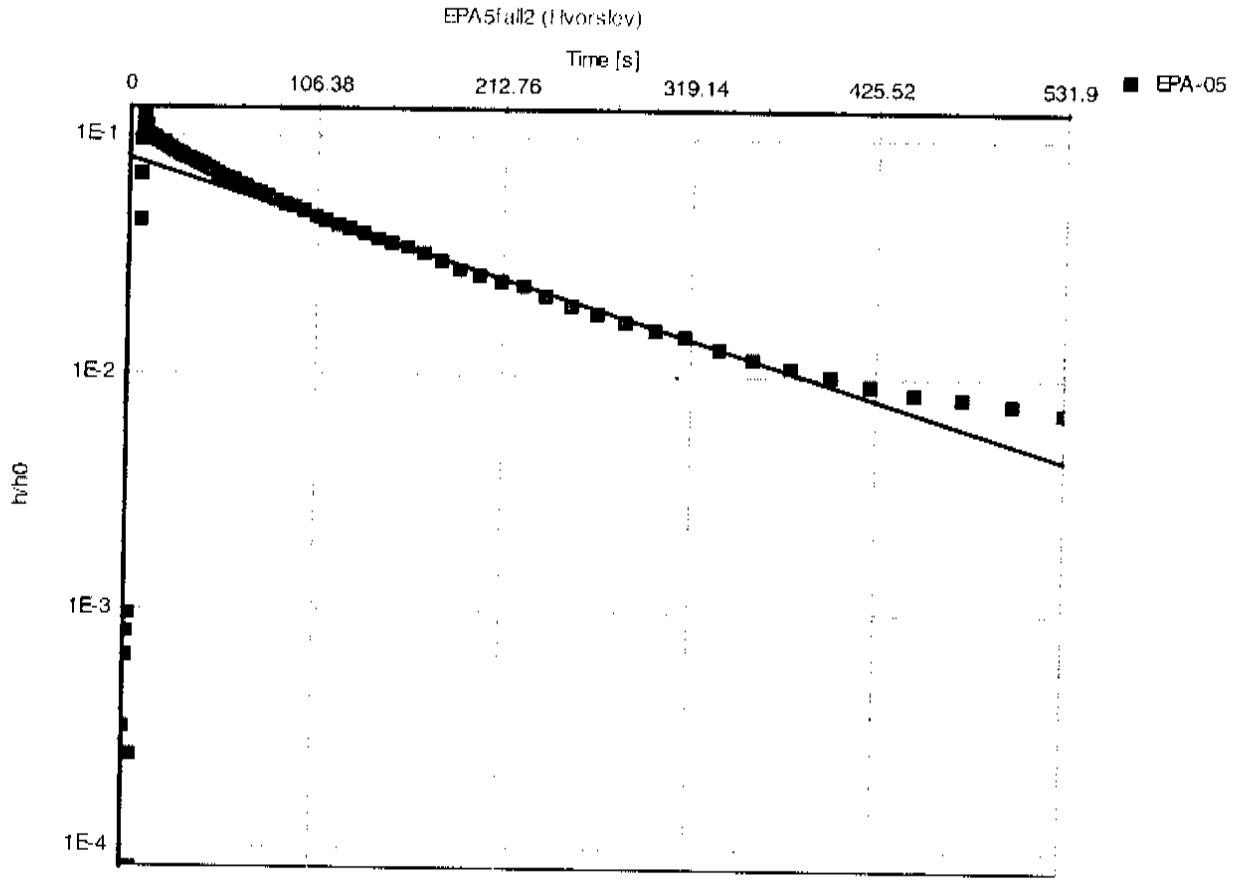

Test name: **EPA5fall2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 3.14E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

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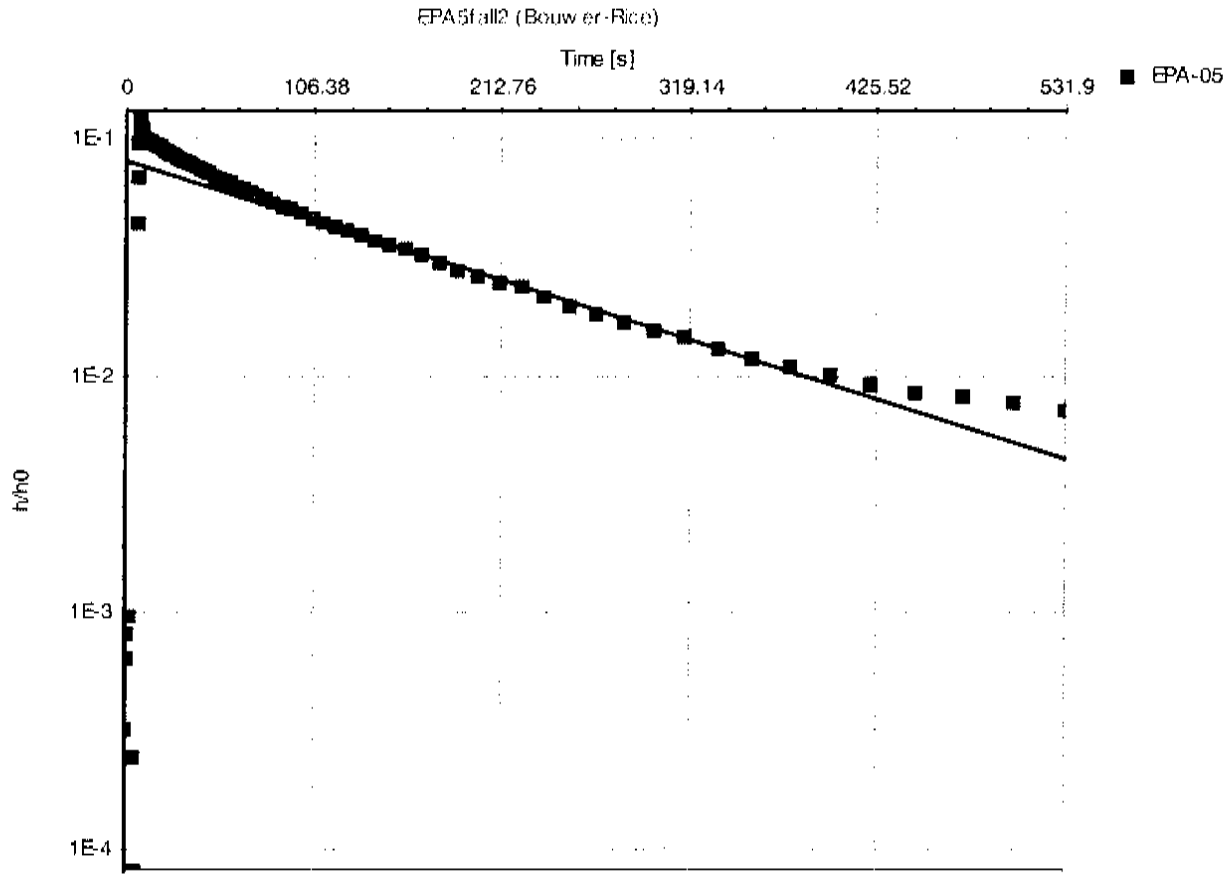

Test name: **EPA5fall2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 3.04E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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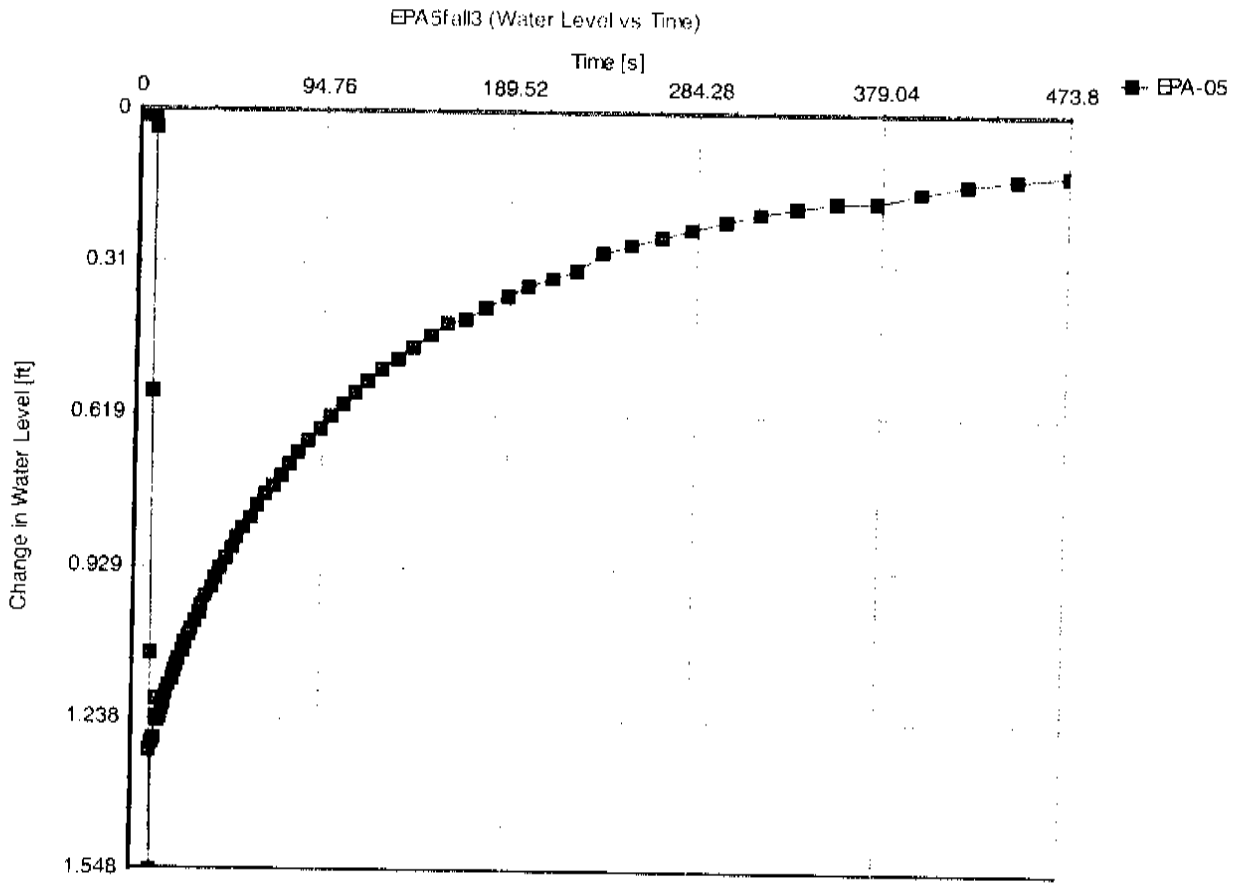

Test name: **EPA5fall3**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

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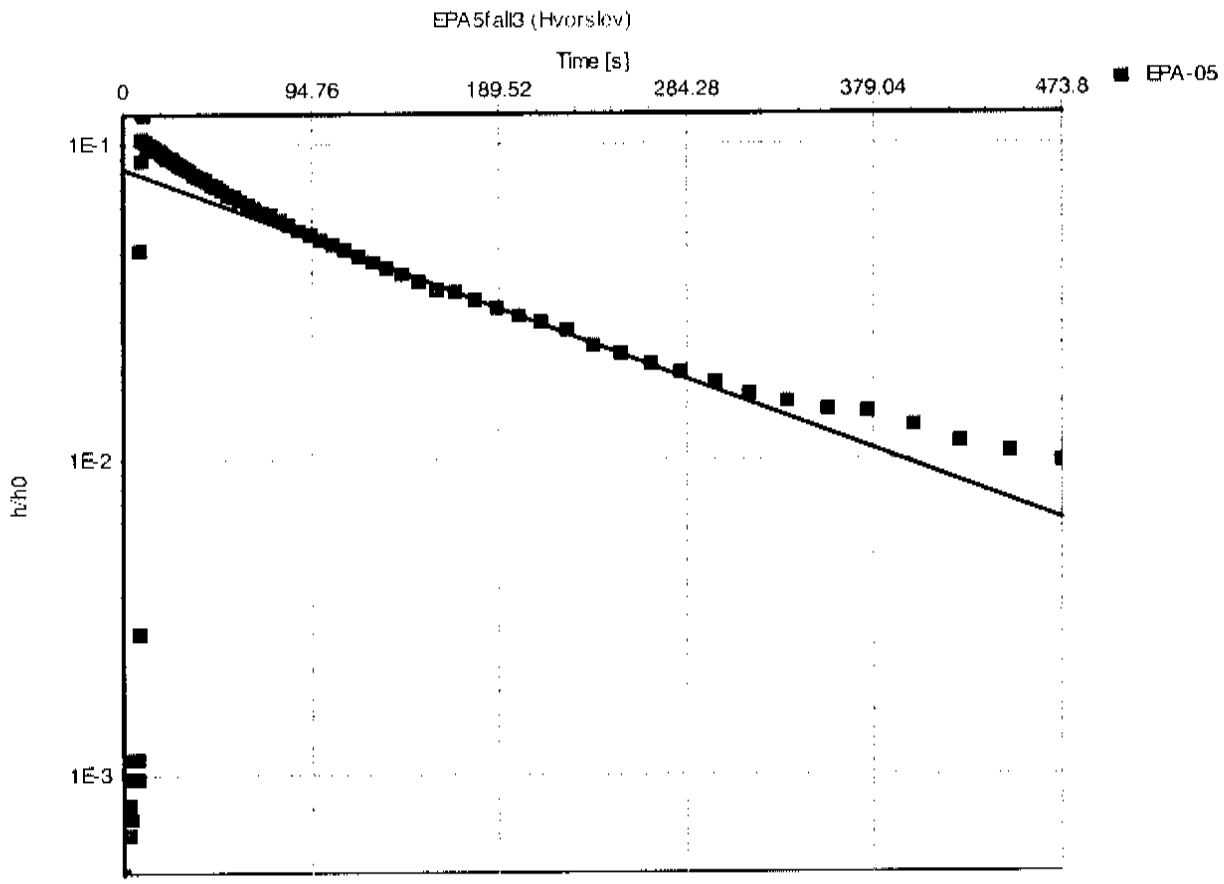

Test name: **EPA5fall3**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 3.11E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

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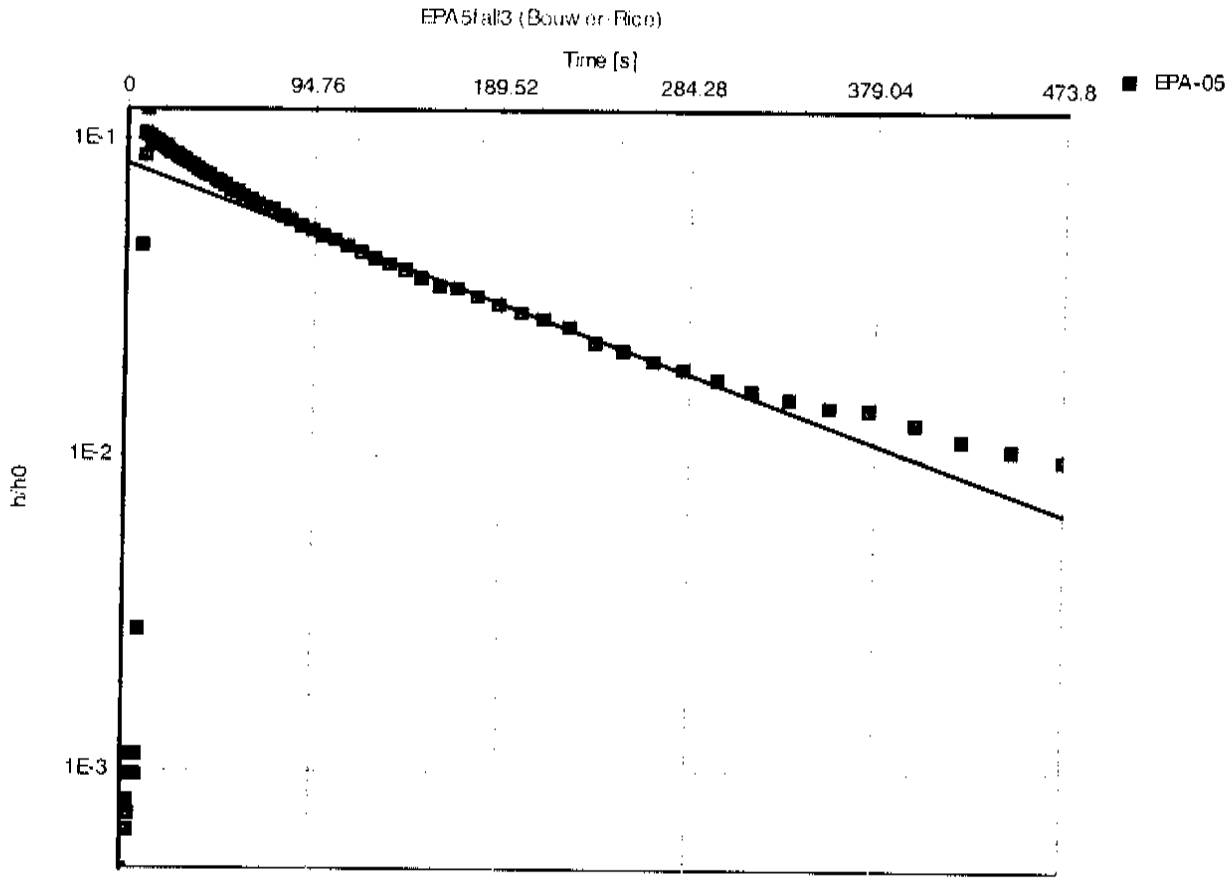

Test name: **EPA5fall3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.99E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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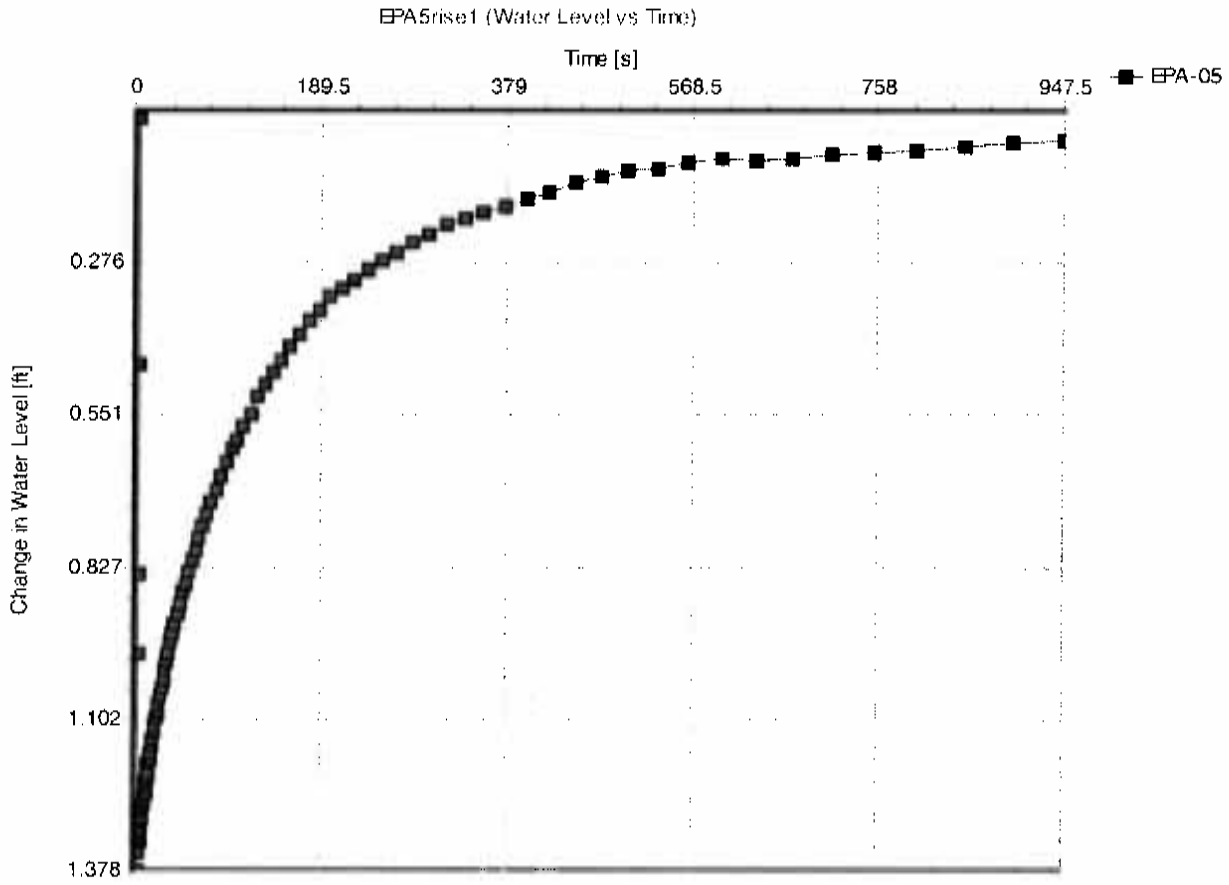
No: 106-1945.2149
Client: USEPA



Test name: **EPA5rise1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

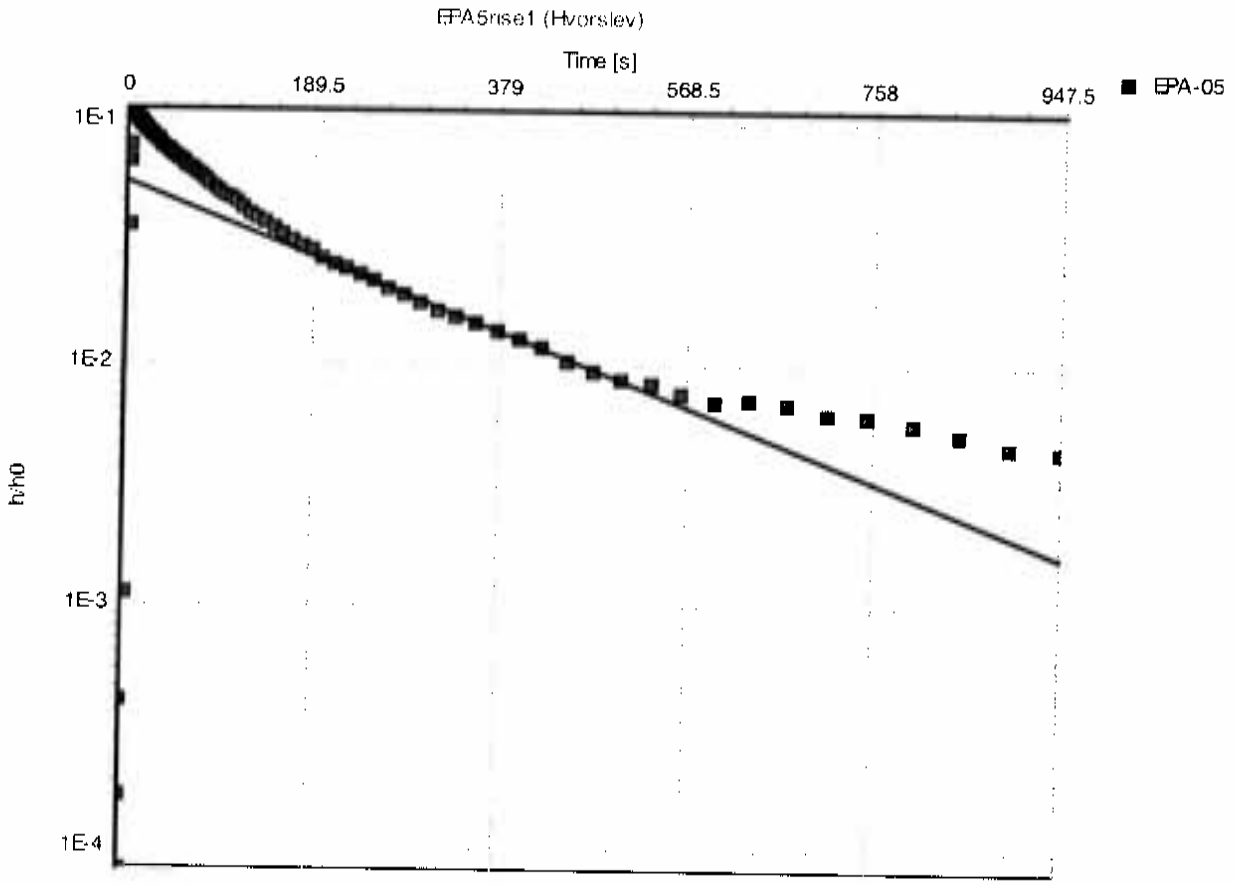
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5rise1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 2.15E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

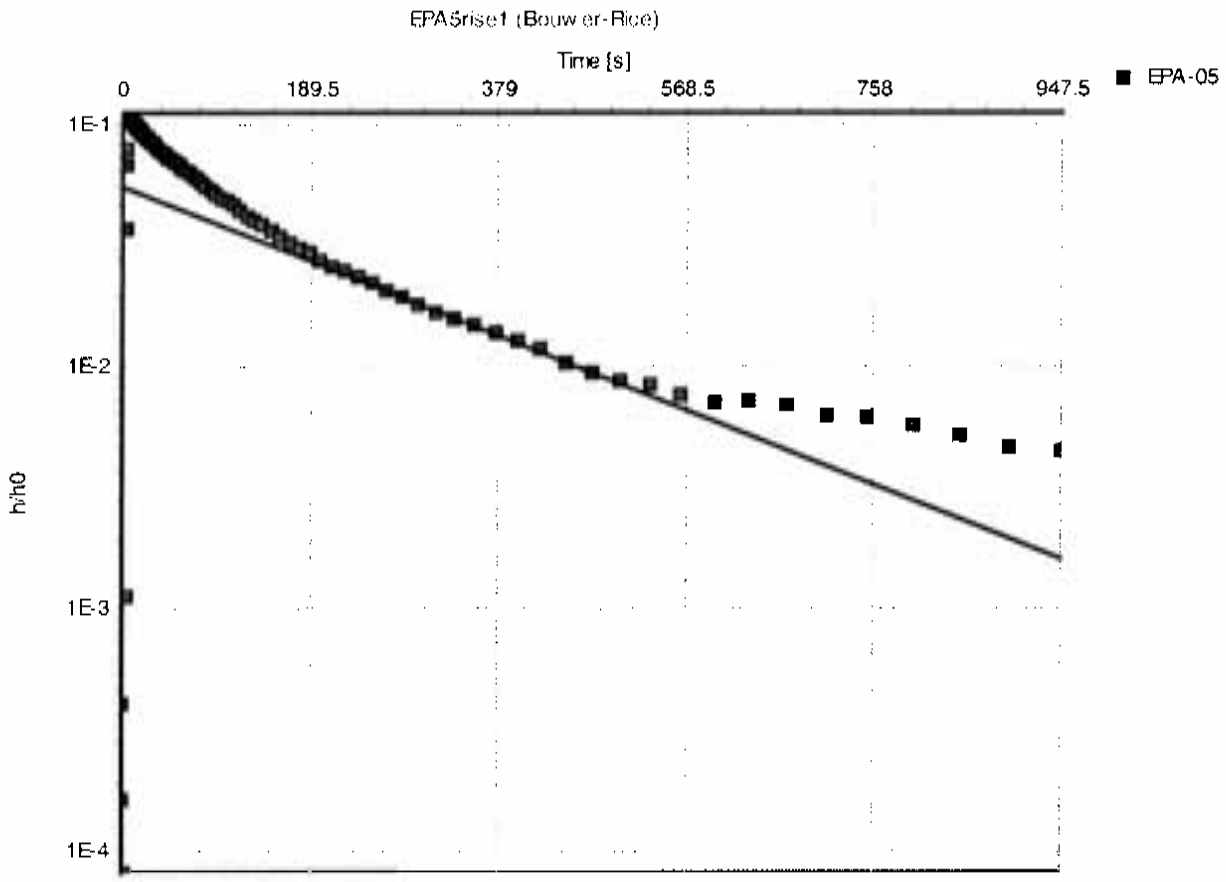
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5rise1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.08E-4 [cm/s]

Test parameters:				
	Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
	Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		
	r(eff):	0.182 [ft]		

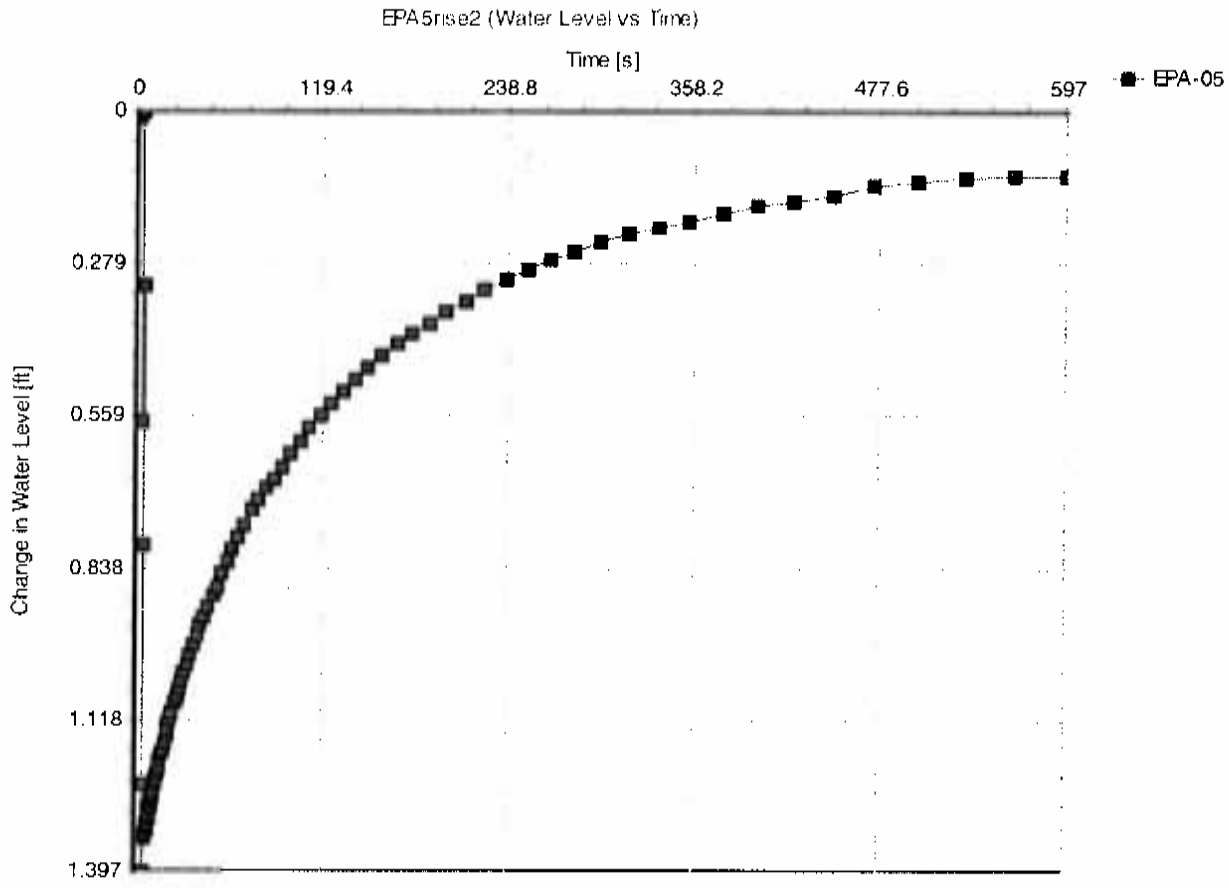
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5rise2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

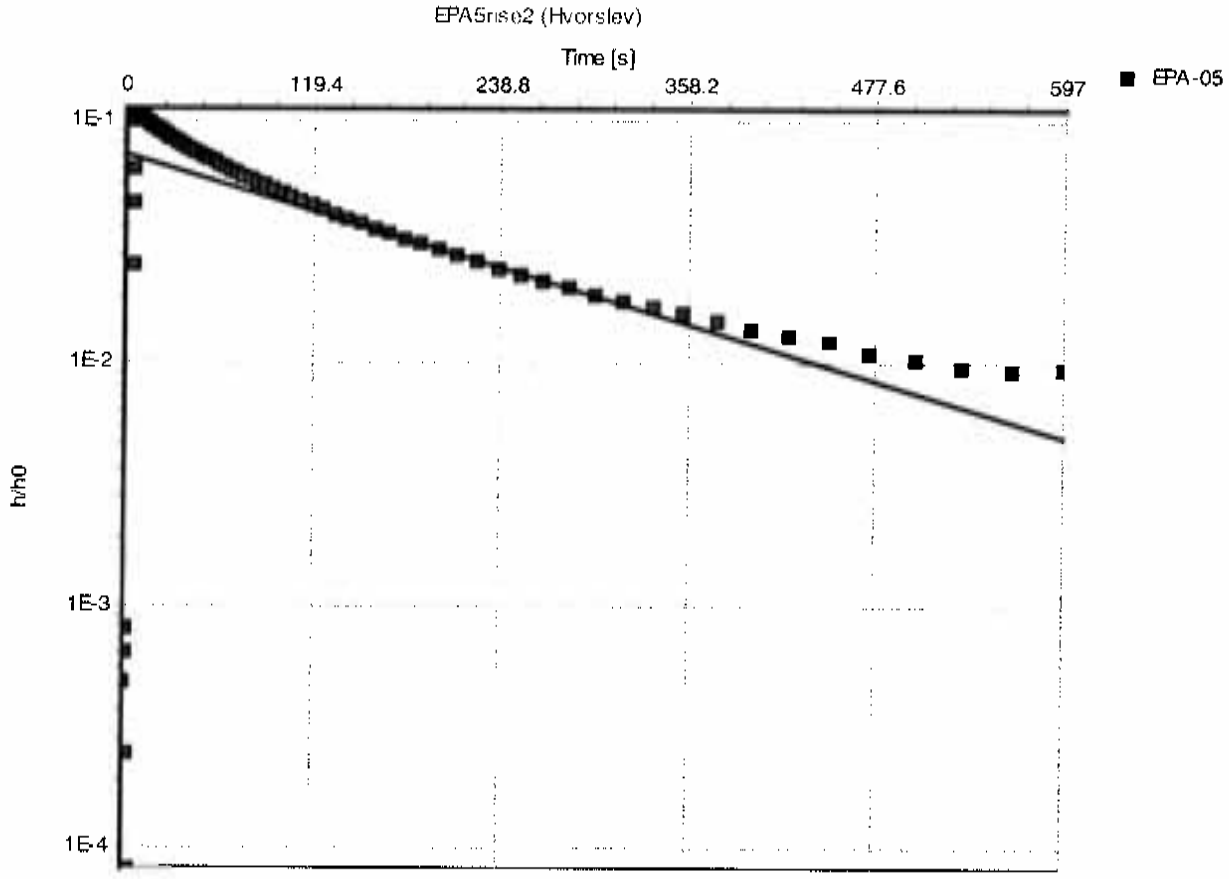
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5rise2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 2.59E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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1000 The American Road
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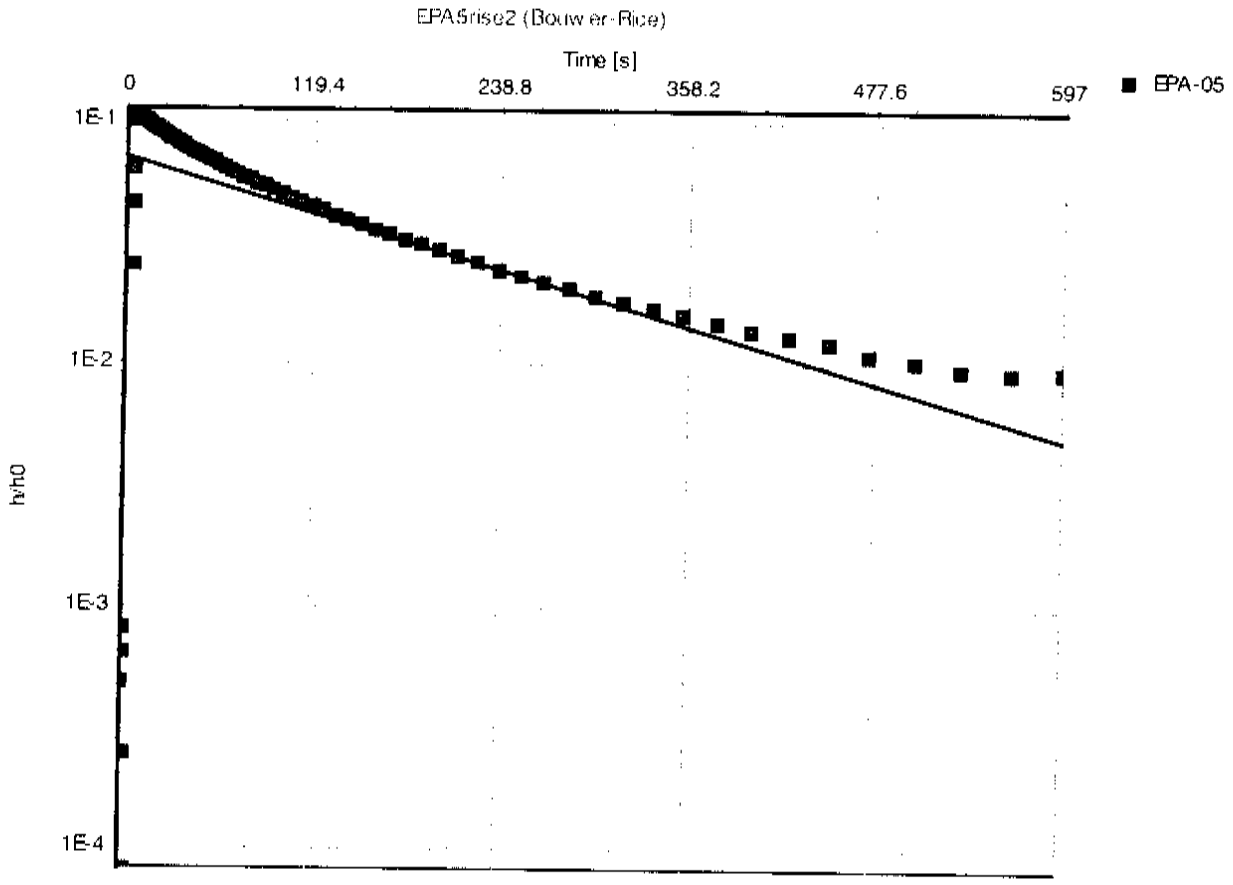
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5rise2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.50E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

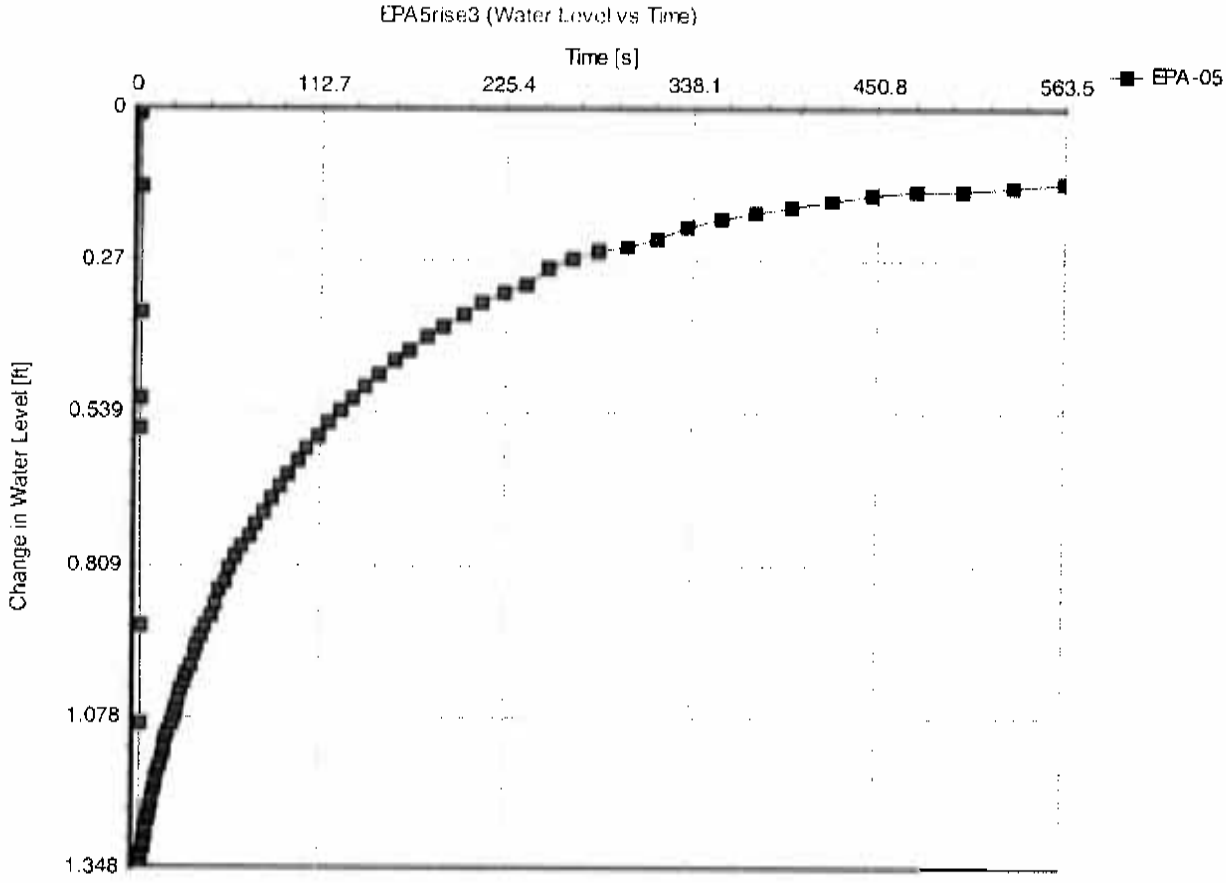
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5rise3**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
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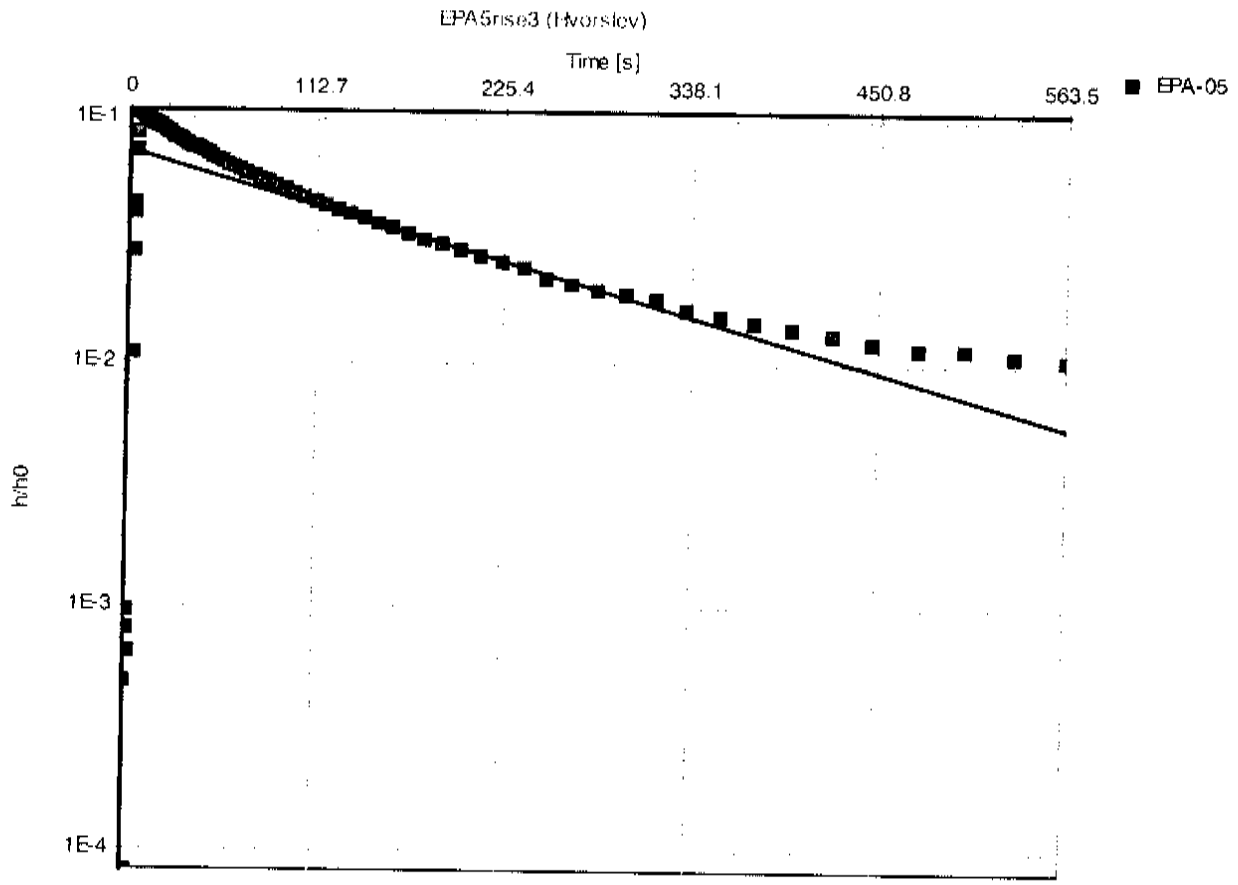
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5rise3**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 2.64E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

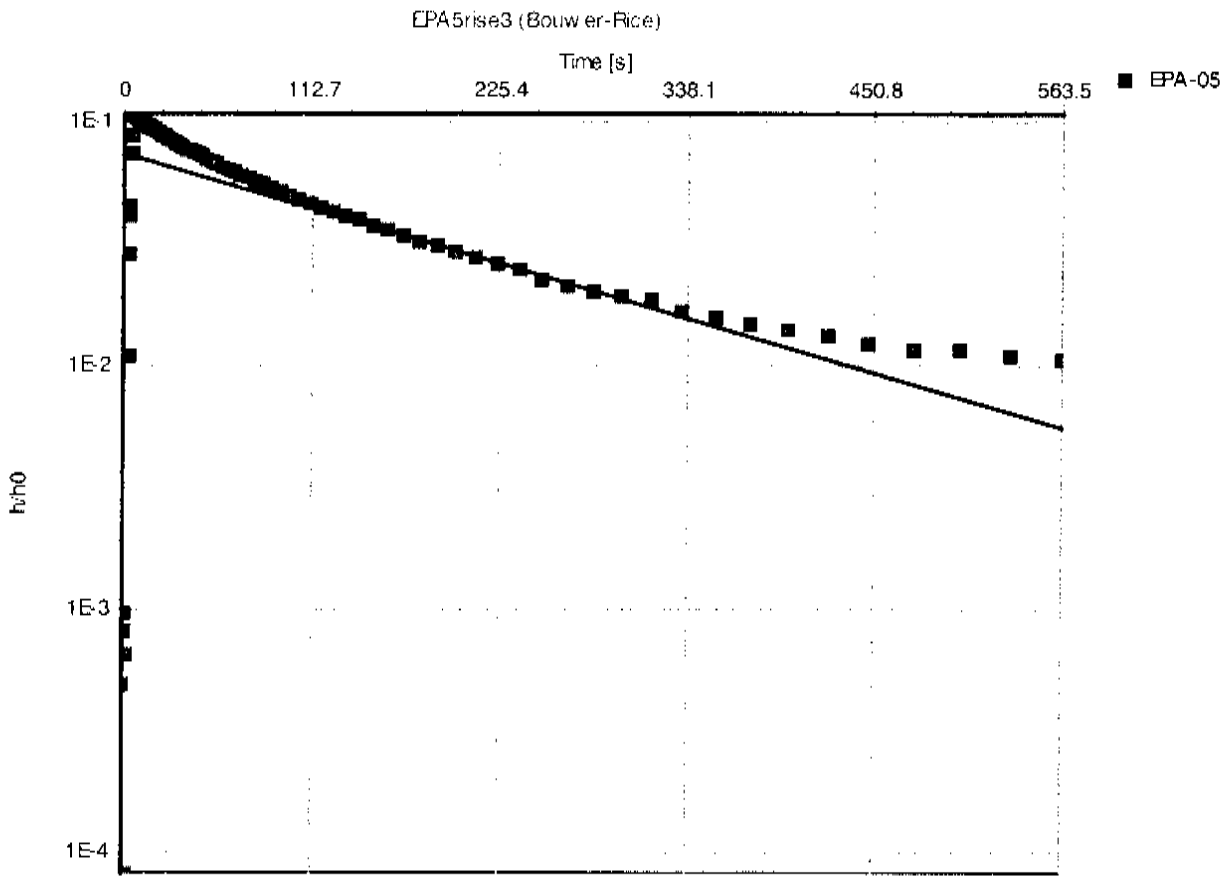
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA5rise3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.56E-4 [cm/s]

Test parameters:

Test well:	EPA-05	Aquifer thickness:	14.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

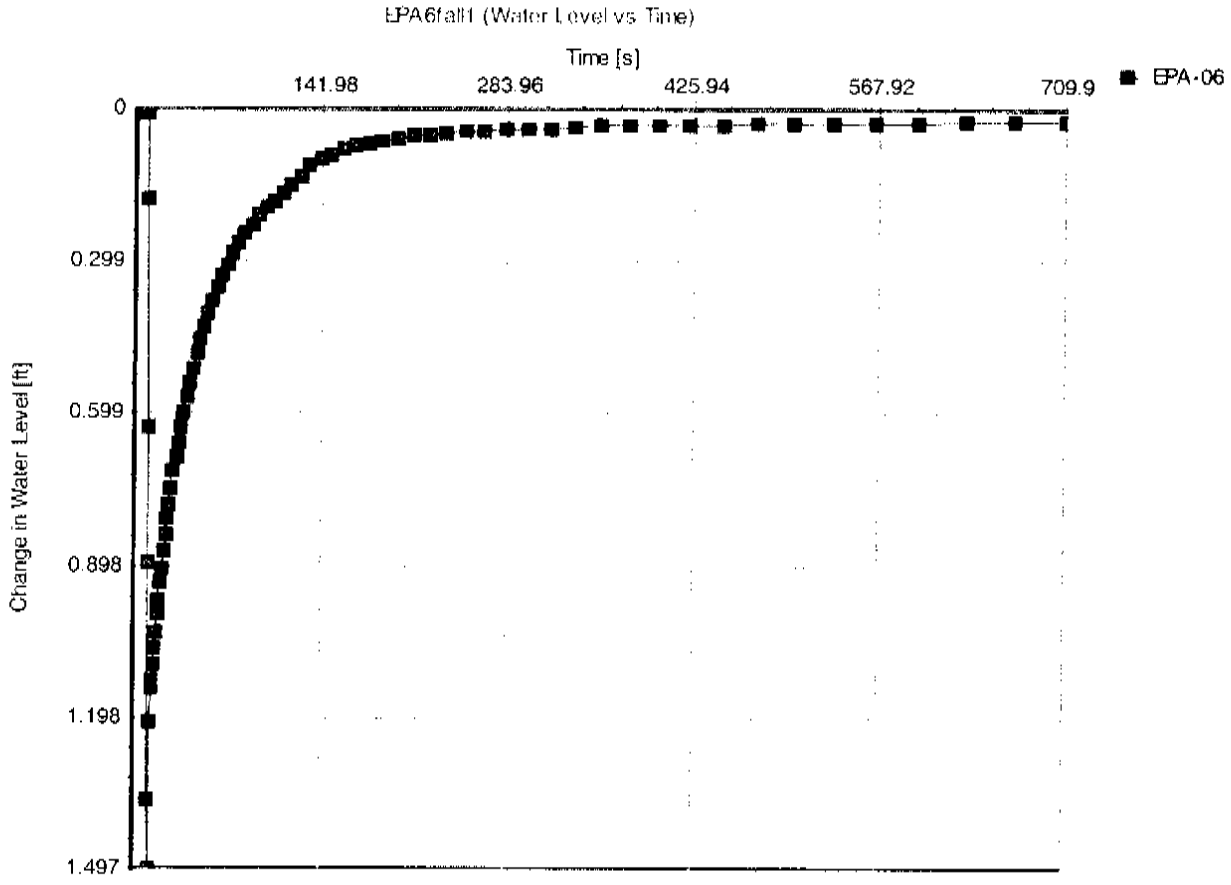
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6fall1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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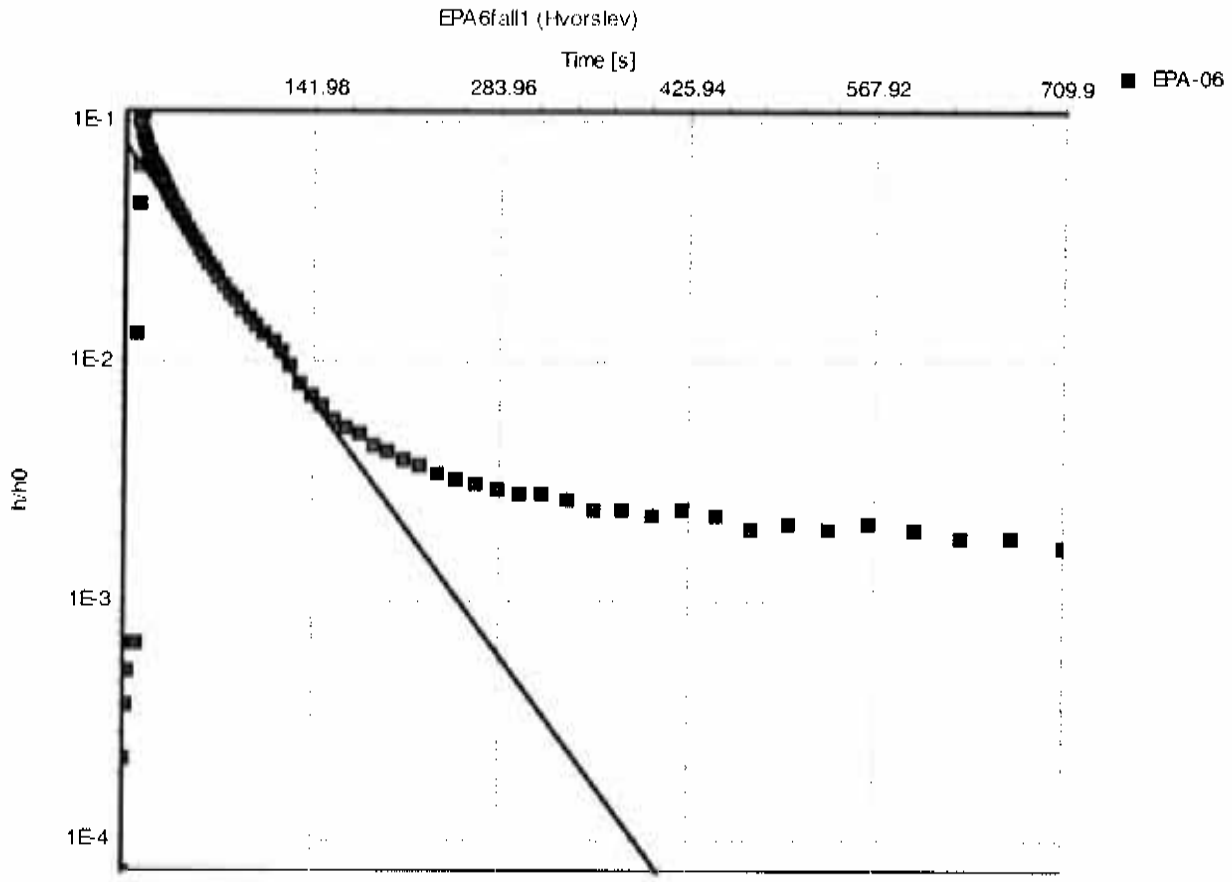
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6fall1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 9.93E-4 [cm/s]

Test parameters:

Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

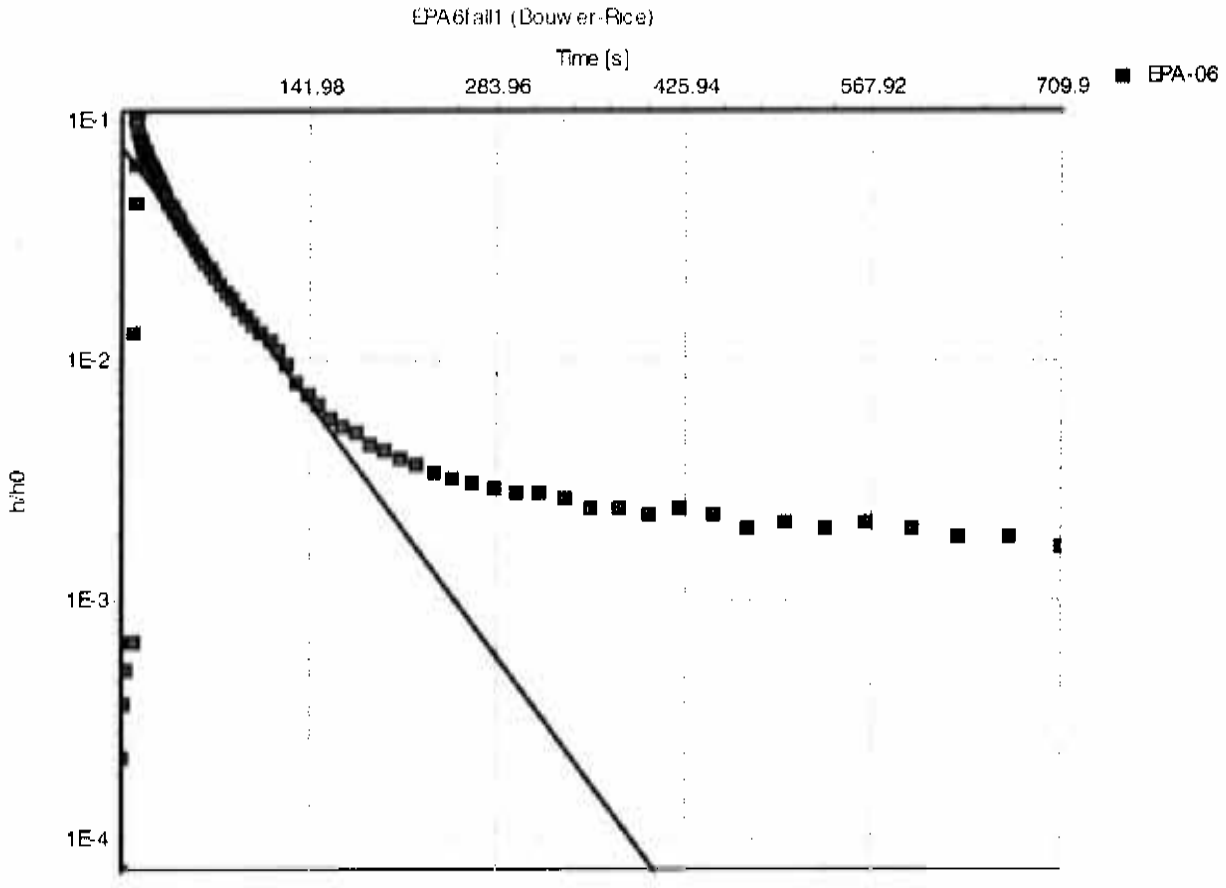
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6fall1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.06E-3 [cm/s]

Test parameters:				
	Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
	Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		
	r(eff):	0.182 [ft]		

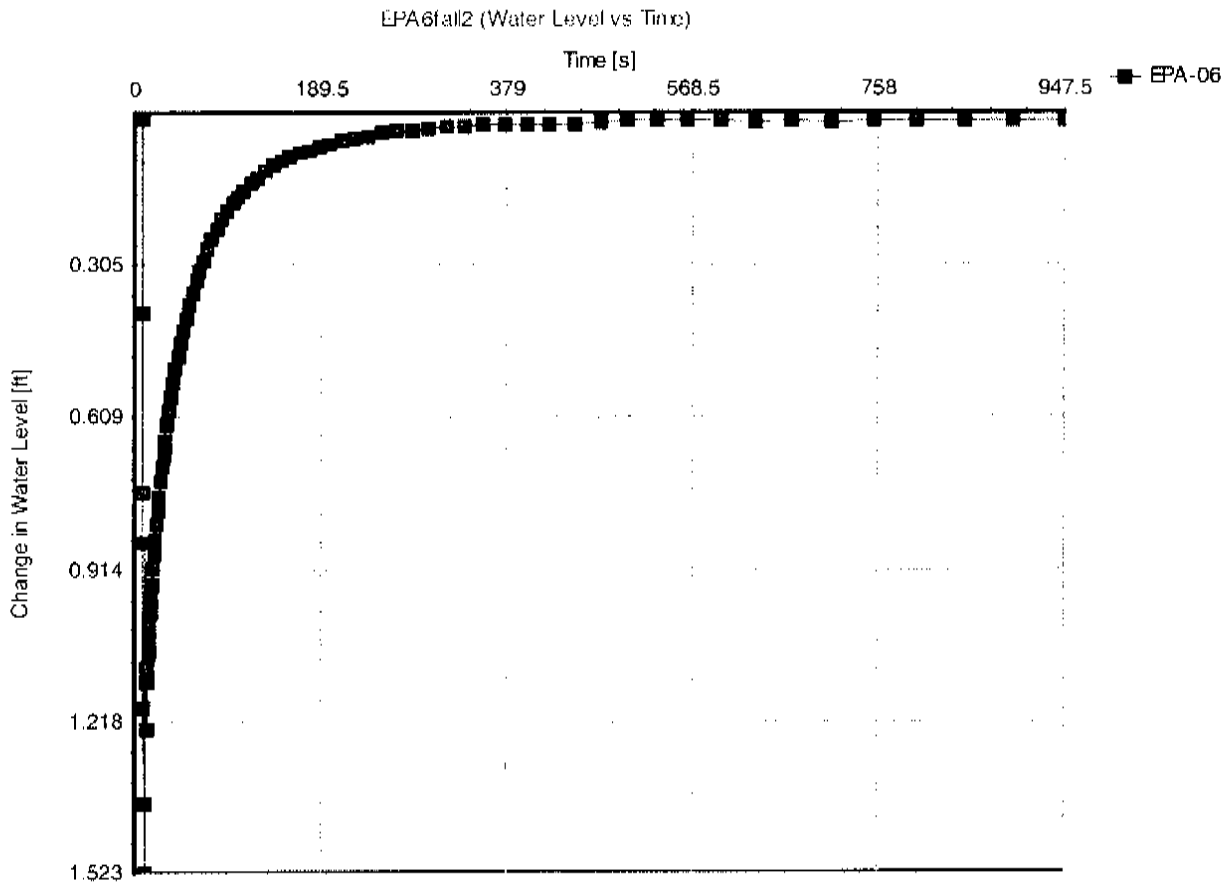
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6fall2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

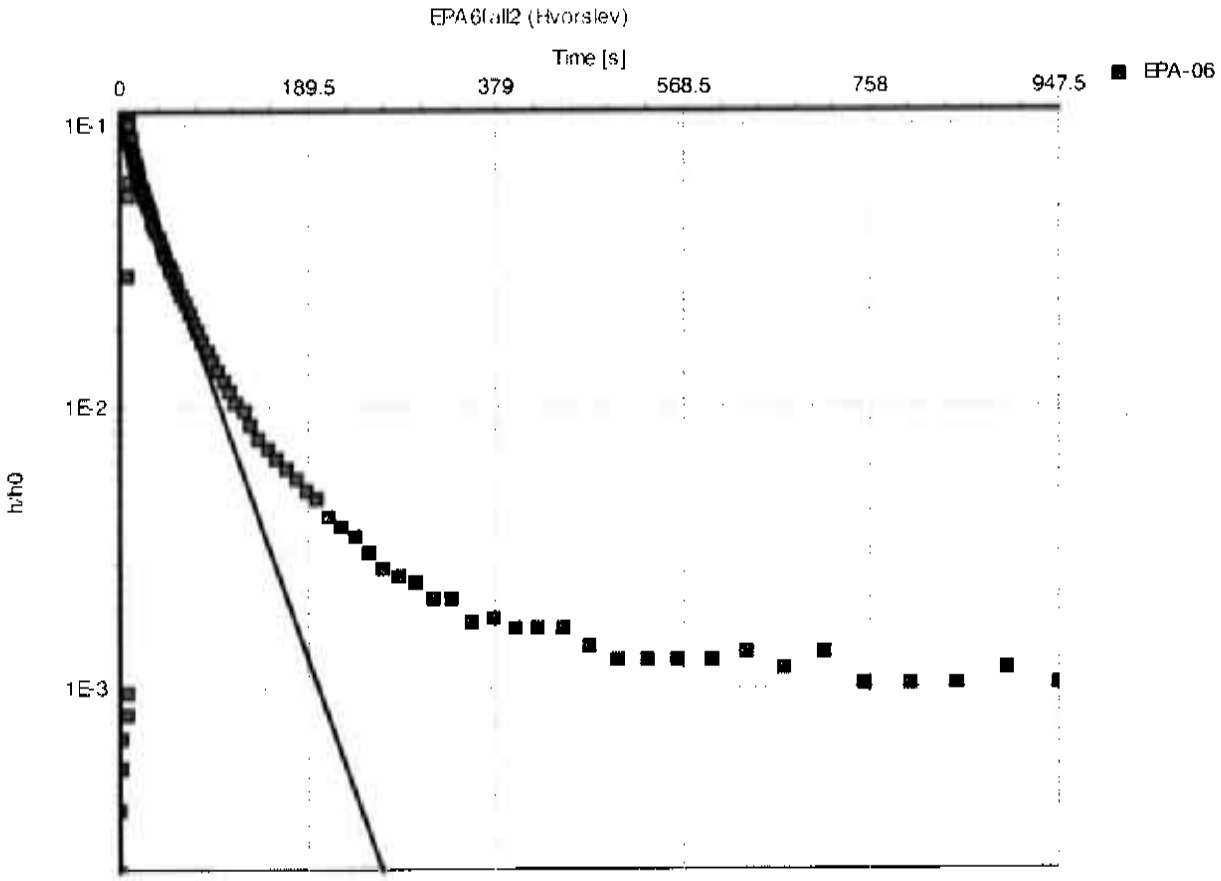
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6fall2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 1.34E-3 [cm/s]

Test parameters:

Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

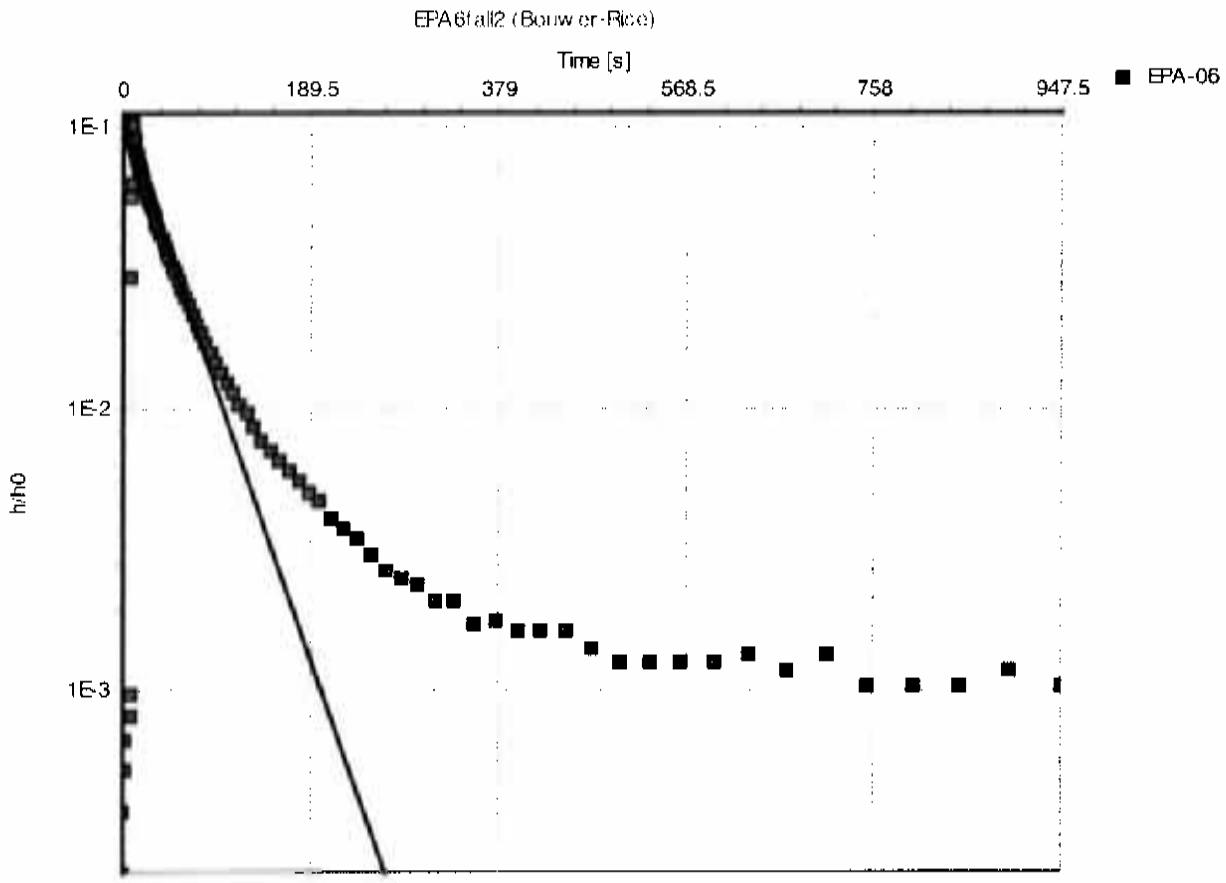
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6fall2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.42E-3 [cm/s]

Test parameters:

Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

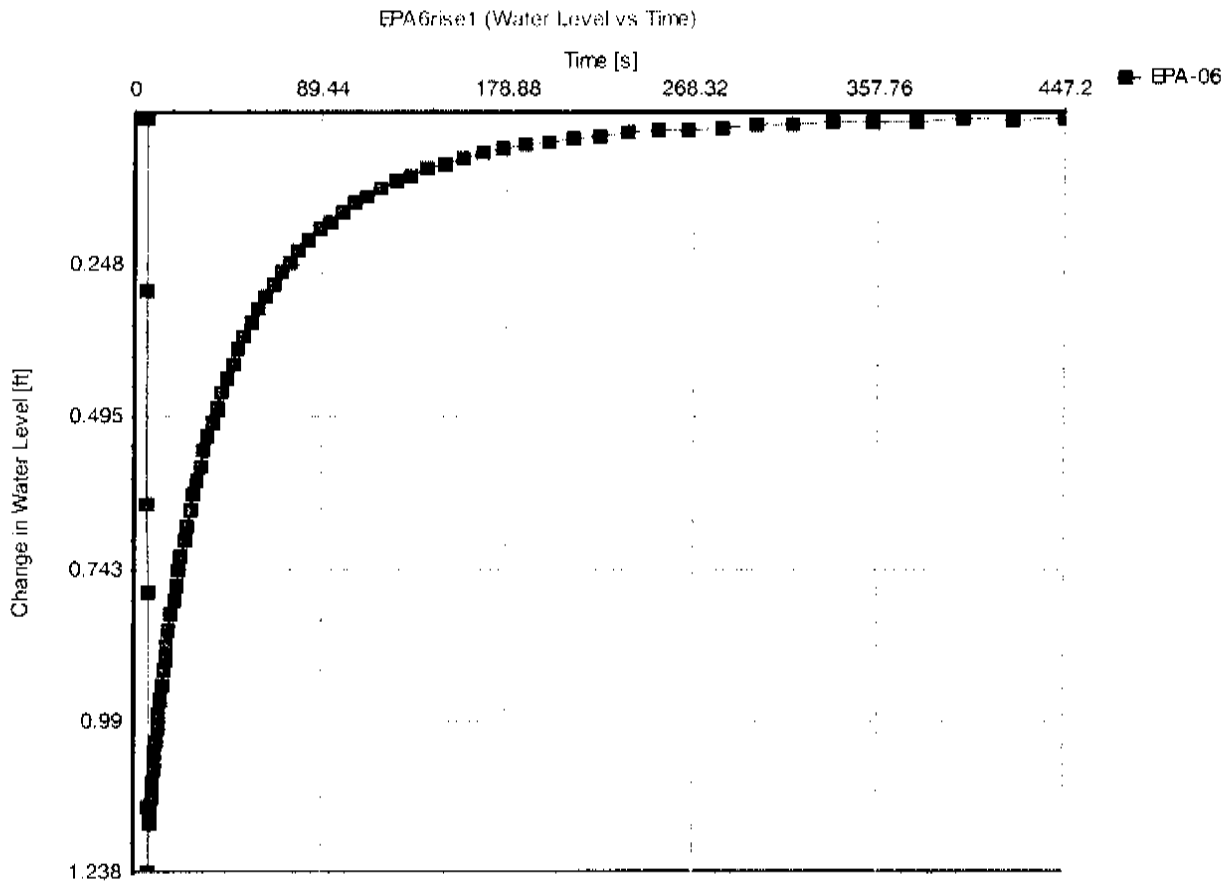
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6rise1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

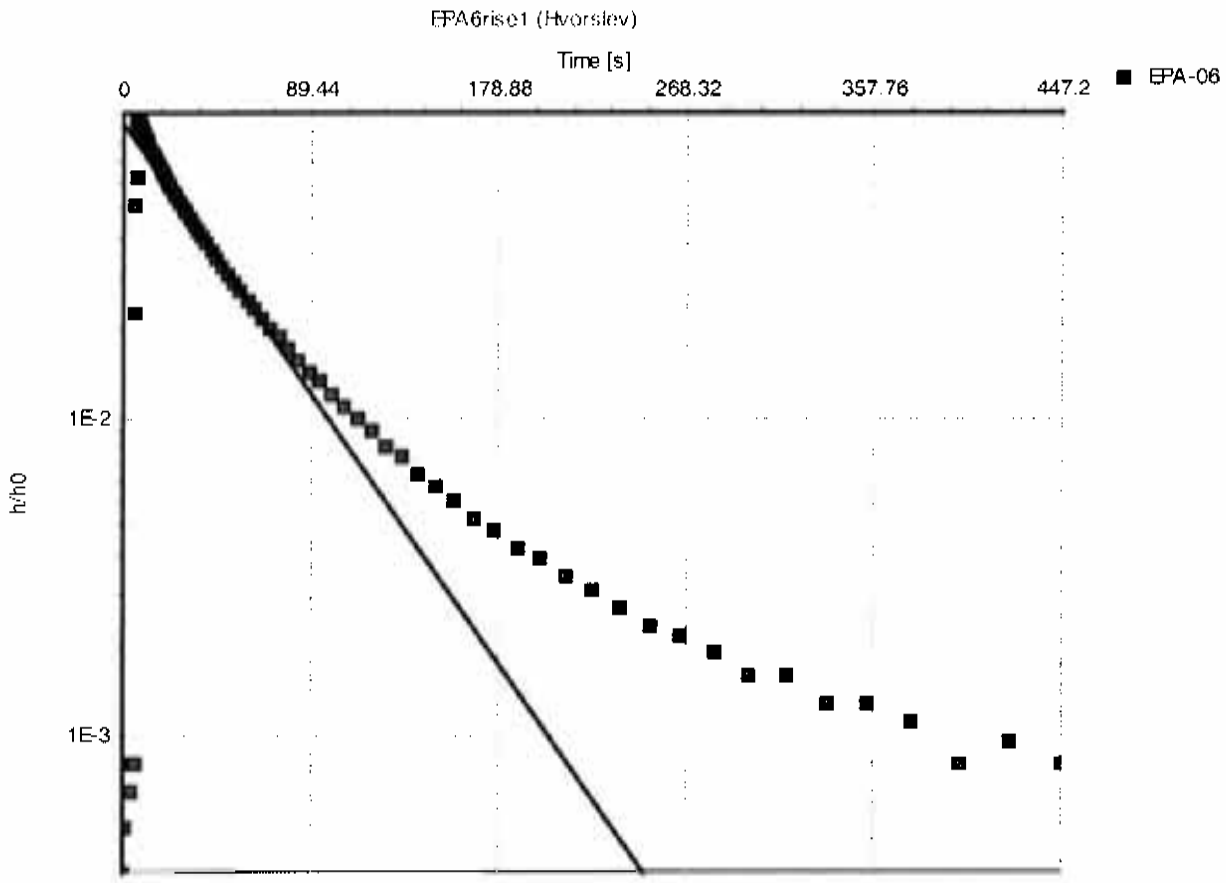
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6rise1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 1.26E-3 [cm/s]

Test parameters:

Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
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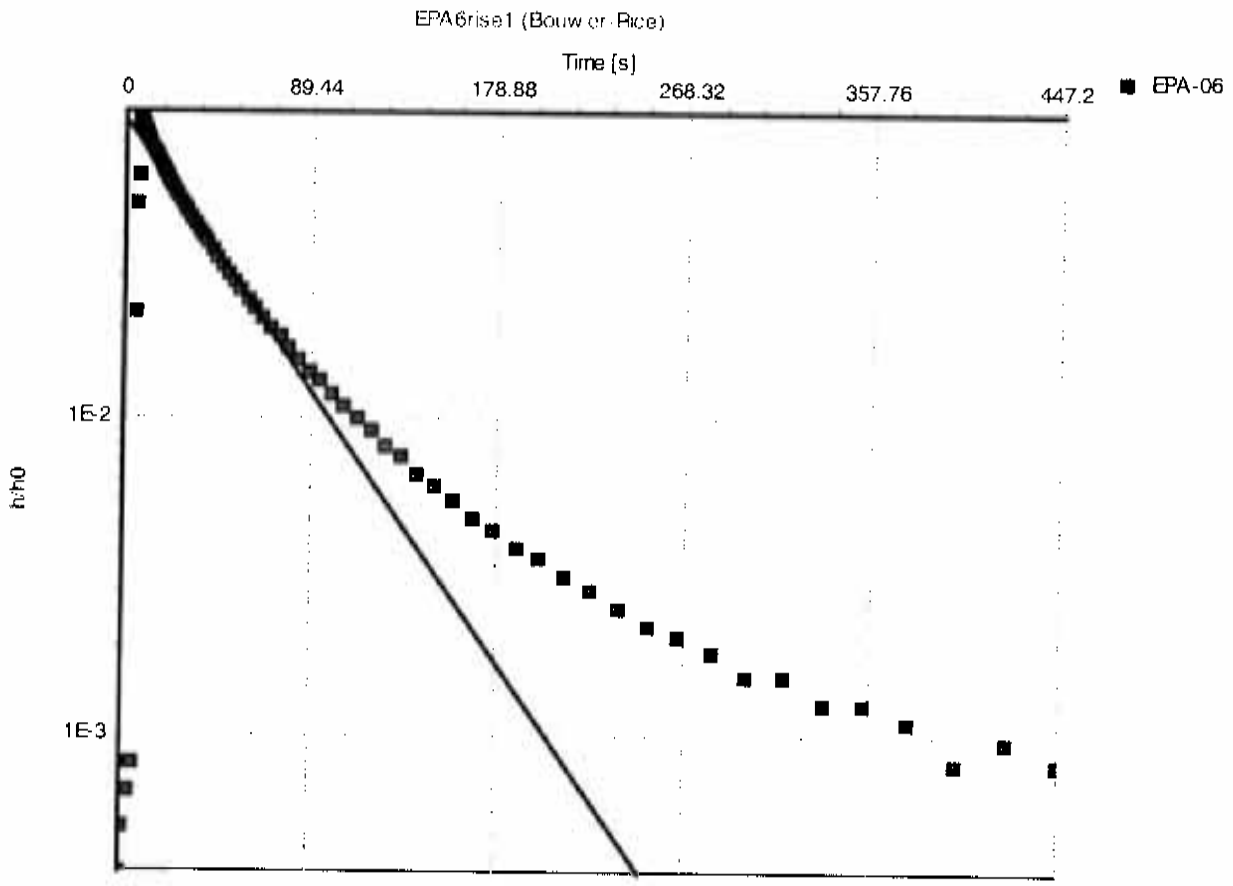
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6rise1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.34E-3 [cm/s]

Test parameters:

Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
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Morris Plains, NJ 07950
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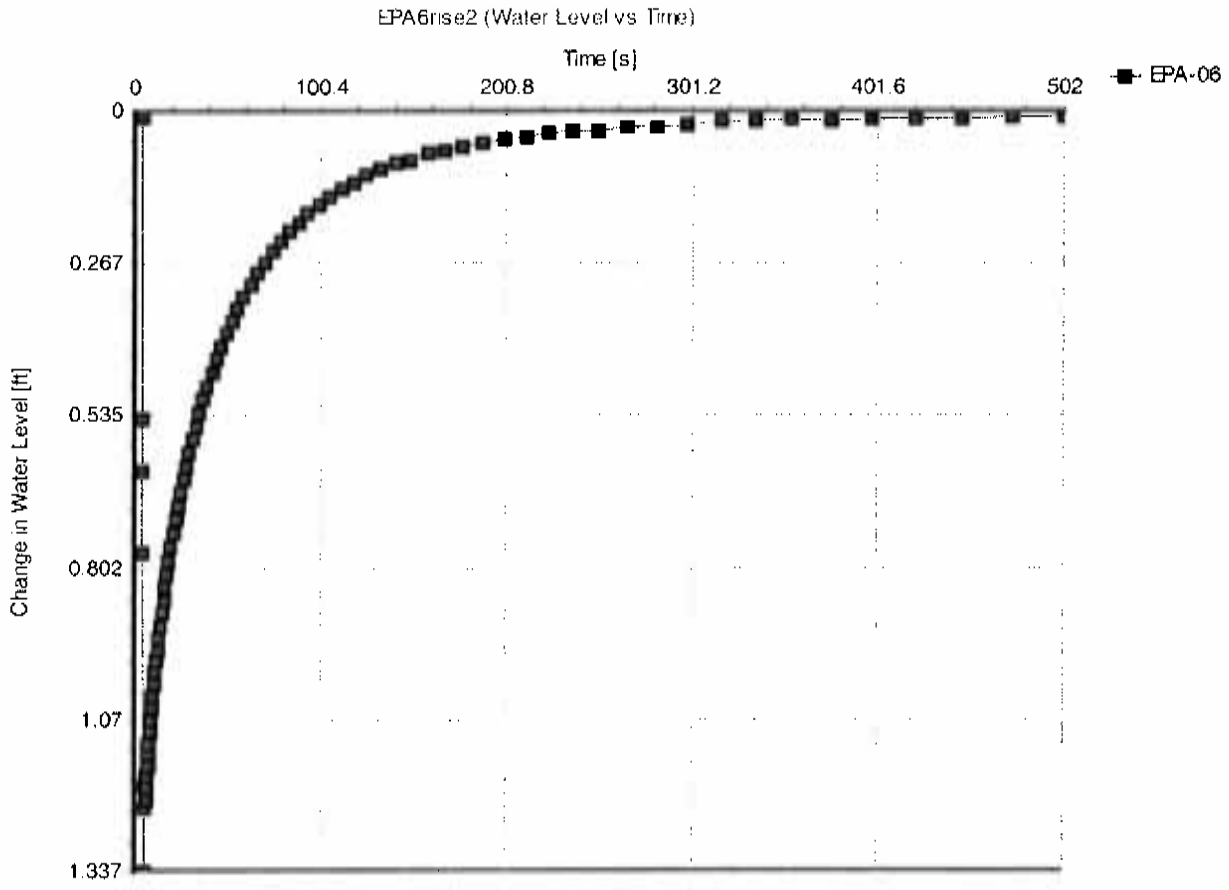
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6rise2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
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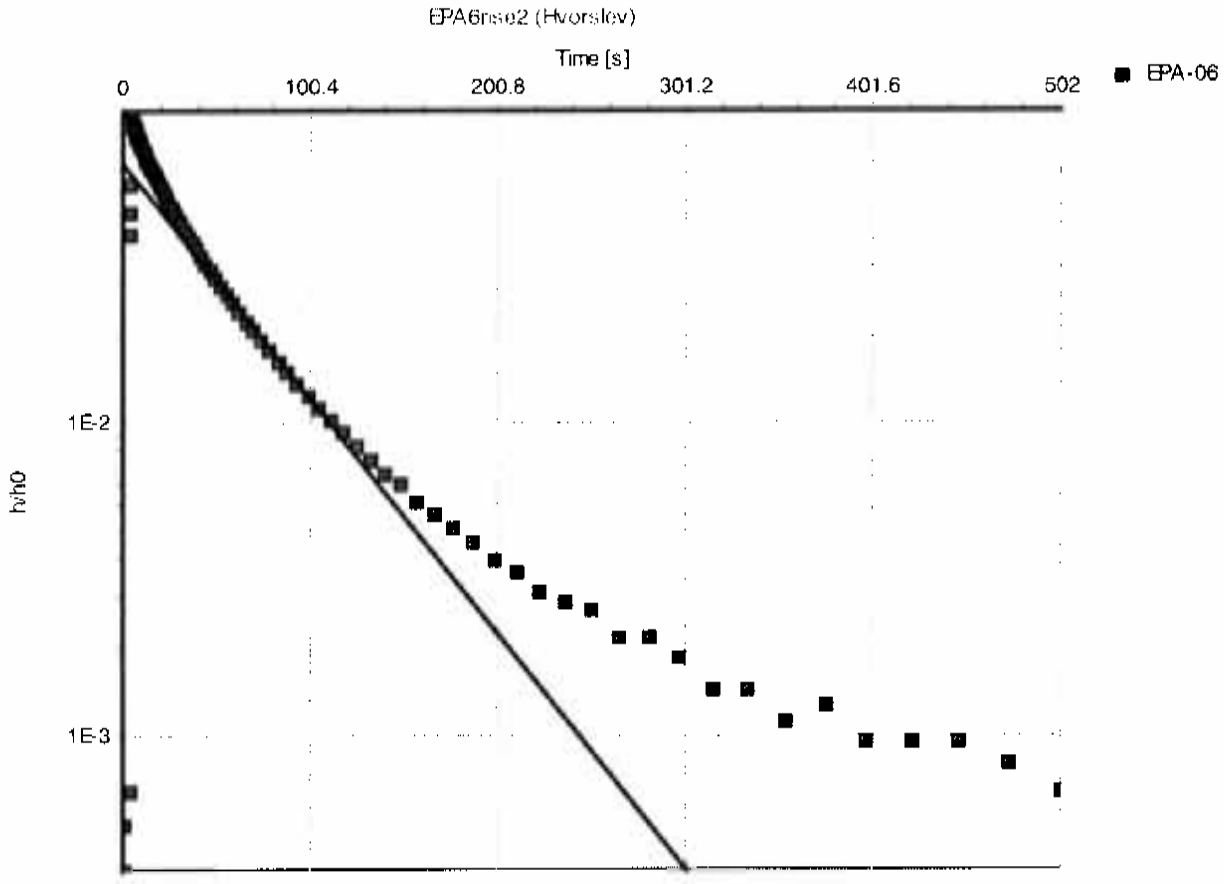
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA6rise2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 9.90E-4 [cm/s]

Test parameters:

Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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1000 The American Road
Morris Plains, NJ 07950
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Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
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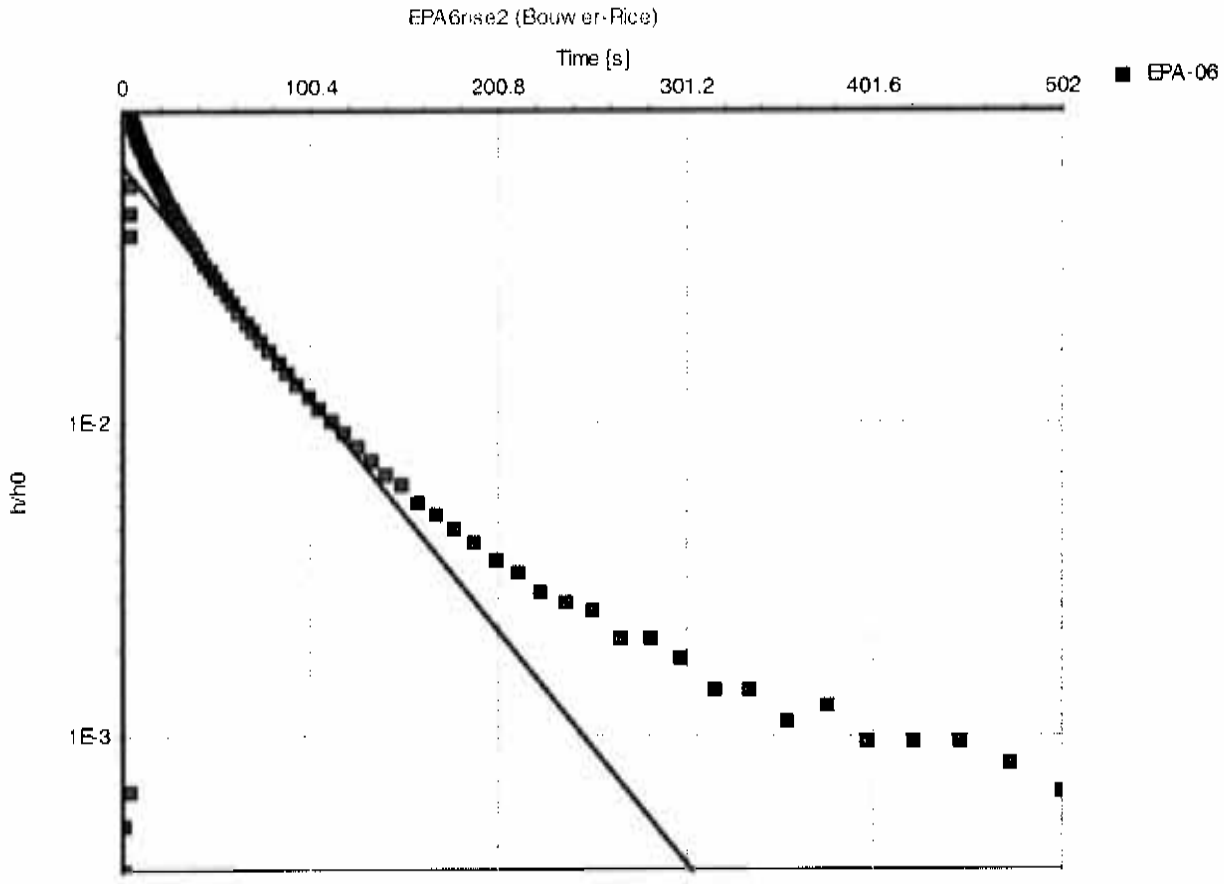

Test name: **EPA6rise2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.04E-3 [cm/s]

Test parameters:

Test well:	EPA-06	Aquifer thickness:	23.5 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
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Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

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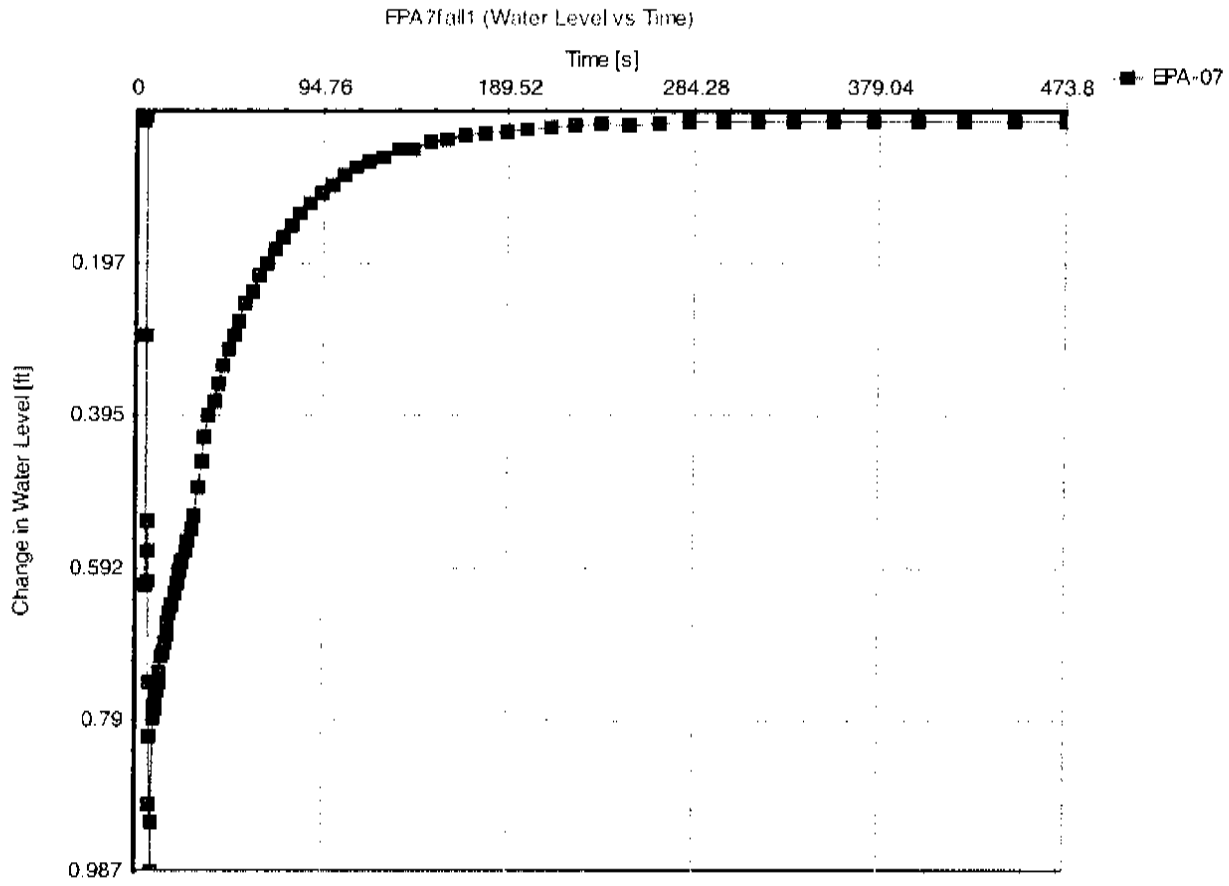
Client: USEPA



Test name: **EPA7fall1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-07	Aquifer thickness:	6 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
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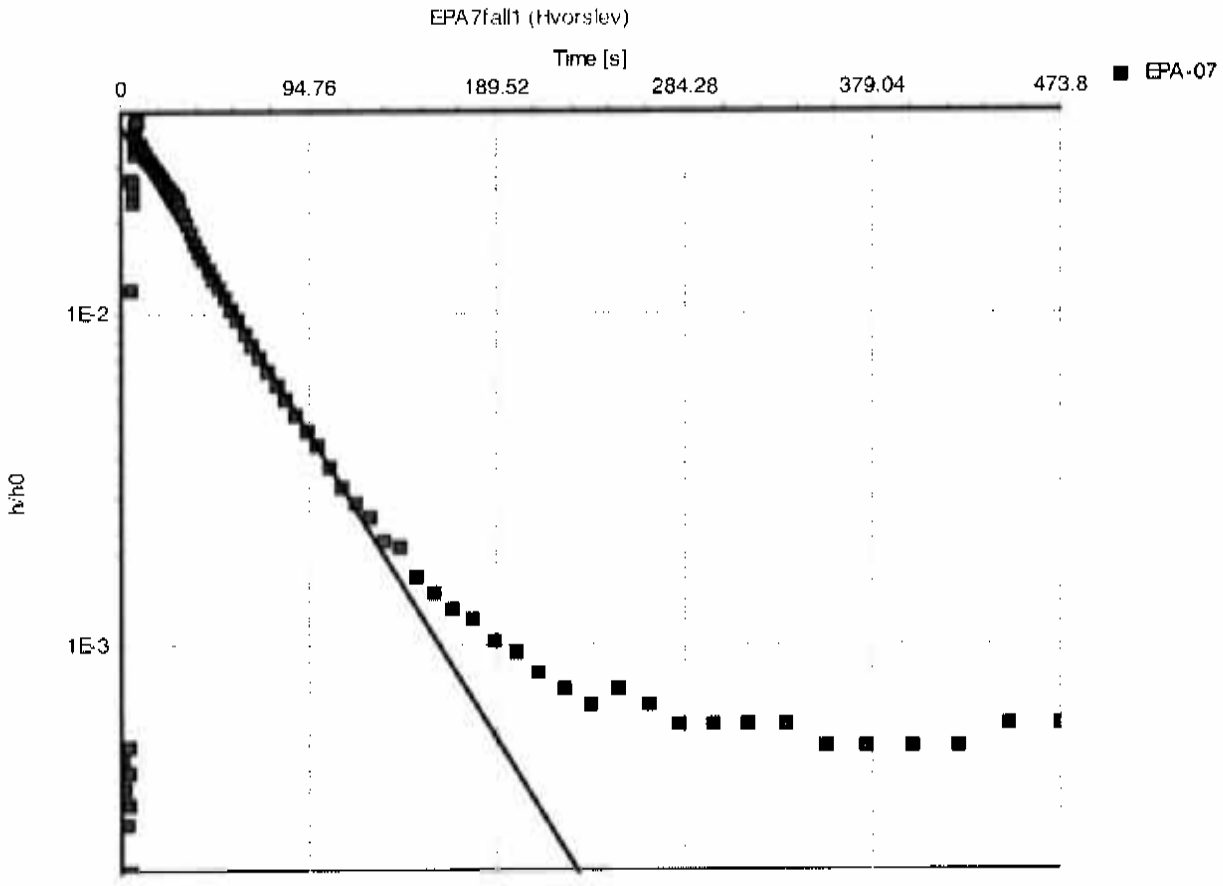
Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7fall1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 1.30E-3 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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Slug Test Analysis Report

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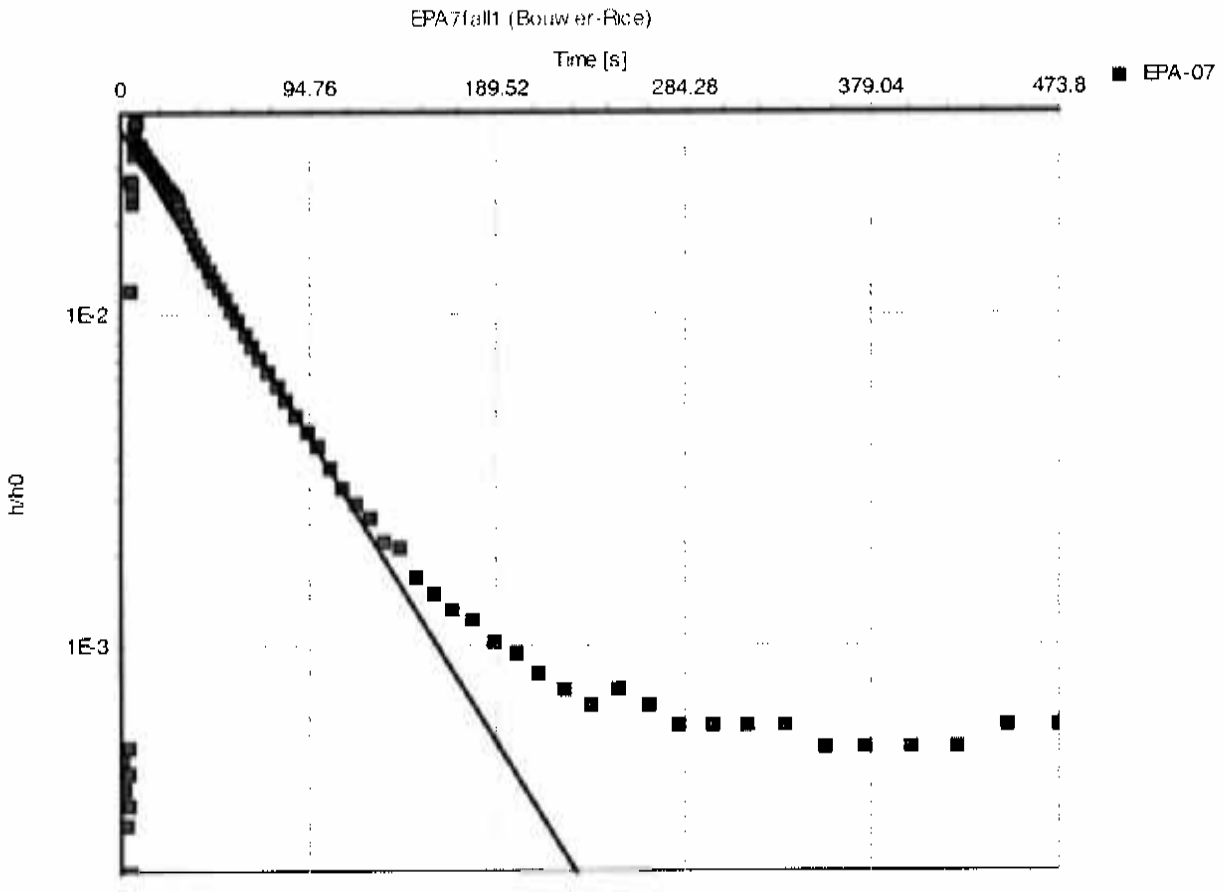
Client: USEPA



Test name: **EPA7fall1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.02E-3 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/6/2008

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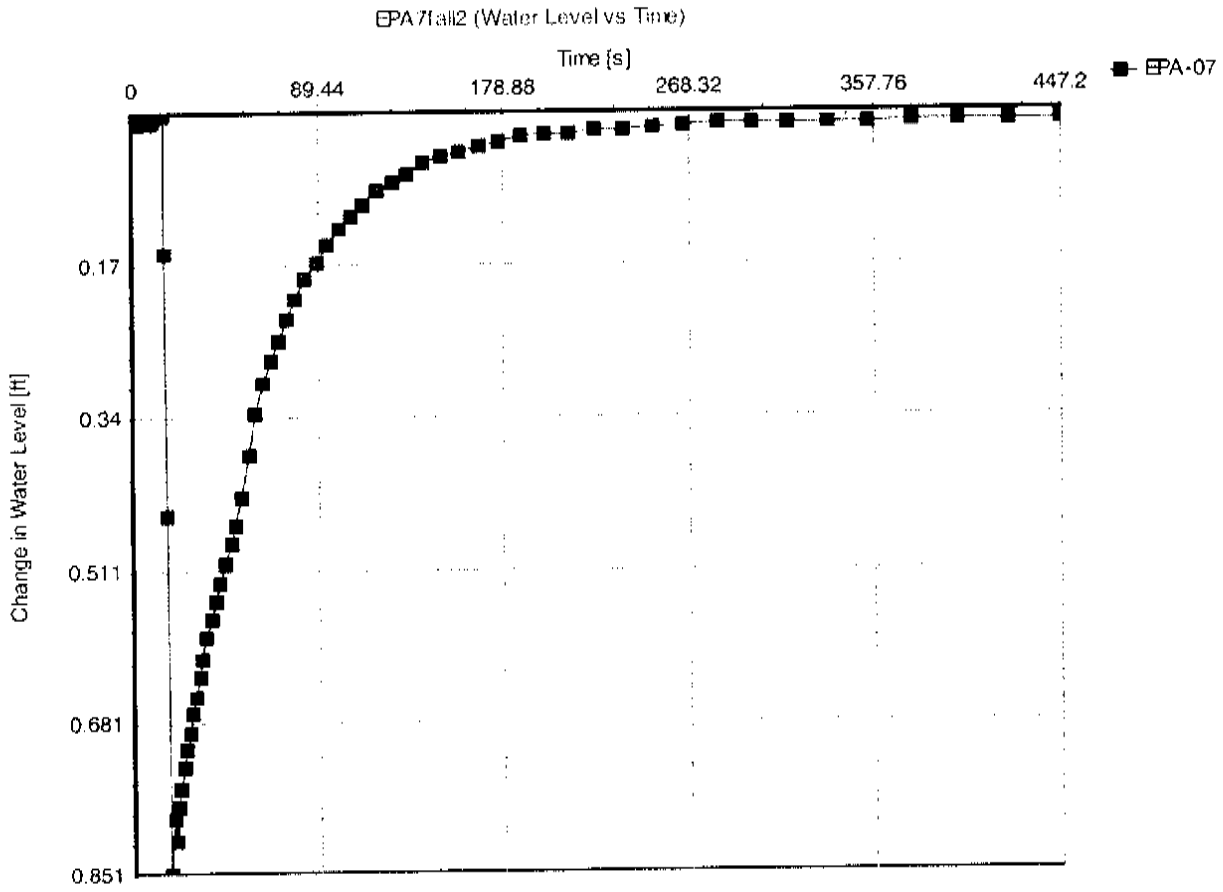
No: 106-1945.2149
Client: USEPA



Test name: **EPA7fall2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-07	Aquifer thickness:	6 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

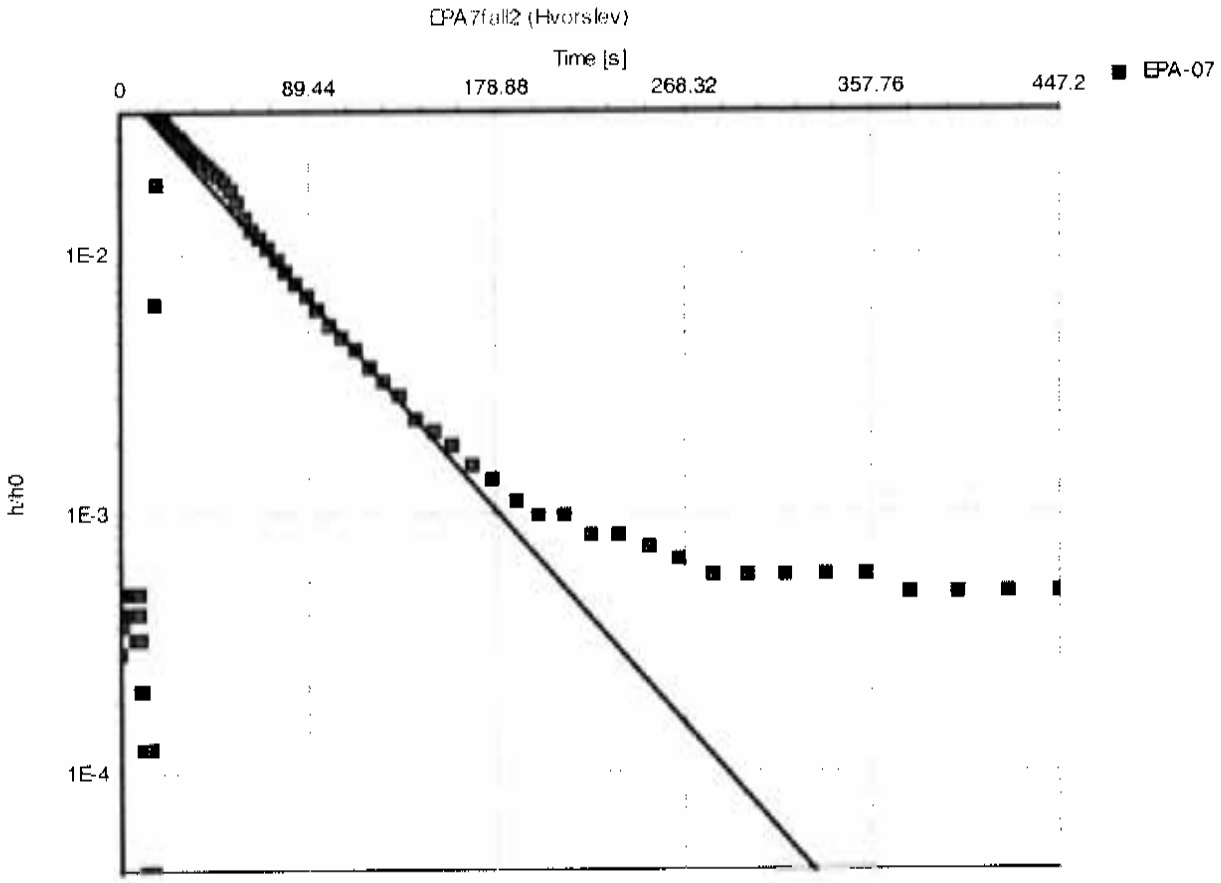
Comments:

Evaluated by: MK
Date: 12/10/20

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7fall2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 1.22E-3 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

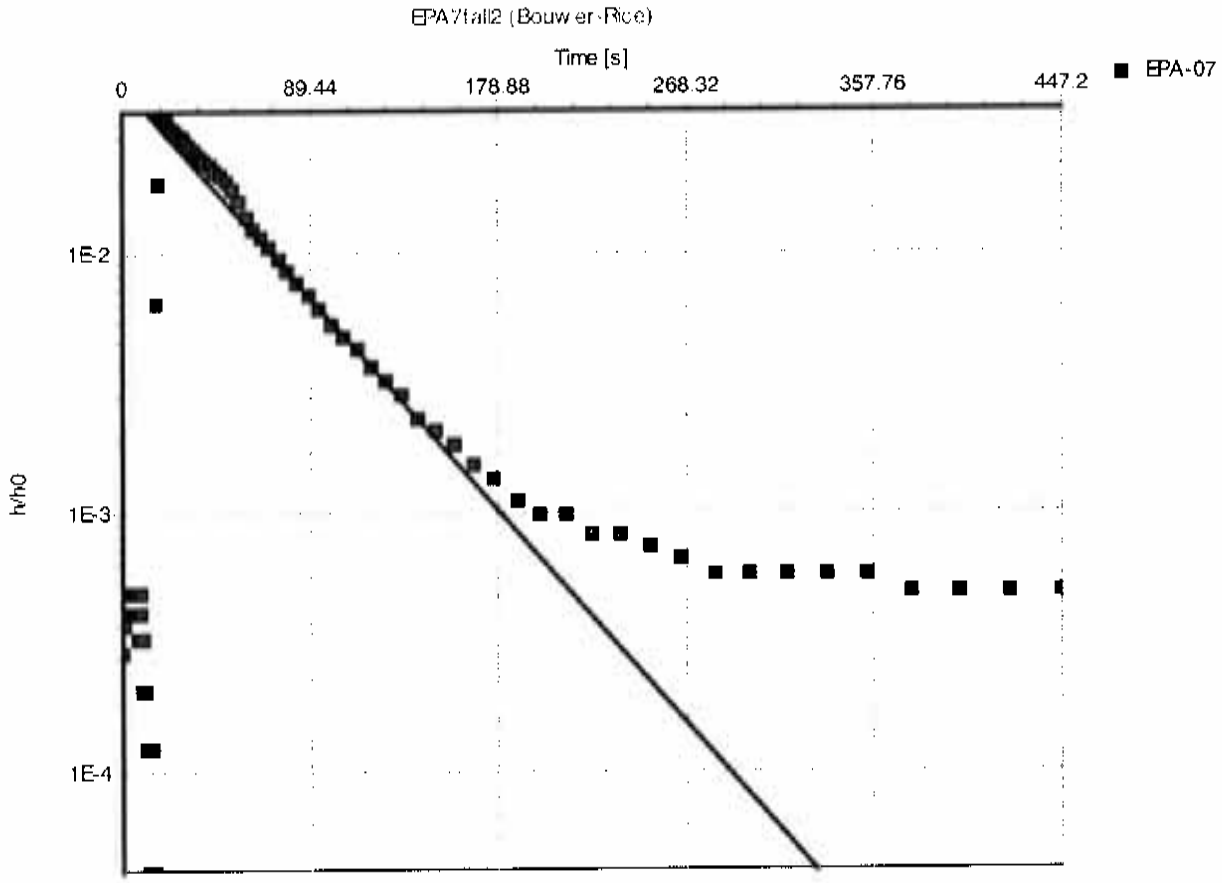
Comments:

Evaluated by: MK
Date: 12/10/20

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7fall2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 9.58E-4 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

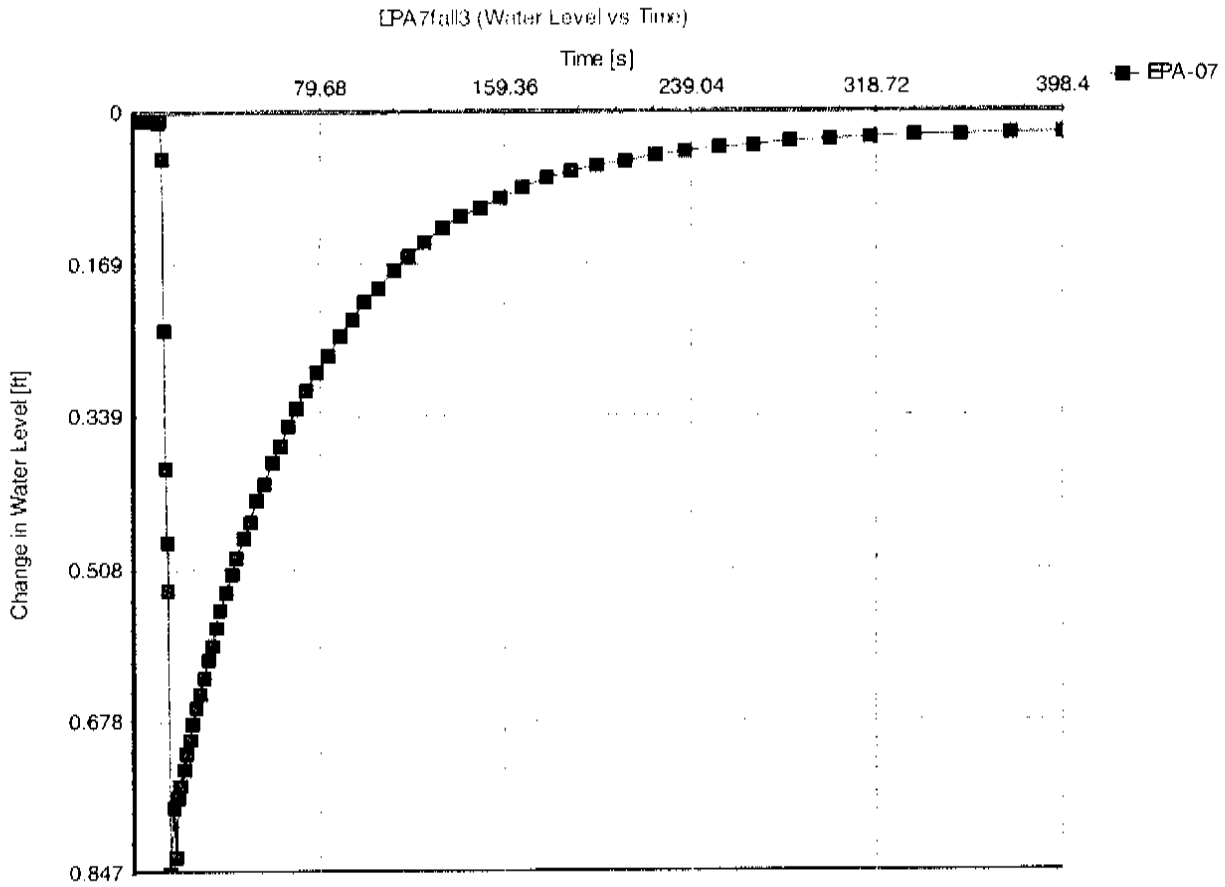
Comments:

Evaluated by: MK
Date: 12/10/20

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7fall3**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-07	Aquifer thickness:	6 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

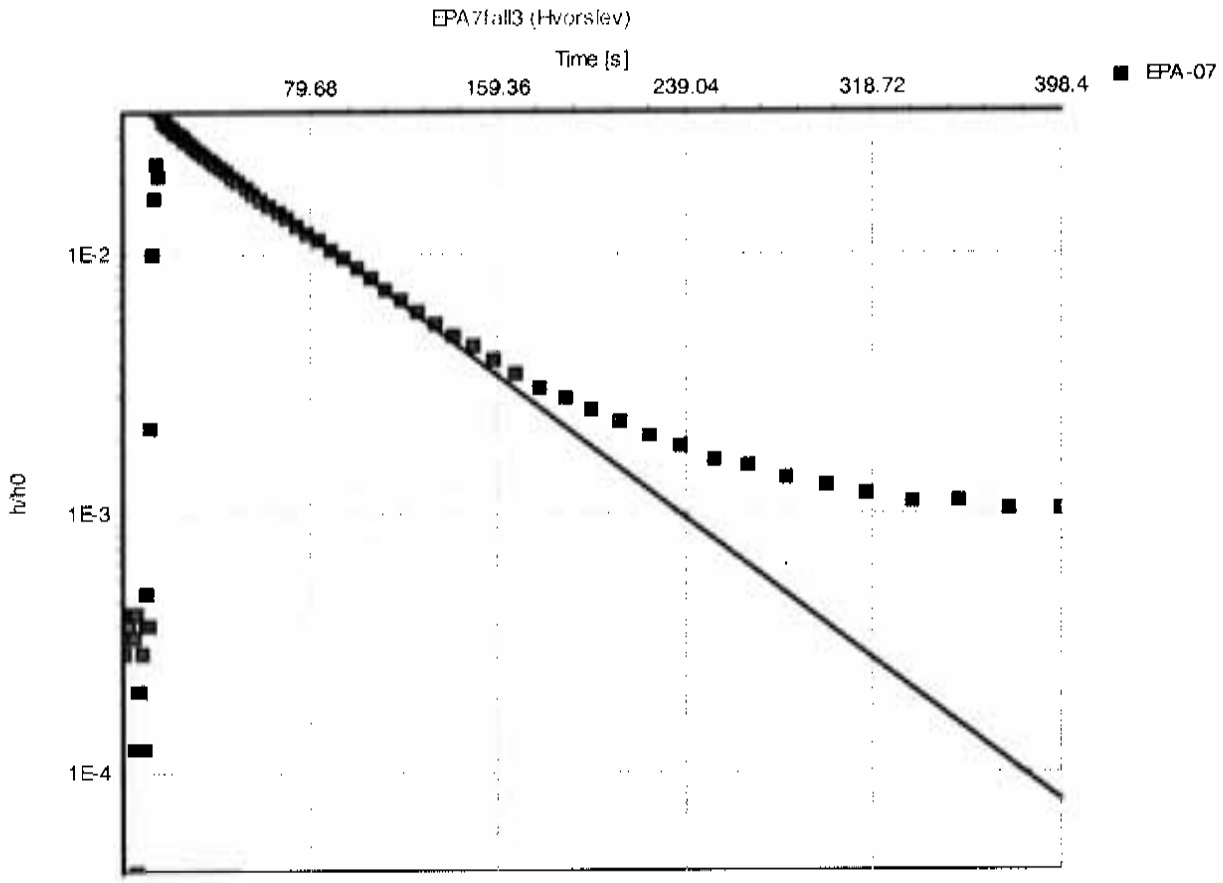
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7fall3**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 9.08E-4 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

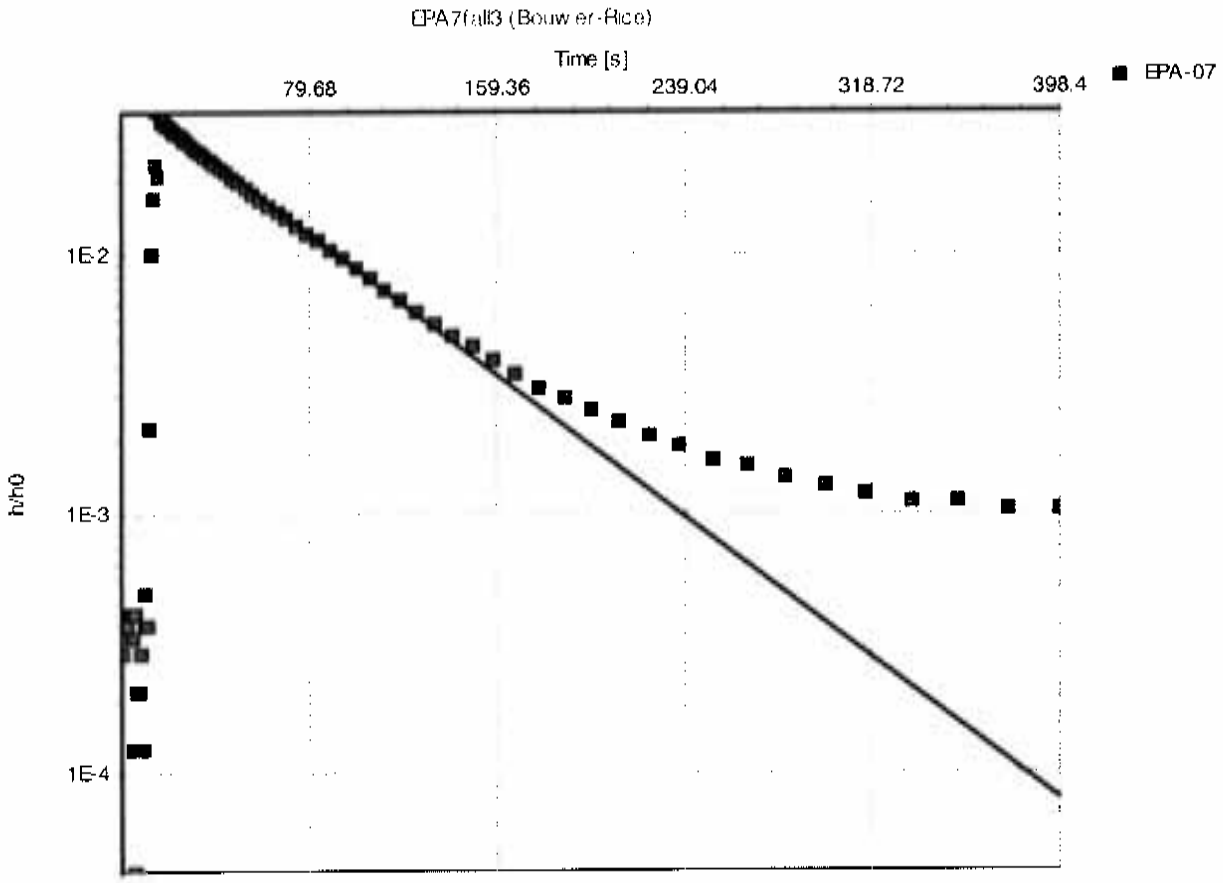
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7fall3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 7.11E-4 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

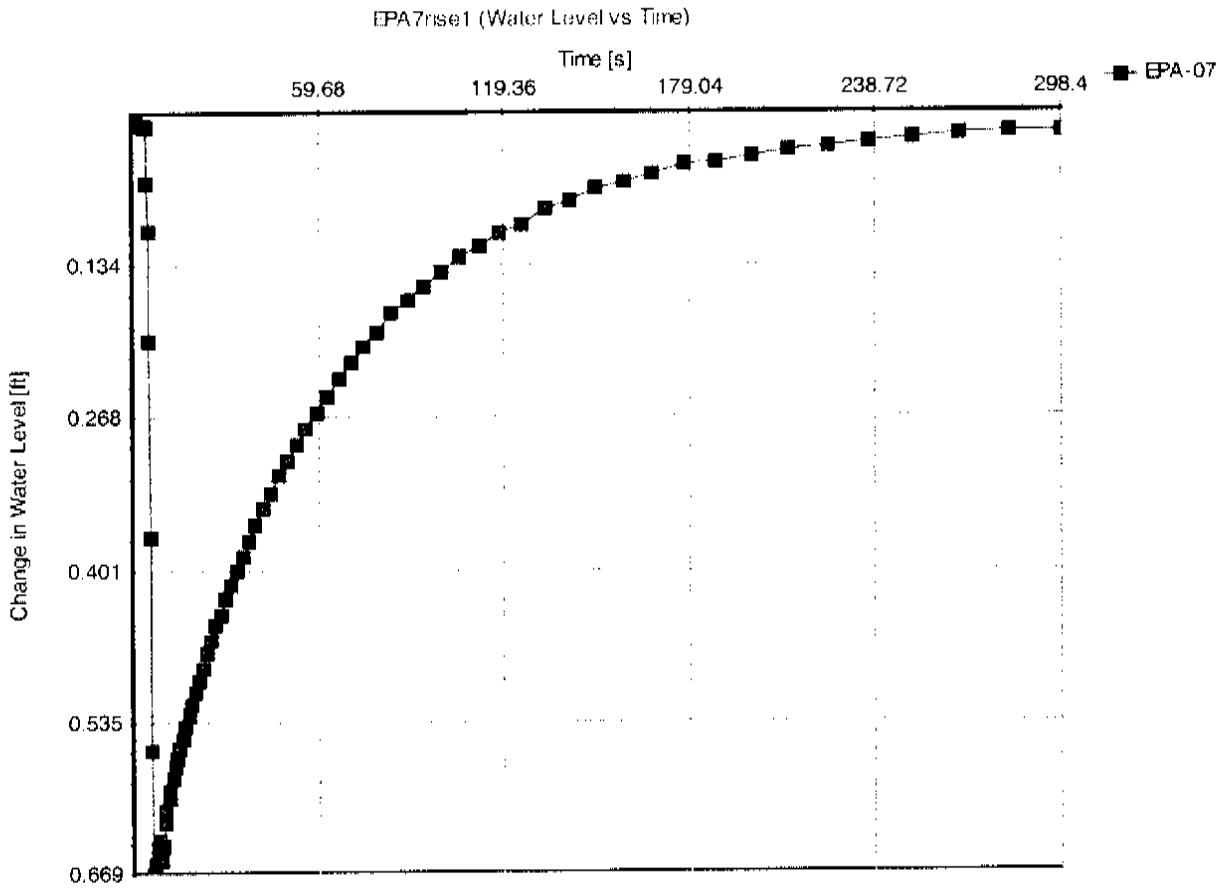
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7rise1**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-07	Aquifer thickness:	6 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

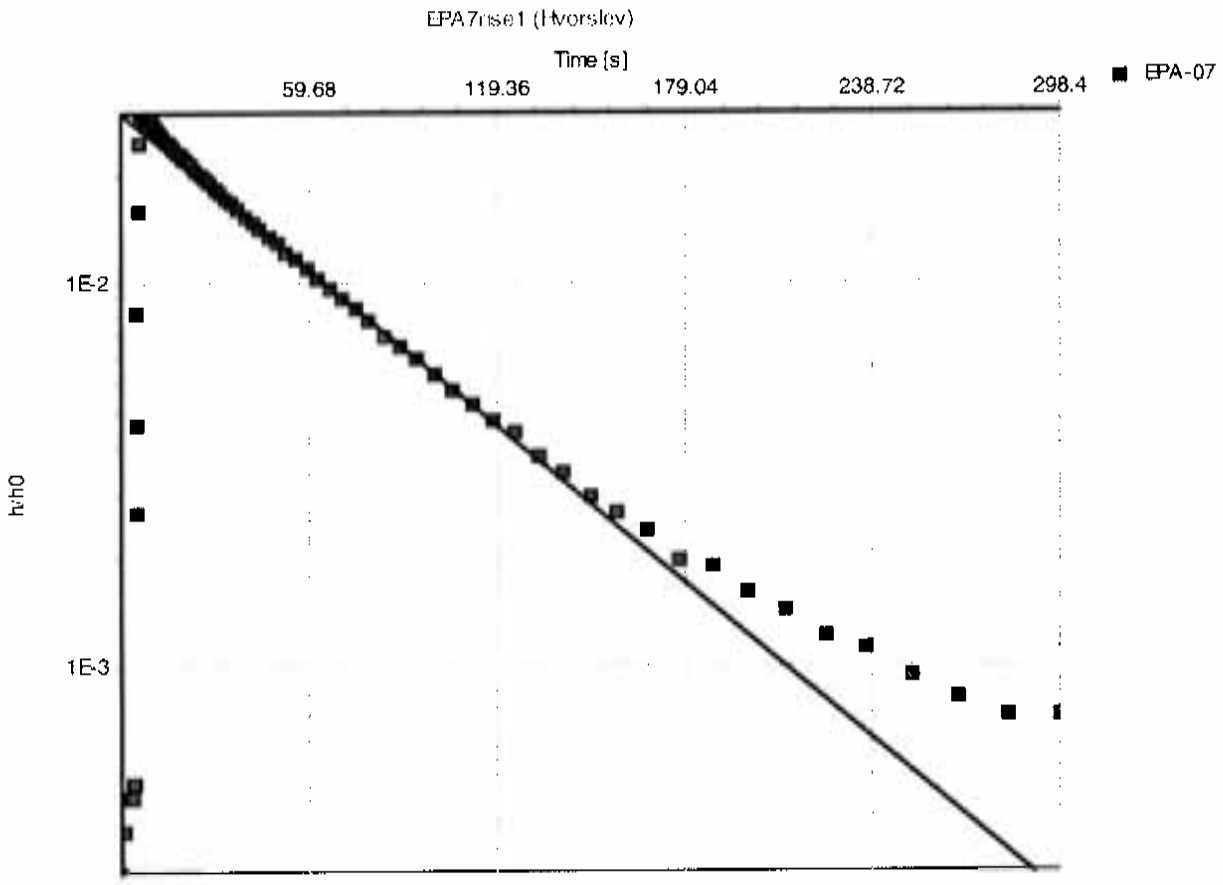
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7rise1**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 9.06E-4 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

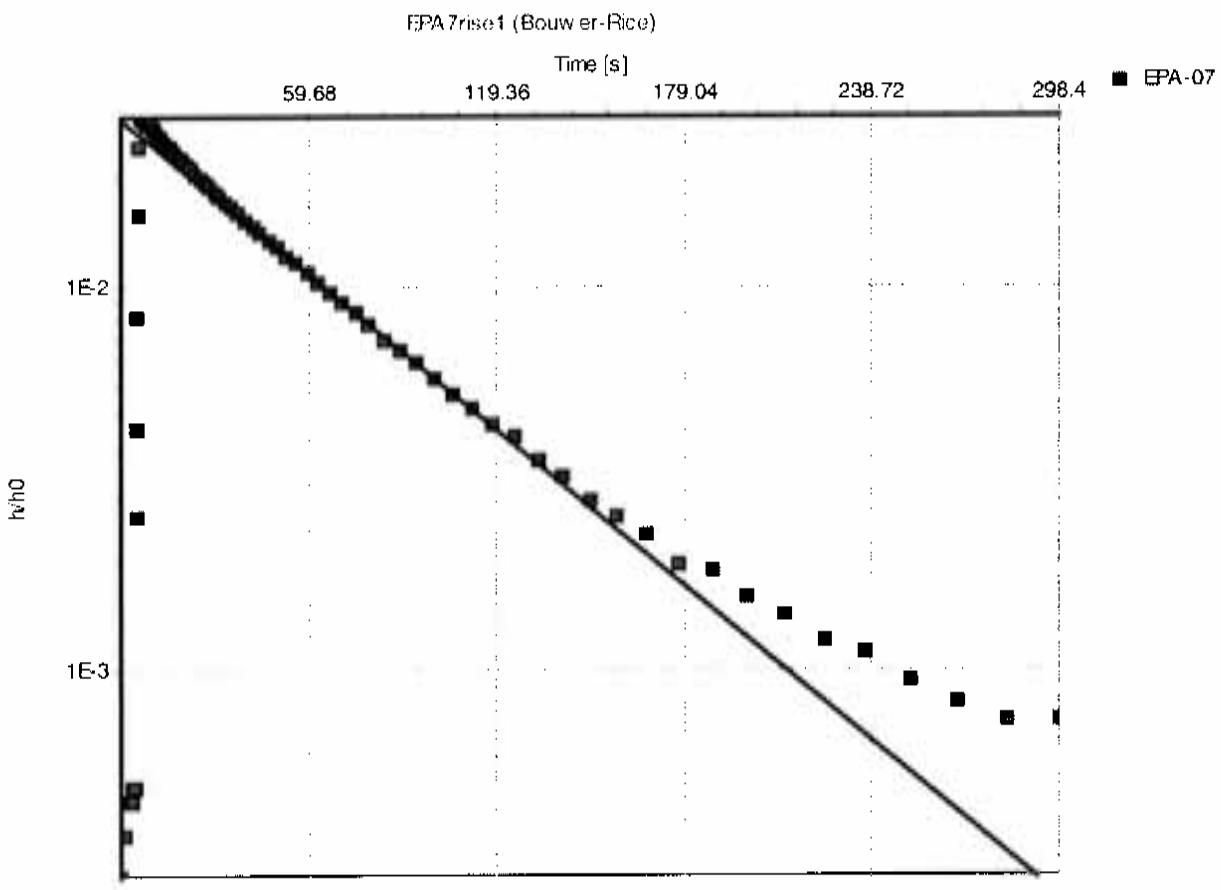
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7rise1**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 7.07E-4 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

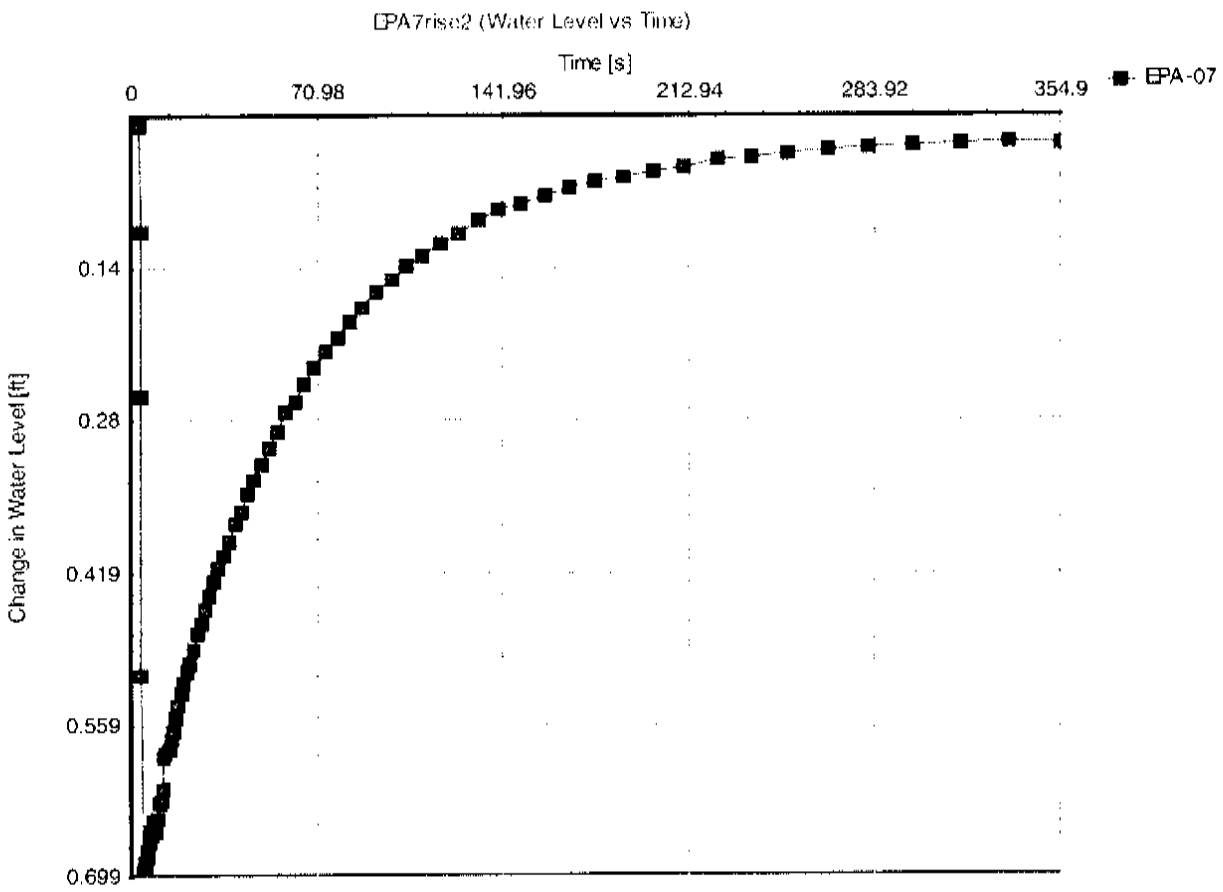
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7rise2**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:				
	Test well:	EPA-07	Aquifer thickness:	6 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

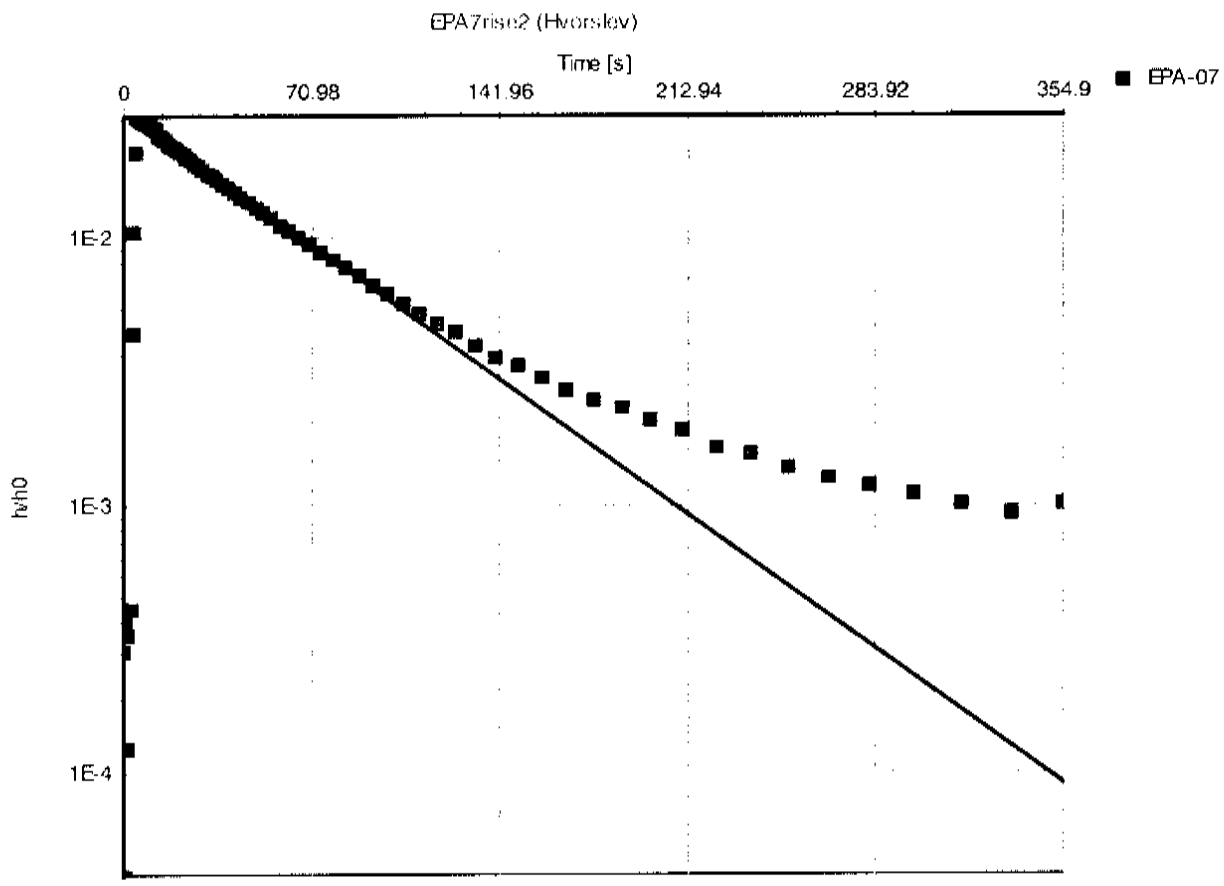
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7rise2**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 9.40E-4 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

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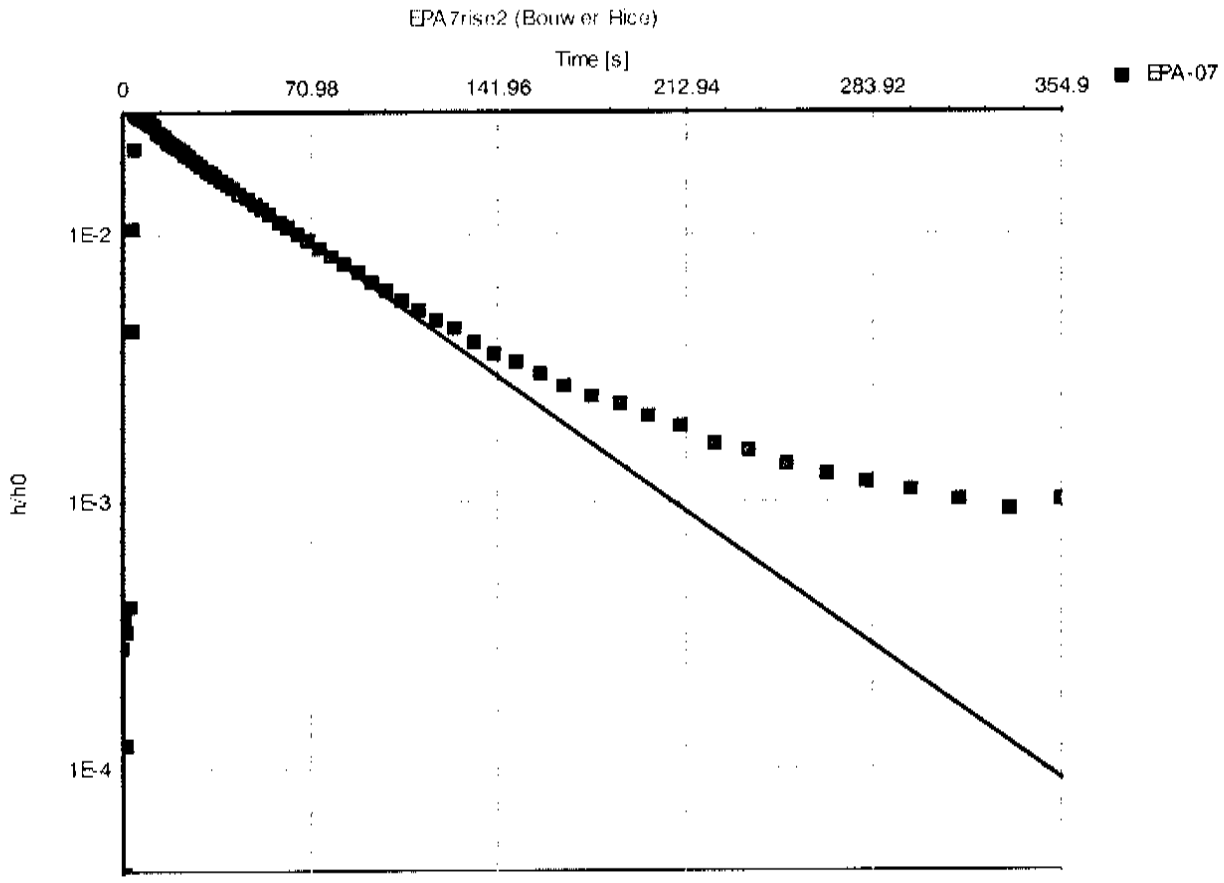
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7rise2**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 7.39E-4 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

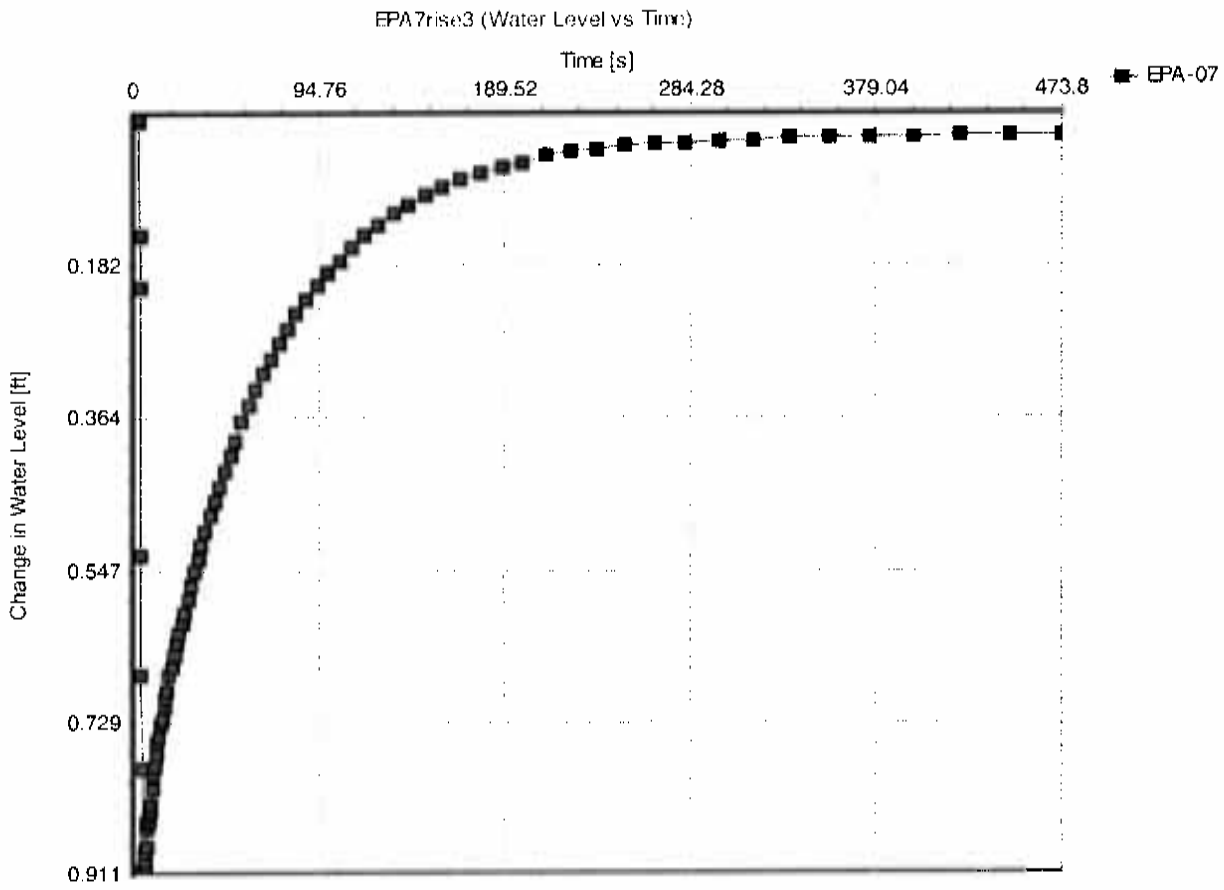
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7rise3**

Analysis method: **Water Level vs Time**

Analysis results:

Test parameters:	Test well:	EPA-07	Aquifer thickness:	6 [ft]
	Screen radius:	0.33333 [ft]		
	Screen length:	5 [ft]		
	Casing radius:	0.08333 [ft]		

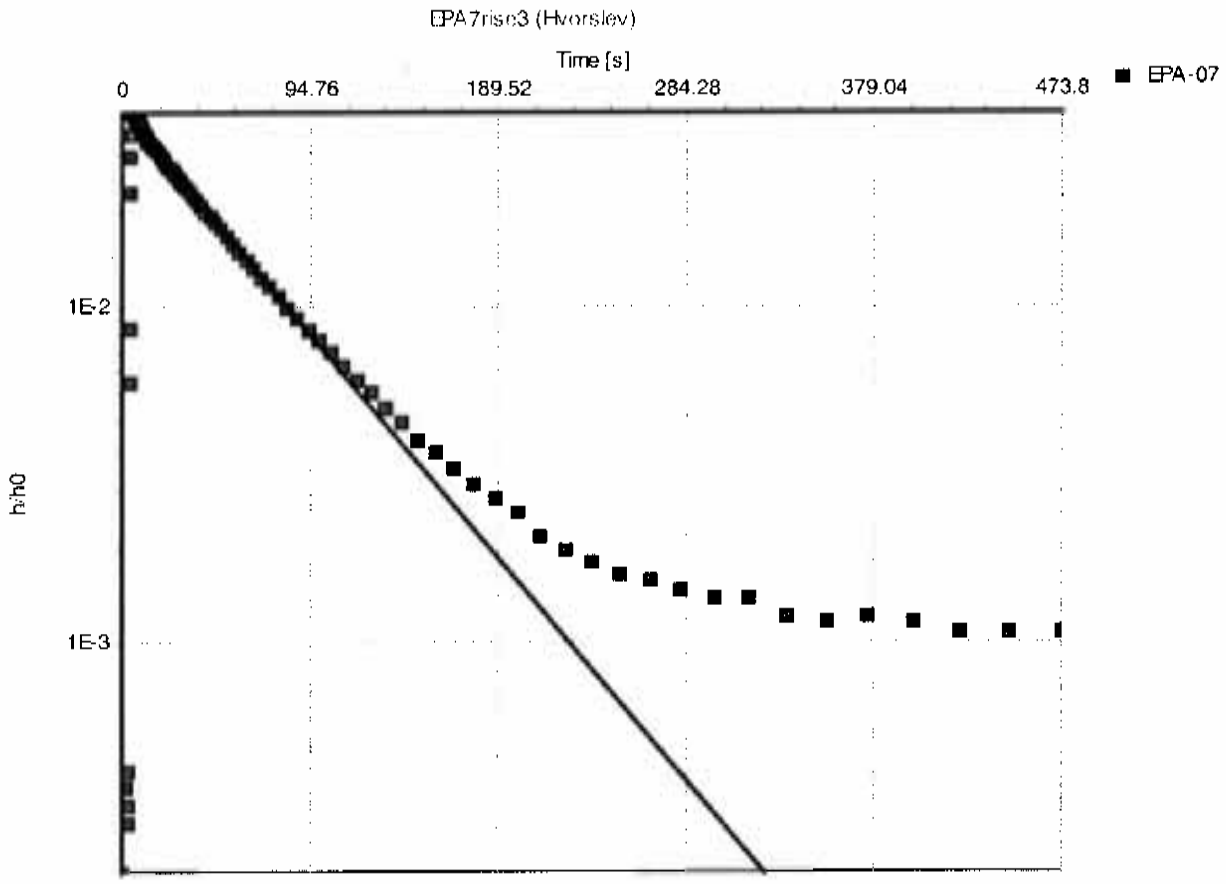
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7rise3**

Analysis method: **Hvorslev**

Analysis results:

Conductivity: 9.25E-4 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]		
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		

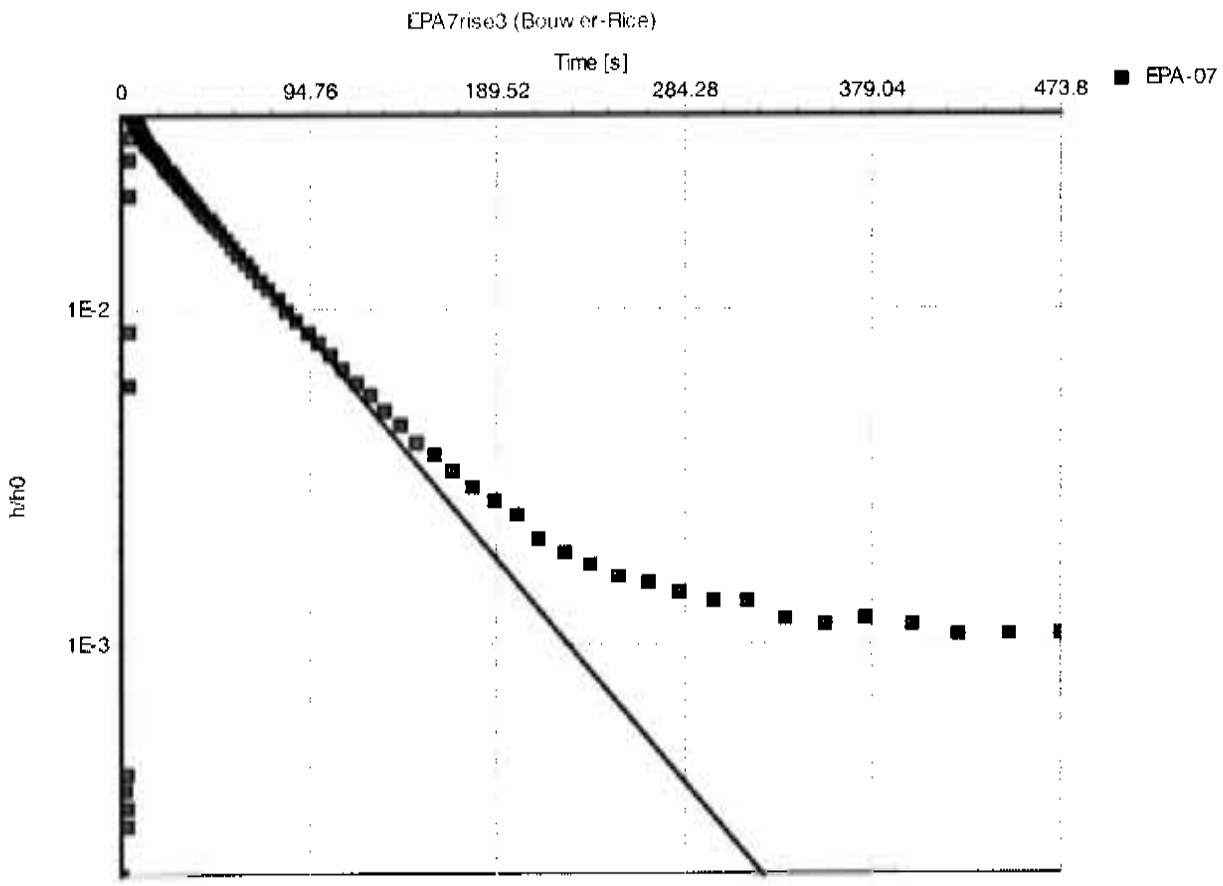
Comments:

Evaluated by: MK
Date: 12/5/2008

Tetra Tech EC, Inc.
1000 The American Road
Morris Plains, NJ 07950
973-630-8000

Slug Test Analysis Report

Project: Ellenville Scrap Iron and Metal Site
No: 106-1945.2149
Client: USEPA



Test name: **EPA7rise3**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 7.30E-4 [cm/s]

Test parameters:

Test well:	EPA-07	Aquifer thickness:	6 [ft]
Screen radius:	0.33333 [ft]	Gravel pack Porosity (%)	25
Screen length:	5 [ft]		
Casing radius:	0.08333 [ft]		
r(eff):	0.182 [ft]		

Comments:

Evaluated by: MK
Date: 12/5/2008

Summary of Slug Test Data - Ellenville Scrap Iron and Metal Site
34 Cape Avenue, Ellenville, NY

Individual Monitoring Well Hydraulic Conductivity Values

Well	Test	Hydraulic Conductivity			
		Hvorslev (1951)		Bouwer and Rice (1976, 1989)	
		cm/sec	ft/day	cm/sec	ft/day
EPA-03	EPA3fall1	9.11E-04	2.58E+00	7.67E-04	2.17E+00
	EPA3fall2	1.12E-03	3.18E+00	9.41E-04	2.67E+00
	EPA3fall3	8.42E-04	2.39E+00	7.11E-04	2.02E+00
	Geometric Mean (Falling Head)	**9.51E-04**	**2.70E+00**	**8.01E-04**	**2.27E+00**
	EPA3rise1	1.71E-04	4.85E-01	1.44E-04	4.08E-01
	EPA3rise2	9.50E-05	2.69E-01	7.97E-05	2.26E-01
	EPA3rise3	1.33E-04	3.77E-01	1.11E-04	3.15E-01
	Geometric Mean (Rising Head)	**1.29E-04**	**3.67E-01**	**1.08E-04**	**3.07E-01**
	Geometric Mean (F. and R. Head)	**3.51E-04**	**9.94E-01**	**2.95E-04**	**8.35E-01**
EPA-04	EPA4fall1	3.55E-04	1.01E+00	3.39E-04	9.61E-01
	EPA4fall2	2.71E-04	7.68E-01	2.57E-04	7.29E-01
	EPA4fall3	3.05E-04	8.65E-01	2.95E-04	8.36E-01
	Geometric Mean (Falling Head)	**3.08E-04**	**8.74E-01**	**2.95E-04**	**8.37E-01**
	EPA4rise1	3.18E-04	9.02E-01	2.99E-04	8.48E-01
	EPA4rise2	3.20E-04	9.07E-01	2.99E-04	8.48E-01
	EPA4rise3	3.13E-04	8.87E-01	2.97E-04	8.42E-01
	Geometric Mean (Rising Head)	**3.17E-04**	**8.99E-01**	**2.98E-04**	**8.46E-01**
	Geometric Mean (F. and R. Head)	**3.13E-04**	**8.86E-01**	**2.97E-04**	**8.41E-01**
EPA-05	EPA5fall1	2.98E-04	8.45E-01	2.89E-04	8.19E-01
	EPA5fall2	3.14E-04	8.90E-01	3.04E-04	8.62E-01
	EPA5fall3	3.11E-04	8.82E-01	2.99E-04	8.48E-01
	Geometric Mean (Falling Head)	**3.08E-04**	**8.72E-01**	**2.97E-04**	**8.43E-01**
	EPA5rise1	2.15E-04	6.10E-01	2.08E-04	5.90E-01
	EPA5rise2	2.59E-04	7.34E-01	2.50E-04	7.09E-01
	EPA5rise3	2.64E-04	7.48E-01	2.56E-04	7.26E-01
	Geometric Mean (Rising Head)	**2.45E-04**	**6.94E-01**	**2.37E-04**	**6.72E-01**
	Geometric Mean (F. and R. Head)	**2.74E-04**	**7.78E-01**	**2.65E-04**	**7.52E-01**
EPA-06	EPA6fall1	9.93E-04	2.82E+00	1.06E-03	3.01E+00
	EPA6fall2	1.34E-03	3.80E+00	1.42E-03	4.03E+00
	Geometric Mean (Falling Head)	**1.15E-03**	**3.27E+00**	**1.23E-03**	**3.48E+00**
	EPA6rise1	1.26E-03	3.57E+00	1.34E-03	3.80E+00
	EPA6rise2	9.90E-04	2.81E+00	1.04E-03	2.95E+00
	Geometric Mean (Rising Head)	**1.12E-03**	**3.17E+00**	**1.18E-03**	**3.35E+00**
	Geometric Mean (F. and R. Head)	**1.14E-03**	**3.22E+00**	**1.20E-03**	**3.41E+00**
EPA-07	EPA7fall1	1.30E-03	3.69E+00	1.02E-03	2.89E+00
	EPA7fall2	1.22E-03	3.46E+00	9.58E-04	2.72E+00
	EPA7fall3	9.08E-04	2.57E+00	7.11E-04	2.02E+00
	Geometric Mean (Falling Head)	**1.13E-03**	**3.20E+00**	**8.86E-04**	**2.51E+00**
	EPA7rise1	9.06E-04	2.57E+00	7.07E-04	2.00E+00
	EPA7rise2	9.40E-04	2.66E+00	7.39E-04	2.10E+00
	EPA7rise3	9.25E-04	2.62E+00	7.30E-04	2.07E+00
	Geometric Mean (Rising Head)	**9.24E-04**	**2.62E+00**	**7.25E-04**	**2.06E+00**
	Geometric Mean (F. and R. Head)	**1.02E-03**	**2.90E+00**	**8.01E-04**	**2.27E+00**

Summary of Hydraulic Conductivity Values

Well	Test	Hydraulic Conductivity			
		Hvorslev (1951)		Bouwer and Rice (1976, 1989)	
		cm/sec	ft/day	cm/sec	ft/day
Summary	Geometric Mean **(Falling Head)**	6.52E-04	1.85E+00	5.98E-04	1.69E+00
	Geometric Mean **(Rising Head)**	4.01E-04	1.14E+00	3.66E-04	1.04E+00
	Geometric Mean **(F. and R. Head)**	5.11E-04	1.45E+00	4.68E-04	1.33E+00
	Minimum Value **(F. and R. Head)**	9.50E-05	2.69E-01	7.97E-05	2.26E-01
	Maximum Value **(F. and R. Head)**	1.34E-03	3.80E+00	1.42E-03	4.03E+00