FINAL PHASE II
REMEDIAL INVESTIGATION REPORT

OLIN CHEMICALS
ROCHESTER PLANT SITE
ROCHESTER, NEW YORK

VOLUME II
APPENDICES

Submitted to:

Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-4011

Prepared by:

ABB Environmental Services, Inc.
110 Free Street
Portland, Maine 04101

OCTOBER 1997

ABB Environmental Services, Inc.

ASEA BROWN BOVERI

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APPENDIX A

PHYSICAL DATA

APPENDIX A-1

SOIL BORING AND ROCK CORE LOGS

ROCK CORING LOG

Project: OLIN Rochester RI/FS			Boring/Well No.: BR-111	Project No.: 7311-32
Client: OLIN Corporation	Driller's Name: K. Marcellus	Logged by: N.B.	Checked by:	Ground Elev.: 537.2'
Drilling Contractor: Marcor of NY	Protection Level: D	Rig Type: Canterra	Start Date: 8-29-95	Finish Date: 8-29-95
Drilling Method: Wire-line Core	Bit Type/Size: HQ / 3.8" Hole	P.I.D. (eV):	Casing Size: 6.0"	Auger Size:
Ground Elev.: 537.2'	Soil Drilled: 12.5'	Core Interval (to/from)(ft): ~~12.5'~~ NB. 14.5' - 45.0'		

Depth (feet) Below GRD Surf.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
14	R-2	NA	Grout in Rock socket	NA	NA	NA	NA	NA	Air hamm drilling done from 12.5' (Rock surface) to 14.5' bgs
14.5 – 15				nat	10°	SL	BKG	BKG	Light gray finely crystalline, medium bedded, DOLOMITE with interbedded Shale
				nat	0°	SL			
16				nat	10°	SL			15.7' - 10° fracture along shale parting
				nat	10°	SL			
				nat	10°	SL			
				nat		SL			
17	R-2	81		nat	0°	SL			
18	5.7'/5.7'			nat	0°	SL			18.0', 18.1' - fractures along shale parting (wavy)
				nat	0°	SL			
19				nat	0°	SL			18.7' - Fracture along shale parting
				nat	0°	SL			
				nat	10°	SL			
20 – 20.2'				nat	10°	SL	↓	↓	
21				nat	0°	SL	BKG	BKG	
				nat	0°				
				nat	30°	S–			— 21.4' 30° Dip wavy shaped fracture
22									
23	R-3			nat	0°	SL			
23		81		nat	0°/10°	SL			— 23.1' - wedge shaped break from 0°/10° dips.
24	10.0'/9.7'								
25				nat	0°	SL			
				nat	0°	SL			
26				nat	10°	SL			Noted possible fracture zone during coring at this depth.
				nat	10°	SL			
				nat	5°	SL			
27				nat	0°	SL			· 27.5' fracture along shale parting
28							↓	↓	

BKG = Background
SL - Slightly [illegible]

Nat = Apparent Natural core break along seam or bedding plane

Sheet 1 of 3

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9509001S

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-111		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** N.B.	**Checked by:**	**Ground Elev.:** ~545.5'
Drilling Contractor: Marcor of NY	**Protection Level:** D	**Rig Type:** Canterra	**Start Date:**	**Finish Date:**
Drilling Method: Wire-line Core	**Bit Type/Size:** HQ/3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 6.0"	**Auger Size:**
Ground Elev.: ~545.5'	**Soil Drilled:**	**Core Interval (to/from)(ft):**		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip: (Approx.)	Weathered Condition:	PID Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
29	R-3			nat nat nat nat nat nat	0° 18° 10° 10° 10° 0°	SL SL SL SL weat SL	4 7 BKG	3 2 BKG	Light gray finely crystalline, medium bedded DOLOMITE with interbedded shale
30 30.2									
31	2.5'/2.0'	75		Nat	0°	SL	BKG	BKG	30.2'-31.2' - Trace shale partings; no core breaks
32 32.7	R-4			nat	0°	SL			
33				nat	0°	SL	BKG	BKG	32.7-33.2' - Mechanical breaks
34	R-5			nat	0°	SL			-33.8' wavy fracture shape
35				nat mech mech	10° 30° 10°-20°	SL SL			irregular core breaks; some mechanical breaks apparent.
36	7.3'/7.3'	91			10°-20°	weat			36.4 10°-20° - wavy, moderately weathered
37									
38				nat	0°	SL			
39	R-5			nat/mech	10°	SL			38.1 trace of chatter marks; possible mechanical break.
40 40.5				nat nat mech	10° 0°	SL SL			
41							BKG	BKG	
42	R-6 4.5/4.2	89		nat	10°	none			-42.4' - 30° wavy fracture
43				nat	30°	none			
44				nat	20° 10°	none			-43.5' - 0° sl. weathered w/ solution cavity along shale parting.

weat = weathered
mech = mechanical break

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-111		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marellus	**Logged by:** N.B.	**Checked by:**	**Ground Elev.:**
Drilling Contractor: Marcor of NY	**Protection Level:** D	**Rig Type:** Canterra	**Start Date:**	**Finish Date:**
Drilling Method: Wire-line core	**Bit Type/Size:** HQ / 3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 6.0"	**Auger Size:**
Ground Elev.:	**Soil Drilled:**	**Core Interval (to/from)(ft):**		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
45	R-6			nat	0°	none	BKG ↓	BKG ↓	Light grey, finely crystalline, medium bedded, DOLOMITE with interbedded Shale 44.0-44.3' - small pits < 1/16 ø

END OF BORING AT 45.0' bgs

NOTE: Approximately 2500 gallons of water lost during coring activity

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-111D		7311-32
Client:	**Driller's Name:**	**Logged by:**	**Checked by:**	**Ground Elev.:**
OLIN Corporation	K. Marcellus	N.B.		537.8'
Drilling Contractor:	**Protection Level:**	**Rig Type:**	**Start Date:**	**Finish Date:**
Marcor of NY	D	Canterra	9-1-95	9-5-95
Drilling Method:	**Bit Type/Size:**	**P.I.D. (eV):**	**Casing Size:**	**Auger Size:**
Wire line core	HQ / 3.8" Hole		4.0"	
Ground Elev.:	**Soil Drilled:**	**Core Interval (to/from)(ft):**		
537.8'	12.0'	50.0' - 100.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks: Type:	Core Breaks: Dip: (Approx)	Weathered Condition:	PID Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
48			4" Ø CASING						Air Hammr drilling done from Rock surface to 50' bgs (12.0')
49			Grout Grout						- possible fractures noticed at 27'-28' and 37' in depth.
50									- 4" casing set at 50' before coring deep section.
51	R-1 1.0/1.0	100		MECH					Light gray finely crystalline, medium bedded. DOLOMITE with interbedded shale
52				MECH			BKG	BKG	
53				nat	0°	NONE			52.7' - wavy 0° fracture along shale bedding plane.
54	R-2								
55	9.0' / 9.0'	89		nat	40°	SL			54.9' - 40° dip fracture along shale rich bedding plane; trace of other unseparated fractures or seams
56				nat	10°	NONE			
57				MECH nat	0°	NONE			
58				nat MECH	60°	NONE			
59				MECH nat	0°	NONE			58.8' - fracture along shale bedding plane
60				nat	0°	NONE			59.7' fracture along shale bedding plane
61	R-3			MECH			3	10	
				nat	15°	NONE	0.6	3	61.0' - 15° along calcite bed < 0.01' thick
				nat	15°	SL	0	4	61.1' - 10° " " " " "
62					10°	SL	0	3	

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		3R-111D		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** N-B.	**Checked by:**	**Ground Elev.:** 537.5
Drilling Contractor: Manor of NY	**Protection Level:** D	**Rig Type:** Canterra	**Start Date:** 9-1-95	**Finish Date:** 9-5-95
Drilling Method: Wire-line Core	**Bit Type/Size:** HQ/3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 4.0"	**Auger Size:**
Ground Elev.:	**Soil Drilled:**	**Core Interval (to/from)(ft):**		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip: (Approx.)	Weathered Condition:	PID Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
63				nat	0°	VSLC	3	5	Light gray, finely crystalline, medium bedded, DOLOMITE with interbedded shale (becoming mostly shale with lesser amounts of Dolomite after 60' bgs)
				nat	10°	NONE			
64				nat	5°	NONE	0	4	
				nat	5°	NONE	3.9	4	
65									
	R-3	75		nat	5°	NONE	0.6	1	
66				nat	5°	NONE			
	10.0' / 9.6'			nat	0°	NONE	2	7	66.3-66.6 three unweathered 0° dipping fractures along shale partings / beds.
				nat	0°	NONE			
67				nat	0°	NONE	14	7	
							0.6	1	
68				nat	0°	NONE	0.6	3	-67.7' - fracture along shale parting near other shale partings with no separation
				nat	5°	NONE	2.7	1	
69				nat	0°	NONE	7.2	0	
70									
71				nat	0°	SL	0	3	71.1'/71.2' - slightly weathered fractures along shale partings
				nat	0°	SL			
72	R-4			nat	0°		2.1	5	
73		96		MECH					
	7.0' / 6.8'			nat	0°	none	0.6	1	
74				MECH					
				MECH			0	3	
							0	0.7	
75				nat	0°	weath	2.7	0	75.1 - weathered 0° breaks 0.03' apart; along shale bedding.
76				nat	0°	SL	4	0	
				nat	0°	SL			
77				MECH					
				MECH					
78	R-5								

ROCK CORING LOG

Project: OLIN Rochester RI/FS			Boring/Well No.: BR-111D		Project No.: 7311-32
Client: OLIN Corporation	Driller's Name: K. Marcellus		Logged by: N.B	Checked by:	Ground Elev.: 537.8
Drilling Contractor: Marcor of NY	Protection Level: D		Rig Type: Canterra	Start Date: 9-1-95	Finish Date: 9-5-95
Drilling Method: Wireline - Core	Bit Type/Size: HQ/3.8" Hole		P.I.D. (eV):	Casing Size: 4.0"	Auger Size:
Ground Elev.:	Soil Drilled:	Core Interval (to/from)(ft):			

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip: (Approx.)	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
79	R-5 3.5'/3.5'	99		nat	0°	NONE	NA	NA	Gray finely crystalline, medium bedded, shale with interbedded dolomite.
80				nat	6°	NONE			
80.5				nat	0°	NONE			78.0', 78.7', 79.7' - fractures along shale and calcite contact surfaces
81				nat	0°	NONE	NA	NA	81.1', 81.3' fracture along shale/calcite bed interface
82				nat	10°	NONE			
83				MECH	0°				- 83.3 - along shale bedding smoothed surface
84	R-6 9.5'/9.7'	85		nat	0°	NONE			- 84.0 - along shale/calcite bedding interface
85				nat	0°	SL			- 84.3 - same as above
86									- 84.6 - same as above and no calcite
87				nat	0°	NONE			86.4' - along shale bed, unweathered
88				nat	0°	SL			86.7' - along shale/calcite bedding interface
89				nat	0°	SL	0	3	87.3 - same as above
90				nat	0°	SL	1.3	3	88.3' - same as above
91	R-7 10.0'/10.3'	98		nat	0°	SL	0	N.	- 89.5 - moderately weathered along shale bed and NB - 0.01' thick calcite seam is 1/2" below fracture
92				Nat	0°	SL			
93				nat	10°	NONE	0		93.4 - 93.6 finely crystalline, trace weathered appearance.
94				nat	0°	SL	0		
					10°				

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-1111D		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** N.B.	**Checked by:**	**Ground Elev.:** 537.8
Drilling Contractor: Marcor of NY	**Protection Level:** D	**Rig Type:** Canterra	**Start Date:** 9-1-95	**Finish Date:** 9-5-95
Drilling Method: Wireline Core	**Bit Type/Size:** HQ/3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 4.0"	**Auger Size:**
Ground Elev.:	**Soil Drilled:**	**Core Interval (to/from)(ft):**		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
95	R-7	98		nat	0°	SL	4.2	NA	Gray finely crystalline, medium bedded, SHALE, with interbedded dolomite.
					0°				
96				nat	5°	SL	4.2	NA	
				nat	10°	SL	0	NA	94.8' fracture along shale/calcite interface
97				nat	10°	SL			96.7'-96.9' along shale/calcite beds
				nat	10°	SL			
98									
99				nat	0°	NONE	0	NA	44.0
				nat	0°	SL	0	NA	44.2 } 0° SL weathered shale NO calcite beds are present
100				nat	0°	SL	0	NA	44.5
									End of Boring at 100.0' below ground surface

ABB Environmental Services, Inc.

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ROCK CORING LOG

Project: **OLIN Rochester RI/FS**			Boring/Well No.: BR-112		Project No.: 7311-32
Client: **OLIN Corporation**	Driller's Name: K. Marcellus		Logged by: N.B	Checked by:	Ground Elev.: ≈545.5'
Drilling Contractor: Mancor of NY	Protection Level: D		Rig Type: Cuterra	Start Date: 8-30-95	Finish Date: 8-31-95
Drilling Method: Wire-line core	Bit Type/Size: HQ / 3.8" Hole		P.I.D. (eV):	Casing Size: 6.0"	Auger Size:
Ground Elev.: ≈545.5'	Soil Drilled:	Core Interval (to/from)(ft):			

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
12	R-1		Grout in Rock Socket						Air hammer drilling done from 11.0' (Rock surface) to 13.0' bgs.
13									
14	R-1			nat	0°	SL	BKG	NA	Light gray finely crystalline, medium bedded, DOLOMITE, with interbedded Shale
				nat	0°	weat			
				nat	0°	weat			
15	7.0'/7.0'			nat	20°	SL			14.6' – 20°/0° fractures along shale stringers.
				nat	0°	SL			
				nat	0°	SL			
16		60		nat	0°	SL			15.4'-15.7' Vertical (90°) break between wavy 0° bedding parallel fractures.
					20°	SL			
					0°	SL			
17				nat	0°	SL			
					0°				
18				nat	10°	SL			16.0' – NO separation – 20° seam along shale stringer.
				mech					
				nat	5°	SL			18.2' – more even (less wavy) break along bedding plane
19				nat	5°	SL			
				nat	5°	SL			19.2' – irregular breaks near bedding dips at ≈ 20°.
20					20°				
				mech	–	–	BKG	NA	20.0 – 20.2 – mechanical
21				nat	0°	SL			
22	R-2	69		nat	0°	SL			22.0-22.3 – wavy fracture (4) along shale partings.
23	4.0'/3.9'			nat	20°	SL			
				nat	30°/30°				
				nat	10°	SL			23.1' – successive texture along plane
24				mech					23.5' – of break not in shale bel. No separation
	1.0/1.3	83		nat	0°	SL			start of water loss in corehole
25	R-3			nat	10°	SL			
26	R-4	88		nat	0°	SL			
				nat	0°	SL			
27									

BKG = Background
SL = slightly weathered
Nat = Apparent natural core break along seam or bedding plane
weat = weathered

ROCK CORING LOG

Project:		Boring/Well No.:		Project No. :
OLIN Rochester RI/FS		BR-112		7311- 32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** N B.	**Checked by:**	**Ground Elev.:**
Drilling Contractor: Marcor of NY	**Protection Level:** D	**Rig Type:** Canterra	**Start Date:** 8-30-95	**Finish Date:** 8-31-95
Drilling Method: Wire-line Core	**Bit Type/Size:** HQ / 3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 6.0"	**Auger Size:**
Ground Elev.:	**Soil Drilled:**	**Core Interval (to/from)(ft):**		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip: (Approx.)	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
28	R-4 50/4.8'	88		nat	10°	SL	NA	NA	Light gray finely crystalline, medium bedded, DOLOMITE with interbedded shale
29				nat	0°	NONE			
30				nat	0°	SL			- 29.5' concave stepped break along shale stringer bedding plane
31	R-5 10.0'/10.0'	91		MECH nat	0° 10°	SL			30.5 0° fracture with hairline 80° fracture 30.7 10° w/ no separation leading to 10° fracture.
32				nat	20°	SL			31.2'-32.2' numerous shale stringers
33				nat nat	0° 10°	SL SL			32.7'-33.7' numerous shale stringers
34				nat	10°	SL			
35				nat	0°				- 35.2' - fracture along shale stringer
36									
37				nat nat	15° 10°	NONE NONE			- fractures along shale stringers - From 38'-40': Noticed fewer wavy shale stringers; more even bedding.
38				nat	15°	none			
39				nat nat	10° 10°				
40									End of Boring at 40.0' bgs
									NOTE: Approximately 500 gallons of drilling water lost during coring.

ROCK CORING LOG

Project:		Boring/Well No.:		Project No. :
OLIN Rochester RI/FS		BR-112A		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** N.B.	**Checked by:**	**Ground Elev.:** 545.0'
Drilling Contractor: Mareor of NY.	**Protection Level:** D	**Rig Type:** CAMTERRA	**Start Date:** 10/10/95	**Finish Date:** 10/11/95
Drilling Method: Wire-line core	**Bit Type/Size:** HQ / 3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 6.0"	**Auger Size:**
Ground Elev.: 545.0'	**Soil Drilled:** 10.5'	**Core Interval (to/from)(ft):** 12.5' - 40.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
10			6" ⌀ CASING / GROUT	NA	NA	NA	NA	NA	Bedrock surface starting at 10.5' bgs.
11									
12									
13				nat	10	SL	NA	NA	Light gray, finely crystalline, medium bedded, DOLOMITE with inter bedded shale
14				nat	0°	SL			
15	R-1			nat	0°	SL			
				nat	0°	SL			
				nat	6°	SL			
16	7.5'	53		nat	0°	SL			fractures along bedding planes
				nat	10°-30°	SL			15.0-15.3' - hairline type fracture (no seperation)
				nat	0°	SL			
17	6.4'			nat	0°/90°	SL			15.5' - 10°-30° fracture along shale bedding and VUG
				nat	5°-10°	SL			
18				nat	10°-15°	SL			16.8'-17.0' - numerous 0° and near 90° dip breaks
				nat	45°	None			
19									18.3'
20									
21	R-2			mod nat					
				nat	0°-5°	SL			
22	10.0'			nat	5°				21.9'-22.6'
				nat					0°-5° breaks w/ intersecting near 90° fracture
				nat					
23	9.3'	72		nat	30°-40°				22.8' - 30°-40° break w/ stylolites at 22.9'
				nat	0°				23.3' - recrystallized VUG (0.2' long
				nat	80°				
24				nat	0°				

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR 112/1		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** NB.	**Checked by:**	**Ground Elev.:** 545.0'
Drilling Contractor: Marcor of NY	**Protection Level:** D	**Rig Type:** CANTERRA	**Start Date:** 10/10/95	**Finish Date:** 10/11/15
Drilling Method:	**Bit Type/Size:** HQ / 3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 6.0"	**Auger Size:**
Ground Elev.: 545.0'	**Soil Drilled:** 10.5'	**Core Interval (to/from)(ft):** 12.5' - 40.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	PID Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
25	R-2 10.0'/43'	72		MECH			NA	NA	Light Gray finely crystalline, medium bedded, DOLOMITE with interbedded shale Lockport FM
				nat	0°	NONE			
26				nat	0%°	NONE			26.1'-28.1' numerous shale stringers (wavy)
				nat	15°	SL			
27				nat	0°	SL			]- 27.35'/27.55'- wavy breaks along shale laminae
				nat	10°	SL			
28				nat	10°	SL			
				nat	0°	NONE			
29				n.d. 10°-15° nat	10°-15°	None			
30				nat	0°	SL			
					nat.	0°-40°			30.0'- highly fractured.
31							NA	NA	]- 30.6'- numerous shaley beds in 0.03' thick layer.
				MECH		NA			
32				0° MECH					
				nat	70°-80°	NONE			]32.8'-33.0'- numerous shaley beds 0°-5° DIP
33	R-3			nat	0°	SL			
34	10.0'/10.0'	81		0° nat	nat 0°	SL			34.0 38.0'. numerous shale stringers
35				0° nat	5° 0° nat	SL			
36				15°-20° nat	15°-20°	NONE			36.4'- unweathered fracture along shale laminae
37				nat	0°	NONE			
38				nat	0-5°	NONE			
				nat	5°	NONE			
39				nat	5°	NONE			
				nat	5°	NONE			
40									

ROCK CORING LOG

Project:		Boring/Well No.:		Project No. :
OLIN Rochester RI/FS		BR-12A		7311-32
Client: OLIN Corporation	Driller's Name: K. Marcellus	Logged by: N.B.	Checked by:	Ground Elev.: 545.0'
Drilling Contractor: Marcor of NY	Protection Level: D	Rig Type: LANTERRA	Start Date: 10/10/95	Finish Date: 10/11/95
Drilling Method: Wire-line Core	Bit Type/Size: HQ / 3.8" Hole	P.I.D. (eV):	Casing Size: 6.0"	Auger Size:
Ground Elev.: 545.0'	Soil Drilled: 10.5'	Core Interval (to/from)(ft): 12.5' - 40.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
									End of Boring at 40.0' below ground surface

NOTES: SL = slightly weathered
nat = Apparent natural break or fracture
MECH - Apparent Mechanical break

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-112D		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcus	**Logged by:** LS	**Checked by:** MB.	**Ground Elev.:** 545.7'
Drilling Contractor: Mercer of NY	**Protection Level:** D	**Rig Type:** Canterra	**Start Date:** 9-6-95	**Finish Date:** 9-6-95
Drilling Method: wireline core	**Bit Type/Size:** HQ/3.8" HWL	**P.I.D. (eV):** 10.2	**Casing Size:** 4.0"	**Auger Size:**
Ground Elev.: 545.7'	**Soil Drilled:** 11.0'	**Core Interval (to/from)(ft):** 45.0' - 100.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
45	R-1 (37'-45')								Air hammer drilling done from ground surface to 45.0'. Core Run R-1 is grout used to seat 4.0" casing
46	R-2 5.0'/4.9'	77		nat	0°-5°		ND	ND	Light gray finely crystalline, medium bedded, Dolomitic with interbedded shale
47				nat	0°-40°				
48				nat	0°-5°				
49				nat	0°-5°				
50				nat	0°				
51				nat	0°				
52				MEch					
53	R-3 10.0'/8.6'	55		nat	0°				
54				nat	0°				
55				Mat nat	0°-5° 0°				54.8 [illegible]
56				nat	0°				
57				nat	0°				
58				nat	5°				58.3' [illegible]
59									

nat = Apparent natural core break along joint, fracture or bedding plane

mech = mechanical break

ND = Not detected above background

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-11D2		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** ES	**Checked by:** NB	**Ground Elev.:** 545.7
Drilling Contractor: Marcor of NY	**Protection Level:** D	**Rig Type:** C-Interra	**Start Date:** 7-6-15	**Finish Date:** 7-6 7-7
Drilling Method: Wireline Core	**Bit Type/Size:** HQ / 3.8" Hole	**P.I.D. (eV):** 10.2	**Casing Size:** 4.0"	**Auger Size:**
Ground Elev.: 545.7'	**Soil Drilled:** 11.0'	**Core Interval (to/from)(ft):** 45.0' - 100.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks: Type:	Core Breaks: Dip:	Weathered Condition:	PID Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
60	T: 3								Light gray, finely crystalline, medium bedded, Dolomite with interbedded shale
61				nat	30°-45°		NA		
				nat	30°	NONE		1	Vuggy zone "root like" shapes.
62				nat	30°			ND	
				nat	45°				
63	R-4			nat	0°				
				mech					
64	10.0'/10.0'	96		nat	0°				- 64' - reported water loss at this depth
				nat	20°				
65				nat	0°-10°				
66				mech					
67									
68				nat	20°				
69					0°-5°				
70				nat	5°-8°	NONE			
71	R-5			mech	0°-5°		NA	NA	- 70.4' - Fracture along calcite ions
				nat	0°-5°	NONE			70.8' " " " "
				nat	30°				
72	10.0'/10.0'	44		nat	0°				
				mech					
73				nat	0°				- 72.9' - Fracture along calcite ions
				nat	0°				73.6 " " " "
74									
75									

ROCK CORING LOG

Project: OLIN Rochester RI/FS		Boring/Well No.: BR-112D		Project No.: 7311-32
Client: OLIN Corporation	Driller's Name: K. Marrelus	Logged by: ES	Checked by: KB	Ground Elev.: 545.7'
Drilling Contractor: Marcor of NY	Protection Level: D	Rig Type: Canterra	Start Date: 9-6-95	Finish Date: 9-6-95
Drilling Method: Wireline Core	Bit Type/Size: HQ/3.8" Hole	P.I.D. (eV): 10.2	Casing Size: 4.0"	Auger Size:
Ground Elev.: 545.7'	Soil Drilled: 11.0'	Core Interval (to/from)(ft): 45.0'-100.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
76	R-5 100'/10.0'	94		nat nat mech nat	0° (vert) 0°		NA	NA	Light to medium gray, finely crystalline medium bedded, Dolomite with interbedded shale. (increase in shale content) (- Increase in frequency of discrete calcite lenses starting at 70'±.) ↓
77				mech					
78				mech					
79				nat mech	0°-5°				
80				mech					
81				mech mech nat	0°		NA	NA	
82	R-6 10.0'/10.0'	86		nat	0°				
83				nat	5°				
84									
85				nat mech	0°	NONE			85'-89.8' - Mostly unweathered surfaces along breaks; calcite lenses appear in most horizontal fractures
86				nat	0°	NONE			
87				nat	0°	NONE			
88				nat nat	0°-3° 0°-3°				
89				nat					
90				nat					
91	R-7			nat	0°	NONE			90.6 - four [illegible] in fracture;

ROCK CORING LOG

Project: OLIN Rochester RI/FS			Boring/Well No.: BR-112D	Project No.: 7311-32
Client: OLIN Corporation	Driller's Name: K. Marcellus	Logged by: ES	Checked by: NB	Ground Elev.: 545.7'
Drilling Contractor: Marcor of NY	Protection Level: D	Rig Type: Century	Start Date: 9-6-95	Finish Date: 9-6-95
Drilling Method: wireline core	Bit Type/Size: HQ / 3.8" Hole	P.I.D. (eV): 10.2	Casing Size: 4.0	Auger Size:
Ground Elev.: 545.7'	Soil Drilled: 11.0'	Core Interval (to/from)(ft): 45.0'-100.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	PID Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
91							NA	NA	Medium gray, finely crystalline, medium bedded, Dolomite with interbedded shale.
92	R-7				0°				
93					0°				
94	10.0'/10.0'	92			0°				
95									
96					0°				
97					0°				
98					10°				- 98.0' VUGS present near fracture at 98'
99									
100									End of Boring at 100.0' below ground surface

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-113		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** NB.	**Checked by:**	**Ground Elev.:** 540.4'
Drilling Contractor: Marcor of NY	**Protection Level:** D	**Rig Type:** Canterra	**Start Date:** 9-15 95	**Finish Date:** 9-18-95
Drilling Method: Wire-line Core	**Bit Type/Size:** HQ / 3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 6.0"	**Auger Size:**
Ground Elev.: 540.4'	**Soil Drilled:** 9.0'	**Core Interval (to/from)(ft):** 11.0 - 45.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
11									Air hammer drilling done from Rock surface (9.0') to 11.0' bgs.
11				nat	0°-10°	weat	NA	NA	Light gray, finely crystalline, medium bedded, DOLOMITE with interbedded shale. LOCKPORT FM
12				nat	0°-15°	weat			-12.2'
				nat	0°-15°	weat			12.8'
13						SL			trace stylolites
						SL			trace fossil imprint
14	R-1			nat	0°-5°	SL			14.4' -
	9.0'/8.6'			nat	0°	SL			14.8' - stylolitic joint - no separation or break
15		82		styl.	20°	SL			
				nat	0°	none			-15.0'-15.8' - Hairline fracture (60°) no separation
				nat	30°	SL			
16				nat	80°	none			
				nat	10°	SL			
17				nat	0°	SL			
									17.5' - wavy fracture along shale bedding surface
18				nat	0°	SL			
				nat	0°	SL			
19				nat	0°	SL			
				nat	5°	SL			
20									
21				nat	0°	SL	NA	NA	
				nat	0°	weath			
22	R-2			nat	5°-10°	SL			
	10.0'/9.3'								
23		76		nat	0°	SL			
				nat	0°-5°	weath			J 23.0' - smooth concave break weathered
24				nat	0°				

ROCK CORING LOG

Project: OLIN Rochester RI/FS			Boring/Well No.: BR-113		Project No.: 7311-32
Client: OLIN Corporation	Driller's Name: K. Marcellus		Logged by: NB	Checked by:	Ground Elev.: 540.4'
Drilling Contractor: Marcor of NY	Protection Level: D		Rig Type: Canterra	Start Date: 9-15-95	Finish Date: 9-18-95
Drilling Method: Wire-line core	Bit Type/Size: HQ/ 3.8" Hole		P.I.D. (eV):	Casing Size: 6.0"	Auger Size:
Ground Elev.: 540.4'	Soil Drilled: 9.0'	Core Interval (to/from)(ft): 11.0 - 45.0			

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
25	R-2 10.0/9.3'	76		nat	0°	SL	NA	NA	Light gray, finely crystalline, Medium bedded, DOLOMITE with Interbedded Shale. Lockport Fm
26				nat	0°	SL			
27				nat	10°	SL			-24.3' - break along stylolitic parting
28				nat	20°	SL			25.1' - 10°-20° fracture intersecting 1' long vug (recrystallized w calcium sulfate (gypsum)
29				nat	20°	SL			
30				nat	0°	SL			
31	R-3 10.0/10.0	96		nat	0°	SL	NA	NA	-30.6' 4" long football shaped vug.
32				nat	0°	SL			
33				nat	0°-10°	SL			-33.3' 1/4" thick band of shaley stringers.
34				nat	10°	SL			33.3' - slightly porous along outer core
35				nat	0°	SL			34.2' - trace evidence of stylolite.
36				nat	0°	SL			
37				nat	0°	SL			
38				nat	0°	SL			
39				nat	0°	SL			38.9' - trace evidence of stylolite
40				nat	0°-20°	SL			

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-113		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** NB.	**Checked by:**	**Ground Elev.:** 540.4'
Drilling Contractor: Mercer of NY	**Protection Level:** D	**Rig Type:** CAMTERRA	**Start Date:** 9-15-95	**Finish Date:** 9-18-95
Drilling Method: wire-line core	**Bit Type/Size:** HQ / 3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 6.0"	**Auger Size:**
Ground Elev.: 540.4'	**Soil Drilled:** 90'	**Core Interval (to/from)(ft):** 11.0' - 45.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
41	R-4 5.0'/5.0'	80		nat	0°	SL	NA	NA	Light gray finely crystalline, medium bedded, DOLOMITE with interbedded shale Lockport FM
42				nat	10°	SL			
				nat	0°	SL			
43									
44				nat	0° 20° 20° 0° 0°	SL SL SL SL			little to no weathering along fractures and joints.
45									END OF BORING AT 45.0' BELOW GROUND SURFACE

NOTES:

- WATER LOSS noted at 21' below ground surface

- nat = natural core break along fracture or joint
- SL = slightly weathered
- styl = stylolite
- weath = weathered

ROCK CORING LOG

Project:	Boring/Well No.:	Project No. :
OLIN Rochester RI/FS	BR-113D	7311-32

Client:	Driller's Name:	Logged by:	Checked by:	Ground Elev.:
OLIN Corporation	K. Marcellus	~~MB~~ ~~DB~~ ES	NB	540.5'

Drilling Contractor:	Protection Level:	Rig Type:	Start Date:	Finish Date:
Marcor of NY	D	Canterra	9-7-95	9-15-95

Drilling Method:	Bit Type/Size:	P.I.D. (eV):	Casing Size:	Auger Size:
Wire-line Core	HQ / 3.8" Hole	10.2	4.0"	

Ground Elev.:	Soil Drilled:	Core Interval (to/from)(ft):
540.5'	9.0'	11.0 - 100.0'

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
									Air hammer drilling done from 9.0' to 11.0' bgs.
11				nat	0°	vug	NA	NA	Light gray, finely crystalline, medium bedded dolomite with interbedded shale.
12				nat	0°				
13				nat	0°				
14				mech					- 14.1' shaley stylolithic fracture
14	R-1			nat					
15	40.0'	40		nat	0°				
15	48.6'			nat	0°				
16				nat	0°				
16				mech					
17					0°				- 17.1'-17.4' high angle (near 90°) fracture
18				nat	5°				
18				nat	5°				
18				nat	0°-5°				
19				nat	0°-5°				
19				nat	0°-5°				
20				mech					
21	R-2	NA		nat	0°		NA	NA	- 20.5'-20.9' high angle (near 90°) fracture
21				nat	5°				- 20.9'-21' high angle (vertical) fracture
22				nat	0°				21.4'-21.55' " " " "
22				mech	0°				
23	R-3			nat	0°	weath			
23						vugs			- 23.2-23.3' small isolated vugs
24	8.0'	65		nat	0°				
24	8.0'			nat		vugs			- 23.7' ~~vugs~~ mud vugs w/in calcareous seam
25				nat	0°				

nat = Apparent natural core break along joint, fracture, or bedding plane

mech = mechanical break

NA = Not available

ND = Not detected (< detection limit)

ROCK CORING LOG

Project: OLIN Rochester RI/FS		Boring/Well No.: BR-113D		Project No.: 7311-32	
Client: OLIN Corporation	Driller's Name: K. Marcellus	Logged by: ES	Checked by: NB	Ground Elev.: 540.5'	
Drilling Contractor: Marcor of NY	Protection Level: D	Rig Type: CanTerra	Start Date: 9-7-95	Finish Date: 9-15-95	
Drilling Method: wireline core	Bit Type/Size: HQ / 3.8" Hole	P.I.D. (eV): 10.2	Casing Size: 4.0"	Auger Size:	
Ground Elev.: 540.5'	Soil Drilled: 9.0'	Core Interval (to/from)(ft): 11.0' - 100.0'			

Depth (feet) Below GRD Surf.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
				na			NA	NA	Light gray, finely crystalline, medium bedded, Dolomite with interbedded shale.
26				nat	0°				
				na	0°				
27	R-3 8.0'/8.0'	65		nat vug	85°				- 26.8'-29.6' near vertical open fracture - 27.2' vug w/ crystal lining
28									
29									
30									30.0' 32.8 near vertical closed fracture (continued from above)
	R-4 2.8/2.8	50		na			NA	NA	
31				na					
				na					
32				vug	0°	weath			- 32.0' vug with crystal lining. - 32.5' 0.1" thin layer of gray silt in horizontal fracture
33	R-5 7.5/7.7'	95		nat	0°		NA	NA	- 32.8 ... veins: vuggy
34				na	0°				
35				na	0°				35.3'-40.3' - increasing competent rock, only low angle fractures observed (~0° dip)
36				nat	0°				
37									
38				nat	0°				
39	0.5'/0.5'			nat	0°				
40				nat	0°				
41	R-6	NA		nat	0°	weath			40.6' Silt layer in horizontal fracture

Sheet 2 of 6

ABB Environmental Services, Inc.

9509001S

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-113D		7311-32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** ES	**Checked by:** NB	**Ground Elev.:** 540.5'
Drilling Contractor: Manor of NY	**Protection Level:** D	**Rig Type:** Cu. Erry.	**Start Date:** 9-7-95	**Finish Date:** 9-15-95
Drilling Method: Wire line core	**Bit Type/Size:** HQ / 3.8" Hole	**P.I.D. (eV):** 10.2	**Casing Size:** 4.0"	**Auger Size:**
Ground Elev.: 540.5'	**Soil Drilled:** 9.0'	**Core Interval (to/from)(ft):** ~~40'-41' NR~~ 11.0'-100.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks: Type:	Core Breaks: Dip:	Weathered Condition:	PID Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
42	R-7 5.2'/5.2'	74		nat	0°-5°		NA	NA	Light gray, finely crystalline, medium bedded, Dolomite with interbedded shale..
43				nat	0°-5°				
44				nat	0°-5°				- 44.3 - Silt layer in horizontal fracture
45				nat	0°-5°	weath			
46									
47	R-8	70		nat	0°-5°		NA	NA	
48				nat	0°-5°				- 48.1-50.0' - high angle (near 90°) fracture w/ no seperation
49				nat	0°-5°				- 49.6-50.0' - occasional pits and vugs
50				nat	0°-5°				
51			grout						(Seat 4.0" casing at 50.0' and grout (overdrill to 51.0' w/ Air hammer)
52	R-9 2.0'/1.2'	18*		nat	0°-5°		NA	NA	- 51.0-52.8' - high angle (near 90°) fracture w/ no seperation
53				nat	0°-5°		0	5-15	- Lost 0.8' of core due to core bit wear
54	R-10 8.0'/7.8'	88		nat	20°	weath	ND	ND	54.1-54.5' - highly fractured; broken shale frags.
55				nat	20°				
56				nat	10°				
57				MECH					
				nat	0°-5°				

* core run may be too short for comparable RQD measurement.

ROCK CORING LOG

Project:		Boring/Well No.:		Project No.:
OLIN Rochester RI/FS		BR-1130		7311-32
Client: OLIN Corporation	**Driller's Name:** K-Marcellus	**Logged by:** ES.	**Checked by:** NB	**Ground Elev.:** 540.5'
Drilling Contractor: Marcor of NY	**Protection Level:** D	**Rig Type:** Cantera	**Start Date:** 9-7 95	**Finish Date:** 9-15-95
Drilling Method: wireline core	**Bit Type/Size:** HQ / 3.8" HQ	**P.I.D. (eV):** 10.2	**Casing Size:** 4.0"	**Auger Size:**
Ground Elev.: 540.5'	**Soil Drilled:** 9.0'	**Core Interval (to/from)(ft):** 11.0'-100.0'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	PID Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
58	R-10	88		nat	0°-5°		ND	ND	Light gray, finely crystalline medium bedded, Dolomite with interbedded shale
59	8.0'/7.8'			nat	0°-5°				
60				nat	0°-5°				
61				nat	0°-5°	weath			-60.8'- partially open weathered fracture
62	R-11	84		nat	0°-5°		ND	ND	
63	5.5'/5.5'			nat	10°				62.9'-63.3'- some small pits (vugs)
64				nat	0°-5°				-63.3'- darker shale rich beds
65				nat	0°-5°				-63.7'-64.8'- isolated small pits (vugs)
66				nat	20°				
				nat	0°-5°	weath			-66'± - Lose water while drilling
				silt					-66.2'- silt layer in fracture, gray soft. Calcareous - No PID or FID readings above background)
67				MECH			NA	NA	
68	R-12	62		nat	0°-5°	weath			
69	4.5/4.5			nat	30°				
70				nat	45°	weath			
71				nat	0°-5°				
72	R-13	18		nat	0°		NA	NA	
73	10.0/9.8			nat	100°				
					0 5°				

ROCK CORING LOG

Project: OLIN Rochester RI/FS			Boring/Well No.: BR-113D		Project No.: 7311-32
Client: OLIN Corporation	Driller's Name: K. Marrello		Logged by: ES	Checked by: NB	Ground Elev.: 540.5'
Drilling Contractor: Mayor of NY	Protection Level: D		Rig Type: Cat Terra	Start Date: 9-7-95	Finish Date: 9-15-95
Drilling Method: Wireline core	Bit Type/Size: H/Q / 3.8" Hole		P.I.D. (eV): 10.2	Casing Size: 4"	Auger Size:
Ground Elev.: 540.5'	Soil Drilled: 9.0'	Core Interval (to/from)(ft): 11.0' - 100.0'			

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
74	R-13 10.0/9.8	98		nat	0°		NA	NA	Light to medium gray, finely crystalline, medium bedded, Dolomite with interbedded shale. (increase in shale content) ~~from above~~ ea.
75				nat	0°				
76				nat	0°				- 76.4' smooth break w/ calcite lens at contact.
77				nat	0°				
78				mech					
79				nat	0°				- 78.6' smooth break / calcite lens at contact.
80				nat	0°-5°				80.4'-80.5' silt lens in near horizontal fracture.
81									
82	R-14 10.0/100'	82		nat	0°-5°		NA	NA	81.9'-87.4' - calcite lenses appearing along near horizontal fractures ↓
83				nat	0°-5°				
84				nat	0°-5°				
85				nat	0°-5°				
86				nat	0°-5°				
87				nat	0°-5°				- 87.7'- silt seam at near horizontal fracture
88				nat	0°-5°				88.7' - [illegible]
89				nat	0°-5°				

ROCK CORING LOG

Project: OLIN Rochester RI/FS	Boring/Well No.: BR-113D	Project No.: 7311-32

Client: OLIN Corporation	Driller's Name: K. Marcellus	Logged by: E.S.	Checked by: NB	Ground Elev.: 540.5'
Drilling Contractor: Marcor of NY	Protection Level: D	Rig Type: Canterra	Start Date: 9-7-95	Finish Date: 9-15-95
Drilling Method: Wireline core	Bit Type/Size: HQ / 3.8 Hole	P.I.D. (eV): 10.2	Casing Size: 4.0	Auger Size:

Ground Elev.: 540.5	Soil Drilled: 9.0'	Core Interval (to/from)(ft): 11.0'-100.0'

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
				MECH			NA	NA	Light to medium gray fine crystalline medium bedded, Dolomite with interbedded shale.
90	R-14			nat nat MECH	0°-5° 0°-5°				
91				nat	0°-5°				
					0-5		ND	ND	91'-100.0' All horizontal type fractures; some w/ calcite seams. trace silt in some open fractures.
92				nat nat	0-5° 0°-5°				
93	R-15								
94	9.0/9.0	83		nat	0-5				
95				nat nat nat	0°-5° 0°-5° 0°-5°				
96				nat nat ~~nat~~ MECH	0°-5° 0°-5° ~~0-5°~~ ND				
97									
98				nat nat	0°-5° 0°-5°				0.01 calcite layer (98.0')
99									
100									End of boring at 100.0 below ground surface

Sheet 6 of 6

ABB Environmental Services, Inc.

9509001S

ROCK CORING LOG

Project:		Boring/Well No.:		Project No. :
OLIN Rochester RI/FS		BR 114		7311- 32
Client: OLIN Corporation	**Driller's Name:** K. Marcellus	**Logged by:** NB	**Checked by:** NB	**Ground Elev.:** 539.8'
Drilling Contractor: Marcor of NY	**Protection Level:** D	**Rig Type:** CONTERRA	**Start Date:** 9 21-95	**Finish Date:** 9 22-95
Drilling Method: Wire-line Core	**Bit Type/Size:** HQ / 3.8" Hole	**P.I.D. (eV):**	**Casing Size:** 6.0'	**Auger Size:**
Ground Elev.: 539.8'	**Soil Drilled:** 17.5'	**Core Interval (to/from)(ft):** 19.5' - 39.6'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
									Air hammer drilling done from rock surface (17.5') to 19.5' below ground surface.
	R-1 0.6/0.6		GROUT						17.5' Rock surface
20				nat	10	SL	NA	NA	
20				MECH nat	0°-20°	Weath	NA	NA	Light gray, finely crystalline, medium bedded, DOLOMITE, with interbedded shale LOCKPORT FM
21									
22				nat	10°-15°	weath			
				styl					22.4' stylolite - no separation
23	R-2 10.0'/9.6'	75		nat nat	5°-10° 0°-5°	weath SL			
24				MECH nat	~20°	SL			24.0' stylolite - no separation
25				nat	0°	SL			24.7'-25.4' - near vertical fracture
				nat nat	20° 0°	SL SL			25.5' - highly fractured 1" thick zone
26				nat	10°	SL			25.6 - 26.9 - near vertical fracture ; slightly weathered
27				nat nat nat	10° 0° 0°	SL weath			27.3' - weathered vertical & horizontal fractures with vugs along horiz wtd plane
28				nat	10°	SL			
				nat	0°	SL			
29				nat nat	0° 0°	SL SL			
30									30.1' - vugs at beginning of core run
31	R-3 5.0'/4.9'	83		nat nat	10° 0°	SL SL	NA	NA	31.6'-32.9' - numerous small stringers
32				nat	15°-20°	SL			

ROCK CORING LOG

Project: **OLIN Rochester RI/FS**			Boring/Well No.: BR-114	Project No.: 7311-32
Client: **OLIN Corporation**	Driller's Name: K. Marrellus	Logged by: NB	Checked by:	Ground Elev.: 539.8'
Drilling Contractor: MARLOR of NY	Protection Level: D	Rig Type: Ingersoll	Start Date: 9-21-95	Finish Date: 9-22-95
Drilling Method: Wire-line core	Bit Type/Size: HQ / 3.8" hole	P.I.D. (eV):	Casing Size: 6.0"	Auger Size:
Ground Elev.: 539.8'	Soil Drilled: 17.5'	Core Interval (to/from)(ft): 19.5' - 39.6'		

Depth (feet) Below GRD Sort.	Sample No. & Penetration/ Recovery (feet)	RQD (%):	Graphic Log	Core Breaks Type:	Core Breaks Dip:	Weathered Condition:	Pid Reading (ppm):	FID Reading (ppm):	Rock Description and Comments on Drilling
33	R-3	83		nat	10°	NONE	ND	NA	Light gray, finely crystalline, medium bedded, DOLOMITE, with interbedded shale Lockport FM
34	5.0'/4.9'			MECH					
				nat	10°	NONE			
35				nat	10°	NONE			
36	R-4	87		nat	5°-10°	NONE	ND	NA	-36.6' - 1/8" thick silt lens in fracture (gray silty clay)
37	4.6'/4.6'			nat	0°	SL			-37.5' - 1/4" thick silty clay lens in fracture
				nat	0°	SL			37.7' - " " " " " "
38				nat	10°-15°	weath			
				nat	0°	SL			
39				nat	5°-10°	NONE			
				nat	0°	SL			

End of Boring at 39.6' below ground surface.

- Lost ~ 2000 gallons of water to formation from 19.5' - 39.6'

* nat = natural core break along fracture or joint
  SL = slightly weathered
  styl = stylolite
  weath = weathered

Sheet 2 of 2

ABB Environmental Services, Inc.

9509001S

Soil Boring Log

Project	Boring/Well No.	Project No.
Olin Rochester Phase II RI/FS	MW-114	7311-32

Client	Site	Sheet No.
Olin Corporation	JAckson welding	1 of 1

Logged By	Ground Elevation	Start Date	Finish Date
N. Breton	539.7'	9/22/95	9/25/95

Drilling Contractor	Driller's Name	Rig Type
Marcor of NY	K. Marcellus	Canterra CT-350

Drilling Method	Protection Level	P.I.D. (eV)	Casing Size	Auger Size
HSA	D	10.2	—	6.25"

Soil Drilled (ft.)	Rock Drilled (ft.)	Total Depth (ft.)	Depth to Groundwater/Date	Piez	Well	Boring
15.9'	—	15.9'	13.79' / 11/6/95	☐	☒	☐

Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6"	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) FID Meter Head Space	Monitoring (ppm) PID Meter Head Space	Other: WELL DETAIL	Lab Tests (GC/CLP)
2						0-5' Dark brown SAND, fine to coarse, some silt, little to some gravel moist - FILL	SM		NA	ND		
4												
6						Reddish Brown SAND, fine to coarse						
8						Mostly Gravel, some sand, fine to coarse	GP					
10	S-1	SS	NA	NA		Gray SAND fine to coarse, some gravel, little silt, well graded moist TILL	SW					
12												
14					▽	(11/6/95) - 13.8'		▽				
16						END OF BORING AT 15.9' BELOW GROUND SURFACE (REFUSAL AT 15.9'						
18						NOTE: NO PID meter Readings above background						
20												

9602008S

APPENDIX A-2

WELL INSTALLATION LOGS

APPENDIX A-2
WELL AND PIEZOMETER CONSTRUCTION DATA

WELL	DATE INSTALLED	UNIT	TYPE	GROUND ELEV.(MSL)	REF. ELEV.(MSL)	STICK-UP (FEET)	INSTALL. METHOD	CASING MAT.	CASING DIA.	SCREEN MAT.	SCREEN DIA.	SCREEN DEPTH TOP	SCREEN DEPTH BOTTOM	COMMENTS
PHASE II RI WELLS INSTALLED IN 1995														
BR-111	29-Aug-95	SBR	MW	537.20	540.42	3.22	Core	Steel	3.8	None	3.8	14.5	45.0	Located adjacent to Barge Canal
BR-111D	26-Sep-95	DBR	MW	537.80	540.51	2.71	Core	PVC	2.0	PVC	2.0	55.0	75.0	" " " " "
BR-112A	11-Oct-95	SBR	MW	545.00	547.72	2.72	Core	Steel	3.8	None	3.8	12.5	40.0	" " " " "
BR-112D	27-Sep-95	DBR	MW	545.70	548.10	2.4	Core	PVC	2.0	PVC	2.0	50.0	70.0	" " " " "
BR-113	18-Sep-95	SBR	MW	540.40	543.02	2.62	Core	Steel	3.8	None	3.8	11.0	45.0	" " " " "
BR-113D	27-Sep-95	DBR	MW	540.50	543.11	2.61	Core	PVC	2.0	PVC	2.0	57.0	77.0	" " " " "
BR-114	22-Sep-95	SBR	MW	539.80	539.77	-0.03	Core	Steel	3.8	None	3.8	19.5	39.6	Located on Jackson Welding Property
MW-114	25-Sep-95	OVB	MW	539.70	539.69	-0.01	HSA	PVC	2.0	PVC	2.0	5.8	15.8	" " " " "
REPLACEMENT WELLS INSTALLED IN 1995														
BR-2A (1)	26-Sep-95	SBR	PW	NA	NA		Air Ham	Steel	6.0	Open	6.0	17.0	42.0	
BR-6A (2)	13-Nov-95	SBR	PW	NA	NA		Air Ham	Steel	6.0	Open	6.0	19.0	57.5	
PHASE I RI WELLS AND PIEZOMETERS														
BR-101	2-Nov-93	SBR	MW	538.20	540.65	2.45	Core	Steel	6.0	Open	3.8	18.0	44.5	
BR-102	3-Nov-93	SBR	MW	540.21	540.21	0	Core	Steel	6.0	Open	3.8	22.0	54.0	
BR-103	16-Nov-93	SBR	MW	533.19	533.19	0	Core	Steel	6.0	Open	3.8	13.0	45.2	On Kodak (formerly Gerber) Property
BR-104	12-Jan-94	SBR	MW	537.56	537.56	0	Core	Steel	6.0	Open	3.8	21.0	40.0	On RG & E right of way (Powerline ROW)
BR-105	14-Dec-93	SBR	MW	536.90	536.90	0	Core	Steel	6.0	Open	3.8	19.0	45.5	On RG & E right of way (Powerline ROW)
BR-105D	19-Jan-94	DBR	MW	536.69	536.69	0	Core	PVC	2.0	PVC	2.0	70.0	79.6	On RG & E right of way (Powerline ROW)
BR-106	11-Jan-94	SBR	MW	535.74	535.74	0	Core	Steel	6.0	Open	3.8	18.0	44.9	On Aid to Hospitals Property
BR-107	15-Nov-93	SBR	MW	536.32	536.32	0	Core	Steel	6.0	Open	3.8	19.0	40.2	On Firth Rixson (formerly Monroe Forging
BR-108	7-Jan-94	SBR	MW	538.40	540.58	2.18	Core	Steel	6.0	Open	3.8	18.0	41.5	On Aid to Hospitals Property
MW-103	10-Nov-93	OVB	MW	533.25	533.25	0	HSA	PVC	2.0	PVC	2.0	6.0	9.0	On Kodak (formerly Gerber) Property
MW-104	4-Jan-94	OVB	MW	537.54	537.54	0	HSA	PVC	2.0	PVC	2.0	9.0	18.6	On RG & E right of way (Powerline ROW)
MW-105	17-Nov-93	OVB/SBR	MW	536.91	536.91	0	HSA/Roll	PVC	2.0	PVC	2.0	9.0	18.6	On RG & E right of way (Powerline ROW)
MW-106	7-Dec-93	OVB/SBR	MW	535.44	535.44	0	HSA/Roll	PVC	2.0	PVC	2.0	10.0	19.6	On Aid to Hospitals Property
MW-107	8-Nov-93	OVB	MW	536.29	536.29	0	HSA	PVC	2.0	PVC	2.0	6.0	15.7	On Firth Rixson (formerly Monroe Forging
MW-108	15-Dec-93	OVB/SBR	MW	538.10	540.80	2.7	HSA/Roll	PVC	2.0	PVC	2.0	8.0	17.6	On Aid to Hospitals Property
PZ-101	26-Oct-93	OVB	PZ	540.50	543.15	2.65	HSA	PVC	2.0	PVC	2.0	9.0	18.6	On Aid to Hospitals Property
PZ-102	14-Jan-94	SBR	PZ	539.10	541.11	2.01	Core	PVC	2.0	PVC	2.0	23.0	31.0	On Aid to Hospitals Property
PZ-103	21-Dec-93	SBR	PZ	537.80	540.34	2.54	Core	PVC	2.0	PVC	2.0	20.0	29.3	On Aid to Hospitals Property
PZ-104	14-Jan-94	SBR	PZ	537.21	537.21	0	Core	PVC	2.0	PVC	2.0	17.0	25.0	On Kodak (Mckee Road) Property
PZ-105	21-Dec-93	SBR	PZ	537.00	539.58	2.58	Core	PVC	2.0	PVC	2.0	23.0	32.4	
PZ-106	21-Dec-93	SBR	PZ	535.00	537.45	2.45	Core	PVC	2.0	PVC	2.0	20.0	29.4	
PZ-107	28-Oct-93	SBR	PZ	536.40	538.64	2.24	Core	PVC	2.0	PVC	2.0	16.0	25.6	
PZ-108	21-Oct-93	OVB	PZ	536.40	536.56	0.16	HSA	PVC	2.0	PVC	2.0	6.0	11.6	On Arthur Hill (Mckee Road) Property

APPENDIX A-2
WELL AND PIEZOMETER CONSTRUCTION DATA

WELL	DATE INSTALLED	UNIT	TYPE	GROUND ELEV.(MSL)	REF. ELEV.(MSL)	STICK-UP (FEET)	INSTALL. METHOD	CASING MAT.	CASING DIA.	SCREEN MAT.	SCREEN DIA.	SCREEN DEPTH TOP	SCREEN DEPTH BOTTOM	COMMENTS
WELLS AND PIEZOMETERS INSTALLED PRIOR TO 1993														
BR-1	23-Jul-87	SBR	MW	535.11	537.11	2	Core	NA	4.0	Open	3.0	16.3	22.8	
BR-2	31-Jul-87	SBR	PW	536.72	538.97	2.25	Core	NA	4.0	Open	3.0	17.0	42.0	Replaced by BR-2A - Sep. 1995
BR-2D	3-Oct-88	DBR	MW	535.94	538.00	2.06	Core	Grout	6.0	Open	3.0	67.5	82.6	
BR-3	28-Jul-87	SBR	PW	536.04	538.04	2	Core	NA	4.0	Open	3.0	17.0	27.0	
BR-3D	4-Oct-88	DBR	MW	534.87	537.00	2.13	Core	PVC	4.0	Open	3.0	71.5	86.5	
BR-4	28-Aug-88	SBR	MW	537.18	538.93	1.75	Core	NA	NA	Open	0.0	12.0	50.0	
BR-5	2-Sep-88	SBR	MW	534.55	536.30	1.75	Core	NA	12.0	Open	3.8	13.0	43.0	
BR-5A		SBR	PW	534.85	536.35	1.5	Core	NA	NA	Open	NA	NA	NA	
BR-6		SBR	PW	535.50	538.00	2.5	Core	NA	12.0	Open	3.8	16.0	56.0	Replaced by BR-6A - Nov. 1995
BR-7		SBR	MW	537.50	539.70	2.2	Core	NA	12.0	Open	3.8	17.0	65.7	
BR-7A		SBR	PW	NA	NA	NA	Core	NA	NA	Open	NA	NA	NA	
BR-8		SBR	MW	537.50	540.00	2.5	Core	NA	12.0	Open	3.8	18.0	38.0	
B-1		OVB	PZ	535.48	537.48	2	HSA	PVC	1.5	PVC	1.5	5.5	15.5	
B-2		OVB	PZ	536.91	538.91	2	HSA	PVC	1.5	PVC	1.5	6.0	16.0	
B-3		OVB	PZ	539.62	541.62	2	HSA	PVC	1.5	PVC	1.5	5.0	15.0	
B-4		OVB	PZ	540.87	542.87	2	HSA	PVC	1.5	PVC	1.5	11.0	21.0	
B-5		OVB	PZ	538.10	540.10	2	HSA	PVC	1.5	PVC	1.5	7.0	17.0	
B-6		OVB	PZ	537.24	539.24	2	HSA	PVC	1.5	PVC	1.5	6.0	16.0	
B-7		OVB	PZ	538.68	540.68	2	HSA	PVC	1.5	PVC	1.5	9.0	19.0	
B-8		OVB	PZ	536.21	538.21	2	HSA	PVC	1.5	PVC	1.5	4.5	14.5	
B-9		OVB	PZ	535.67	537.67	2	HSA	PVC	1.5	PVC	1.5	2.0	12.0	
B-10		OVB	PZ	535.97	537.97	2	HSA	PVC	1.5	PVC	1.5	3.0	13.0	
B-11		OVB	PZ	NA	536.00	NA	NA	NA	NA	NA	NA	NA	NA	
B-12		OVB	PZ	537.12	537.12	0	HSA	PVC	2.0	PVC	2.0	4.3	14.3	Destroyed during road repair.
B-13		OVB	PZ	537.07	537.07	0	HSA	PVC	2.0	PVC	2.0	4.7	14.7	On Kodak (Mckee Road) Property
B-14		OVB	PZ	537.95	537.95	0	HSA	PVC	2.0	PVC	2.0	7.0	17.0	On Kodak (Mckee Road) Property
B-15		OVB	PZ	535.29	535.29	0	HSA	PVC	2.0	PVC	2.0	4.0	14.0	On Kodak (Mckee Road) Property
B-16		OVB	PZ	536.21	536.21	0	HSA	PVC	2.0	PVC	2.0	3.5	13.5	On Kodak (Mckee Road) Property
B-17		OVB	MW	538.84	538.84	0	HSA	SS	2.0	SS	2.0	11.6	16.0	
C-1	14-Jan-82	OVB	MW	536.63	539.05	2.42	HSA	SS	2.0	SS	2.0	5.8	10.8	
C-2	18-Jan-82	OVB	MW	NA	539.00	NA	HSA	SS	2.0	SS	2.0	6.0	11.0	Abandoned; Replaced by C-2A.
C-2A		OVB	MW	537.37	539.12	1.75	HSA	SS	2.0	SS	2.0	4.7	14.7	
C-3	14-Jan-82	OVB	MW	538.88	541.63	2.75	HSA	SS	2.0	SS	2.0	6.5	11.5	
C-4	20-Jan-82	OVB	MW	538.82	540.82	2	HSA	SS	2.0	SS	2.0	7.0	12.0	
C-5	7-Jan-82	OVB	MW	534.10	536.35	2.25	HSA	SS	2.0	SS	2.0	6.3	11.3	
EC-1	6-Aug-87	OVB/SBR	MW	537.99	539.99	2	HSA	SS	2.0	SS	2.0	14.0	19.0	On RG & E right of way (Powerline ROW)
EC-2	8-Aug-87	OVB/SBR	MW	540.00	542.00	2	HSA	SS	2.0	SS	2.0	6.2	11.2	Located adjacent to Barge Canal
E-1		OVB	PW	532.32	534.32	2	HSA	SS	NA	SS	NA	3.3	8.3	
E-2	21-Jan-82	OVB	MW	536.60	538.32	1.72	HSA	SS	2.0	SS	2.0	7.7	11.7	New casing and reference elevation - 10/
E-3	13-Jan-82	OVB	MW	534.25	536.00	1.75	HSA	SS	2.0	SS	2.0	5.0	10.0	
E-4	12-Jan-82	OVB	MW	537.08	538.58	1.5	HSA	SS	2.0	SS	2.0	7.0	12.0	
E-5	12-Jan-82	OVB	MW	536.56	539.31	2.75	HSA	SS	2.0	SS	2.0	4.2	9.2	

APPENDIX A-2
WELL AND PIEZOMETER CONSTRUCTION DATA

WELL	DATE INSTALLED	UNIT	TYPE	GROUND ELEV.(MSL)	REF. ELEV.(MSL)	STICK-UP (FEET)	INSTALL. METHOD	CASING MAT.	CASING DIA.	SCREEN MAT.	SCREEN DIA.	SCREEN DEPTH TOP	SCREEN DEPTH BOTTOM	COMMENTS
WELLS AND PIEZOMETERS INSTALLED PRIOR TO 1993 (Continued)														
N-1	8-Jan-82	OVB	MW	535.30	537.06	1.76	HSA	SS	2.0	SS	2.0	5.5	10.5	New casing and reference elevation - 10/
N-2	13-Jan-82	OVB	MW	534.17	536.92	2.75	HSA	SS	2.0	SS	2.0	5.1	10.1	
N-3	8-Jan-82	OVB	MW	535.08	537.16	2.08	HSA	SS	2.0	SS	2.0	6.0	11.0	
S-1		OVB	PW	534.80	536.76	1.96	HSA	SS	NA	SS	0.0	4.3	14.3	
S-2	17-Oct-88	OVB	PW	534.30	536.31	2.01	HSA	PVC	4.0	PVC	4.0	2.5	11.7	
S-3		OVB	PW	534.40	536.40	2	HSA	SS	NA	SS	NA	2.3	12.3	
S-4		OVB	PW	534.70	536.68	2	NA	NA	NA	NA	NA	NA	NA	
W-1		OVB	PW	534.98	536.98	2	HSA	SS	NA	SS	NA	6.1	16.1	
W-2		OVB	PW	537.53	539.53	2	HSA	SS	NA	SS	NA	8.4	18.4	
W-3	10-Oct-88	OVB	PW	539.91	541.91	2	HSA	PVC	4.0	PVC	4.0	7.4	16.5	
W-4	7-Oct-88	OVB	PW	538.35	540.35	2	HSA	PVC	4.0	PVC	4.0	6.2	15.4	
W-5		OVB	PW	535.69	537.69	2	HSA	SS	NA	SS	NA	5.0	15.0	
W-6		OVB	PW	536.25	538.25	2	HSA	SS	NA	SS	NA	7.3	12.3	
MARK IV WELLS														
MW-1		OVB	MW	535.20	535.20	0	HSA	PVC	2.0	PVC	2.0	3.0	13.0	Abandoned in place with grout.
MW-2		OVB	MW	535.50	535.50	0	HSA	PVC	2.0	PVC	2.0	3.0	13.0	
MW-3		OVB	MW	535.89	535.89	0	HSA	PVC	2.0	PVC	2.0	3.0	13.0	
GRIFFITH OIL WELLS														
MW-G6		OVB	MW	534.65	534.65	0	NA	PVC	2.0	PVC	2.0	NA	NA	
MW-G8		OVB	MW	533.60	534.25	0.65	NA	PVC	2.0	PVC	2.0	NA	NA	
MW-G9		OVB	MW	536.20	536.60	0.4	NA	PVC	2.0	PVC	2.0	NA	NA	
NESS PRECISION PRODUCTS WELLS														
NESS-E		DBR	PW	NA	NA	0	NA	NA	NA	NA	NA	NA	NA	Former Industrial water supply well
NESS-W		DBR	PW	NA	NA	0	NA	NA	NA	NA	NA	NA	NA	Former Industrial water supply well
CUMBERLAND FARMS PETROLEUM TERMINAL WELLS														
2-6	12-Mar-80	DBR	MW	541.70	543.70	2	Air Rot	Steel	6.0	Open	6.0	9.0	61.0	
6-6	24-Mar-80	DBR	MW	543.20	543.20	0	Air Rot	Steel	6.0	Open	6.0	15.0	60.0	
7-6	24-Jul-84	DBR	MW	543.90	543.17	-0.73	Air Rot	Steel	6.0	Open	6.0	10.1	65.0	
8-6	24-Jul-84	DBR	MW	549.90	549.30	-0.6	Air Rot	Steel	6.0	Open	6.0	12.9	85.0	
9-6	24-Jul-84	DBR	MW	547.20	546.50	-0.7	Air Rot	Steel	6.0	Open	6.0	13.5	85.0	
10-6	24-Jul-84	DBR	MW	547.00	546.37	-0.63	Air Rot	Steel	6.0	Open	6.0	18.2	78.0	
11-6	24-Jul-84	DBR	MW	541.80	541.17	-0.63	Air Rot	Steel	6.0	Open	6.0	9.0	65.0	
12-6	24-Jul-84	DBR	MW	549.50	548.85	-0.65	Air Rot	Steel	6.0	Open	6.0	10.5	85.0	
13-4	21-Nov-90	DBR	MW	547.80	547.58	-0.22	Core	Steel	4.0	Open	3.0	17.0	73.0	
OW-101	13-Nov-86	DBR	MW	536.90	536.90	0	Core	Steel	4.0	Open	2.4	15.0	48.0	
OW-102A	17-Nov-86	DBR	MW	537.70	537.70	0	Core	Steel	4.0	Open	3.0	26.5	52.5	
OW-103	24-Nov-86	DBR	MW	536.50	536.50	0	Core	Steel	4.0	Open	3.0	12.5	50.0	

APPENDIX A-2
WELL AND PIEZOMETER CONSTRUCTION DATA

WELL	DATE INSTALLED	UNIT	TYPE	GROUND ELEV.(MSL)	REF. ELEV.(MSL)	STICK-UP (FEET)	INSTALL. METHOD	CASING MAT.	CASING DIA.	SCREEN MAT.	SCREEN DIA.	SCREEN DEPTH TOP	SCREEN DEPTH BOTTOM	COMMENTS
CUMBERLAND FARMS PETROLEUM TERMINAL WELLS (Continued)														
RW-1	19-Mar-80	DBR	PW	542.80	545.70	2.9	NA	Steel	12.0	NA	NA	NA	100.0	10 foot long screen from 90'-100'
RW-2	3-Jun-87	DBR	PW	NA	NA	2	NA	SS	8.0	SS	6.0	24.0	59.0	

NOTES:

(1) = Replacement well for BR-2; Well diameter increased to accomodate pump.
(2) = Replacement well for BR-6; Well diameter increased to accomodate pump.

OVB = OVERBURDEN
SBR = SHALLOW BEDROCK
DBR = DEEP BEDROCK
OVB/SBR = SCREEN STRADDLING OVERBURDEN AND SHALLOW BE
MW = MONITORING WELL
PW = PUMPING WELL
PZ = PIEZOMETER

HSA = HOLLOW STEM AUGER DRILLING METHOD
ROLL = ROLLER BIT ROTARY DRILLING METHOD
CORE = ROCK CORING DRILLING METHOD
Air Rot = AIR ROTARY
Air Ham = AIR HAMMER
PVC = POLYVINYL CHLORIDE
SS = STAINLESS STEEL

WELL INSTALLATION DIAGRAM

WELL NO.: **BR-111**

PROJECT NAME: OLIN ROCHESTER RI

PROJECT NO.: 7311-32

GROUND ELEVATION: 537.2'

REFERENCE POINT ELEVATION: 540.42'

DATE INSTALLED: 08 / 29 / 95

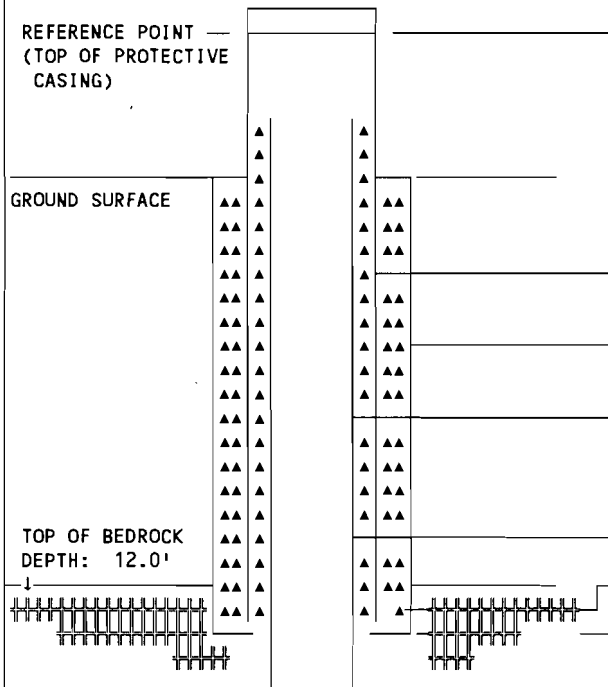
DRILLING METHOD: DRIVEN CASING \ CORE

CORE HOLE DIA.: 3.8 - INCH

RIG GEOLOGIST: B. JOHNSON / N. BRETON

INITIAL WATER LEVEL DEPTH: 29.32' (RF)

DATE: 10 / 03 / 95



PROTECTIVE CASING STICKUP: 3.2'

OUTSIDE DIAMETER OF STEEL CASING: 6-INCH

BOREHOLE DIAMETER: 10-INCH

CORE HOLE DIAMETER: 3.8-INCH

TYPE OF BACKFILL: CEMENT\BENTONITE GROUT

DEPTH TO BOTTOM OF 6" CASING: 14.5'

DEPTH TO BOTTOM OF ROCK SOCKET AND CEMENT\BENTONITE BACKFILL: 14.5'

ROCK CORE HOLE DIAMETER: 3.8-INCH

DEPTH TO BOTTOM OF OPEN CORE HOLE: 45.0'

ABB ENVIRONMENTAL SERVICES, INC.

WELL INSTALLATION DIAGRAM

WELL NO.: **BR-111D**

PROJECT NAME: OLIN ROCHESTER RI

PROJECT NO.: 7311-32

GROUND ELEVATION: 537.8'

REFERENCE POINT ELEVATION: 540.34'

DATE INSTALLED: 09 / 26 / 95

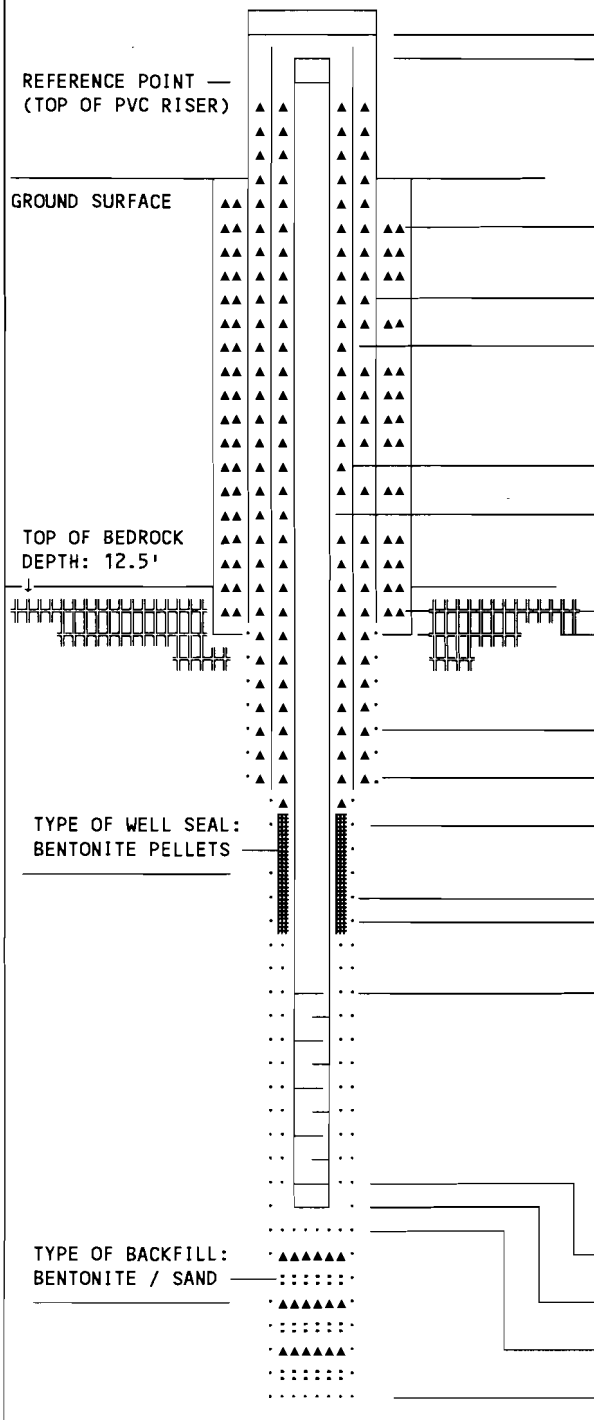
DRILLING METHOD: DRIVEN CASING / CORE

CORE HOLE DIA.: 3.8 - INCH

RIG GEOLOGIST: B. JOHNSON / N.BRETON

INITIAL WATER LEVEL DEPTH: 29.4' (PVC)

DATE: 10 / 03 / 95



PROTECTIVE CASING STICKUP 2.7'

PVC RISER STICKUP: 2.5'

BOREHOLE DIAMETER: 10 - INCH (OVERBURDEN)

OUTSIDE DIAMETER OF STEEL CASING: 6 - INCH

OUTSIDE DIA. OF INNER STEEL CASING: 4 - INCH

TYPE OF BACKFILL: CEMENT\BENTONITE GROUT

WELL RISER ID: 2.0 - INCH

TYPE OF WELL RISER: SCH 40 PVC

DEPTH TO BOTTOM OF 6" CASING: 14.5'

DEPTH TO BOTTOM OF ROCK SOCKET AND CEMENT\BENTONITE BACKFILL: 14.5'

BOREHOLE DIA. (AIR H.): 6.0 - INCH (TO 50.0')

DEPTH OF 4" STEEL CASING: 50.0'

DEPTH TO TOP OF BENTONITE SEAL: 47.0'

ROCK CORE HOLE DIAMETER: 3.8-INCH (TO 100.0')

DEPTH TO TOP OF SAND PACK: 52.0'

DEPTH TO TOP OF WELL SCREEN: 55.0'

TYPE OF WELL SCREEN: SCH 40 PVC

WELL SCREEN ID: 2.0 - INCH

LENGTH OF WELL SCREEN: 19.6'

TYPE OF SAND PACK: "0" SIZE SILICA SAND

DEPTH TO BOTTOM OF WELL SCREEN: 74.6'

DEPTH TO BOTTOM OF SEDIMENT TRAP: 75.0'

DEPTH TO TOP OF BENTONITE / SAND: 75.0'

DEPTH TO BOTTOM OF CORE HOLE: 100.0'

ABB ENVIRONMENTAL SERVICES, INC.

WELL INSTALLATION DIAGRAM

WELL NO.: **BR-112A**

PROJECT NAME: OLIN ROCHESTER RI

PROJECT NO.: 7311-32

GROUND ELEVATION: 545.0'

REFERENCE POINT ELEVATION: 547.72'

DATE INSTALLED: 10 / 11 / 95

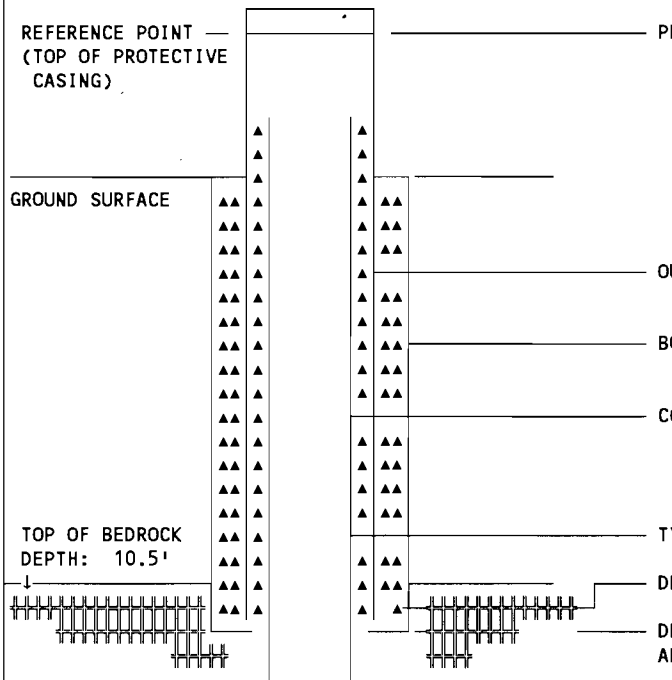
DRILLING METHOD: DRIVEN CASING \ CORE

CORE HOLE DIA.: 3.8 - INCH

RIG GEOLOGIST: E. SANDIN/T. DELANO

INITIAL WATER LEVEL DEPTH: 34.98' (RF)

DATE: 11 / 07 / 95



PROTECTIVE CASING STICKUP: 2.7'

OUTSIDE DIAMETER OF STEEL CASING: 6-INCH

BOREHOLE DIAMETER: 10-INCH

CORE HOLE DIAMETER: 3.8-INCH

TYPE OF BACKFILL: CEMENT\BENTONITE GROUT

DEPTH TO BOTTOM OF 6" CASING: 12.5'

DEPTH TO BOTTOM OF ROCK SOCKET AND CEMENT\BENTONITE BACKFILL: 12.5'

ROCK CORE HOLE DIAMETER: 3.8-INCH

DEPTH TO BOTTOM OF OPEN CORE HOLE: 40.0'

ABB ENVIRONMENTAL SERVICES, INC.

WELL INSTALLATION DIAGRAM

WELL NO.: **BR-112D**

PROJECT NAME: OLIN ROCHESTER RI

PROJECT NO.: 7311-32

GROUND ELEVATION: 545.7'

REFERENCE POINT ELEVATION: 547.91'

DATE INSTALLED: 09 / 27 / 95

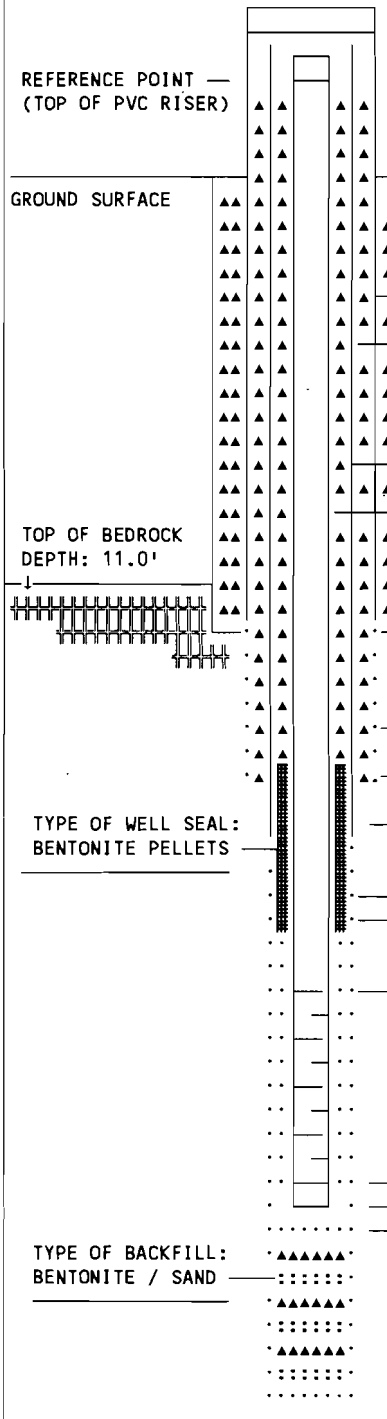
DRILLING METHOD: DRIVEN CASING / CORE

CORE HOLE DIA.: 3.8 - INCH

RIG GEOLOGIST: B. JOHNSON / N.BRETON

INITIAL WATER LEVEL DEPTH: 37.00'(CS)

DATE: 10 / 04 / 95



PROTECTIVE CASING STICKUP 2.4'

PVC RISER STICKUP: 2.2'

BOREHOLE DIAMETER: 10 - INCH (OVERBURDEN)

OUTSIDE DIAMETER OF STEEL CASING: 6 - INCH

OUTSIDE DIA. OF INNER STEEL CASING: 4 - INCH

TYPE OF BACKFILL: CEMENT\BENTONITE GROUT

WELL RISER ID: 2.0 - INCH

TYPE OF WELL RISER: SCH 40 PVC

DEPTH TO BOTTOM OF 6" CASING: 13.0'

DEPTH TO BOTTOM OF ROCK SOCKET AND CEMENT\BENTONITE BACKFILL: 13.0'

BOREHOLE DIA. (AIR H.): 6.0 - INCH (TO 45.0')

DEPTH TO TOP OF BENTONITE SEAL: 42.0'

DEPTH OF 4" STEEL CASING: 45.0'

ROCK CORE HOLE DIAMETER: 3.8-INCH (TO 100.0')

DEPTH TO TOP OF SAND PACK: 47.0'

DEPTH TO TOP OF WELL SCREEN: 50.0'

TYPE OF WELL SCREEN: SCH 40 PVC

WELL SCREEN ID: 2.0 - INCH

LENGTH OF WELL SCREEN: 19.6'

TYPE OF SAND PACK: "0" SIZE SILICA SAND

DEPTH TO BOTTOM OF WELL SCREEN: 69.6'

DEPTH TO BOTTOM OF SEDIMENT TRAP: 70.0'

DEPTH TO TOP OF BENTONITE / SAND: 70.0'

DEPTH TO BOTTOM OF CORE HOLE: 100.0'

ABB ENVIRONMENTAL SERVICES

WELL INSTALLATION DIAGRAM

WELL NO.: **BR-113**

PROJECT NAME: OLIN ROCHESTER RI

PROJECT NO.: 7311-32

GROUND ELEVATION: 540.4'

REFERENCE POINT ELEVATION: 543.02'

DATE INSTALLED: 09 / 18 / 95

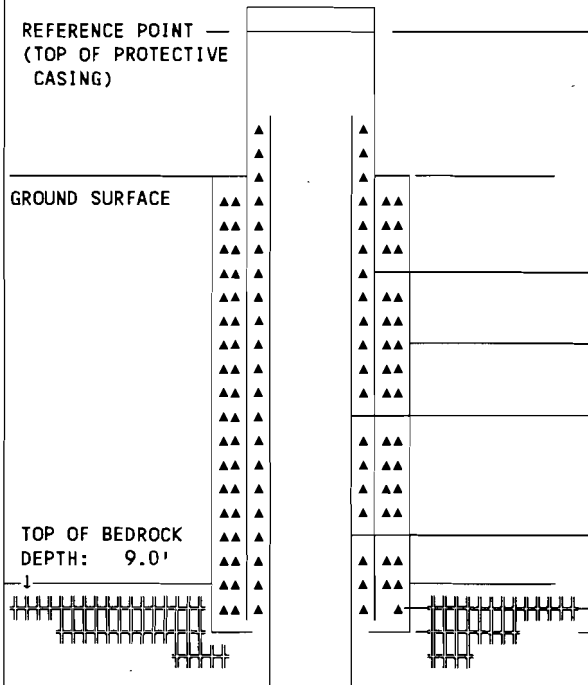
DRILLING METHOD: DRIVEN CASING \ CORE

CORE HOLE DIA.: 3.8 - INCH

RIG GEOLOGIST: B. JOHNSON / N. BRETON

INITIAL WATER LEVEL DEPTH: 32.40' (RF)

DATE: 09 / 28 / 95



PROTECTIVE CASING STICKUP: 2.6'

OUTSIDE DIAMETER OF STEEL CASING: 6-INCH

BOREHOLE DIAMETER: 10-INCH

CORE HOLE DIAMETER: 3.8-INCH

TYPE OF BACKFILL: CEMENT\BENTONITE GROUT

DEPTH TO BOTTOM OF 6" CASING: 11.0'

DEPTH TO BOTTOM OF ROCK SOCKET AND CEMENT\BENTONITE BACKFILL: 11.0'

ROCK CORE HOLE DIAMETER: 3.8-INCH

DEPTH TO BOTTOM OF OPEN CORE HOLE: 45.0'

ABB ENVIRONMENTAL SERVICES, INC.

WELL INSTALLATION DIAGRAM

WELL NO.: **BR-113D**

PROJECT NAME: OLIN ROCHESTER RI

PROJECT NO.: 7311-32

GROUND ELEVATION: 540.5'

REFERENCE POINT ELEVATION: 542.93'

DATE INSTALLED: 09 / 27 / 95

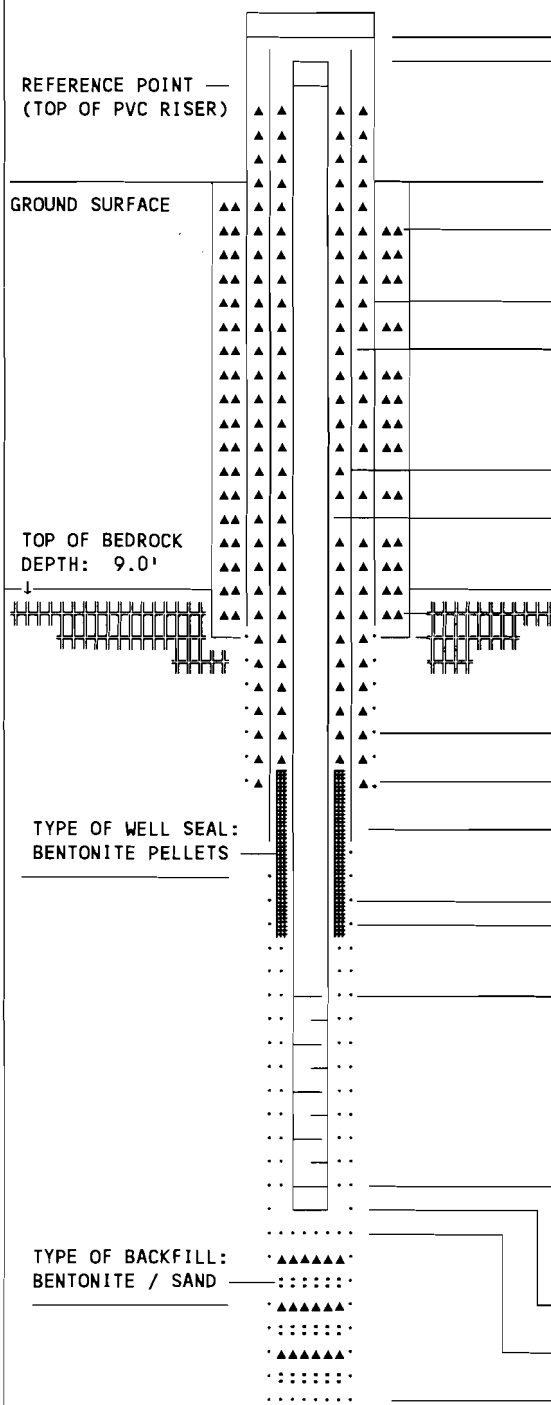
DRILLING METHOD: DRIVEN CASING / CORE

CORE HOLE DIA.: 3.8 - INCH

RIG GEOLOGIST: B. JOHNSON / E. SANDIN

INITIAL WATER LEVEL DEPTH: 36.17'(RF)

DATE: 09 / 28 / 95



PROTECTIVE CASING STICKUP 2.6'

PVC RISER STICKUP: 2.4'

BOREHOLE DIAMETER: 10 - INCH (OVERBURDEN)

OUTSIDE DIAMETER OF STEEL CASING: 6 - INCH

OUTSIDE DIA. OF INNER STEEL CASING: 4 - INCH

TYPE OF BACKFILL: CEMENT\BENTONITE GROUT

WELL RISER ID: 2.0 - INCH

TYPE OF WELL RISER: SCH 40 PVC

DEPTH TO BOTTOM OF 6" CASING: 11.0'

DEPTH TO BOTTOM OF ROCK SOCKET AND CEMENT\BENTONITE BACKFILL: 11.0'

BOREHOLE DIA. (AIR H.): 6.0 - INCH (TO 45.0')

DEPTH TO TOP OF BENTONITE SEAL: 49.0'

DEPTH OF 4" STEEL CASING: 51.0'

ROCK CORE HOLE DIAMETER: 3.8-INCH (TO 100.0')

DEPTH TO TOP OF SAND PACK: 54.0'

DEPTH TO TOP OF WELL SCREEN: 57.0'

TYPE OF WELL SCREEN: SCH 40 PVC

WELL SCREEN ID: 2.0 - INCH

LENGTH OF WELL SCREEN: 19.6'

TYPE OF SAND PACK: "0" SIZE SILICA SAND

DEPTH TO BOTTOM OF WELL SCREEN: 76.6'

DEPTH TO BOTTOM OF SEDIMENT TRAP: 77.0'

DEPTH TO TOP OF BENTONITE / SAND: 77.0'

DEPTH TO BOTTOM OF CORE HOLE: 100.0'

ABB ENVIRONMENTAL SERVICES, INC.

WELL INSTALLATION DIAGRAM

WELL NO.: **BR-114**

PROJECT NAME: OLIN ROCHESTER RI

PROJECT NO.: 7311-32

GROUND ELEVATION: 539.77'

REFERENCE POINT ELEVATION: 539.77'

DATE INSTALLED: 09 / 21 / 95

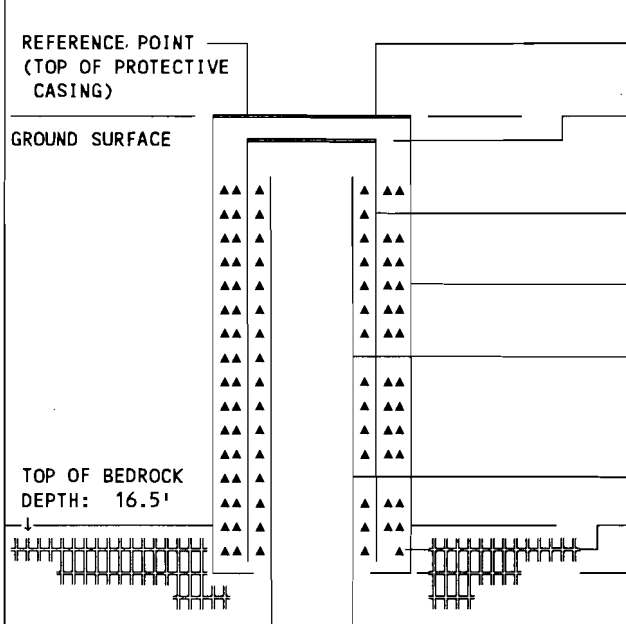
DRILLING METHOD: DRIVEN CASING \ CORE

CORE HOLE DIA.: 3.8 - INCH

RIG GEOLOGIST: E. SANDIN / N. BRETON

INITIAL WATER LEVEL DEPTH: 16.73'(RF)

DATE: 09 / 27 / 95



FLUSH MOUNTED PROTECTIVE CASING - STICKUP = 0.0'

TOP OF STEEL CASING DEPTH: 0.5 '

OUTSIDE DIAMETER OF STEEL CASING: 6-INCH

BOREHOLE DIAMETER: 10-INCH

CORE HOLE DIAMETER: 3.8-INCH

TYPE OF BACKFILL: CEMENT\BENTONITE GROUT

DEPTH TO BOTTOM OF 6" CASING: 19.5'

DEPTH TO BOTTOM OF ROCK SOCKET AND CEMENT\BENTONITE BACKFILL: 19.5'

ROCK CORE HOLE DIAMETER: 3.8-INCH

DEPTH TO BOTTOM OF OPEN CORE HOLE: 39.6'

ABB ENVIRONMENTAL SERVICES, INC.

WELL INSTALLATION DIAGRAM

WELL NO.: **MW-114**

PROJECT NAME: OLIN ROCHESTER RI

PROJECT NO.: 7311-32

GROUND ELEVATION: 539.69'

REFERENCE POINT ELEVATION: 539.69'

DATE INSTALLED: 09 / 22 / 95

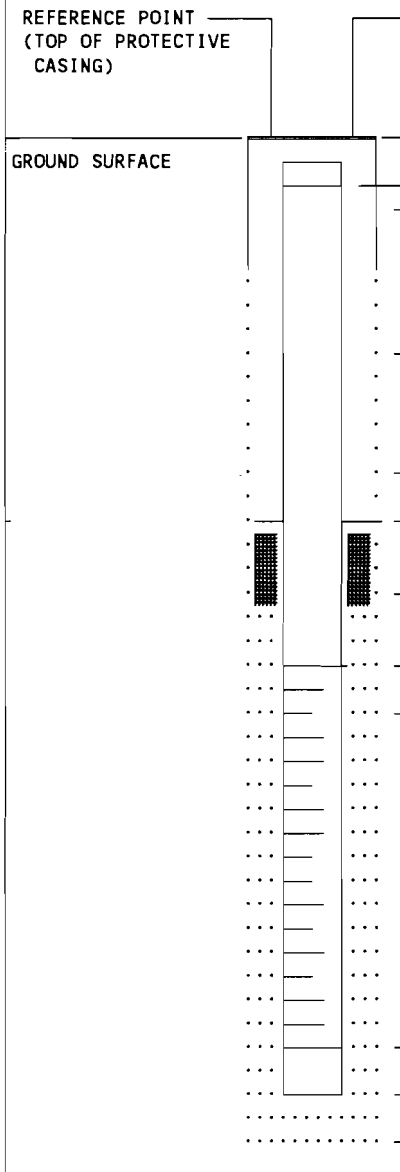
DRILLING METHOD: HSA

AUGER ID: 6.25 - INCH

RIG GEOLOGIST: N. BRETON

INITIAL WATER LEVEL DEPTH: 13.50 '(RF)

DATE: 09 / 22 / 95



FLUSH MOUNTED PROTECTIVE CASING - STICKUP = 0.0'

TOP OF PVC RISER DEPTH: 0.5'

OUTSIDE DIAMETER OF STEEL PROTECTIVE CASING: 8 - INCH

WELL RISER ID: 2.0-INCH

TYPE OF WELL RISER: SCH 40 PVC

TYPE OF BACKFILL: PENN SILICA # 1 SAND (FOR DRAINAGE)

DEPTH TO TOP OF BENTONITE PELLET SEAL: 2.0'

DEPTH TO TOP OF SAND PACK: 4.0'

DEPTH TO TOP OF WELL SCREEN: 5.8'

BOREHOLE DIAMETER: 10.25 - INCH

TYPE OF WELL SCREEN: SCH 40 PVC

WELL SCREEN ID: 2.0-INCH

WELL SLOT SIZE: 0.010-INCH

LENGTH OF WELL SCREEN: 9.7'

TYPE OF SAND PACK: "0" SIZE SILICA SAND

DEPTH TO BOTTOM OF WELL SCREEN: 15.5'

DEPTH TO BOTTOM OF SEDIMENT TRAP: 15.9'

DEPTH OF BOREHOLE: 15.9'

ABB ENVIRONMENTAL SERVICES, INC.

APPENDIX A-3

WELL DEVELOPMENT DATA

APPENDIX A-3
WELL DEVELOPMENT SUMMARY
OLIN CHEMICALS PHASE I RI REPORT
ROCHESTER, NY

WELL / PIEZOMETER	TYPE	TOTAL AMOUNT PURGED (gal)	DURATION (hours)	AVERAGE PURGE RATE (gpm)	DATE COMPLETED
BR-111	BEDROCK	2055	4.75	9	03-Oct-95
BR-111D	BEDROCK	1700	5.5	5	03-Oct-95
BR-112A [1]	BEDROCK	8	3	>2	13-Oct-95
BR-112D	BEDROCK	2350	4.7	8.6	04-Oct-95
BR-113	BEDROCK	1920	4	8	28-Sep-95
BR-113D	BEDROCK	675	1	7.5	28-Sep-95
BR-114	BEDROCK	1970	4	9	29-Sep-95
MW-114 [2]	OVERBURDEN	NA	NA	NA	NA

Notes:

(1) Slow recovery rate(well dry after 1 min at 2 gpm) resulting in smaller purge volume and one set of parameter measurements.

(2) Slow recovery rate and 3 foot water column height prevent sustained pumping for development. Remove one well volume after installation on 9-Oct-95.

APPENDIX A-3
WELL DEVELOPMENT SUMMARY
OLIN CHEMICALS PHASE I RI REPORT
ROCHESTER, NY

WELL / PIEZOMETER	PH START	PH END	CONDUCTANCE START umhos/cm	CONDUCTANCE END	TEMPERATURE (C°) START	TEMPERATURE (C°) END	TURBIDITY (NTUs) START	TURBIDITY (NTUs) END
BR-101	7.00	6.91	1647	3200	14.5	12.1	> 200	> 200
BR-111	7.27	7.32	310	250	15.3	15.0	5.47	1.24
BR-111D	6.65	6.65	1600	1820	12.4	12.4	348	114
BR-112A (1)	NA	7.39	NA	788	NA	27.8	NA	21.5
BR-112D	6.99	6.85	1150	999	10.9	10.7	27.1	3.0
BR-113	7.39	7.08	449	430	16.2	15.7	3.04	0.8
BR-113D	6.25	7.10	1190	1194	12.8	13.2	15	2.87
BR-114	6.84	6.75	1010	998	NA	16.7	67.7	12.6
MW-114 (2)	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

(1) Slow recovery rate(well dry after 1 min at 2 gpm) resulting in smaller purge volume and one set of parameter measurements.

(2) Slow recovery rate and 3 foot water column height prevent sustained pumping for development. Remove one well volume after installation on 9-Oct-95.

WELL DEVELOPMENT RECORD

Project: Phase II RI	Well Installation Date:		Project No. 7311-32
Client: OLIN CHEMICALS ROCHESTER	Well Development Date: 9-14-95 and 10-3-95	Logged by: E.S.	Checked by:
Well/Site I.D.: BR-111	Weather: 10-3-95 dry, 60's	Start Date: 9-14-95	Finish Date: 10-3-95
Initial Water Level (ft): 29.32 ft below TOC		Start Time: 1345	Finish Time: 1655
Water Level during Initial Pumping/Purging (ft): 29.4			
Water Level at Termination of Pumping/Purging (ft): 29.4			

Estimated Well Volume: 10 gallons

Cumulative Number of Well Volumes	TIME	TEMP.	pH	Conductivity	Approximate Pumping Rate (gal/min)	Turbidity (NTU's)
48	1400	15.3	7.27	310	9.0	5.47
83	1440	15.3	7.35	250	9.0	2.14
136	1540	14.8	7.32	250	9.0	1.69
190	1640	15.0	7.37	250	9.0	1.58
200	1650	15.0	7.32	250	9.0	1.24

Notes:

Well development commenced on 9-14-95 when approximately 300 gallons of groundwater removed during 1.5 hours pumping at approximately 3 gpm

Well development completed on 10-3-95 by pumping at 9.0 gpm for ~~180~~ 195 minutes (1755 gallons)

TOTAL PURGED FROM BR-111 = 2000 + gallons

WELL DEVELOPER'S SIGNATURE Eric Sadi

FIGURE 4-5
WELL DEVELOPMENT RECORD
QUALITY ASSURANCE PROJECT PLAN
OLIN CHEMICALS GROUP
ROCHESTER, NEW YORK

WELL DEVELOPMENT RECORD

Project:	Well Installation Date:		Project No.
Phase II RI			7311-32
Client: OLIN CHEMICALS ROCHESTER, N.Y.	Well Development Date: 9-13-95 and 10-3-95	Logged by: E.S.	Checked by:
Well/Site I.D.: BR-111D	Weather:	Start Date: 10-3-95	Finish Date: 10-3-95
Initial Water Level (ft): 29.4 below PVC riser		Start Time: 1704	Finish Time: 1834
Water Level during Initial Pumping/Purging (ft): 37.0 at 20 minutes elapsed time pumping			
Water Level at Termination of Pumping/Purging (ft): 37.35 prior to end of pumping / 29.4 after recovery			

Estimated Well Volume: 7.5 gallons

TOTAL CUMULATIVE Number of Well Volumes	TIME on 10-3	TEMP.	pH	Conductivity	Approximate Pumping Rate (gal/min)	Turbidity (NTU's)
160	START OF PUMPING ON 10-5-95					
190	1744	12.4	6.65	1600	5.5	348
202	1800	12.4	6.65	1690	5.5	222
217	1820	12.4	6.65	1820	5.5	114

Notes:

Well development commenced on 9-13-95 when BR-111D was pumped for 4 hours at 5 gpm (1200 gallons) to remove water introduced during drilling prior to construction of a 2" ID PVC well within the corehole

Development was completed on 10-3-95 by pumping at 5.5 gpm for 1.5 hours (500 gallons)

TOTAL purged from BR-111D = 1700 gallons

WELL DEVELOPER'S SIGNATURE E. Sandi

FIGURE 4-5
WELL DEVELOPMENT RECORD
QUALITY ASSURANCE PROJECT PLAN
OLIN CHEMICALS GROUP
ROCHESTER, NEW YORK

WELL DEVELOPMENT RECORD

Project:	Well Installation Date:		Project No.
Olin Rochester	10/11/95		73.1-32
Client:	**Well Development Date:**	**Logged by:**	**Checked by:**
Olin	10/13/95	T. DeLaney	
Well/Site I.D.:	**Weather:**	**Start Date:**	**Finish Date:**
BR112D	Sunny 75°F	10/13/95	10/13/95
Initial Water Level (ft): 32.9' (top of casing)		**Start Time:** 1225	**Finish Time:** 1539
Water Level during Initial Pumping/Purging (ft): 37.7' (immediately went dry, total depth = 42.62)			
Water Level at Termination of Pumping/Purging (ft): 37.30 (top of casing)			

Estimated Well Volume: ~~0.59~~ 4 gal
TD

Number of Well Volumes	TIME	TEMP.	pH	Conductivity	Approximate Pumping Rate (gal/min)	Turbidity (NTU's)
2*	1530	27.8°C	7.39	788 umhos/cm	*2 gal/min	21.5

Notes:

* sustained for ~1 min

▽ = 32.9' @ 1225 hrs, pumped dry
▽ = 37.7' @ 1240 hrs
▽ = 37.48' @ 1296 hrs.
▽ = 36.51' @ 1330 hrs
▽ = 36.35' @ 1337 hrs
▽ = 33.64 @ 1520 hrs

* No readings taken after first volume pumped

Well dry @ ~1230 hrs, pumped out second volume @ 1530 hrs, took readings

Recharges extremely slowly

All water levels measured to top of casing, casing stickup from ground surface = 2.9'

WELL DEVELOPER'S SIGNATURE Tony DeLaney

FIGURE 4-5
WELL DEVELOPMENT RECORD
QUALITY ASSURANCE PROJECT PLAN
OLIN CHEMICALS GROUP
ROCHESTER, NEW YORK

WELL DEVELOPMENT RECORD

Project: Phase II R.I.	Well Installation Date:			Project No. 7311-32
Client: OLIN CHEMICALS ROCHESTER NY.	Well Development Date: 9-15-95 and 10-4-95		Logged by: E.S.	Checked by:
Well/Site I.D.: BR-112 D	Weather:		Start Date: 10-4-95	Finish Date: 10-4-95
Initial Water Level (ft): 37.00			Start Time: 1435	Finish Time: 1515

Water Level during Initial Pumping/Purging (ft): 40.15 after 18 minutes pumping

Water Level at Termination of Pumping/Purging (ft): 37.00 immediately after pumping

Estimated Well Volume: 5.4 gallons

TOTAL CUMULATIVE Number of Well Volumes	TIME	TEMP.	pH	Conductivity	Approximate Pumping Rate (gal/min)	Turbidity (NTU's)
370 purged on 9-15-95			—	—	8.4	—
	1440	10.9	6.99	1150	8.8	27.1
	1450	11.1	6.85	984	8.8	8.8
	1500	10.9	6.88	996	8.8	5.3
	1510	10.7	6.78	989	8.8	5.6
	1515	10.7	6.85	999	8.8	3.0

Notes:

Well development commenced on 9-15-95 when BR-112 D was pumped for 4 hours at an approximate rate of 8.4 gpm (2000 gallons) to purge drilling water prior to construction of 2" ID PVC well within corehole.

Development was completed on 10-4-95 by pumping at 8.8 gpm for 40 minutes (350 gallons)

TOTAL PURGED FROM BR-112 D = 2350 gallons

WELL DEVELOPER'S SIGNATURE [signature]

FIGURE 4-5
WELL DEVELOPMENT RECORD
QUALITY ASSURANCE PROJECT PLAN
OLIN CHEMICALS GROUP
ROCHESTER, NEW YORK

WELL DEVELOPMENT RECORD

Project: Olin Rochester RI/FS	Well Installation Date: 09/18/95		Project No. 7311-C-2
Client: Olin Corporation	Well Development Date: 09/25/95	Logged by: S Allcock	Checked by:
Well No. BR113	Weather: Sunny, low 70's	Start Date: 09/25/95	Finish Date: 09/25/95
Initial Water Level (ft): 32.46 TOC		Start Time: 14:15	Finish Time: 18:15
Water Level during Initial Pumping/Purging (ft): 32.56 TOC			
Water Level at Termination of Pumping/Purging (ft): 32.52 ~~32.55~~ TOC			

Estimated Well Volume: ≈37.5 gals

Number of Well Volumes	TIME	TEMP.	pH	Conductivity	Approximate Pumping Rate (gal/min)	Turbidity (NTU's)
2	1425	16.2	7.39	.414	5	3.04
8.5	1453	15.9	7.15	.450	5	1.30
15	1525	15.7	7.15	.435	5	1.62
28	1625	15.4	7.23	.441	5	0.92
40.5	1725	15.4	7.13	.438	5	0.81
51	1815	15.7	7.08	.430	5	0.76

Notes: Total of 192C gals purged over a 4 hour period.

WELL DEVELOPER'S SIGNATURE Scott Allcock

9309014S(a)

WELL DEVELOPMENT RECORD

Project: Olin Rochester RI/FS	Well Installation Date:		Project No. 7311-C 2
Client: Olin Corporation	Well Development Date: 9/25/95	Logged by: S Allcock	Checked by:
Well No. BR 1130	Weather: Sunny low 70's	Start Date: 9/25/95	Finish Date: 9/25/95
Initial Water Level (ft): n/a		Start Time: 11:45	Finish Time: 13:20
Water Level during Initial Pumping/Purging (ft): 36.35 ~~BGS~~ TOC			
Water Level at Termination of Pumping/Purging (ft): 36.17 ~~BGS~~ TOC			

Estimated Well Volume: 13.2 gals

Number of Well Volumes	TIME	TEMP.	pH	Conductivity	Approximate Pumping Rate (gal/min)	Turbidity (NTU's)
17	1220	12.5	6.25	1.190	7.5	~~3.14~~ 150
34	1250	12.5	6.56	1.147	7.5	~~1.30~~ 3.41
51.6	1320	13.2	7.10	1.194	7.5	~~1.62~~ 257

Notes:

Very productive well. Turbidity cleared up very well. 675 gals purged for development.

WELL DEVELOPER'S SIGNATURE Scott Allcock

WELL DEVELOPMENT RECORD

Project: Olin Rochester RI/FS	Well Installation Date:		Project No. 7311-02
Client: Olin Corporation	Well Development Date: 09/27/95 to 09/29/95	Logged by: S Alkeca	Checked by:
Well No. BR 114	Weather:	Start Date: 09/27/95	Finish Date: 09/29/95
Initial Water Level (ft): 16.73' BGS		Start Time: 11:20/1035	Finish Time: 1340/1125

Water Level during Initial Pumping/Purging (ft): 17.72 to ~~18.55~~ 18.27

Water Level at Termination of Pumping/Purging (ft): 18.27

Estimated Well Volume: 34.85

Number of Well Volumes	TIME	TEMP.	pH	Conductivity	Approximate Pumping Rate (gal/min)	Turbidity (NTU's)
8	1150	n/a	6.84	1.010	9.5	67
14	1210	n/a	7.03	.960	9.5	10.2
19	1230	n/a	7.07	.944	9.5	137
25	1250	n/a	7.06	.929	9.5	158
30	1310	n/a	7.10	.947	9.5	140
9/27 35	1340	n/a	6.99	1.135	9.5	210
9/29 45	1035	15.9	6.76	.907	8.0	8.07
52	1105	16.4	6.90	.920	8.0	8.04
57	1125	16.7	6.75	.948	8.0	12.6

Notes:

Pump supplied by Marcor malfunctioned at 14:02 on 9/27 2 hrs and 40 minutes into the pumping. Pumping restarted at 10:35 on 9/29 for an additional 1 hr 2 min. During the down time, settling in the borehole occurred which showed a dramatic drop in Turbidity. Also, no Temp. readings were available due to a malfunctioning pH meter. 1970 gals. purged for Development over a 4 hr period.

WELL DEVELOPER'S SIGNATURE [signature]

9309014S(a)

APPENDIX A-4

BOREHOLE GEOPHYSICAL LOGS

MEMORANDUM

Date: September 22, 1995

From: Scott F. Calkin, Geophysicist and Larry Dearborn, Hydrogeologist

To: Mike Belotti (OLIN), Tom Eschner (ABB-ES), Steve Walbridge (ABB-ES), Nelson Breton (ABB-ES), and Eric Sandin (ABB-ES)

Subject: Olin Chemical, Rochester, NY - Phase II RI
Borehole Geophysical Results and Recommendations for Well Screen Placement for BR-111D, BR-112D, and BR-113D

Introduction

Borehole geophysical logging was conducted in the open boreholes of BR-111D, BR-112D, and BR-113D located downgradient of the Olin Chemical Plant in Rochester, New York. These boreholes were all located adjacent to the Erie Canal, approximately 800 to 1200 feet west or southwest of the plant. Borehole logging was conducted on September 18 and 19, 1995, by Scott Calkin (ABB-ES).

The purpose of geophysical logging is to guide the proper location of well screens by identifying the presence of hydraulically-active fractured intervals in the bedrock aquifer. Logging was also used to determine stratigraphy, identify stratigraphic changes, and potentially to correlate lithology between boreholes. Logging suites were conducted in the following sequence.

1) Fluid temperature and fluid resistivity
2) Three arm caliper
3) Single point resistance (SPR) and spontaneous potential (SP)
4) Natural gamma

Data was collected using a Mount Sopris MGX data logger and a field computer. All depths discussed in this memo and plotted on the attached figures are referenced to ground surface.

Results and Recommendations

Rock core logs and borehole geophysical results were reviewed to select proper location of well screens for the three existing deep boreholes. Table 1 presents the recommended well screen interval for each borehole, along with a summary of core log observations and a summary of borehole geophysical results indicating the presence of fractured media and fluid flow. Preliminary composite log field plots of geophysical results for each borehole are attached to this memo.

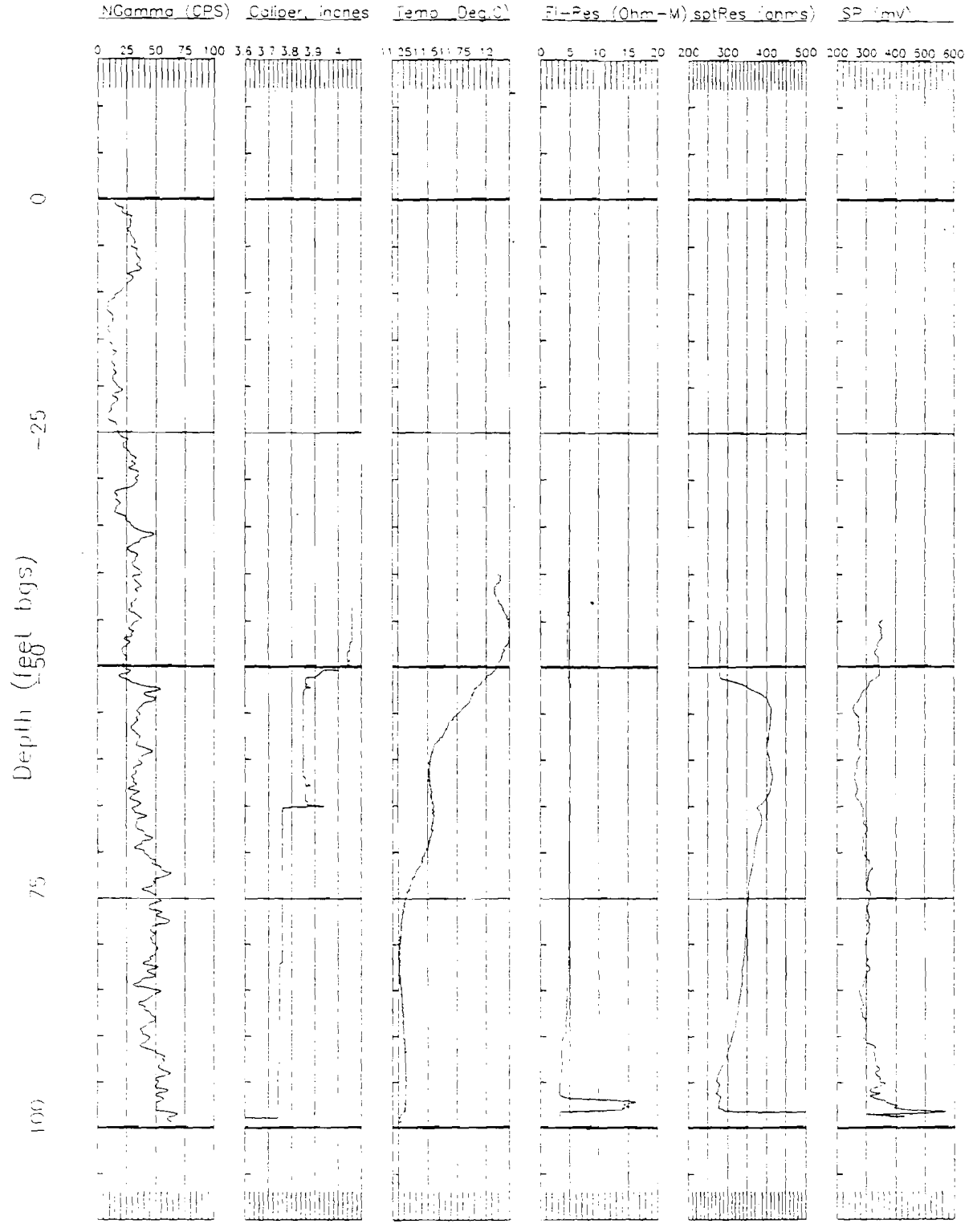
SP and natural gamma logging indicates increasing shale content with depth in all three boreholes. Borehole diameters all decrease with depth indicating either more competent rock

or it may be a function of increasing shale content with depth. SPR logging indicates stratigraphic correlation between boreholes.

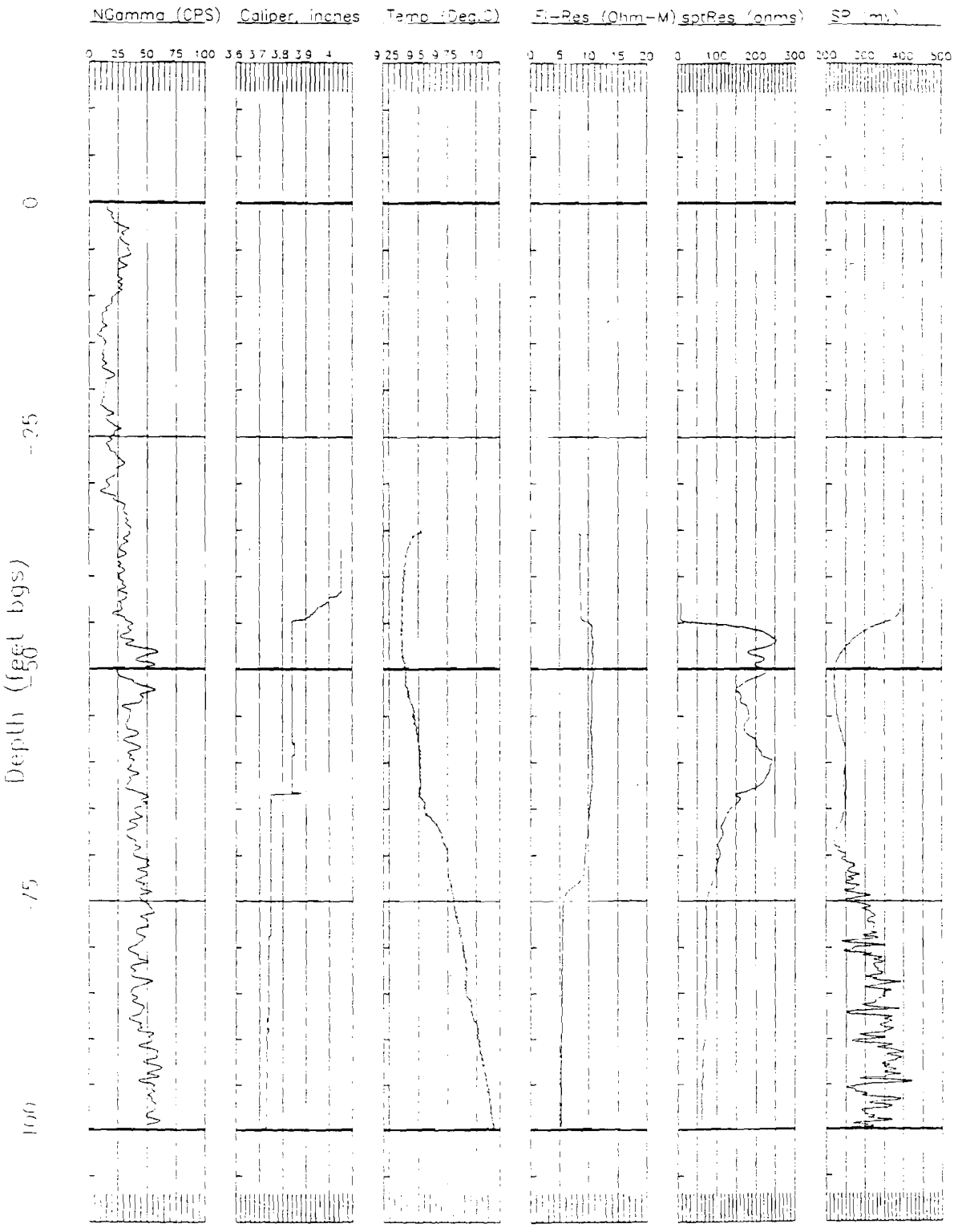
Table 1
OLIN Chemicals Borehole Geophysical Program
Recommended Well Screen Intervals for BR-111D, BR-112D, and BR-113D
Rochester, New York

Well Location	Recommended Well Screen Interval Depth, feet bgs	Core Log Observations	Borehole Geophysical Results
BR-111D	55-75	Low angle fractures noted throughout interval.	Slight caliper deviation at 57.6 feet bgs, more substantial caliper deviation at 59.7 feet bgs; temperature breaks at 57.1, 58.3, and 61.9 suggests water is either entering or exiting borehole from fractures as these intervals; fluid resistivity shifts are coincident with temperature breaks. Slight SPR low at 57.4 is suggestive of fractured media, SPR shifts 59.4 feet bgs and 75.1 indicate lithology changes. SP and natural gamma logging indicate increasing shale content with depth.
BR-112D	50-70	Water loss noted in the vicinity of 64 feet bgs, higher angle fractures noted from 60-64 feet bgs.	Slight caliper deviation at 58.5 feet bgs, more substantial caliper deviation at 63.3 feet bgs; temperature breaks at 58.3, 63.4, and 67.5 suggests water is either entering or exiting borehole from fractures as these intervals; fluid resistivity shifts are coincident with temperature breaks at 59.4 and 61.9 feet bgs. Large fluid resistivity 73.4 feet bgs. Slight SPR low at 63.5 is suggestive of fractured media, large SPR shift at 66.6 feet bgs indicates lithology change. SP and natural gamma logging indicate increasing shale content with depth.
BR-113D	57-77	Water loss noted at approx. 65.9 feet bgs. Silt filled fracture observed at 66.3 feet bgs. Chips noted at 72.4 feet bgs.	Slight caliper deviation at 62.7 feet bgs, more substantial caliper deviation at 64.8 feet bgs; temperature breaks at 58.3, 61.8, 68.3, and 74.1 suggests water is either entering or exiting borehole from fractures as these intervals. Slight SPR low at 64.9 is suggestive of fractured media. SP and natural gamma logging indicates increasing shale content with depth.

Well Name: BR113D
File Name: BR113D
Location: OLIN Chemicals, Rochester
Elevation: 0 Reference: Ground Surface



Well Name: BR112D
File Name: BR112D
Location: OLIN Chemicals, Rochester
Elevation: 0 Reference: Ground Surface



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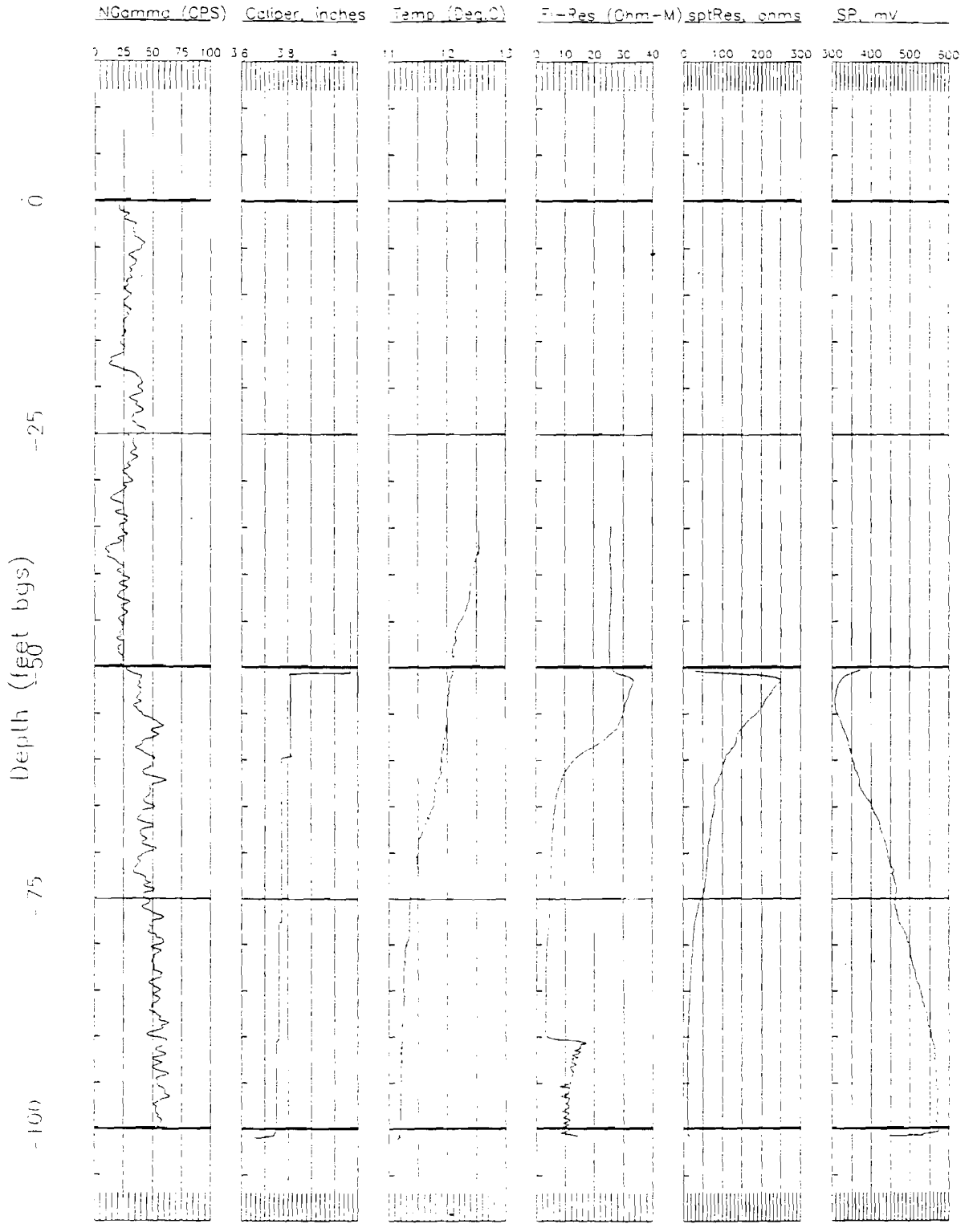
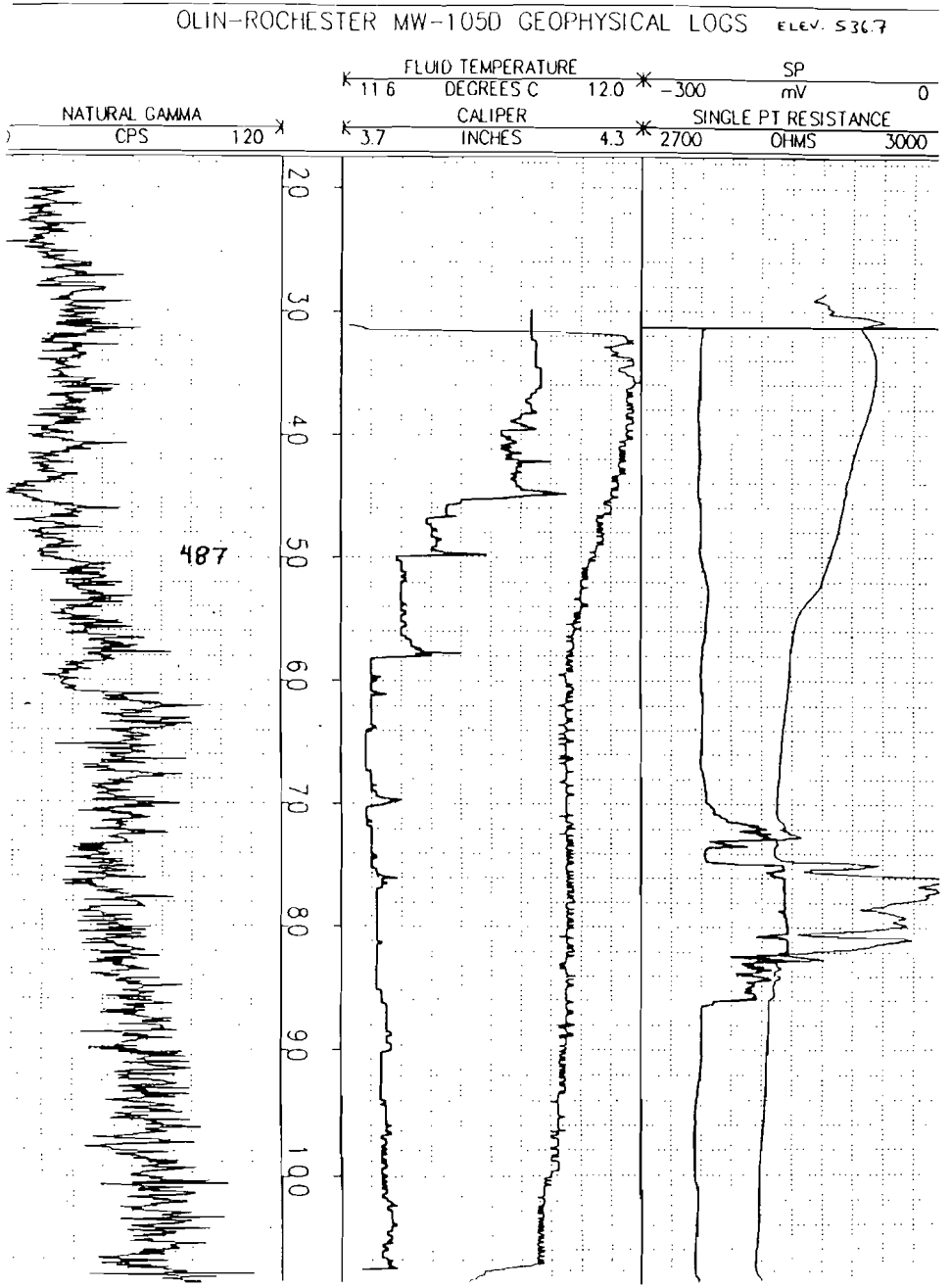
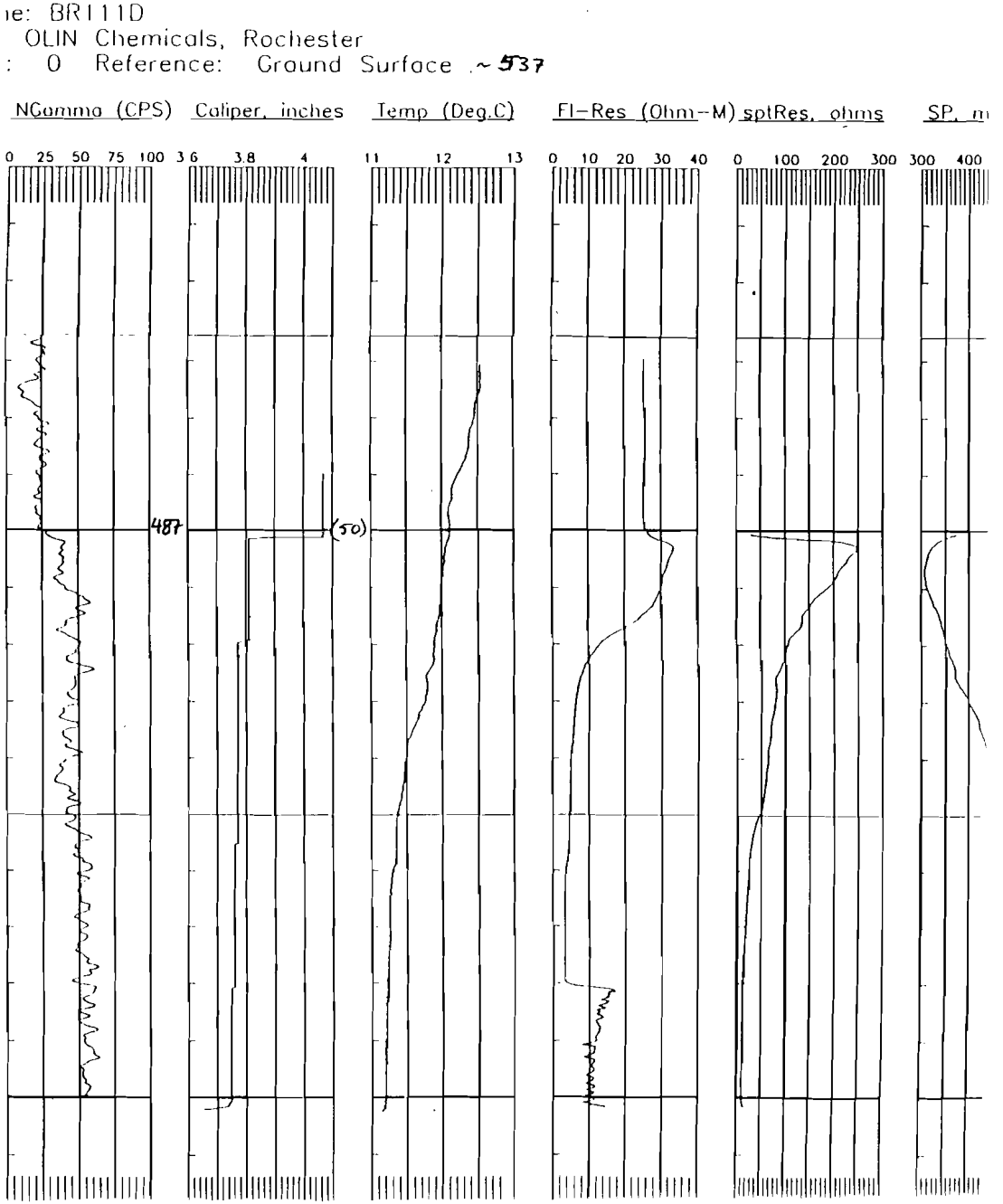
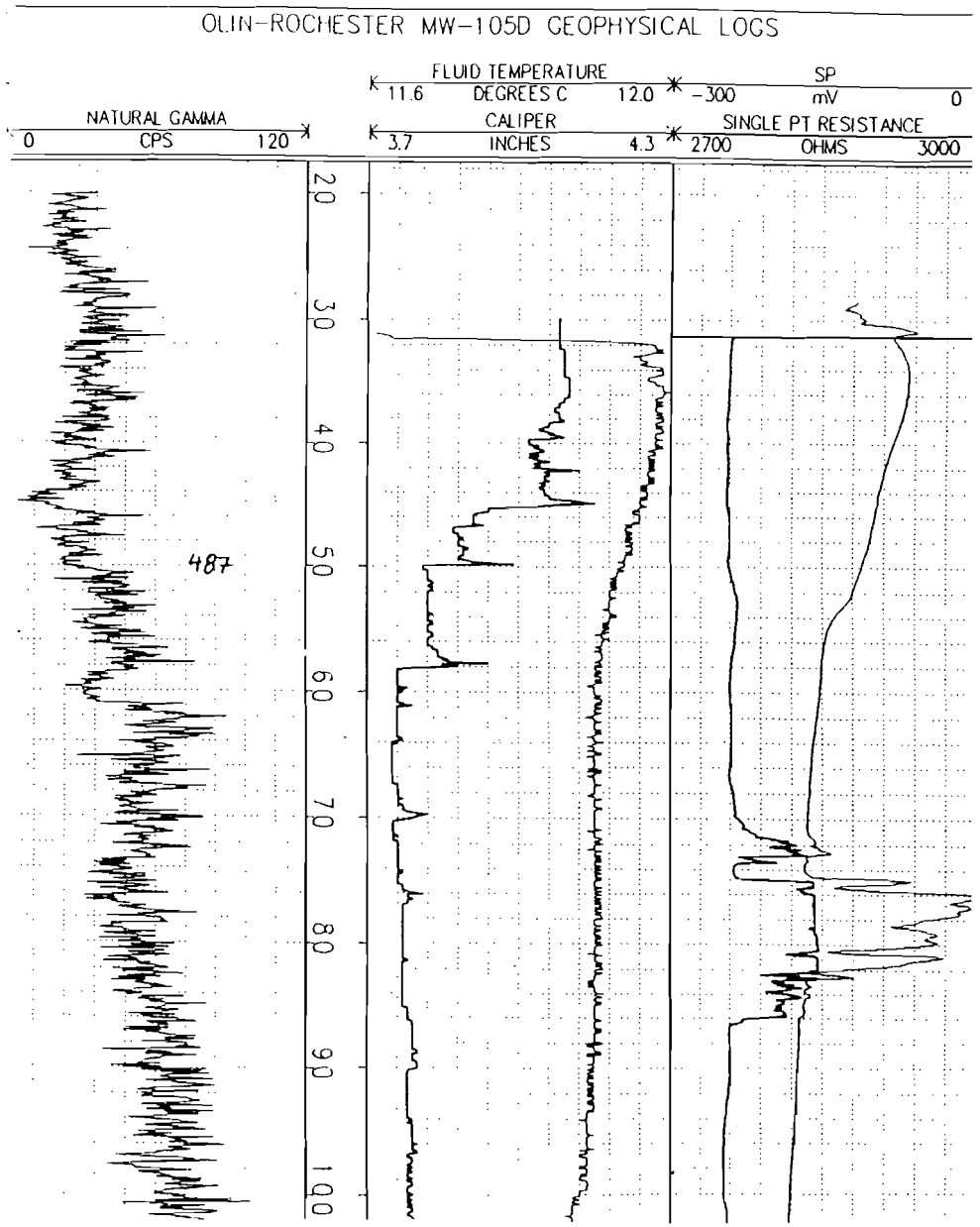
File Name: BR111D
Location: OLIN Chemicals, Rochester
Elevation: 0 Reference: Ground Surface



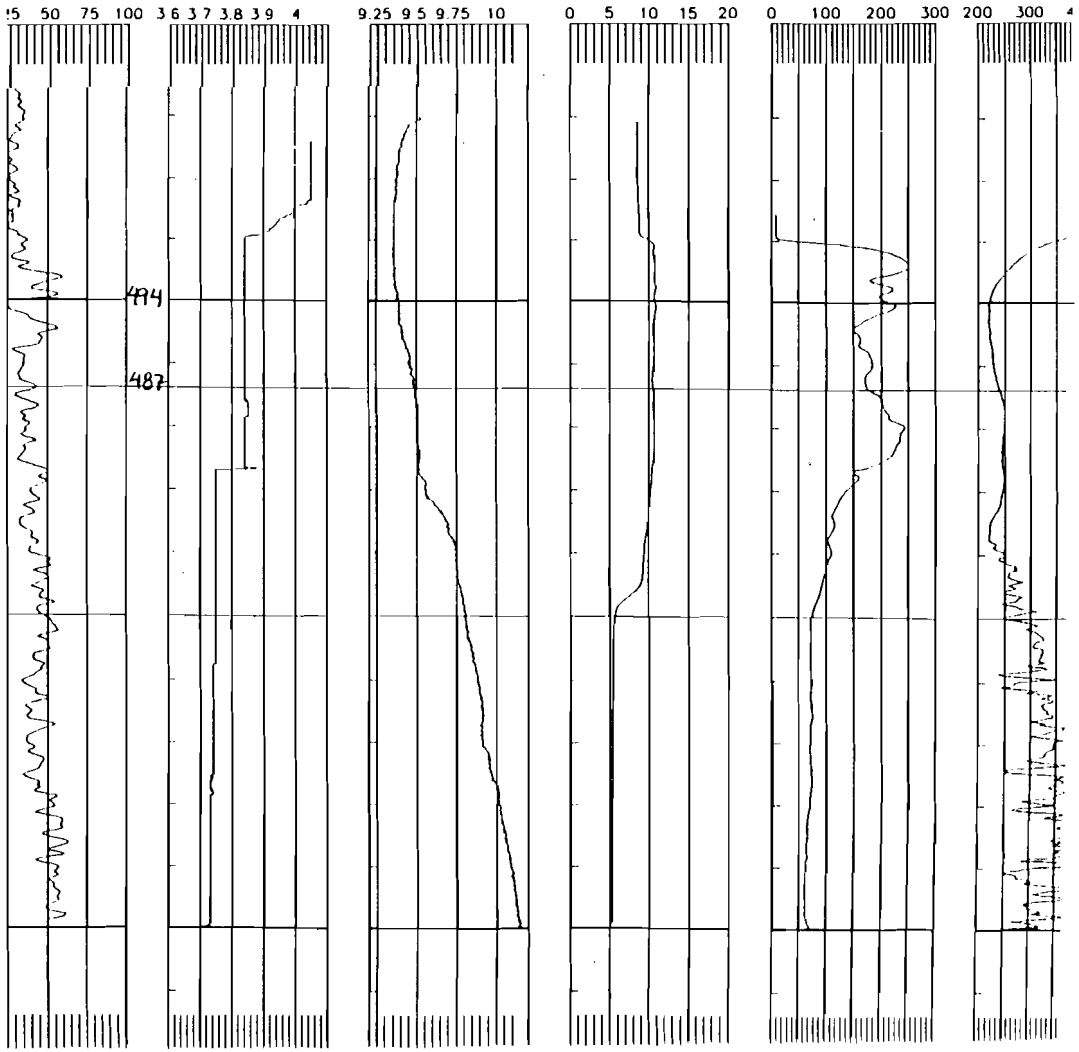
Well Name: BR111D
Name: BR111D
OLIN Chemicals, Rochester
: 0 Reference: Ground Surface ~537







BR112D
BR112D
LIN Chemicals, Rochester
0 Reference: Ground Surface ~544



: BR111D
: BR111D
OLIN Chemicals, Rochester
0 Reference: Ground Surface ~537

NGamma (CPS) Caliper, inches Temp (Deg.C) Fl-Res (Ohm-M) sptRes, ohms SP, mV

25 50 75 100 3.6 3.8 4 11 12 13 0 10 20 30 40 0 100 200 300 300 400 500 60

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e: BR112D
e: BR112D
OLIN Chemicals, Rochester
0 Reference: Ground Surface ~544

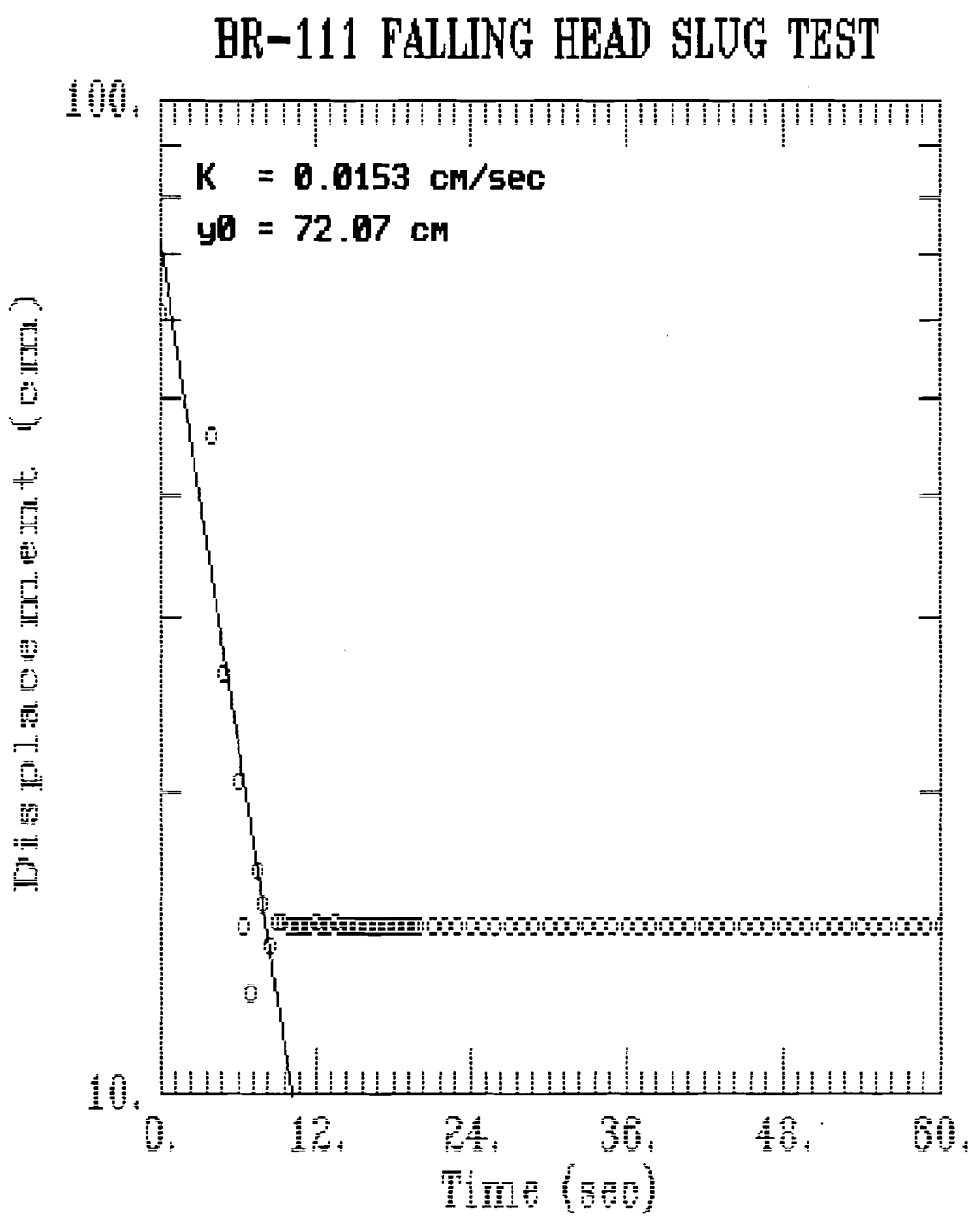
NGamma (CPS) Caliper, inches Temp (Deg.C) Fl--Res (Ohm-M) sptRes (

0 25 50 75 100 3.6 3.7 3.8 3.9 4 9.25 9.5 9.75 10 0 5 10 15 20 0 100 2

487

APPENDIX A-5

HYDRAULIC CONDUCTIVITY TEST RESULTS


BR-111 FALLING HEAD SLUG TEST
K = 0.0153 cm/sec
y0 = 72.07 cm
100.
10.
0.
12.
24.
36.
48.
60.
Time (sec)

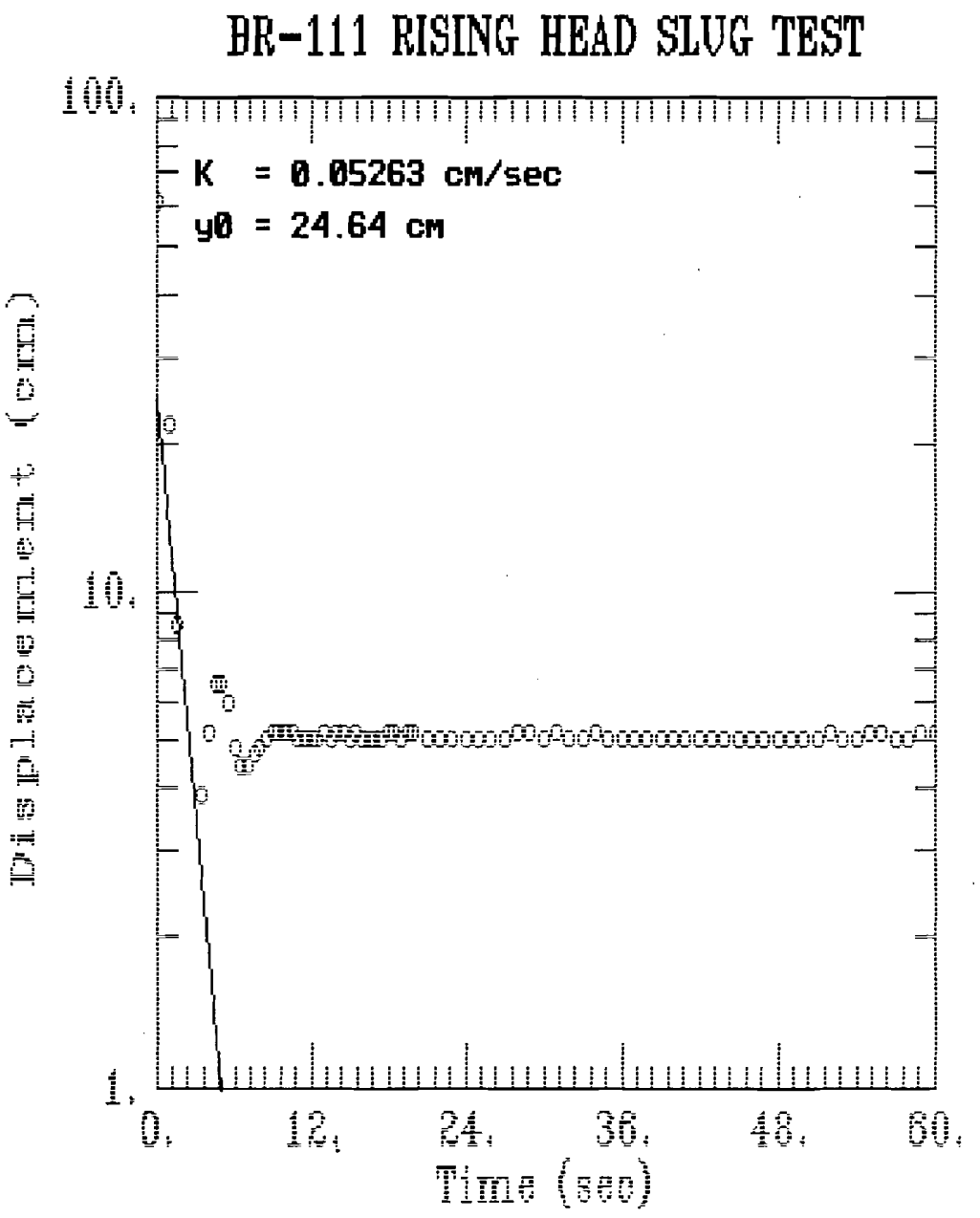
BR-111 FALLING HEAD TEST

SLUG VOLUME	**0.170**	**FT3**
SLUG DISPLACEMENT	**2.05**	**FT**
WELL RADIUS	**0.16**	**FT**
SCREEN RADIUS	**0.16**	**FT**
AQUIFER THICKNESS	**18**	**FT**
SCREEN LENGTH	**18**	**FT**
WATER COLUMN HEIGHT	**18**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+0.986)
0	-0.006	
0.0083	-0.909	
0.0166	-0.113	
0.025	-0.537	
0.0333	-0.985	
0.0416	0.473	
0.05	0.328	
0.0583	-0.556	
0.0666	1.023	2.009
0.075	-0.48	0.506
0.0833	0.385	1.371
0.0916	-0.334	0.652
0.1	0.195	1.181
0.1083	0	0.986
0.1166	-0.069	0.917
0.125	0.069	1.055
0.1333	0.025	1.011
0.1416	-0.018	0.968
0.15	0.006	0.992
0.1583	0.006	0.992
0.1666	0	0.986
0.175	0	0.986
0.1833	0	0.986
0.1916	0	0.986
0.2	0.006	0.992
0.2083	0	0.986
0.2166	0	0.986
0.225	0.006	0.992
0.2333	0	0.986
0.2416	0	0.986
0.25	0	0.986
0.2583	0	0.986

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+0.986)
0.2666	0	0.986
0.275	0	0.986
0.2833	0	0.986
0.2916	0	0.986
0.3	0	0.986
0.3083	0	0.986
0.3166	0	0.986
0.325	0	0.986
0.3333	0	0.986
0.35	0	0.986
0.3666	0	0.986
0.3833	0	0.986
0.4	0	0.986
0.4166	0	0.986
0.4333	0	0.986
0.45	0	0.986
0.4666	0	0.986
0.4833	0	0.986
0.5	0	0.986
0.5166	0	0.986
0.5333	0	0.986
0.55	0	0.986
0.5666	0	0.986
0.5833	0	0.986
0.6	0	0.986
0.6166	0	0.986
0.6333	0	0.986
0.65	0	0.986
0.6666	0	0.986
0.6833	0	0.986
0.7	0	0.986
0.7166	0	0.986

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+0.986)
0.7333	0	0.986
0.75	0	0.986
0.7666	0	0.986
0.7833	0	0.986
0.8	0	0.986
0.8166	0	0.986
0.8333	0	0.986
0.85	0	0.986
0.8666	0	0.986
0.8833	0	0.986
0.9	0	0.986
0.9166	0	0.986
0.9333	0	0.986
0.95	0	0.986
0.9666	0	0.986
0.9833	0	0.986
1	0	0.986
1.2	0	0.986
1.4	0	0.986
1.6	0	0.986
1.8	0	0.986
2	0	0.986
2.2	0	0.986
2.4	0	0.986
2.6	0.006	0.992
2.8	0.006	0.992
3	0.006	0.992
3.2	0.006	0.992
3.4	0.006	0.992
3.6	0.006	0.992
3.8	0.006	0.992
4	0.012	0.998
4.2	0.012	0.998
4.4	0.006	0.992
4.6	0.006	0.992
4.8	0.006	0.992
5	0.006	0.992


BR-111 RISING HEAD SLUG TEST
K = 0.05263 cm/sec
y0 = 24.64 cm
100.
10.
1.
0.
12.
24.
36.
48.
60.
Time (sec)
Displacement (cm)

BR-111 RISING HEAD TEST

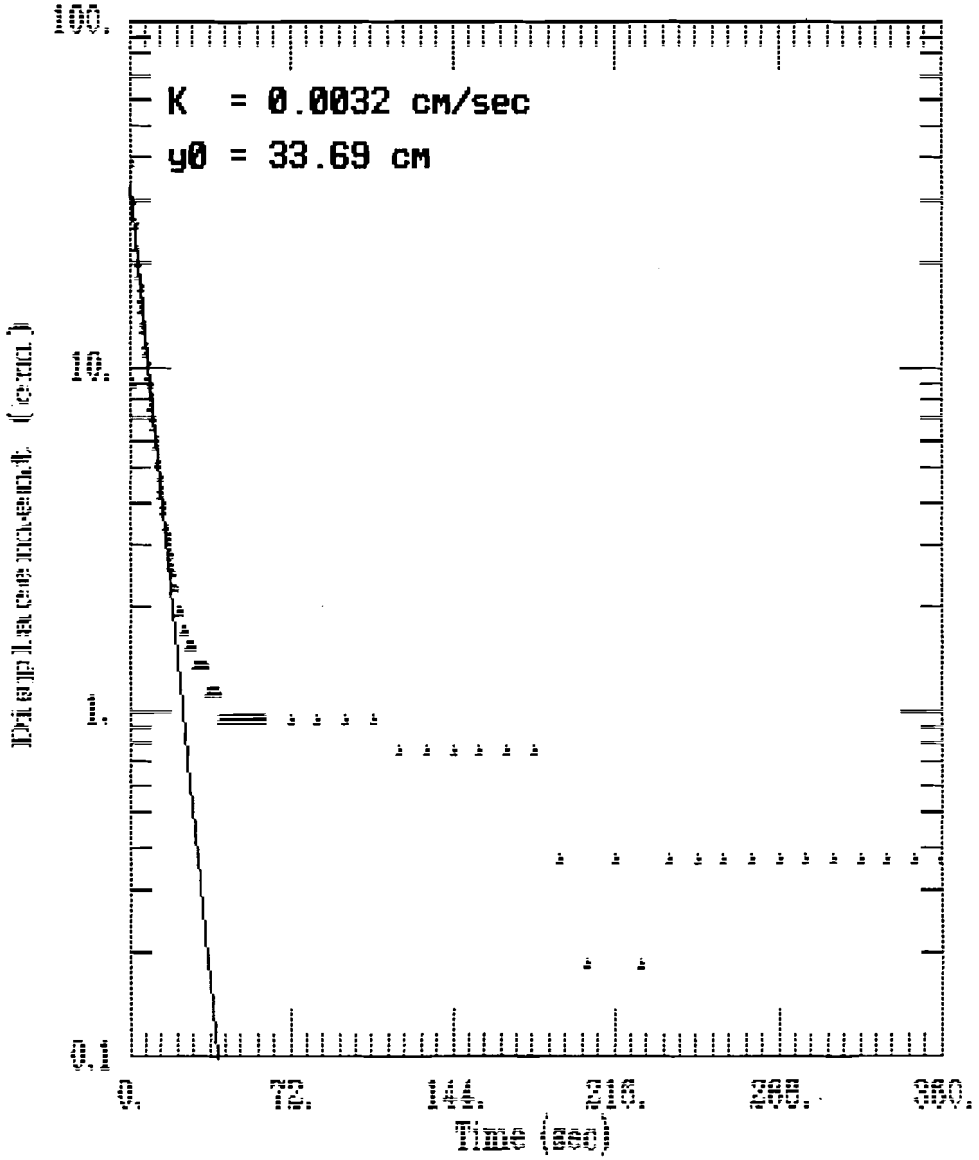
SLUG VOLUME	**0.170**	**FT3**
SLUG DISPLACEMENT	**2.05**	**FT**
WELL RADIUS	**0.16**	**FT**
SCREEN RADIUS	**0.16**	**FT**
AQUIFER THICKNESS	**18**	**FT**
SCREEN LENGTH	**18**	**FT**
WATER COLUMN HEIGHT	**18**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+0.171)
0	0.669	~~0.840~~
0.0083	0.366	~~0.537~~
0.0166	0.543	0.714
0.025	0.113	0.284
0.0333	-0.139	~~0.032~~
0.0416	-0.17	~~0.001~~
0.05	-0.107	~~0.064~~
0.0583	-0.044	0.127
0.0666	0	0.171
0.075	0.044	0.215
0.0833	0.044	0.215
0.0916	0.025	0.196
0.1	-0.012	0.159
0.1083	-0.025	0.146
0.1166	-0.025	0.146
0.125	-0.018	0.153
0.1333	-0.012	0.159
0.1416	-0.006	0.165
0.15	0	0.171
0.1583	0	0.171
0.1666	0	0.171
0.175	0	0.171
0.1833	-0.006	0.165
0.1916	-0.006	0.165
0.2	-0.006	0.165
0.2083	-0.006	0.165
0.2166	0	0.171
0.225	-0.006	0.165
0.2333	0	0.171
0.2416	0	0.171
0.25	-0.006	0.165
0.2583	0	0.171
0.2666	-0.006	0.165
0.275	-0.006	0.165

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+0.171)
0.2833	-0.006	0.165
0.2916	-0.006	0.165
0.3	0	0.171
0.3083	0	0.171
0.3166	-0.006	0.165
0.325	0	0.171
0.3333	0	0.171
0.35	-0.006	0.165
0.3666	-0.006	0.165
0.3833	-0.006	0.165
0.4	-0.006	0.165
0.4166	-0.006	0.165
0.4333	-0.006	0.165
0.45	-0.006	0.165
0.4666	0	0.171
0.4833	0	0.171
0.5	-0.006	0.165
0.5166	0	0.171
0.5333	-0.006	0.165
0.55	-0.006	0.165
0.5666	0	0.171
0.5833	-0.006	0.165
0.6	-0.006	0.165
0.6166	-0.006	0.165
0.6333	-0.006	0.165
0.65	-0.006	0.165
0.6666	-0.006	0.165
0.6833	-0.006	0.165
0.7	-0.006	0.165
0.7166	-0.006	0.165
0.7333	-0.006	0.165
0.75	-0.006	0.165
0.7666	-0.006	0.165
0.7833	-0.006	0.165

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+0.171)
0.8	-0.006	0.165
0.8166	-0.006	0.165
0.8333	-0.006	0.165
0.85	-0.006	0.165
0.8666	0	0.171
0.8833	-0.006	0.165
0.9	-0.006	0.165
0.9166	0	0.171
0.9333	0	0.171
0.95	-0.006	0.165
0.9666	-0.006	0.165
0.9833	0	0.171
1	0	0.171
1.2	0	0.171
1.4	0	0.171
1.6	0	0.171
1.8	0	0.171
2	0.006	0.177
2.2	0.006	0.177
2.4	0.006	0.177
2.6	0.006	0.177
2.8	0.006	0.177
3	0.006	0.177
3.2	0.006	0.177
3.4	0.006	0.177

BR-111D FALLING HEAD SLUG TEST



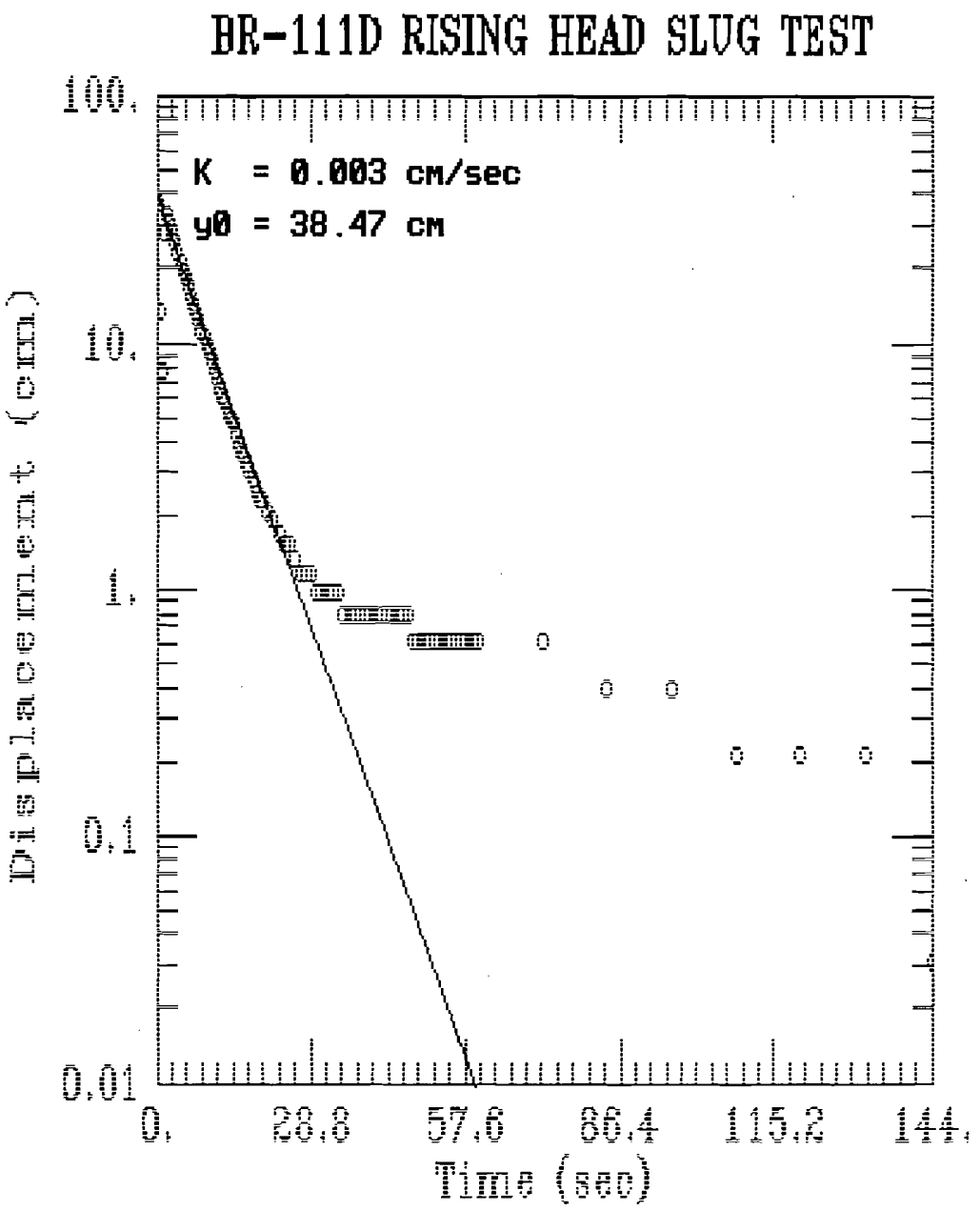
BR-111D FALLING HEAD TEST

SLUG VOLUME	**0.027**	**FT3**
SLUG DISPLACEMENT	**1.25**	**FT**
WELL RADIUS	**0.08333**	**FT**
SCREEN RADIUS(EFF.)	**0.106**	**FT**
AQUIFER THICKNESS	**48**	**FT**
SCREEN LENGTH	**23**	**FT**
WATER COLUMN HEIGHT	**48**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
0	-1.042	
0.0083	-1.206	1.206
0.0166	-1.27	1.27
0.025	-0.985	0.985
0.0333	-0.296	0.296
0.0416	-0.859	0.859
0.05	-0.72	0.72
0.0583	-0.65	0.65
0.0666	-0.6	0.6
0.075	-0.556	0.556
0.0833	-0.518	0.518
0.0916	-0.48	0.48
0.1	-0.448	0.448
0.1083	-0.417	0.417
0.1166	-0.385	0.385
0.125	-0.36	0.36
0.1333	-0.334	0.334
0.1416	-0.309	0.309
0.15	-0.29	0.29
0.1583	-0.271	0.271
0.1666	-0.252	0.252
0.175	-0.233	0.233
0.1833	-0.221	0.221
0.1916	-0.202	0.202
0.2	-0.195	0.195
0.2083	-0.176	0.176
0.2166	-0.17	0.17
0.225	-0.157	0.157
0.2333	-0.145	0.145
0.2416	-0.139	0.139
0.25	-0.132	0.132
0.2583	-0.126	0.126

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
0.2666	-0.113	0.113
0.275	-0.113	0.113
0.2833	-0.107	0.107
0.2916	-0.101	0.101
0.3	-0.094	0.094
0.3083	-0.088	0.088
0.3166	-0.088	0.088
0.325	-0.082	0.082
0.3333	-0.075	0.075
0.35	-0.075	0.075
0.3666	-0.063	0.063
0.3833	-0.063	0.063
0.4	-0.056	0.056
0.4166	-0.056	0.056
0.4333	-0.05	0.05
0.45	-0.05	0.05
0.4666	-0.05	0.05
0.4833	-0.05	0.05
0.5	-0.044	0.044
0.5166	-0.044	0.044
0.5333	-0.044	0.044
0.55	-0.044	0.044
0.5666	-0.044	0.044
0.5833	-0.037	0.037
0.6	-0.037	0.037
0.6166	-0.037	0.037
0.6333	-0.037	0.037
0.65	-0.037	0.037
0.6666	-0.037	0.037
0.6833	-0.031	0.031
0.7	-0.031	0.031
0.7166	-0.031	0.031

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
0.7333	-0.031	0.031
0.75	-0.031	0.031
0.7666	-0.031	0.031
0.7833	-0.031	0.031
0.8	-0.031	0.031
0.8166	-0.031	0.031
0.8333	-0.031	0.031
0.85	-0.031	0.031
0.8666	-0.031	0.031
0.8833	-0.031	0.031
0.9	-0.031	0.031
0.9166	-0.031	0.031
0.9333	-0.031	0.031
0.95	-0.031	0.031
0.9666	-0.031	0.031
0.9833	-0.031	0.031
1	-0.031	0.031
1.2	-0.031	0.031
1.4	-0.031	0.031
1.6	-0.031	0.031
1.8	-0.031	0.031
2	-0.025	0.025
2.2	-0.025	0.025
2.4	-0.025	0.025
2.6	-0.025	0.025
2.8	-0.025	0.025
3	-0.025	0.025
3.2	-0.012	0.012
3.4	-0.006	0.006
3.6	-0.012	0.012
3.8	-0.006	0.006
4	-0.012	0.012
4.2	-0.012	0.012
4.4	-0.012	0.012
4.6	-0.012	0.012
4.8	-0.012	0.012
5	-0.012	0.012
5.2	-0.012	0.012
5.4	-0.012	0.012
5.6	-0.012	0.012
5.8	-0.012	0.012
6	-0.012	0.012


BR-111D RISING HEAD SLUG TEST
K = 0.003 cm/sec
y0 = 38.47 cm
100.
10.
1.
0.1
0.01
Displacement (cm)
0.
28.8
57.6
86.4
115.2
144.
Time (sec)

BR-111D RISING HEAD TEST

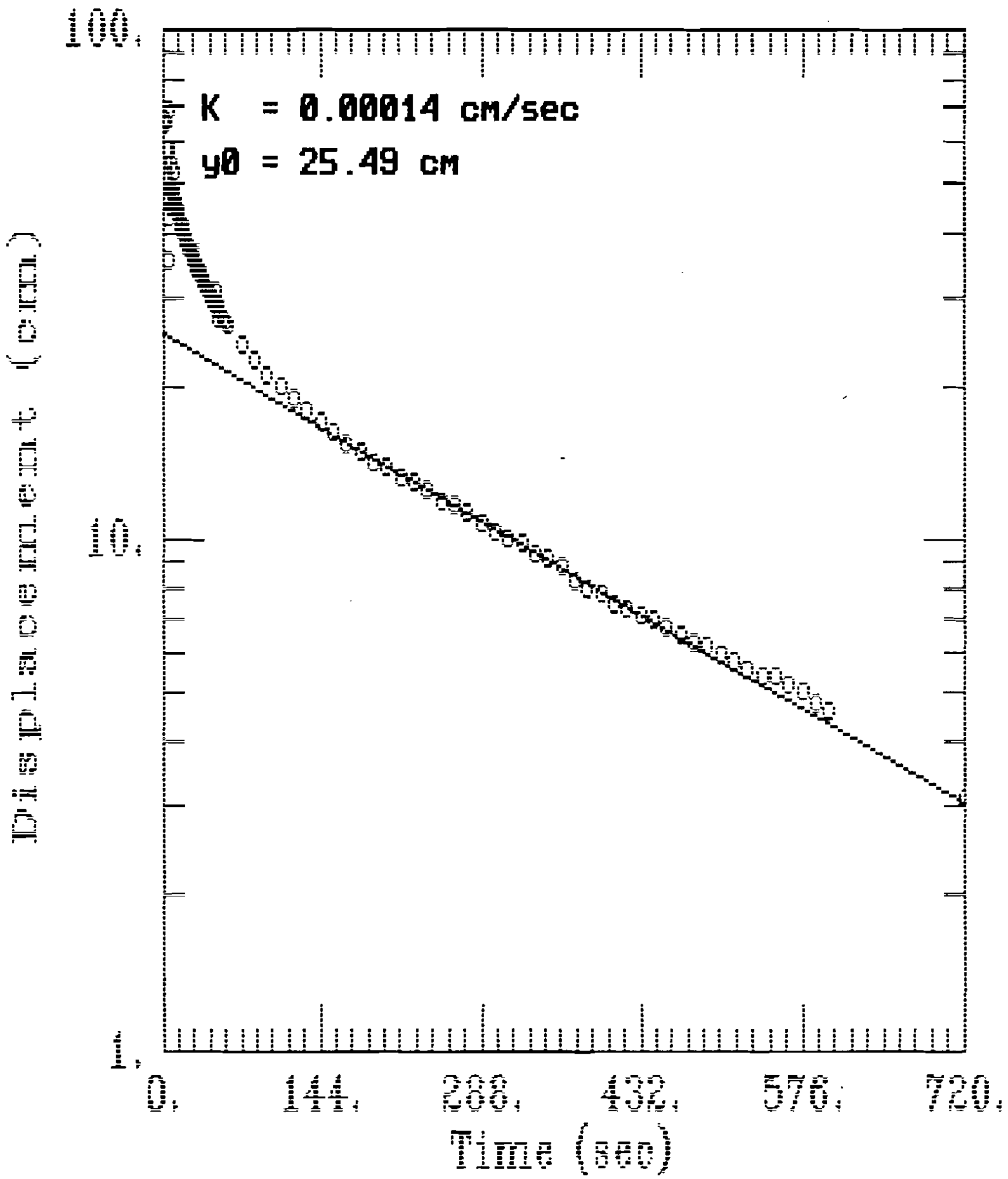
SLUG VOLUME	**0.027**	**FT3**
SLUG DISPLACEMENT	**1.25**	**FT**
WELL RADIUS	**0.08333**	**FT**
SCREEN RADIUS(EFF.)	**0.106**	**FT**
AQUIFER THICKNESS	**48**	**FT**
SCREEN LENGTH	**23**	**FT**
WATER COLUMN HEIGHT	**48**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+.038)
0	0.511	0.549
0.0083	0.398	0.436
0.0166	0.214	0.252
0.025	0.878	0.916
0.0333	1.055	1.093
0.0416	0.96	0.998
0.05	0.871	0.909
0.0583	0.796	0.834
0.0666	0.726	0.764
0.075	0.663	0.701
0.0833	0.612	0.650
0.0916	0.556	0.594
0.1	0.518	0.556
0.1083	0.473	0.511
0.1166	0.435	0.473
0.125	0.398	0.436
0.1333	0.366	0.404
0.1416	0.328	0.366
0.15	0.309	0.347
0.1583	0.284	0.322
0.1666	0.259	0.297
0.175	0.24	0.278
0.1833	0.214	0.252
0.1916	0.195	0.233
0.2	0.176	0.214
0.2083	0.164	0.202
0.2166	0.151	0.189
0.225	0.132	0.170
0.2333	0.126	0.164
0.2416	0.12	0.158
0.25	0.101	0.139
0.2583	0.088	0.126

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+.038)
0.2666	0.082	0.120
0.275	0.075	0.113
0.2833	0.069	0.107
0.2916	0.063	0.101
0.3	0.056	0.094
0.3083	0.05	0.088
0.3166	0.044	0.082
0.325	0.037	0.075
0.3333	0.037	0.075
0.35	0.031	0.069
0.3666	0.025	0.063
0.3833	0.018	0.056
0.4	0.012	0.050
0.4166	0.012	0.050
0.4333	0.006	0.044
0.45	0	0.038
0.4666	0	0.038
0.4833	0	0.038
0.5	-0.006	0.032
0.5166	-0.006	0.032
0.5333	-0.006	0.032
0.55	-0.006	0.032
0.5666	-0.006	0.032
0.5833	-0.012	0.026
0.6	-0.012	0.026
0.6166	-0.012	0.026
0.6333	-0.012	0.026
0.65	-0.012	0.026
0.6666	-0.012	0.026
0.6833	-0.012	0.026
0.7	-0.012	0.026
0.7166	-0.012	0.026

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+.038)
0.7333	-0.012	0.026
0.75	-0.012	0.026
0.7666	-0.012	0.026
0.7833	-0.012	0.026
0.8	-0.018	0.020
0.8166	-0.018	0.020
0.8333	-0.018	0.020
0.85	-0.018	0.020
0.8666	-0.018	0.020
0.8833	-0.018	0.020
0.9	-0.018	0.020
0.9166	-0.018	0.020
0.9333	-0.018	0.020
0.95	-0.018	0.020
0.9666	-0.018	0.020
0.9833	-0.018	0.020
1	-0.018	0.020
1.2	-0.018	0.020
1.4	-0.025	0.013
1.6	-0.025	0.013
1.8	-0.031	0.007
2	-0.031	0.007
2.2	-0.031	0.007
2.4	-0.037	0.001

BR-112A FALLING HEAD SLUG TEST



BR-112A FALLING HEAD TEST

SLUG VOLUME	**0.170**	**FT3**
SLUG DISPLACEMENT	**2.05**	**FT**
WELL RADIUS	**0.16**	**FT**
SCREEN RADIUS	**0.16**	**FT**
AQUIFER THICKNESS	**10.4**	**FT**
SCREEN LENGTH	**27.5**	**FT**
WATER COLUMN HEIGHT	**10.4**	**FT**

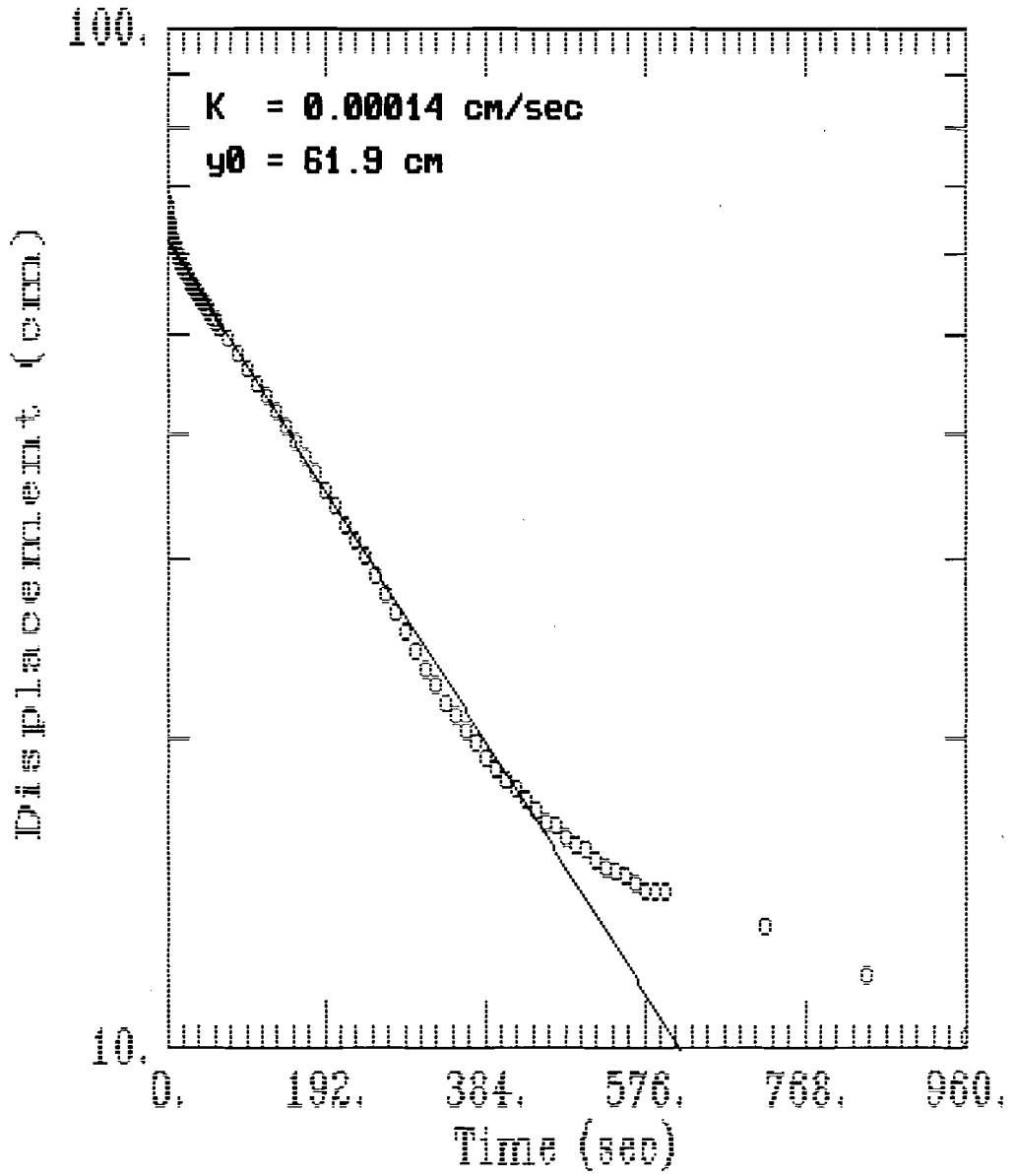
TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
0	-0.398	~~0.398~~
0.0083	-0.391	~~0.391~~
0.0166	-0.884	~~0.884~~
0.025	-1.598	~~1.598~~
0.0333	-2.129	2.129
0.0416	-1.68	1.680
0.05	-1.794	1.794
0.0583	-2.154	2.154
0.0666	-1.901	1.901
0.075	-1.168	1.168
0.0833	-2.268	2.268
0.0916	-1.497	1.497
0.1	-1.409	1.409
0.1083	-1.908	1.908
0.1166	-1.598	1.598
0.125	-1.794	1.794
0.1333	-1.623	1.623
0.1416	-1.484	1.484
0.15	-1.718	1.718
0.1583	-1.566	1.566
0.1666	-1.503	1.503
0.175	-1.579	1.579
0.1833	-1.535	1.535
0.1916	-1.484	1.484
0.2	-1.497	1.497
0.2083	-1.491	1.491
0.2166	-1.465	1.465
0.225	-1.453	1.453
0.2333	-1.44	1.440
0.2416	-1.427	1.427
0.25	-1.415	1.415
0.2583	-1.402	1.402
0.2666	-1.39	1.390
0.275	-1.377	1.377

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
0.2833	-1.371	1.371
0.2916	-1.352	1.352
0.3	-1.352	1.352
0.3083	-1.339	1.339
0.3166	-1.326	1.326
0.325	-1.32	1.320
0.3333	-1.307	1.307
0.35	-1.288	1.288
0.3666	-1.27	1.270
0.3833	-1.251	1.251
0.4	-1.232	1.232
0.4166	-1.219	1.219
0.4333	-1.2	1.200
0.45	-1.187	1.187
0.4666	-1.175	1.175
0.4833	-1.156	1.156
0.5	-1.143	1.143
0.5166	-1.124	1.124
0.5333	-1.112	1.112
0.55	-1.099	1.099
0.5666	-1.093	1.093
0.5833	-1.08	1.080
0.6	-1.067	1.067
0.6166	-1.055	1.055
0.6333	-1.042	1.042
0.65	-1.029	1.029
0.6666	-1.023	1.023
0.6833	-1.01	1.010
0.7	-1.004	1.004
0.7166	-0.992	0.992
0.7333	-0.985	0.985
0.75	-0.973	0.973
0.7666	-0.966	0.966
0.7833	-0.96	0.960

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
0.8	-0.954	0.954
0.8166	-1.004	1.004
0.8333	-0.89	0.890
0.85	-0.941	0.941
0.8666	-0.916	0.916
0.8833	-0.909	0.909
0.9	-0.903	0.903
0.9166	-0.897	0.897
0.9333	-0.89	0.890
0.95	-0.884	0.884
0.9666	-0.878	0.878
0.9833	-0.871	0.871
1	-0.865	0.865
1.2	-0.796	0.796
1.4	-0.745	0.745
1.6	-0.695	0.695
1.8	-0.657	0.657
2	-0.619	0.619
2.2	-0.587	0.587
2.4	-0.562	0.562
2.6	-0.53	0.530
2.8	-0.511	0.511
3	-0.486	0.486
3.2	-0.467	0.467
3.4	-0.454	0.454
3.6	-0.435	0.435
3.8	-0.423	0.423
4	-0.41	0.410
4.2	-0.391	0.391
4.4	-0.385	0.385
4.6	-0.372	0.372
4.8	-0.353	0.353
5	-0.341	0.341
5.2	-0.328	0.328
5.4	-0.322	0.322
5.6	-0.309	0.309
5.8	-0.303	0.303
6	-0.29	0.290
6.2	-0.271	0.271
6.4	-0.265	0.265
6.6	-0.259	0.259
6.8	-0.246	0.246
7	-0.24	0.240
7.2	-0.233	0.233
7.4	-0.227	0.227

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
7.6	-0.221	0.221
7.8	-0.214	0.214
8	-0.208	0.208
8.2	-0.202	0.202
8.4	-0.195	0.195
8.6	-0.189	0.189
8.8	-0.183	0.183
9	-0.176	0.176
9.2	-0.176	0.176
9.4	-0.17	0.170
9.6	-0.164	0.164
9.8	-0.157	0.157
10	-0.151	0.151
12	-0.101	0.101

BR-112A RISING HEAD SLUG TEST



BR-112A RISING HEAD TEST

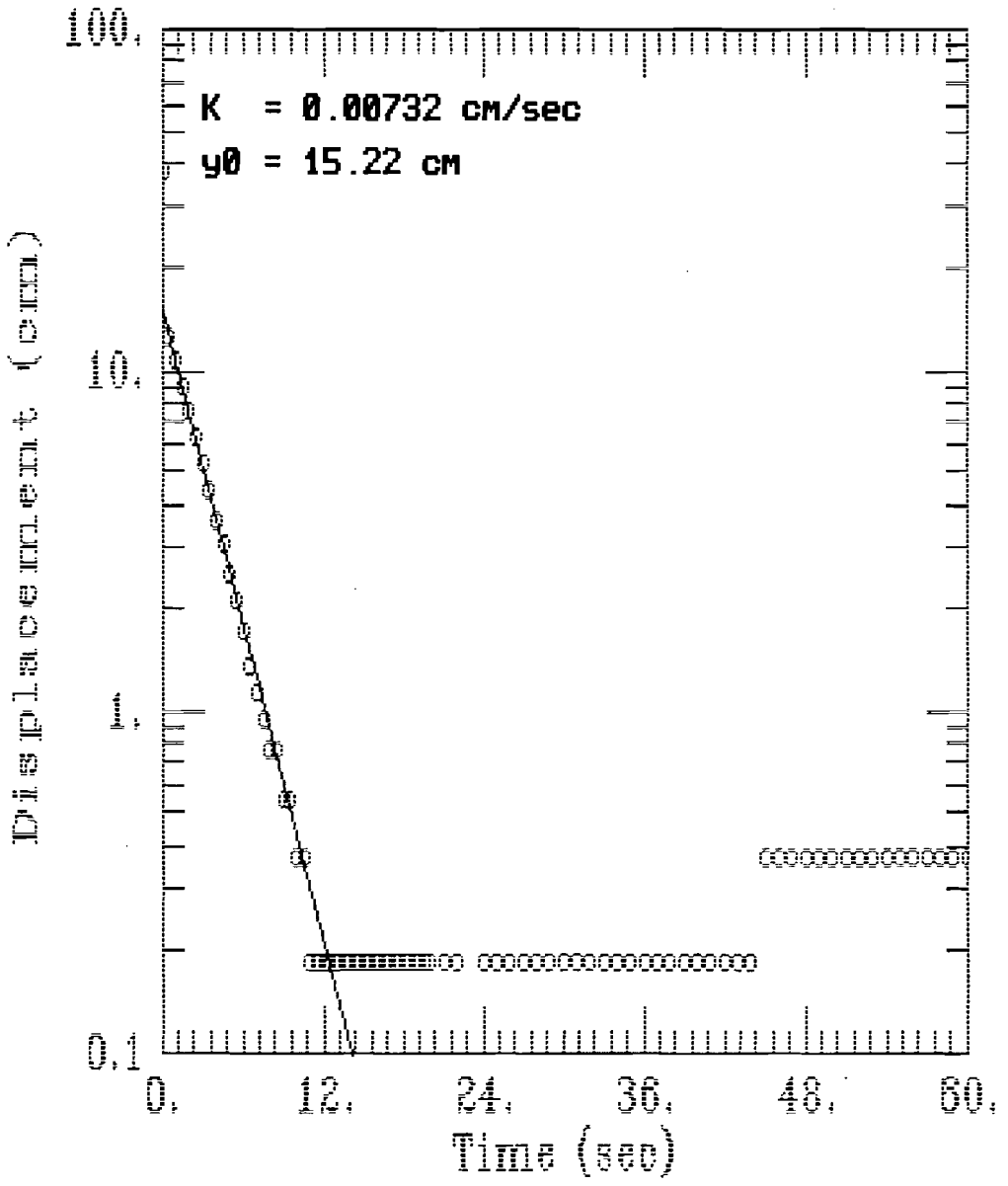
SLUG VOLUME	**0.170**	**FT3**
SLUG DISPLACEMENT	**2.05**	**FT**
WELL RADIUS	**0.16**	**FT**
SCREEN RADIUS	**0.16**	**FT**
AQUIFER THICKNESS	**10.4**	**FT**
SCREEN LENGTH	**27.5**	**FT**
WATER COLUMN HEIGHT	**10.4**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET)
0	0.012	~~0.012~~
0.0083	1.592	~~1.592~~
0.0166	0.827	~~0.827~~
0.025	2.192	2.192
0.0333	2.16	2.16
0.0416	2.135	2.135
0.05	2.11	2.11
0.0583	2.097	2.097
0.0666	2.085	2.085
0.075	2.072	2.072
0.0833	2.078	2.078
0.0916	2.059	2.059
0.1	2.04	2.04
0.1083	2.034	2.034
0.1166	2.034	2.034
0.125	2.028	2.028
0.1333	2.015	2.015
0.1416	2.009	2.009
0.15	2.009	2.009
0.1583	2.002	2.002
0.1666	1.996	1.996
0.175	1.99	1.99
0.1833	1.984	1.984
0.1916	1.977	1.977
0.2	1.971	1.971
0.2083	1.965	1.965
0.2166	1.965	1.965
0.225	1.958	1.958
0.2333	1.946	1.946
0.2416	1.946	1.946
0.25	1.939	1.939
0.2583	1.933	1.933
0.2666	1.933	1.933
0.275	1.927	1.927
0.2833	1.92	1.92
0.2916	1.92	1.92
0.3	1.914	1.914
0.3083	1.908	1.908
0.3166	1.908	1.908
0.325	1.908	1.908
0.3333	1.901	1.901
0.35	1.895	1.895
0.3666	1.889	1.889
0.3833	1.882	1.882
0.4	1.87	1.87
0.4166	1.863	1.863
0.4333	1.863	1.863
0.45	1.851	1.851
0.4666	1.845	1.845
0.4833	1.838	1.838
0.5	1.832	1.832
0.5166	1.826	1.826
0.5333	1.819	1.819
0.55	1.819	1.819
0.5666	1.813	1.813
0.5833	1.807	1.807
0.6	1.8	1.8
0.6166	1.794	1.794
0.6333	1.788	1.788
0.65	1.781	1.781
0.6666	1.775	1.775
0.6833	1.775	1.775
0.7	1.769	1.769
0.7166	1.762	1.762
0.7333	1.756	1.756
0.75	1.75	1.75
0.7666	1.743	1.743
0.7833	1.743	1.743

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET)
0.8	1.737	1.737
0.8166	1.731	1.731
0.8333	1.724	1.724
0.85	1.718	1.718
0.8666	1.718	1.718
0.8833	1.712	1.712
0.9	1.705	1.705
0.9166	1.705	1.705
0.9333	1.693	1.693
0.95	1.693	1.693
0.9666	1.687	1.687
0.9833	1.68	1.68
1	1.674	1.674
1.2	1.623	1.623
1.4	1.573	1.573
1.6	1.522	1.522
1.8	1.472	1.472
2	1.427	1.427
2.2	1.383	1.383
2.4	1.339	1.339
2.6	1.288	1.288
2.8	1.244	1.244
3	1.2	1.2
3.2	1.156	1.156
3.4	1.112	1.112
3.6	1.067	1.067
3.8	1.029	1.029
4	0.992	0.992
4.2	0.954	0.954
4.4	0.909	0.909
4.6	0.871	0.871
4.8	0.834	0.834
5	0.802	0.802
5.2	0.77	0.77
5.4	0.739	0.739
5.6	0.713	0.713
5.8	0.695	0.695
6	0.669	0.669
6.2	0.65	0.65
6.4	0.631	0.631
6.6	0.612	0.612
6.8	0.6	0.6
7	0.587	0.587

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET)
7.2	0.574	0.574
7.4	0.556	0.556
7.6	0.543	0.543
7.8	0.537	0.537
8	0.524	0.524
8.2	0.518	0.518
8.4	0.511	0.511
8.6	0.499	0.499
8.8	0.492	0.492
9	0.486	0.486
9.2	0.48	0.48
9.4	0.473	0.473
9.6	0.467	0.467
9.8	0.467	0.467
10	0.467	0.467
12	0.429	0.429
14	0.385	0.385
16	0.334	0.334

BR-112D FALLING HEAD SLUG TEST



BR-112D FALLING HEAD TEST

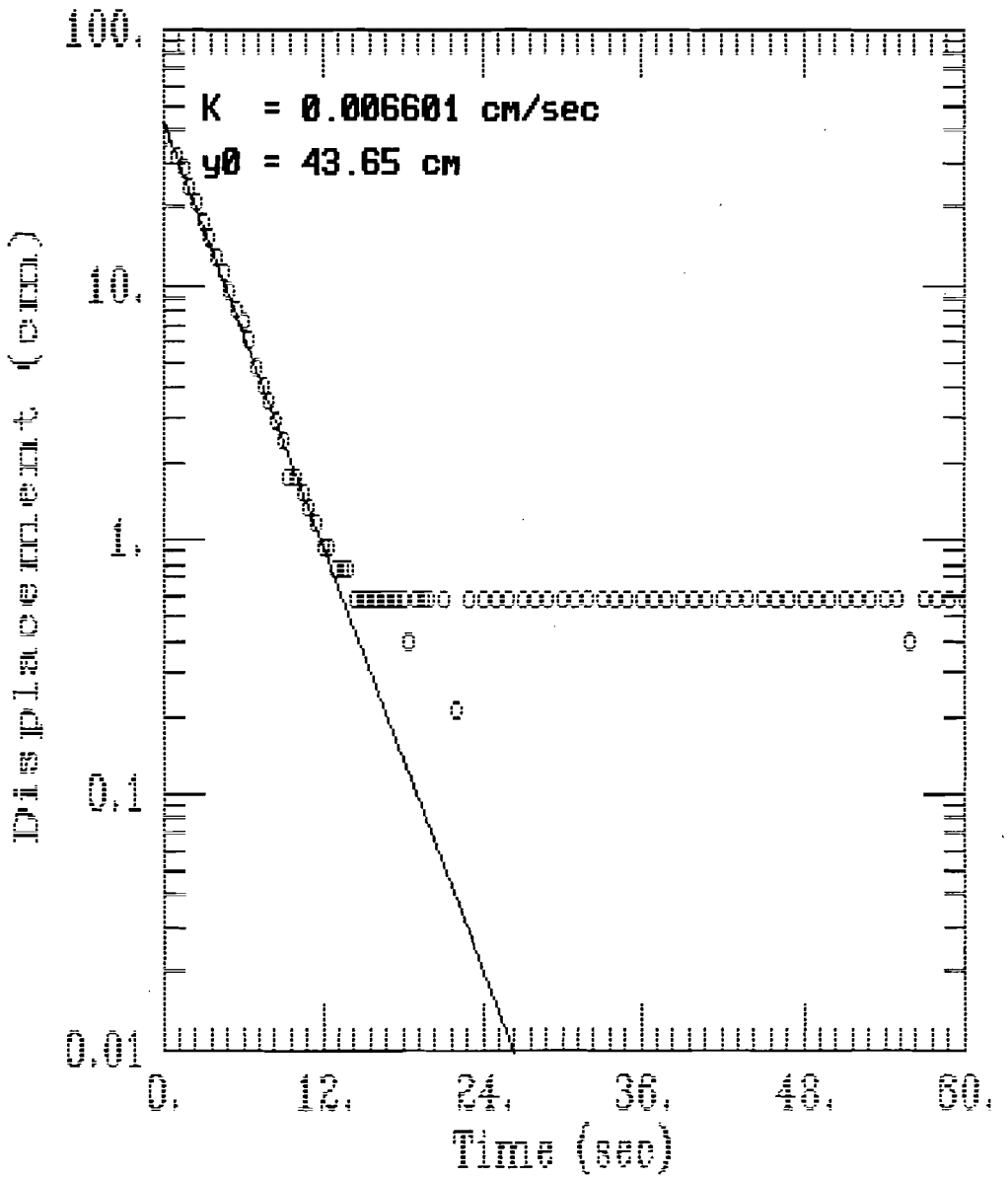
SLUG VOLUME	**0.03**	**FT3**
SLUG DISPLACEMENT	**1.25**	**FT**
WELL RADIUS	**0.08333**	**FT**
SCREEN RADIUS	**0.106**	**FT**
AQUIFER THICKNESS	**34.5**	**FT**
SCREEN LENGTH	**23**	**FT**
WATER COLUMN HEIGHT	**34.5**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
0	-0.492	0.492
0.0083	-0.41	0.410
0.0166	-0.353	0.353
0.025	-0.296	0.296
0.0333	-0.252	0.252
0.0416	-0.208	0.208
0.05	-0.176	0.176
0.0583	-0.145	0.145
0.0666	-0.12	0.120
0.075	-0.101	0.101
0.0833	-0.082	0.082
0.0916	-0.069	0.069
0.1	-0.056	0.056
0.1083	-0.044	0.044
0.1166	-0.037	0.037
0.125	-0.031	0.031
0.1333	-0.025	0.025
0.1416	-0.025	0.025
0.15	-0.018	0.018
0.1583	-0.018	0.018
0.1666	-0.012	0.012
0.175	-0.012	0.012
0.1833	-0.006	0.006
0.1916	-0.006	0.006
0.2	-0.006	0.006
0.2083	-0.006	0.006
0.2166	-0.006	0.006
0.225	-0.006	0.006
0.2333	-0.006	0.006
0.2416	-0.006	0.006
0.25	-0.006	0.006

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
0.2583	-0.006	0.006
0.2666	-0.006	0.006
0.275	-0.006	0.006
0.2833	-0.006	0.006
0.2916	-0.006	0.006
0.3	-0.006	0.006
0.3083	-0.006	0.006
0.3166	-0.006	0.006
0.325	-0.006	0.006
0.3333	-0.006	0.006
0.35	-0.006	0.006
0.3666	-0.006	0.006
0.3833	0	0.000
0.4	-0.006	0.006
0.4166	-0.006	0.006
0.4333	-0.006	0.006
0.45	-0.006	0.006
0.4666	-0.006	0.006
0.4833	-0.006	0.006
0.5	-0.006	0.006
0.5166	-0.006	0.006
0.5333	-0.006	0.006
0.55	-0.006	0.006
0.5666	-0.006	0.006
0.5833	-0.006	0.006
0.6	-0.006	0.006
0.6166	-0.006	0.006
0.6333	-0.006	0.006
0.65	-0.006	0.006
0.6666	-0.006	0.006
0.6833	-0.006	0.006

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (ABS)
0.7	-0.006	0.006
0.7166	-0.006	0.006
0.7333	-0.006	0.006
0.75	-0.012	0.012
0.7666	-0.012	0.012
0.7833	-0.012	0.012
0.8	-0.012	0.012
0.8166	-0.012	0.012
0.8333	-0.012	0.012
0.85	-0.012	0.012
0.8666	-0.012	0.012
0.8833	-0.012	0.012
0.9	-0.012	0.012
0.9166	-0.012	0.012
0.9333	-0.012	0.012
0.95	-0.012	0.012
0.9666	-0.012	0.012
0.9833	-0.012	0.012
1	-0.012	0.012
1.2	-0.012	0.012
1.4	-0.012	0.012
1.6	-0.012	0.012
1.8	-0.012	0.012
2	-0.012	0.012
2.2	-0.012	0.012
2.4	-0.006	0.006
2.6	-0.006	0.006
2.8	-0.006	0.006
3	-0.006	0.006
3.2	-0.012	0.012
3.4	-0.006	0.006
3.6	-0.012	0.012
3.8	-0.006	0.006
4	-0.012	0.012
4.2	-0.012	0.012
4.4	-0.012	0.012
4.6	-0.012	0.012
4.8	-0.012	0.012
5	-0.012	0.012
5.2	-0.012	0.012
5.4	-0.012	0.012
5.6	-0.012	0.012
5.8	-0.012	0.012
6	-0.012	0.012

BR-112D RISING HEAD SLUG TEST



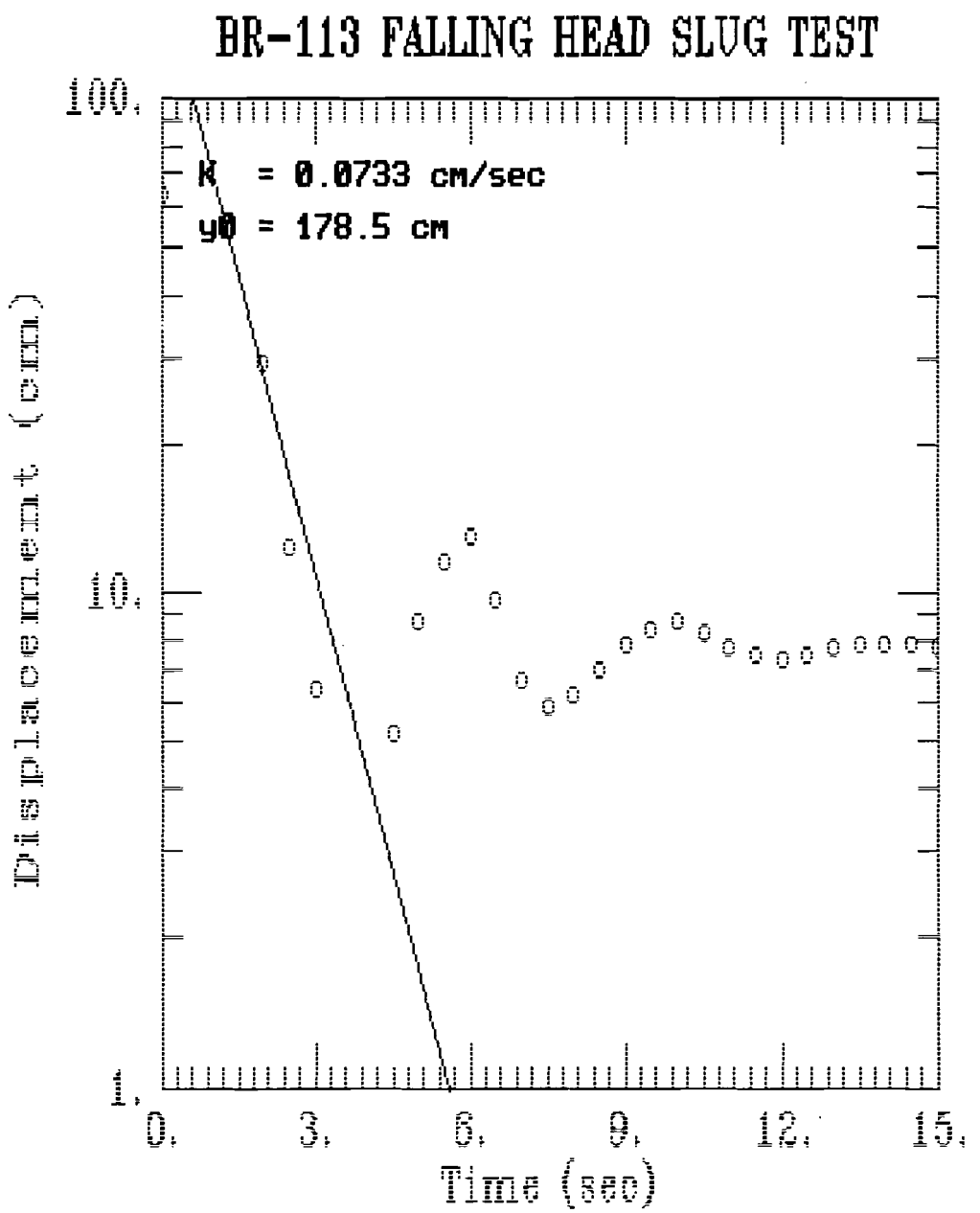
BR-112D RISING HEAD TEST

SLUG VOLUME	**0.03**	**FT3**
SLUG DISPLACEMENT	**1.25**	**FT**
WELL RADIUS	**0.08333**	**FT**
SCREEN RADIUS	**0.106**	**FT**
AQUIFER THICKNESS	**34.5**	**FT**
SCREEN LENGTH	**23**	**FT**
WATER COLUMN HEIGHT	**34.5**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+.013)
0	0.966	~~0.979~~
0.0083	0.492	~~0.505~~
0.0166	1.048	1.061
0.025	0.922	0.935
0.0333	0.789	0.802
0.0416	0.676	0.689
0.05	0.568	0.581
0.0583	0.492	0.505
0.0666	0.417	0.430
0.075	0.353	0.366
0.0833	0.296	0.309
0.0916	0.252	0.265
0.1	0.221	0.234
0.1083	0.183	0.196
0.1166	0.145	0.158
0.125	0.12	0.133
0.1333	0.101	0.114
0.1416	0.082	0.095
0.15	0.069	0.082
0.1583	0.044	0.057
0.1666	0.044	0.057
0.175	0.037	0.050
0.1833	0.031	0.044
0.1916	0.025	0.038
0.2	0.018	0.031
0.2083	0.018	0.031
0.2166	0.012	0.025
0.225	0.012	0.025
0.2333	0.012	0.025
0.2416	0.006	0.019
0.25	0.006	0.019
0.2583	0.006	0.019
0.2666	0.006	0.019

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+.013)
0.275	0.006	0.019
0.2833	0.006	0.019
0.2916	0.006	0.019
0.3	0.006	0.019
0.3083	0	0.013
0.3166	0.006	0.019
0.325	0.006	0.019
0.3333	0.006	0.019
0.35	0.006	0.019
0.3666	-0.006	0.007
0.3833	0.006	0.019
0.4	0.006	0.019
0.4166	0.006	0.019
0.4333	0.006	0.019
0.45	0.006	0.019
0.4666	0.006	0.019
0.4833	0.006	0.019
0.5	0.006	0.019
0.5166	0.006	0.019
0.5333	0.006	0.019
0.55	0.006	0.019
0.5666	0.006	0.019
0.5833	0.006	0.019
0.6	0.006	0.019
0.6166	0.006	0.019
0.6333	0.006	0.019
0.65	0.006	0.019
0.6666	0.006	0.019
0.6833	0.006	0.019
0.7	0.006	0.019
0.7166	0.006	0.019
0.7333	0.006	0.019
0.75	0.006	0.019

TIME (MIN)	AS MEAS (FEET)	PLOTTED (FEET) (+.013)
0.7666	0.006	0.019
0.7833	0.006	0.019
0.8	0.006	0.019
0.8166	0.006	0.019
0.8333	0.006	0.019
0.85	0.006	0.019
0.8666	0.006	0.019
0.8833	0.006	0.019
0.9	0.006	0.019
0.9166	0.006	0.019
0.9333	0	0.013
0.95	0.006	0.019
0.9666	0.006	0.019
0.9833	0.006	0.019
1	0.006	0.019
1.2	0	0.013
1.4	0	0.013
1.6	0	0.013
1.8	0	0.013
2	0	0.013
2.2	0	0.013
2.4	0	0.013
2.6	-0.006	0.007
2.8	-0.006	0.007
3	-0.006	0.007
3.2	-0.012	0.001
3.4	-0.006	0.007
3.6	-0.012	0.001
3.8	-0.006	0.007
4	-0.012	0.001
4.2	-0.012	0.001
4.4	-0.012	0.001
4.6	-0.012	0.001
4.8	-0.012	0.001
5	-0.012	0.001
5.2	-0.012	0.001
5.4	-0.012	0.001
5.6	-0.012	0.001
5.8	-0.012	0.001
6	-0.012	0.001


BR-113 FALLING HEAD SLUG TEST
K = 0.0733 cm/sec
y0 = 178.5 cm
100.
10.
1.
0.
3.
6.
9.
12.
15.
Displacement (cm)
Time (sec)

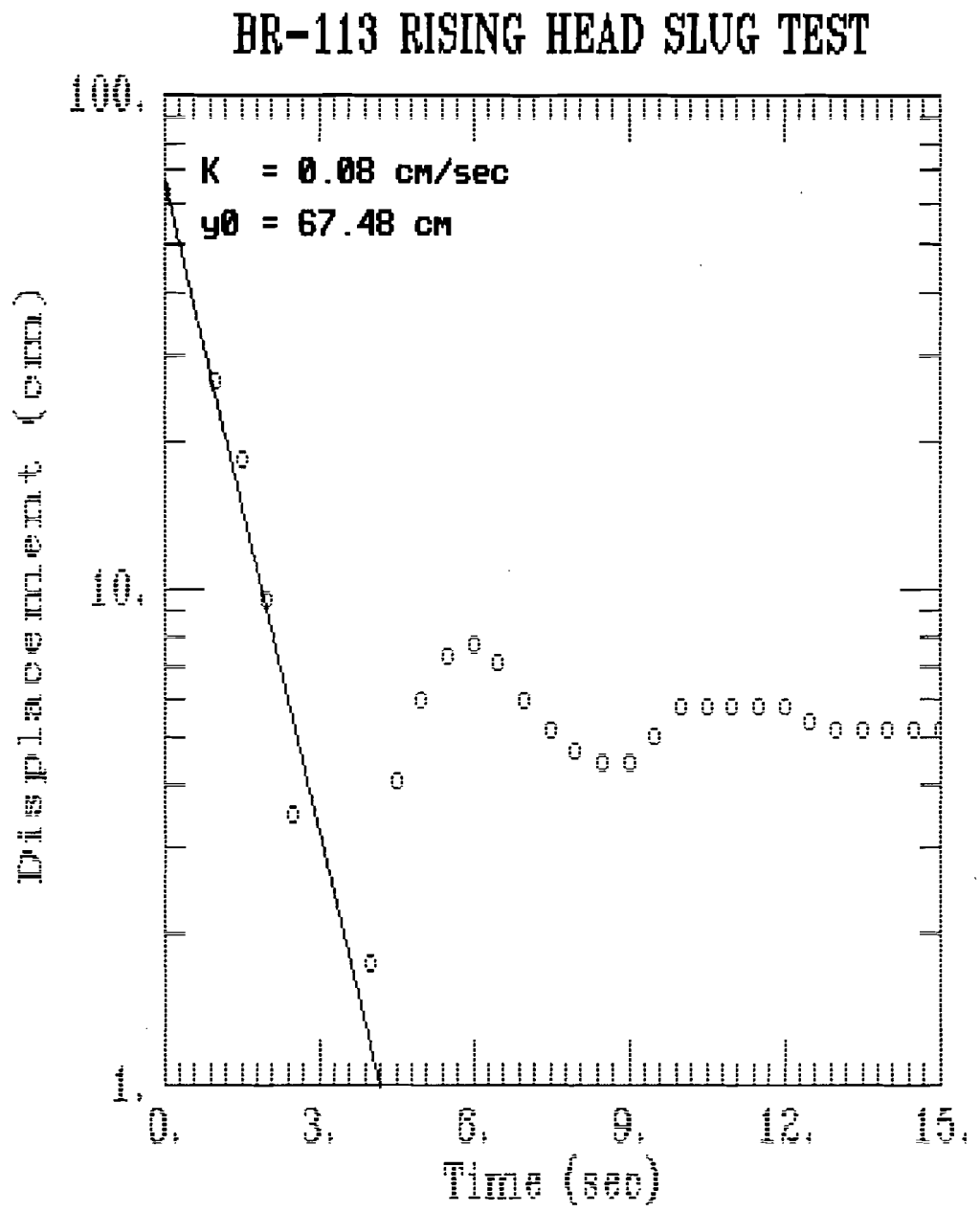
BR-113 FALLING HEAD TEST

SLUG VOLUME	**0.170**	**FT3**
SLUG DISPLACEMENT	**2.05**	**FT**
WELL RADIUS	**0.16**	**FT**
SCREEN RADIUS	**0.16**	**FT**
AQUIFER THICKNESS	**18**	**FT**
SCREEN LENGTH	**18**	**FT**
WATER COLUMN HEIGHT	**18**	**FT**

TIME (MIN)	AS MEAS (FEET)	INVERT (FEET)	PLOTTED FEET (+0.241)
0	-0.006	0.006	~~0.247~~
0.0083	-0.006	0.006	~~0.247~~
0.0166	-0.644	0.644	~~0.885~~
0.025	-0.631	0.631	~~0.872~~
0.0333	-0.72	0.720	0.961
0.0416	-0.164	0.164	0.405
0.05	0.031	-0.031	0.210
0.0583	0.24	-0.240	~~0.001~~
0.0666	0.202	-0.202	~~0.039~~
0.075	0.069	-0.069	0.172
0.0833	-0.044	0.044	0.285
0.0916	-0.139	0.139	0.380
0.1	-0.189	0.189	0.430
0.1083	-0.075	0.075	0.316
0.1166	0.025	-0.025	0.216
0.125	0.05	-0.050	0.191
0.1333	0.037	-0.037	0.204
0.1416	0.012	-0.012	0.229
0.15	-0.018	0.018	0.259
0.1583	-0.037	0.037	0.278
0.1666	-0.044	0.044	0.285
0.175	-0.031	0.031	0.272
0.1833	-0.012	0.012	0.253
0.1916	-0.006	0.006	0.247
0.2	0	0.000	0.241
0.2083	-0.006	0.006	0.247
0.2166	-0.012	0.012	0.253
0.225	-0.018	0.018	0.259
0.2333	-0.018	0.018	0.259
0.2416	-0.018	0.018	0.259
0.25	-0.012	0.012	0.253
0.2583	-0.012	0.012	0.253
0.2666	-0.012	0.012	0.253
0.275	-0.012	0.012	0.253

TIME (MIN)	AS MEAS (FEET)	INVERT (FEET)	PLOTTED FEET (+0.241)
0.2833	-0.012	0.012	0.253
0.2916	-0.012	0.012	0.253
0.3	-0.012	0.012	0.253
0.3083	-0.018	0.018	0.259
0.3166	-0.012	0.012	0.253
0.325	-0.012	0.012	0.253
0.3333	-0.012	0.012	0.253
0.35	-0.012	0.012	0.253
0.3666	-0.012	0.012	0.253
0.3833	-0.012	0.012	0.253
0.4	-0.012	0.012	0.253
0.4166	-0.012	0.012	0.253
0.4333	-0.012	0.012	0.253
0.45	-0.012	0.012	0.253
0.4666	-0.012	0.012	0.253
0.4833	-0.012	0.012	0.253
0.5	-0.006	0.006	0.247
0.5166	-0.012	0.012	0.253
0.5333	-0.012	0.012	0.253
0.55	-0.012	0.012	0.253
0.5666	-0.012	0.012	0.253
0.5833	-0.012	0.012	0.253
0.6	-0.012	0.012	0.253
0.6166	-0.006	0.006	0.247
0.6333	-0.006	0.006	0.247
0.65	-0.012	0.012	0.253
0.6666	-0.006	0.006	0.247
0.6833	-0.006	0.006	0.247
0.7	-0.006	0.006	0.247
0.7166	-0.006	0.006	0.247
0.7333	-0.012	0.012	0.253
0.75	-0.006	0.006	0.247
0.7666	-0.006	0.006	0.247
0.7833	-0.012	0.012	0.253

TIME (MIN)	AS MEAS (FEET)	INVERT (FEET)	PLOTTED FEET (+0.241)
0.8	-0.006	0.006	0.247
0.8166	-0.006	0.006	0.247
0.8333	-0.006	0.006	0.247
0.85	-0.006	0.006	0.247
0.8666	-0.006	0.006	0.247
0.8833	-0.006	0.006	0.247
0.9	-0.012	0.012	0.253
0.9166	-0.006	0.006	0.247
0.9333	-0.006	0.006	0.247
0.95	-0.006	0.006	0.247
0.9666	-0.006	0.006	0.247
0.9833	-0.006	0.006	0.247
1	-0.012	0.012	0.253
1.2	-0.012	0.012	0.253
1.4	-0.012	0.012	0.253
1.6	-0.012	0.012	0.253
1.8	-0.006	0.006	0.247
2	-0.006	0.006	0.247
2.2	-0.006	0.006	0.247
2.4	-0.006	0.006	0.247
2.6	-0.012	0.012	0.253
2.8	-0.012	0.012	0.253
3	-0.012	0.012	0.253
3.2	-0.012	0.012	0.253


BR-113 RISING HEAD SLUG TEST
K = 0.08 cm/sec
y0 = 67.48 cm
100.
10.
1.
0.
3.
6.
9.
12.
15.
Time (sec)
Displacement (cm)

BR-113 RISING HEAD TEST

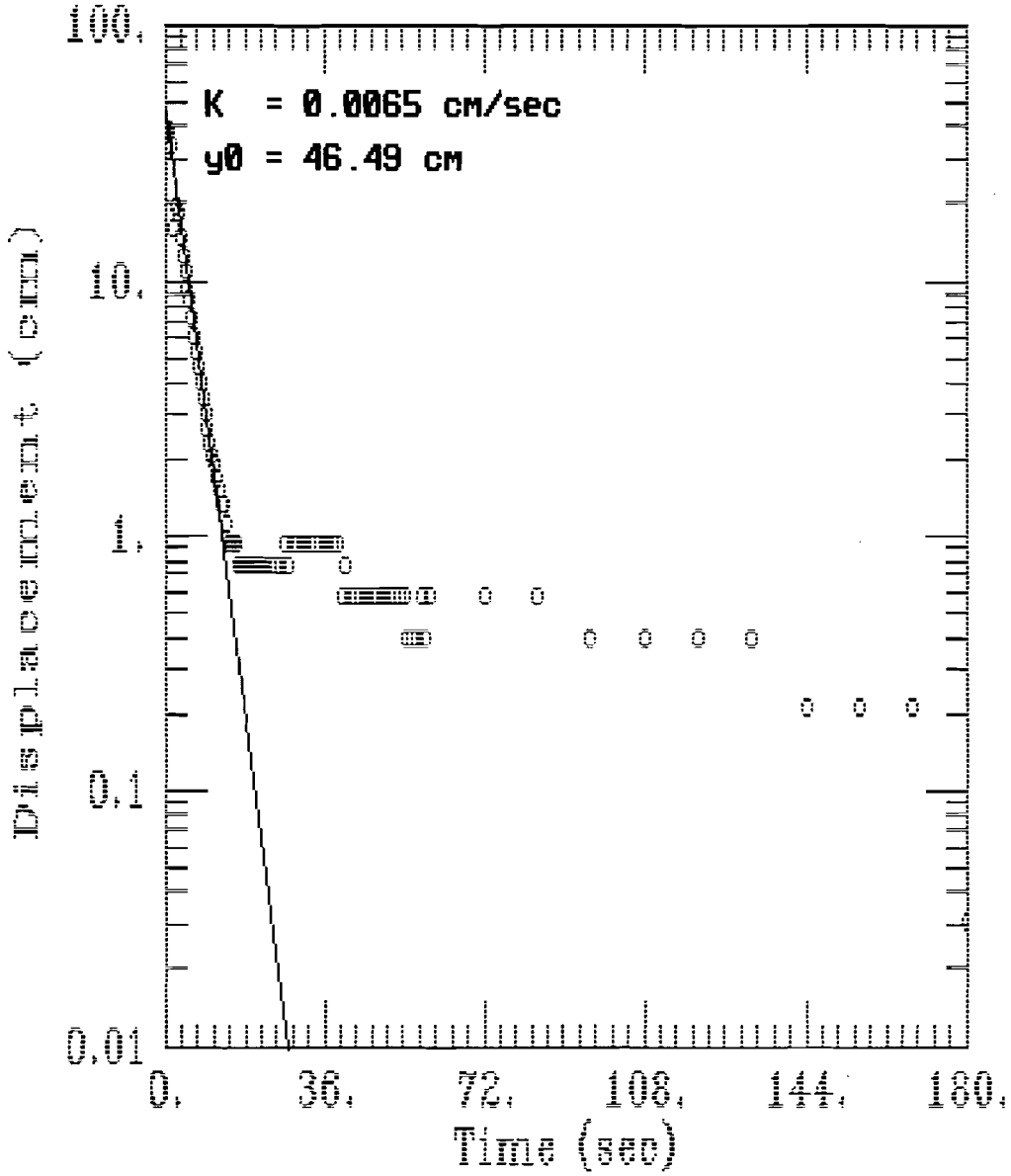
SLUG VOLUME	**0.170**	**FT3**
SLUG DISPLACEMENT	**2.05**	**FT**
WELL RADIUS	**0.16**	**FT**
SCREEN RADIUS	**0.16**	**FT**
AQUIFER THICKNESS	**18**	**FT**
SCREEN LENGTH	**18**	**FT**
WATER COLUMN HEIGHT	**18**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED FEET (+0.165)
0	0.385	~~0.550~~
0.0083	0.669	~~0.834~~
0.0166	0.707	0.872
0.025	0.442	0.607
0.0333	0.145	0.310
0.0416	-0.05	0.115
0.05	-0.145	~~0.020~~
0.0583	-0.164	~~0.001~~
0.0666	-0.107	0.058
0.075	-0.031	0.134
0.0833	0.031	0.196
0.0916	0.075	0.240
0.1	0.088	0.253
0.1083	0.069	0.234
0.1166	0.031	0.196
0.125	0.006	0.171
0.1333	-0.012	0.153
0.1416	-0.018	0.147
0.15	-0.018	0.147
0.1583	0	0.165
0.1666	0.025	0.190
0.175	0.025	0.190
0.1833	0.025	0.190
0.1916	0.025	0.190
0.2	0.025	0.190
0.2083	0.012	0.177
0.2166	0.006	0.171
0.225	0.006	0.171
0.2333	0.006	0.171
0.2416	0.006	0.171
0.25	0.006	0.171
0.2583	0.006	0.171
0.2666	0.012	0.177
0.275	0.012	0.177

TIME (MIN)	AS MEAS (FEET)	PLOTTED FEET (+0.165)
0.2833	0.012	0.177
0.2916	0.006	0.171
0.3	0.006	0.171
0.3083	0.006	0.171
0.3166	0.006	0.171
0.325	0.006	0.171
0.3333	0.006	0.171
0.35	0.006	0.171
0.3666	0.006	0.171
0.3833	0.006	0.171
0.4	0.006	0.171
0.4166	0.006	0.171
0.4333	0.006	0.171
0.45	0.006	0.171
0.4666	0.006	0.171
0.4833	0.006	0.171
0.5	0.006	0.171
0.5166	0.006	0.171
0.5333	0.006	0.171
0.55	0.006	0.171
0.5666	0.006	0.171
0.5833	0.006	0.171
0.6	0.006	0.171
0.6166	0.006	0.171
0.6333	0.006	0.171
0.65	0.006	0.171
0.6666	0.006	0.171
0.6833	0	0.165
0.7	0.006	0.171
0.7166	0	0.165
0.7333	0.006	0.171
0.75	0.006	0.171
0.7666	0.006	0.171
0.7833	0.006	0.171

TIME (MIN)	AS MEAS (FEET)	PLOTTED FEET (+0.165)
0.8	0.006	0.171
0.8166	0.006	0.171
0.8333	0.006	0.171
0.85	0.006	0.171
0.8666	0	0.165
0.8833	0.006	0.171
0.9	0.006	0.171
0.9166	0	0.165
0.9333	0.006	0.171
0.95	0.006	0.171
0.9666	0.006	0.171
0.9833	0.006	0.171
1	0.006	0.171
1.2	0	0.165
1.4	0	0.165
1.6	0	0.165
1.8	0	0.165
2	0	0.165
2.2	0	0.165
2.4	0	0.165
2.6	0	0.165
2.8	0	0.165
3	0	0.165
3.2	0	0.165
3.4	0	0.165
3.6	0	0.165
3.8	0	0.165
4	0	0.165
4.2	0	0.165
4.4	0	0.165

BR-113D FALLING HEAD SLUG TEST

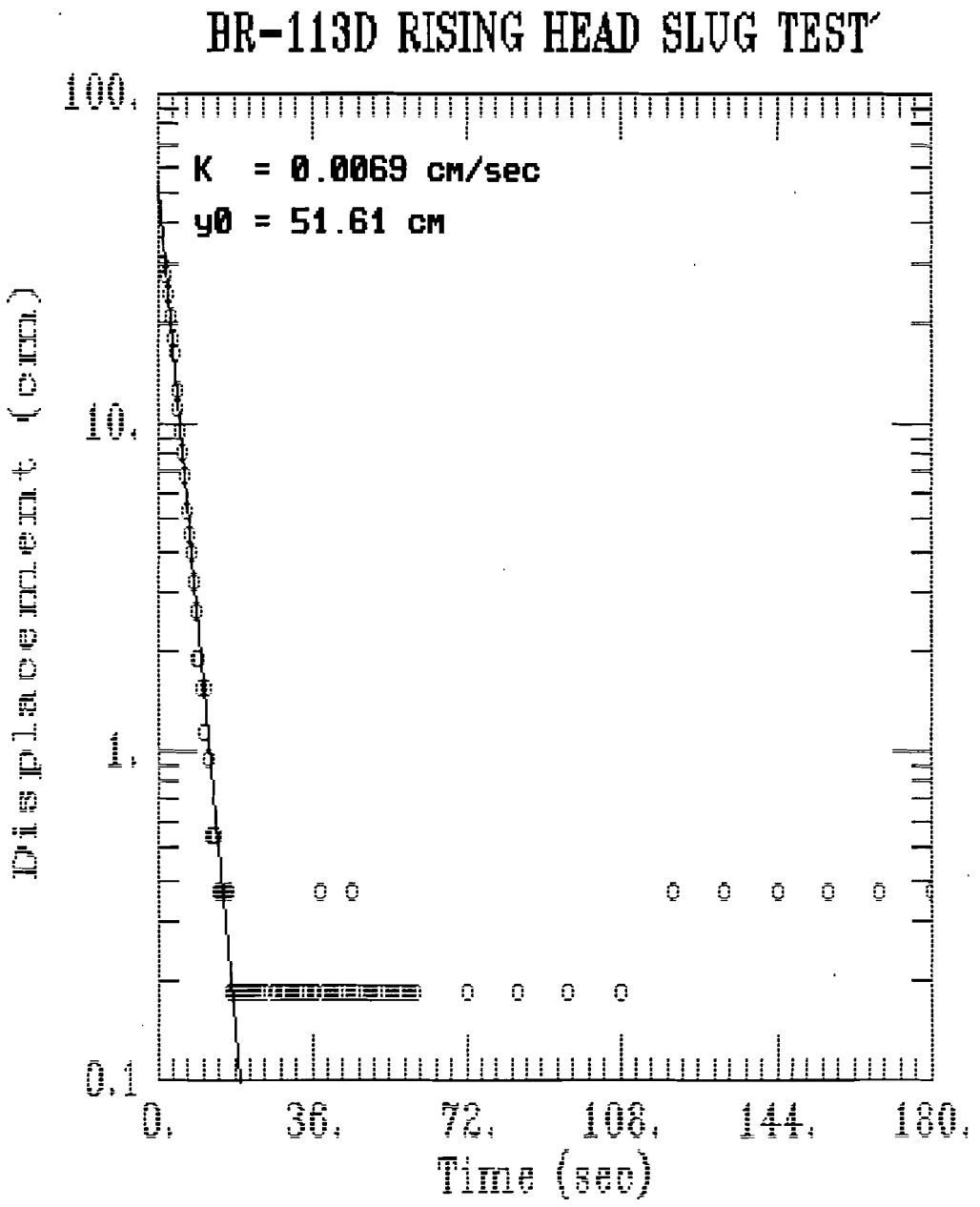


BR-113D FALLING HEAD TEST

SLUG VOLUME	**0.027**	**FT3**
SLUG DISPLACEMENT	**1.25**	**FT**
WELL RADIUS	**0.0833333**	**FT**
SCREEN RADIUS	**0.106**	**FT**
AQUIFER THICKNESS	**43**	**FT**
SCREEN LENGTH	**23**	**FT**
WATER COLUMN HEIGHT	**43**	**FT**

TIME (MIN)	AS MEAS (FEET)	INVERT (FEET)	PLOTTED FEET (+0.019)
0	-1.472	1.472	~~1.491~~
0.0083	-0.815	0.815	~~0.834~~
0.0166	-1.27	1.270	1.289
0.025	-1.08	1.080	1.099
0.0333	-0.511	0.511	0.530
0.0416	-0.619	0.619	0.638
0.05	-0.581	0.581	0.600
0.0583	-0.467	0.467	0.486
0.0666	-0.385	0.385	0.404
0.075	-0.334	0.334	0.353
0.0833	-0.296	0.296	0.315
0.0916	-0.259	0.259	0.278
0.1	-0.214	0.214	0.233
0.1083	-0.183	0.183	0.202
0.1166	-0.157	0.157	0.176
0.125	-0.132	0.132	0.151
0.1333	-0.113	0.113	0.132
0.1416	-0.094	0.094	0.113
0.15	-0.082	0.082	0.101
0.1583	-0.069	0.069	0.088
0.1666	-0.056	0.056	0.075
0.175	-0.05	0.050	0.069
0.1833	-0.044	0.044	0.063
0.1916	-0.037	0.037	0.056
0.2	-0.031	0.031	0.050
0.2083	-0.025	0.025	0.044
0.2166	-0.025	0.025	0.044
0.225	-0.018	0.018	0.037
0.2333	-0.018	0.018	0.037
0.2416	-0.012	0.012	0.031
0.25	-0.012	0.012	0.031
0.2583	-0.012	0.012	0.031
0.2666	-0.012	0.012	0.031
0.275	-0.006	0.006	0.025
0.2833	-0.006	0.006	0.025
0.2916	-0.006	0.006	0.025
0.3	-0.006	0.006	0.025
0.3083	-0.006	0.006	0.025
0.3166	-0.006	0.006	0.025
0.325	-0.006	0.006	0.025
0.3333	-0.006	0.006	0.025
0.35	-0.006	0.006	0.025
0.3666	-0.006	0.006	0.025
0.3833	-0.006	0.006	0.025
0.4	-0.006	0.006	0.025
0.4166	-0.006	0.006	0.025
0.4333	-0.006	0.006	0.025
0.45	-0.012	0.012	0.031
0.4666	-0.006	0.006	0.025
0.4833	-0.012	0.012	0.031
0.5	-0.012	0.012	0.031
0.5166	-0.012	0.012	0.031
0.5333	-0.012	0.012	0.031
0.55	-0.012	0.012	0.031
0.5666	-0.012	0.012	0.031
0.5833	-0.012	0.012	0.031
0.6	-0.012	0.012	0.031
0.6166	-0.012	0.012	0.031
0.6333	-0.012	0.012	0.031
0.65	-0.012	0.012	0.031
0.6666	0	0.000	0.019
0.6833	-0.006	0.006	0.025
0.7	0	0.000	0.019
0.7166	0	0.000	0.019
0.7333	0	0.000	0.019
0.75	0	0.000	0.019
0.7666	0	0.000	0.019

TIME (MIN)	AS MEAS (FEET)	INVERT (FEET)	PLOTTED FEET (+0.019)
0.7833	0	0.000	0.019
0.8	0	0.000	0.019
0.8166	0	0.000	0.019
0.8333	0	0.000	0.019
0.85	0	0.000	0.019
0.8666	0	0.000	0.019
0.8833	0	0.000	0.019
0.9	0	0.000	0.019
0.9166	0.006	-0.006	0.013
0.9333	0.006	-0.006	0.013
0.95	0.006	-0.006	0.013
0.9666	0	0.000	0.019
0.9833	0.006	-0.006	0.013
1	0	0.000	0.019
1.2	0	0.000	0.019
1.4	0	0.000	0.019
1.6	0.006	-0.006	0.013
1.8	0.006	-0.006	0.013
2	0.006	-0.006	0.013
2.2	0.006	-0.006	0.013
2.4	0.012	-0.012	0.007
2.6	0.012	-0.012	0.007
2.8	0.012	-0.012	0.007
3	0.018	-0.018	0.001


BR-113D RISING HEAD SLUG TEST
K = 0.0069 cm/sec
y0 = 51.61 cm
100.
10.
1.
0.1
0.
36.
72.
108.
144.
180.
Time (sec)
Displacement (cm)

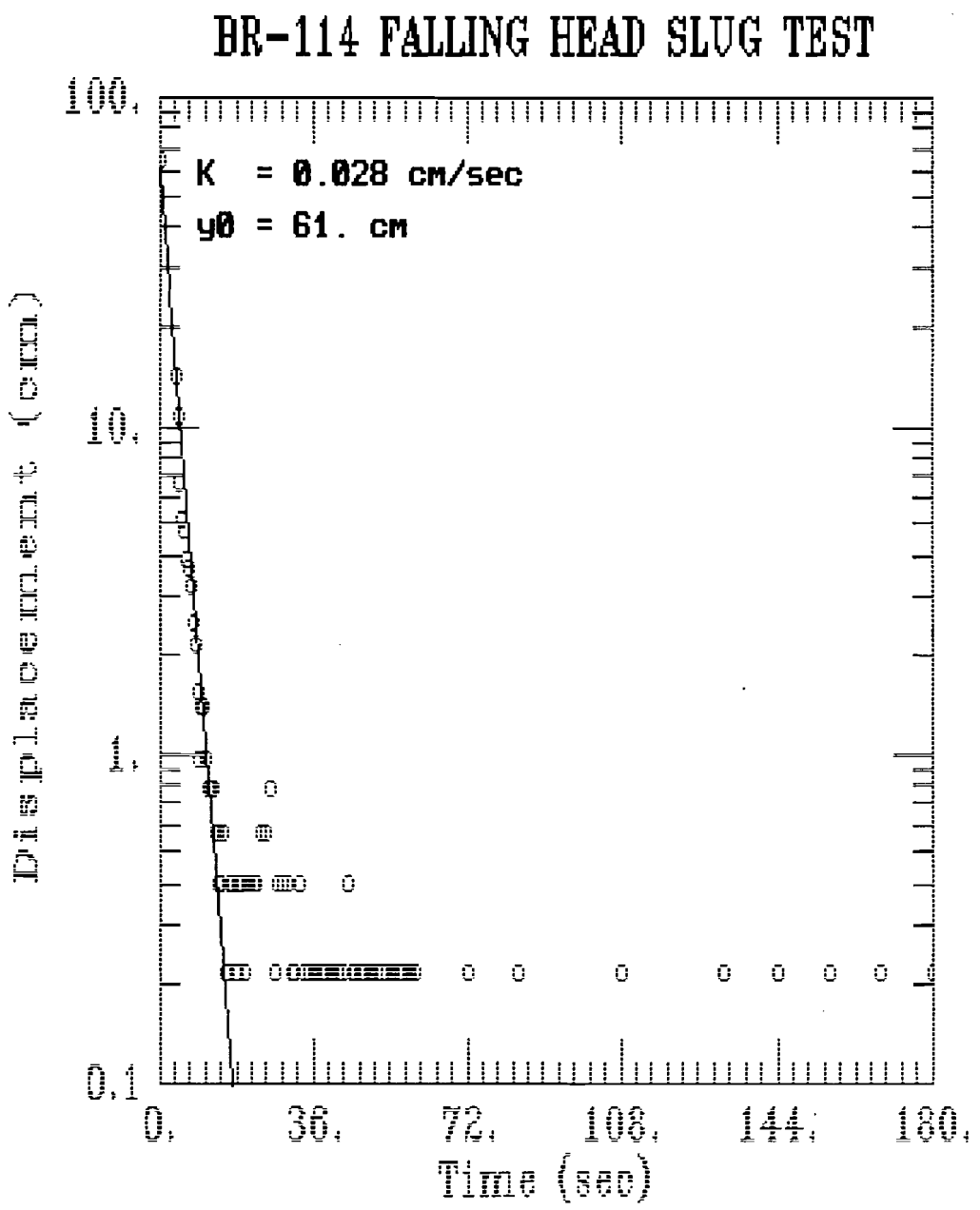
BR-113D RISING HEAD TEST

SLUG VOLUME	**0.027**	**FT3**
SLUG DISPLACEMENT	**1.25**	**FT**
WELL RADIUS	**0.08333**	**FT**
SCREEN RADIUS	**0.106**	**FT**
AQUIFER THICKNESS	**43**	**FT**
SCREEN LENGTH	**23**	**FT**
WATER COLUMN HEIGHT	**43**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED FEET (+0.007)
0	0.732	~~0.738~~
0.0083	0.372	~~0.378~~
0.0166	0.631	~~0.637~~
0.025	0.998	1.004
0.0333	0.922	0.928
0.0416	0.796	0.802
0.05	0.676	0.682
0.0583	0.581	0.587
0.0666	0.524	0.530
0.075	0.41	0.416
0.0833	0.353	0.359
0.0916	0.303	0.309
0.1	0.259	0.265
0.1083	0.221	0.227
0.1166	0.17	0.176
0.125	0.145	0.151
0.1333	0.126	0.132
0.1416	0.101	0.107
0.15	0.082	0.088
0.1583	0.056	0.062
0.1666	0.056	0.062
0.175	0.044	0.050
0.1833	0.031	0.037
0.1916	0.044	0.050
0.2	0.025	0.031
0.2083	0.012	0.018
0.2166	0.012	0.018
0.225	0.012	0.018
0.2333	0.012	0.018
0.2416	0.006	0.012
0.25	0.006	0.012
0.2583	0.006	0.012
0.2666	0.006	0.012
0.275	0.006	0.012

TIME (MIN)	AS MEAS (FEET)	PLOTTED FEET (+0.007)
0.2833	0	0.006
0.2916	0	0.006
0.3	0	0.006
0.3083	0	0.006
0.3166	0	0.006
0.325	0	0.006
0.3333	0	0.006
0.35	0	0.006
0.3666	0	0.006
0.3833	0	0.006
0.4	0	0.006
0.4166	0	0.006
0.4333	-0.006	0.000
0.45	0	0.006
0.4666	0	0.006
0.4833	0	0.006
0.5	0	0.006
0.5166	0	0.006
0.5333	0	0.006
0.55	0	0.006
0.5666	0	0.006
0.5833	0	0.006
0.6	0	0.006
0.6166	0	0.006
0.6333	0.006	0.012
0.65	0	0.006
0.6666	0	0.006
0.6833	0	0.006
0.7	0	0.006
0.7166	0	0.006
0.7333	0	0.006
0.75	0.006	0.012
0.7666	0	0.006
0.7833	0	0.006

TIME (MIN)	AS MEAS (FEET)	PLOTTED FEET† (+0.007)
0.8	0	0.006
0.8166	0	0.006
0.8333	0	0.006
0.85	0	0.006
0.8666	0	0.006
0.8833	0	0.006
0.9	0	0.006
0.9166	0	0.006
0.9333	0	0.006
0.95	0	0.006
0.9666	0	0.006
0.9833	0	0.006
1	0	0.006
1.2	0	0.006
1.4	0	0.006
1.6	0	0.006
1.8	0	0.006
2	0.006	0.012
2.2	0.006	0.012
2.4	0.006	0.012
2.6	0.006	0.012
2.8	0.006	0.012
3	0.006	0.012


BR-114 FALLING HEAD SLUG TEST
K = 0.028 cm/sec
y0 = 61. cm
100.
10.
1.
0.1
0.
36.
72.
108.
144.
180.
Time (sec)
Displacement (cm)

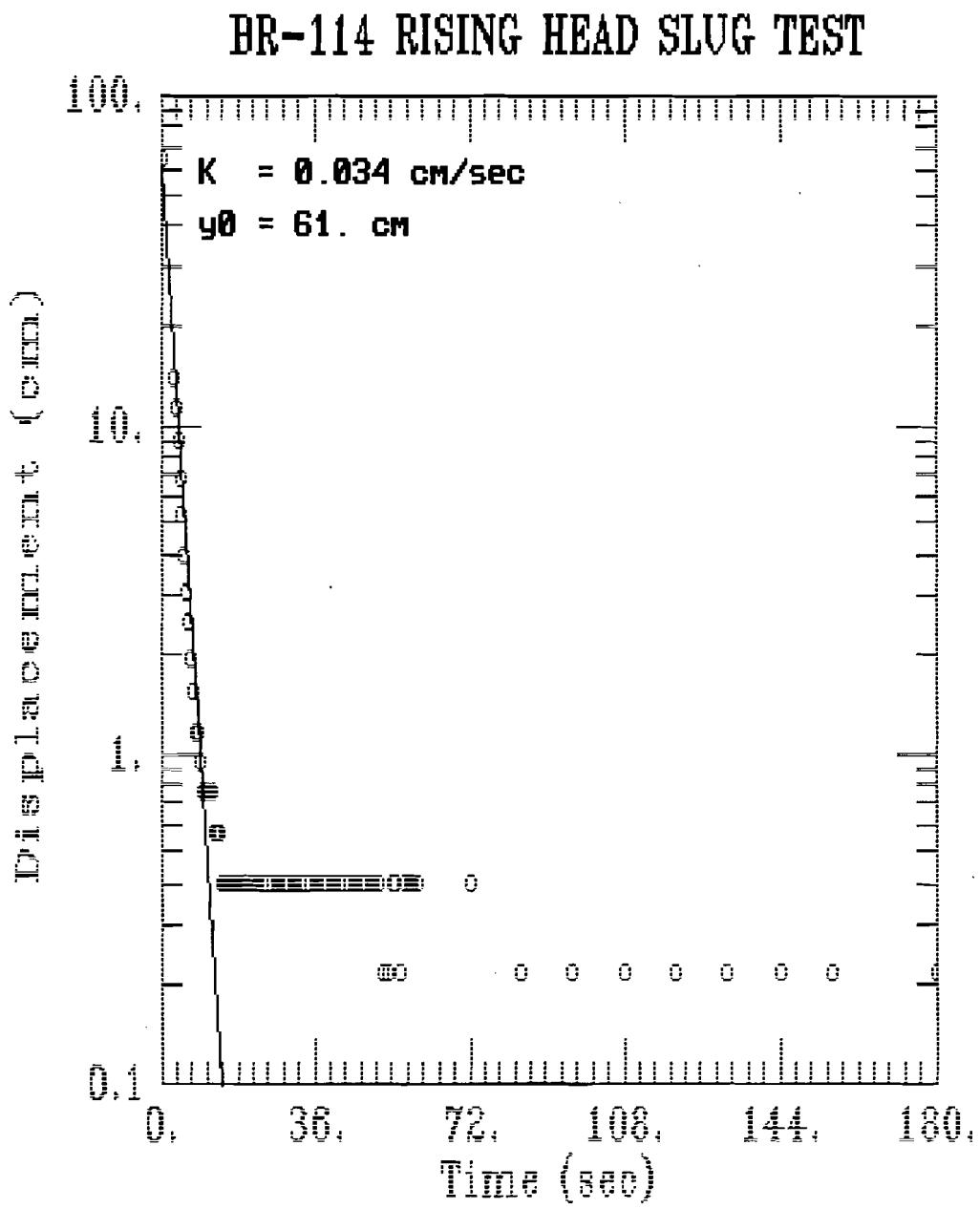
BR-114 FALLING HEAD TEST

SLUG VOLUME	**0.170**	**FT3**
SLUG DISPLACEMENT	**2.05**	**FT**
WELL RADIUS	**0.16**	**FT**
SCREEN RADIUS	**0.16**	**FT**
AQUIFER THICKNESS	**21.6**	**FT**
SCREEN LENGTH	**20**	**FT**
WATER COLUMN HEIGHT	**21.6**	**FT**

TIME (MIN)	AS MEAS (FEET)	ADJUST (FEET) ADD -0.001	PLOTTED FEET INVERT
0	-0.006	-0.007	~~0.007~~
0.0083	-0.037	-0.038	~~0.038~~
0.0166	-0.082	-0.083	~~0.083~~
0.025	-0.145	-0.146	~~0.146~~
0.0333	-0.233	-0.234	~~0.234~~
0.0416	-0.271	-0.272	~~0.272~~
0.05	-0.41	-0.411	~~0.411~~
0.0583	-0.41	-0.411	~~0.411~~
0.0666	-0.467	-0.468	0.468
0.075	-0.347	-0.348	0.348
0.0833	-0.221	-0.222	0.222
0.0916	-0.17	-0.171	0.171
0.1	-0.157	-0.158	0.158
0.1083	-0.126	-0.127	0.127
0.1166	-0.12	-0.121	0.121
0.125	-0.107	-0.108	0.108
0.1333	-0.082	-0.083	0.083
0.1416	-0.069	-0.070	0.070
0.15	-0.05	-0.051	0.051
0.1583	-0.031	-0.032	0.032
0.1666	-0.044	-0.045	0.045
0.175	-0.044	-0.045	0.045
0.1833	-0.031	-0.032	0.032
0.1916	-0.025	-0.026	0.026
0.2	-0.025	-0.026	0.026
0.2083	-0.025	-0.026	0.026
0.2166	-0.018	-0.019	0.019
0.225	-0.018	-0.019	0.019
0.2333	-0.012	-0.013	0.013
0.2416	-0.012	-0.013	0.013
0.25	-0.018	-0.019	0.019
0.2583	-0.006	-0.007	0.007
0.2666	-0.006	-0.007	0.007
0.275	-0.012	-0.013	0.013

TIME (MIN)	AS MEAS (FEET)	ADJUST (FEET) ADD -0.001	PLOTTED FEET INVERT
0.2833	-0.012	-0.013	0.013
0.2916	-0.006	-0.007	0.007
0.3	-0.006	-0.007	0.007
0.3083	-0.012	-0.013	0.013
0.3166	-0.012	-0.013	0.013
0.325	-0.012	-0.013	0.013
0.3333	-0.006	-0.007	0.007
0.35	-0.012	-0.013	0.013
0.3666	-0.012	-0.013	0.013
0.3833	-0.012	-0.013	0.013
0.4	-0.018	-0.019	0.019
0.4166	-0.018	-0.019	0.019
0.4333	-0.025	-0.026	0.026
0.45	-0.006	-0.007	0.007
0.4666	-0.012	-0.013	0.013
0.4833	-0.012	-0.013	0.013
0.5	-0.012	-0.013	0.013
0.5166	-0.006	-0.007	0.007
0.5333	-0.006	-0.007	0.007
0.55	-0.012	-0.013	0.013
0.5666	-0.006	-0.007	0.007
0.5833	-0.006	-0.007	0.007
0.6	-0.006	-0.007	0.007
0.6166	-0.006	-0.007	0.007
0.6333	-0.006	-0.007	0.007
0.65	-0.006	-0.007	0.007
0.6666	-0.006	-0.007	0.007
0.6833	-0.006	-0.007	0.007
0.7	-0.006	-0.007	0.007
0.7166	-0.006	-0.007	0.007
0.7333	-0.012	-0.013	0.013
0.75	-0.006	-0.007	0.007
0.7666	-0.006	-0.007	0.007
0.7833	-0.006	-0.007	0.007

TIME (MIN)	AS MEAS (FEET)	ADJUST (FEET) ADD -0.001	PLOTTED FEET INVERT
0.8	-0.006	-0.007	0.007
0.8166	-0.006	-0.007	0.007
0.8333	-0.006	-0.007	0.007
0.85	-0.006	-0.007	0.007
0.8666	-0.006	-0.007	0.007
0.8833	-0.006	-0.007	0.007
0.9	-0.006	-0.007	0.007
0.9166	-0.006	-0.007	0.007
0.9333	-0.006	-0.007	0.007
0.95	-0.006	-0.007	0.007
0.9666	-0.006	-0.007	0.007
0.9833	-0.006	-0.007	0.007
1	-0.006	-0.007	0.007
1.2	-0.006	-0.007	0.007
1.4	-0.006	-0.007	0.007
1.6	0	-0.001	0.001
1.8	-0.006	-0.007	0.007
2	0	-0.001	0.001
2.2	-0.006	-0.007	0.007
2.4	-0.006	-0.007	0.007
2.6	-0.006	-0.007	0.007
2.8	-0.006	-0.007	0.007
3	-0.006	-0.007	0.007
3.2	-0.006	-0.007	0.007
3.4	-0.006	-0.007	0.007
3.6	-0.006	-0.007	0.007
3.8	0	-0.001	0.001
4	-0.006	-0.007	0.007
4.2	0	-0.001	0.001
4.4	-0.006	-0.007	0.007
4.6	-0.006	-0.007	0.007
4.8	-0.006	-0.007	0.007
5	0	-0.001	0.001
5.2	0	-0.001	0.001
5.4	0	-0.001	0.001
5.6	0	-0.001	0.001
5.8	-0.006	-0.007	0.007
6	-0.006	-0.007	0.007
6.2	0	-0.001	0.001


BR-114 RISING HEAD SLUG TEST
K = 0.034 cm/sec
y0 = 61. cm
100.
10.
1.
0.1
0.
36.
72.
108.
144.
180.
Time (sec)
(cm) Displacement

BR-114 RISING HEAD TEST

SLUG VOLUME	**0.170**	**FT3**
SLUG DISPLACEMENT	**2.05**	**FT**
WELL RADIUS	**0.16**	**FT**
SCREEN RADIUS	**0.16**	**FT**
AQUIFER THICKNESS	**21.6**	**FT**
SCREEN LENGTH	**20**	**FT**
WATER COLUMN HEIGHT	**21.6**	**FT**

TIME (MIN)	AS MEAS (FEET)	PLOTTED FEET ADD 0.013
0	0.176	~~0.189~~
0.0083	0.012	~~0.025~~
0.0166	0.088	~~0.101~~
0.025	0.208	~~0.221~~
0.0333	0.315	~~0.328~~
0.0416	0.404	~~0.417~~
0.05	0.442	0.455
0.0583	0.36	0.373
0.0666	0.284	0.297
0.075	0.214	0.227
0.0833	0.164	0.177
0.0916	0.12	0.133
0.1	0.088	0.101
0.1083	0.069	0.082
0.1166	0.05	0.063
0.125	0.037	0.050
0.1333	0.025	0.038
0.1416	0.025	0.038
0.15	0.018	0.031
0.1583	0.018	0.031
0.1666	0.012	0.025
0.175	0.012	0.025
0.1833	0.012	0.025
0.1916	0.012	0.025
0.2	0.012	0.025
0.2083	0.006	0.019
0.2166	0.006	0.019
0.225	0.006	0.019
0.2333	0.006	0.019
0.2416	0	0.013
0.25	0	0.013
0.2583	0	0.013
0.2666	0	0.013
0.275	0	0.013

TIME (MIN)	AS MEAS (FEET)	PLOTTED FEET ADD 0.013
0.2833	0	0.013
0.2916	0	0.013
0.3	0	0.013
0.3083	0	0.013
0.3166	0	0.013
0.325	0	0.013
0.3333	0	0.013
0.35	0	0.013
0.3666	0	0.013
0.3833	0	0.013
0.4	0	0.013
0.4166	0	0.013
0.4333	0	0.013
0.45	0	0.013
0.4666	0	0.013
0.4833	0	0.013
0.5	0	0.013
0.5166	0	0.013
0.5333	0	0.013
0.55	0	0.013
0.5666	0	0.013
0.5833	0	0.013
0.6	0	0.013
0.6166	0	0.013
0.6333	0	0.013
0.65	0	0.013
0.6666	0	0.013
0.6833	0	0.013
0.7	0	0.013
0.7166	0	0.013
0.7333	0	0.013
0.75	0	0.013
0.7666	0	0.013
0.7833	0	0.013

TIME (MIN)	AS MEAS (FEET)	PLOTTED FEET ADD 0.013
0.8	0	0.013
0.8166	0	0.013
0.8333	0	0.013
0.85	0	0.013
0.8666	-0.006	0.007
0.8833	-0.006	0.007
0.9	0	0.013
0.9166	0	0.013
0.9333	-0.006	0.007
0.95	0	0.013
0.9666	0	0.013
0.9833	0	0.013
1	0	0.013
1.2	0	0.013
1.4	-0.006	0.007
1.6	-0.006	0.007
1.8	-0.006	0.007
2	-0.006	0.007
2.2	-0.006	0.007
2.4	-0.006	0.007
2.6	-0.006	0.007
2.8	-0.012	0.001
3	-0.006	0.007
3.2	-0.006	0.007
3.4	-0.006	0.007
3.6	-0.006	0.007
3.8	-0.006	0.007
4	-0.006	0.007
4.2	-0.006	0.007

APPENDIX A-6

GROUNDWATER ELEVATION DATA

APPENDIX A-6
GROUNDWATER PIEZOMETRIC DATA

OLIN CHEMICALS PHASE II RI REPORT
ROCHESTER, NEW YORK

WELL	REFERENCE ELEV. (MSL)	PIEZOMETRIC ELEVATIONS (MSL)								
		Jan-94	Mar-94	Jun-94	Sep-94	Dec-94	Mar-95	May-95	Sep-95	Nov-95
B-1	537.48	526.27	529.33	528.35	526.58	527.12	527.40	527.34	526.10	527.80
B-2	538.91	530.66	528.48	527.94	526.95	527.73	528.21	527.76	526.65	528.28
B-3	541.62	526.79	536.69	537.62	534.72	527.18	530.12	529.54	526.74	528.37
B-4	542.87	529.51	530.09	530.57	528.79	529.87	530.88	530.28	528.46	529.72
B-5	540.10	529.31	530.41	531.09	529.30	530.42	531.27	530.77	529.05	530.04
B-6	539.24	525.14	524.70	524.70	523.26	524.23	524.49	NA	524.04	526.44
B-7	540.68	525.74	529.30	527.23	525.58	526.76	527.04	526.49	525.60	526.69
B-8	538.21	530.05	531.61	531.11	529.63	530.44	530.71	530.28	528.91	529.76
B-9	537.67	531.57	532.59	531.96	530.57	531.52	531.95	531.37	529.75	531.00
B-10	537.97	531.66	532.84	532.52	530.31	531.50	531.85	531.19	529.33	530.77
B-11	536.00	532.44	533.28	533.50	531.42	531.24	532.27	531.89	530.26	531.68
B-13	537.07	DRY	DRY	DRY	DRY	DRY	524.46	DRY	DRY	DRY
B-14	537.95	529.38	531.01	530.78	529.25	529.99	530.30	529.80	528.52	529.60
B-15	535.29	530.51	532.14	531.93	530.25	531.05	531.49	531.08	529.63	NA
B-16	536.21	527.46	532.64	532.23	530.71	531.64	532.01	531.50	529.87	531.01
B-17	538.84	531.14	532.71	532.43	530.99	531.69	532.17	532.15	529.38	531.39
BR-1	537.11	528.31	530.28	529.49	527.73	529.09	529.41	528.75	527.29	529.51
BR-2	538.97	513.87	527.37	512.27	514.67	517.22	512.57	512.40	506.97	529.47
BR-2D	538.00	457.80	461.82	463.26	463.54	465.06	468.60	470.59	475.66	460.59
BR-3	538.04	515.94	521.06	514.76	DRY	DRY	515.01	515.04	538.04	521.91
BR-3D	537.00	455.50	451.75	454.37	453.14	453.05	454.94	456.02	458.28	456.09
BR-4	538.93	532.33	533.27	533.15	531.21	532.25	533.01	532.23	529.93	532.60
BR-5	536.30	524.95	528.70	522.72	527.18	528.55	528.61	527.96	527.80	530.73
BR-5A	536.35	524.55	510.34	522.77	526.51	518.27	525.05	512.95	529.47	532.72
BR-6	NA	NA	NA	526.83	490.40	DRY	DRY	525.00	508.40	538.00	NA
BR-7	539.70	520.22	520.50	520.05	520.36	520.58	519.51	NM	519.54	NA
BR-8	540.00	528.67	530.72	531.43	529.60	530.58	531.57	531.10	529.36	530.38
BR-101	540.65	528.85	531.48	531.69	530.15	531.30	531.95	531.49	530.08	531.56
BR-102	540.21	515.38	514.51	518.29	516.23	516.85	512.16	515.71	516.62	516.66
BR-103	533.19	527.69	528.81	528.24	526.65	527.20	526.81	527.07	526.63	528.77
BR-104	537.56	520.46	525.76	527.10	526.36	525.86	526.94	526.36	525.86	526.27
BR-105	536.90	510.80	511.40	512.75	512.18	511.92	511.60	512.47	512.18	512.80
BR-105D	536.49	503.29	504.19	511.70	509.99	504.68	503.67	510.56	511.01	511.09
BR-106	535.74	510.84	508.96	513.59	512.68	508.84	509.21	511.01	511.66	511.56
BR-107	536.32	513.92	508.61	512.22	510.36	515.13	508.94	511.84	510.62	511.32
BR-108	540.58	511.67	511.79	511.67	511.60	514.46	511.65	511.65	511.58	511.64
BR-111	540.42	NI	NI	NI	NI	NI	NI	NI	NI	510.87
BR-111D	540.34	NI	NI	NI	NI	NI	NI	NI	NI	510.85
BR-112A	547.72	NI	NI	NI	NI	NI	NI	NI	NI	512.74
BR-112D	547.91	NI	NI	NI	NI	NI	NI	NI	NI	510.75
BR-113	543.02	NI	NI	NI	NI	NI	NI	NI	NI	510.63
BR-113D	542.93	NI	NI	NI	NI	NI	NI	NI	NI	510.78
BR-114	539.77	NI	NI	NI	NI	NI	NI	NI	NI	523.92
C-1	539.05	532.05	533.08	533.71	531.67	532.05	532.59	532.28	530.97	532.05
C-2A	539.12	532.32	533.92	533.22	531.32	531.36	532.64	532.32	530.62	532.66
C-3	541.63	531.93	532.58	532.88	531.29	531.95	532.43	532.13	530.81	531.80
C-4	540.82	531.92	532.92	532.82	531.57	533.16	532.59	532.42	DRY	531.83
C-5	536.35	528.65	529.34	529.36	527.65	530.42	528.95	528.72	527.05	528.07
CANAL *	548.13	NA	NA	NA	510.79	501.83	504.43	511.19	510.99	510.89
E-1	534.32	527.07	523.30	527.31	527.32	530.78	530.12	524.52	528.78	531.17
E-2	538.83	532.23	533.75	534.69	531.47	533.07	532.38	532.31	538.83	532.73
E-3	536.00	525.10	525.59	526.44	525.74	525.38	527.70	526.20	529.40	532.22
E-4	538.58	531.28	533.96	531.03	528.58	532.79	533.38	531.45	DRY	NA
E-5	539.31	DRY	533.98	DRY	DRY	533.19	533.64	DRY	DRY	533.41
EC-1	539.99	521.09	521.56	521.33	520.55	520.36	521.75	521.55	520.29	520.25
EC-2	542.00	DRY	DRY	NA	DRY	DRY	529.52	DRY	DRY	DRY
MW-2	535.50	528.79	530.75	530.59	529.53	529.95	529.88	529.62	528.68	530.00
MW-3	535.89	528.54	530.05	529.94	528.99	529.41	529.34	529.29	528.59	529.39
MW-103	533.25	529.27	NA	531.13	529.37	530.69	531.27	530.75	529.59	531.20
MW-104	537.54	524.54	527.28	528.11	527.00	526.92	526.92	526.76	525.95	526.48
MW-105	536.91	DRY	DRY	518.31	DRY	DRY	518.31	DRY	DRY	DRY
MW-106	535.44	523.34	525.34	525.16	523.43	524.74	526.52	526.05	523.82	523.50
MW-107	536.29	525.11	526.21	525.46	523.49	525.76	526.02	525.70	524.00	524.96

APPENDIX A-6
GROUNDWATER PIEZOMETRIC DATA

OLIN CHEMICALS PHASE II RI REPORT
ROCHESTER, NEW YORK

WELL	REFERENCE ELEV. (MSL)	PIEZOMETRIC ELEVATIONS (MSL)								
		Jan-94	Mar-94	Jun-94	Sep-94	Dec-94	Mar-95	May-95	Sep-95	Nov-95
MW-108	540.69	520.70	521.99	520.94	DRY	521.91	522.51	521.32	DRY	521.69
MW-114	539.69	NI	NI	NI	NI	NI	NI	NI	NI	525.90
MW-G6	534.65	528.15	531.51	530.75	528.85	529.71	530.12	529.41	528.31	529.48
MW-G8	534.25	525.95	528.54	527.56	526.25	527.07	527.25	526.60	525.93	527.25
MW-G9	536.60	526.20	530.84	527.44	525.42	527.77	528.26	526.75	524.86	527.40
N-1	536.91	531.81	534.05	531.74	529.53	532.66	533.27	531.76	NA	533.13
N-2	536.92	530.52	533.52	530.83	529.02	532.39	532.69	530.89	528.24	532.34
N-3	537.16	528.26	531.10	530.87	527.96	529.60	530.16	529.09	527.46	529.77
PZ-101	543.15	527.59	529.27	529.60	527.37	528.83	530.23	529.57	527.06	528.63
PZ-102	541.11	514.89	519.24	524.86	522.67	524.57	528.51	527.24	523.81	525.30
PZ-103	540.34	527.57	528.67	529.38	527.64	528.90	530.03	529.48	527.54	528.72
PZ-104	537.21	521.51	522.88	522.73	522.79	522.39	522.97	522.33	521.75	522.86
PZ-105	539.58	526.34	527.92	527.21	520.66	526.17	526.36	525.92	524.94	527.45
PZ-106	537.45	524.71	529.06	527.77	527.37	527.18	526.87	526.65	525.31	529.86
PZ-107	538.64	531.29	532.90	532.31	530.79	531.69	531.94	531.49	529.90	531.37
PZ-108	536.56	532.26	533.92	532.67	530.96	532.45	532.86	531.72	528.57	531.35
S-1	536.76	528.76	529.81	521.92	DRY	521.78	529.78	521.83	527.82	528.86
S-2	536.31	521.01	531.71	520.97	522.05	521.31	520.90	524.72	521.21	532.49
S-3	536.40	525.08	531.85	526.65	526.62	526.70	526.60	526.41	526.52	530.36
S-4	NA	527.39	531.73	523.94	DRY	536.38	523.93	523.98	523.92	532.45
W-1	536.98	NA	527.78	527.13	524.78	519.28	525.58	526.43	524.88	527.30
W-2	539.53	NA	524.43	522.63	521.53	521.80	521.75	521.73	523.43	527.13
W-3	541.91	522.11	528.86	522.23	522.21	515.05	530.91	522.21	522.29	530.23
W-4	540.35	522.35	529.85	522.30	524.95	522.65	522.21	522.25	522.25	530.65
W-5	537.69	526.79	529.49	524.54	524.89	522.79	523.69	526.77	526.19	528.14
W-6	538.25	DRY	524.75	525.10	526.71	525.22	526.59	NA	524.81	525.90

NOTE:

Starting with November, 1995 measurements, the new reference elevations for E-2 and N-1 are as follows:

E-2	538.32
N-1	537.06

* Canal refererence elevation is from an "X" mark on the Buffalo Road Bridge hand rail that measures 3.34 feet above the concrete sidewalk.

NA = Data is not available
NI = Well not installed

APPENDIX A-7

EXPLORATION LOCATION COORDINATES

APPENDIX A-7
Exploration Location Coordinates

Olin Chemicals Phase II RI Report
Rochester, NY

Location ID	Exploration Type	Coordinates (a) Northing	Easting	Survey or Point Measurement Source
BR-111	Monitoring well	1,149,839	743,207	Om Popli Surveying Co. - Data tabulated 10/95
BR-111D	Monitoring well	1,149,847	743,207	Om Popli Surveying Co. - Data tabulated 10/95
BR-112A	Monitoring well	1,149,224	743,367	Om Popli Surveying Co. - Data tabulated 10/95
BR-112D	Monitoring well	1,149,253	743,357	Om Popli Surveying Co. - Data tabulated 10/95
BR-113	Monitoring well	1,148,717	743,458	Om Popli Surveying Co. - Data tabulated 10/95
BR-113D	Monitoring well	1,148,704	743,459	Om Popli Surveying Co. - Data tabulated 10/95
BR-114	Monitoring well	1,148,994	745,139	Om Popli Surveying Co. - Data tabulated 10/95
MW-114	Monitoring well	1,148,999	745,139	Om Popli Surveying Co. - Data tabulated 10/95
FR-1	Fracture measurement	1,148,156	741,065	Om Popli Surveying Co. - Data tabulated 10/95
FR-2	Fracture measurement	1,147,903	741,067	Om Popli Surveying Co. - Data tabulated 10/95
FR-3	Fracture measurement	1,147,777	740,669	Om Popli Surveying Co. - Data tabulated 10/95
QS-1	Seep sample location	1,148,155	741,062	Om Popli Surveying Co. - Data tabulated 10/95
QS-2	Seep sample location	1,148,079	741,050	Om Popli Surveying Co. - Data tabulated 10/95
QS-3	Seep sample location	1,147,991	741,048	Om Popli Surveying Co. - Data tabulated 10/95
QS-4	Seep sample location	1,147,894	741,059	Om Popli Surveying Co. - Data tabulated 10/95
SB-1	Soil boring	1,150,125	744,505	ABB-ES field measurement 8/95 - Located to nearest 5 feet using offset measurements to known coordinates.
SB-2	Soil boring	1,150,155	744,648	ABB-ES field measurement 8/95 - Located to nearest 5 feet using offset measurements to known coordinates.
SB-3	Soil boring	1,150,208	744,530	ABB-ES field measurement 8/95 - Located to nearest 5 feet using offset measurements to known coordinates.
SS-116	Surface soil	1,150,140	744,630	ABB-ES field measurement 8/95 - Located to nearest 5 feet using offset measurements to known coordinates.
SS-117	Surface soil	1,150,140	744,640	ABB-ES field measurement 8/95 - Located to nearest 5 feet using offset measurements to known coordinates.

Notes:
(a) New York State Plane Coordinate System

APPENDIX B

CHEMICAL DATA

APPENDIX B-1

LABORATORY ANALYTICAL DATA

Lab Sample Area Soil and Groundwater
Groundwater Results (September 1995)
Groundwater Data From New Wells/Points (November-December 1995)
Surface Water Results (November 1994 to November 1995)
Quarry Seep, Collection Pond and QA/QC and Outfall Results
Tentatively Identified Compounds
Validation Memoranda
Offsite Historical Results

APPENDIX B - 1
ANALYTICAL PROGRAM

OLIN PHASE II RI REPORT
ROCHESTER, NEW YORK

LOCATION	MEDIA	DATE	ANALYTICAL CLASS					
			Pyridines	SVOCs[3]	VOCs[4]	Inorganics[5]	Mercury[6]	Methanol[7]
QO-1	SW	25-Oct-95	X[1]					
QP-1	SW	25-Oct-95	X[1]					
QS-1	GW	6-Sep-95	X[1]					
QS-2	GW	6-Sep-95	X[1]					
QS-3	GW	6-Sep-95	X[1]					
QS-4	GW	6-Sep-95	X[1]					
QS-4(Duplicate)	GW	25-Oct-95	X[1]					
QS-4	GW	25-Oct-95	X[1]					
SB-1	GW	19-Sep-95			X			
SB-1	SO	17-Aug-95	X[1]	X	X	X		
SB-2	GW	19-Sep-95	X[1]	X	X	X		
SB-2	SO	17-Aug-95	X[1]	X	X	X		
SB-3	GW	19-Sep-95	X[1]	X	X			
SB-3(Duplicate)	SO	17-Aug-95	X[1]	X	X	X		
SB-3	SO	17-Aug-95	X[1]	X	X	X		
SS-116	SS	20-Sep-95					X	
SS-117	SS	20-Sep-95					X	
SW-1	SW	20-Nov-95	X[1]					
SW-2(Duplicate)	SW	20-Nov-95	X[1]					
SW-2	SW	20-Nov-95	X[1]					
SW-3	SW	20-Nov-95	X[1]					
BR-111	GW	26-Oct-95		X	X	X		
BR-111	GW	7-Dec-95	X[1]					
BR-111D	GW	26-Oct-95		X	X	X		
BR-111D	GW	7-Dec-95	X[1]					
BR-112A	GW	27-Oct-95		X	X	X		
BR-112A	GW	7-Dec-95	X[1]					
BR-112D	GW	27-Oct-95		X	X	X		
BR-112D	GW	7-Dec-95	X[1]					
BR-113(Duplicate)	GW	26-Oct-95		X	X	X		
BR-113(Duplicate)	GW	7-Dec-95	X[1]					
BR-113	GW	26-Oct-95		X	X	X		
BR-113	GW	7-Dec-95	X[1]					
BR-113D	GW	26-Oct-95		X	X	X		
BR-113D	GW	7-Dec-95	X[1]					
BR-114	GW	27-Oct-95		X	X	X		
BR-114	GW	7-Dec-95	X[1]					
MW-114	GW	27-Oct-95		X	X	X		
MW-114	GW	7-Dec-95	X[1]					
NESS-E(Duplicate)	GW	20-Nov-95		X	X	X		
NESS-E	GW	20-Nov-95		X	X	X		
NESS-E	GW	7-Dec-95	X[1]					
NESS-W	GW	20-Nov-95		X	X	X		
NESS-W	GW	7-Dec-95	X[1]					

APPENDIX B - 1
ANALYTICAL PROGRAM

OLIN PHASE II RI REPORT
ROCHESTER, NEW YORK

LOCATION	MEDIA	DATE	ANALYTICAL CLASS					
			Pyridines	SVOCs[3]	VOCs[4]	Inorganics[5]	Mercury[6]	Methanol[7]
QUARTERLY SURFACE WATER MONITORING (Continued)								
SW-2	SW	17-May-95	X[2]					
SW-2	SW	6-Sep-95	X[1]					
SW-3	SW	2-Nov-94	X[2]					
SW-3	SW	27-Mar-95	X[2]					
SW-3	SW	17-May-95	X[2]					
SW-3(Duplicate)	SW	6-Sep-95	X[1]					
SW-3	SW	6-Sep-95	X[1]					

NOTES:

SO = Subsurface soil (0'-10')
SS = Surface soil
SW = Surface water sample ("SW"=Canal, "QP" and "QP" = Quarry water)
GW = Groundwater sample (Wells and quarry seeps "QS")

(1) Pyridines analyses for 2,6-dichloropyridine, 2-chloropyridine, 3-chloropyridine, 4-chloropyridine, p-fluoroaniline, and pyridine. Groundwater samples analyzed by USEPA SW-846 Method 8270; Surface waters analyzed by NYSDEC ASP methodology.

(2) Groundwater samples analyzed for 2,6-dichloropyridine, 2-chloropyridine, 3-chloropyridine, and p-fluoroaniline by USEPA SW-846 Method 8270; Quarterly surface water samples analyzed for compounds listed above plus pyridine by NYSDEC ASP Methodology.

(3) Target compound list (TCL) semivolatile organic compounds (SVOCs) by USEPA SW-846 Method 8270.

(4) TCL volatile organic compounds (VOCs) by USEPA SW-846 Method 8240/8260.

(5) Target Analyte List (TAL) inorganics analysis by USEPA SW-846 Method 6010/7000s

(6) Mercury analysis by USEPA SW-846 Method 7471.

(7) Methanol analysis by USEPA SW-846 Method 8015.

LAB SAMPLE AREA SOIL AND GROUNDWATER

Table 1
Laboratory Report of Analysis

	LOCATION:	SS-116	SS-117
	ISIS ID:	01SS116000X1XX	01SS117000X1XX
	LAB NUMBER:	A5503204	A5503205
	DATE SAMPLED:	09/20/95	09/20/95
ANALYTE	RL		
Mercury	0.1	0.15	7.2
Percent Solids:		87	84
Sample Volume\Weight (ml\g):		.58	.05
Associated Method Blank:		SS116	SS116
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

Site: SURFACE SOILS

Table 1
Laboratory Report of Analysis

	LOCATION:	BS-1	BS-2	BS-3 DUP	BS-3
	ISIS ID:	01BSXX1XX6X1XX	01BSXX2XX5X1XX	01BSXX3XX6X1DX	01BSXX3XX6X1XX
	LAB NUMBER:	A5441001	A5441002	A5441003 FD	A5441003
	DATE SAMPLED:	08/17/95	08/17/95	08/17/95	08/17/95
	DATE EXTRACTED:	08/23/95	08/23/95	08/23/95	08/23/95
	DATE ANALYZED:	08/29/95	08/29/95	08/29/95	08/29/95
ANALYTE	RL				
Fluorene	330	330 U	300 J	30 J	26 J
Hexachlorobenzene	330	330 U	330 U	330 U	330 U
Hexachlorobutadiene	330	330 U	330 U	330 U	330 U
Hexachlorocyclopentadiene	330	330 U	330 U	330 U	330 U
Hexachloroethane	330	330 U	330 U	330 U	330 U
Indeno(1,2,3-c,d)Pyrene	330	20 J	3300	490 J	240 J
Isophorone	330	330 U	330 U	330 U	330 U
2-Methylnaphthalene	330	330 U	330 U	330 U	330 U
2-Methylphenol	330	330 U	330 U	330 U	330 U
4-Methylphenol	330	330 U	330 U	330 U	330 U
Naphthalene	330	330 U	330 U	330 U	330 U
2-Nitroaniline	1600	1600 U	1600 U	1600 U	1600 U
3-Nitroaniline	1600	1600 U	1600 U	1600 U	1600 U
4-Nitroaniline	1600	1600 U	1600 U	1600 U	1600 U
Nitrobenzene	330	330 U	330 U	330 U	330 U
2-Nitrophenol	330	330 U	330 U	330 U	330 U
4-Nitrophenol	1600	1600 U	1600 U	1600 U	1600 U
N-Nitroso-di-n-propylamine	330	330 U	330 U	330 U	330 U
N-Nitrosodiphenylamine	330	330 U	330 U	330 U	330 U
Pentachlorophenol	1600	1600 U	1600 U	1600 U	1600 U
Phenanthrene	330	33 J	4900	480 U	390 J
Phenol	330	330 U	330 U	330 U	330 U
Pyrene	330	110 J	9200	1300	840
1,2,4-Trichlorobenzene	330	330 U	330 U	330 U	330 U
2,4,5-Trichlorophenol	800	800 U	800 U	800 U	800 U
2,4,6-Trichlorophenol	330	330 U	330 U	330 U	330 U
Dilution Factor:		1.0	1.0	1.0	1.0
Percent Solids:		90	29	96	96
Sample Volume\Weight (ml\g):		30.12	30.18	30.5	30.06
Associated Method Blank:		Z24115.RR	Z24115.RR	Z24115.RR	Z24115.RR
Associated Equipment Blank:		01QS201XXXX1XX	01QS201XXXX1XX	01QS201XXXX1XX	01QS201XXXX1XX
Associated Field Blank:		-	-	-	-

Site: SOIL BORINGS

Table 1
Laboratory Report of Analysis

LOCATION:	BS-1	BS-2	BS-3 DUP	BS-3
ISIS ID:	01BSXX1XX6X1XX	01BSXX2XX5X1XX	01BSXX3XX6X1DX	01BSXX3XX6X1XX
LAB NUMBER:	A5441001	A5441002	A5441003 FD	A5441003
DATE SAMPLED:	08/17/95	08/17/95	08/17/95	08/17/95
DATE EXTRACTED:	08/23/95	08/23/95	08/23/95	08/23/95
DATE ANALYZED:	08/29/95	08/29/95	08/29/95	08/29/95

ANALYTE	RL				
Pyridine	330	330 U	330 U	330 U	330 U
2-Chloropyridine	330	330 U	330 U	330 U	330 U
3-Chloropyridine	330	330 U	330 U	330 U	330 U
4-Chlropyridine	330	330 U	330 U	330 U	330 U
2,6-Dichloropyridine	330	450	100 J	330 U	330 U
p-Fluoroaniline	330	330 U	330 U	330 U	330 U

Dilution Factor:	1.0	1.0	1.0	1.0
Percent Solids:	90	29	96	96
Sample Volume\Weight (ml\g):	30.12	30.18	30.05	30.06
Associated Method Blank:	Z24115.RR	Z24115.RR	Z24115.RR	Z24115.RR
Associated Equipment Blank:	-	-	-	-
Associated Field Blank:	-	-	-	-

Site: SOIL BORINGS

Table 1
Laboratory Report of Analysis

LOCATION:	SB-1	SB-2	SB-3
ISIS ID:	01BW001XXXX1XX	01BW002XXXX1XX	01BW003XXXX1XX
LAB NUMBER:	A5503201	A5503202	A5503203
DATE SAMPLED:	09/19/95	09/19/95	09/19/95
DATE ANALYZED:	09/26/95	09/26/95	09/26/95

ANALYTE	RL					
Acetone	10	25	U	25	U	100000 U
Benzene	5	1.2	U	2.1		5000 U
Bromodichloromethane	5	1.2	U	1.2	U	5000 U
Bromoform	5	1.2	U	1.2	U	5000 U
Bromomethane	10	2.5	U	2.5	U	10000 U
2-Butanone	10	2.5	U	2.5	U	10000 U
Carbon Disulfide	5	1.2	U	1.2	U	5000 U
Carbon Tetrachloride	5	3.4		1.2	U	260000
Chlorobenzene	5	0.71	J	85		5000 U
Chloroethane	10	2.5	U	2.5	U	10000 U
Chloroform	5	1.8		1.2	U	80000
Chloromethane	10	2.5	U	2.5	U	10000 U
Dibromochloromethane	5	1.2	U	1.2	U	5000 U
1,1-Dichloroethane	5	1.2	U	1.2	U	5000 U
1,2-Dichloroethane	5	35		1.2	U	5000 U
1,1-Dichloroethene	5	1.2	U	1.2	U	5000 U
1,2-Dichloroethene (total)	5	44		1.2	U	5000 U
1,2-Dichloropropane	5	1.2	U	1.2	U	5000 U
cis-1,3-Dichloropropene	5	1.2	U	1.2	U	5000 U
trans-1,3-Dichloropropene	5	1.2	U	1.2	U	5000 U
Ethylbenzene	5	1.2	U	1.7		5000 U
2-Hexanone	10	2.5	U	2.5	U	10000 U
Methylene Chloride	5	7.5	U	7.5	U	30000 U
4-Methyl-2-Pentanone	10	2.5	U	2.5	U	10000 U
Styrene	5	1.2	U	1.2	U	5000 U
1,1,2,2-Tetrachloroethane	5	1.2	U	1.2	U	5000 U
Tetrachloroethene	5	1.3		1.2	U	5000 U
Toluene	5	0.71	J	48		5000 U
1,1,1-Trichloroethane	5	1.2	U	1.2	U	5000 U
1,1,2-Trichloroethane	5	1.2	U	1.2	U	5000 U
Trichloroethene	5	1.2		1.2	U	5000 U
Vinyl Acetate	10	12	U	12	U	50000 U
Vinyl Chloride	10	89		2.5	U	10000 U
Total Xylenes	5	1.7		9.3		5000 U

Dilution Factor:	2.50	2.50	10000
Sample Volume\Weight (ml\g):	25	25	25
Associated Method Blank:	L7411.RR	L7411.RR	L7411.RR
Associated Equipment Blank:	-	-	-
Associated Field Blank:	-	-	-
Associated Trip Blank:	01QT202XXXX1XX	01QT202XXXX1XX	01QT202XXXX1XX

Site: SOIL BORING WATERS

Table 1
Laboratory Report of Analysis

	LOCATION:	SB-2	SB-3
	ISIS ID:	01BW002XXXX1XX	01BW003XXXX1XX
	LAB NUMBER:	A5503202	A5503203
	DATE SAMPLED:	09/19/95	09/19/95
	DATE EXTRACTED:	09/25/95	09/25/95
	DATE ANALYZED:	10/06/95	10/11/95
ANALYTE	RL		
Fluorene	10	10 U	10 U
Hexachlorobenzene	10	10 U	10 U
Hexachlorobutadiene	10	10 U	10 U
Hexachlorocyclopentadiene	10	10 U	12
Hexachloroethane	10	10 U	390
Indeno(1,2,3-c,d)Pyrene	10	10 U	10 U
Isophorone	10	10 U	10 U
2-Methylnaphthalene	10	10 U	10 U
2-Methylphenol	10	17	10 U
4-Methylphenol	10	12	10 U
Naphthalene	10	10 U	10 U
2-Nitroaniline	50	50 U	50 U
3-Nitroaniline	50	50 U	50 U
4-Nitroaniline	50	50 U	50 U
Nitrobenzene	10	10 U	10 U
2-Nitrophenol	10	10 U	10 U
4-Nitrophenol	50	50 U	50 U
N-Nitroso-di-n-propylamine	10	10 U	10 U
N-Nitrosodiphenylamine	10	10 U	10 U
Pentachlorophenol	50	50 U	50 U
Phenanthrene	10	10 U	10 U
Phenol	10	10 U	10 U
Pyrene	10	10 U	10 U
1,2,4-Trichlorobenzene	10	10 U	10 U
2,4,5-Trichlorophenol	25	25 U	25 U
2,4,6-Trichlorophenol	10	10 U	10 U
Dilution Factor:		1.00	1.00
Sample Volume\Weight (ml\g):		980	540
Associated Method Blank:		22328W.MSQ	22328W.MSQ
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

Site: SOIL BORING WATERS

Table 1
Laboratory Report of Analysis

LOCATION:	SB-2
ISIS ID:	01BW002XXXX1XX
LAB NUMBER:	A5503202
DATE SAMPLED:	09/19/95

ANALYTE	RL		
Aluminum	200	14200	
Antimony	10	10.0	U
Arsenic	5	119	
Barium	20	2550	
Beryllium	3	8.3	
Cadmium	5	10.9	
Calcium	1000	2320000	
Chromium	10	364	N
Cobalt	10	129	
Copper	5	788	
Iron	30	417000	N
Lead	3	464	
Magnesium	300	326000	
Manganese	5	15100	
Mercury	0.2	1.7	
Nickel	10	1400	
Potassium	2000	32700	
Selenium	3	3.0	U
Silver	10	10.0	UN
Sodium	1000	177000	
Thallium	3	3.0	U
Vanadium	10	241	
Zinc	10	1330	
Cyanide	10	10.0	U

Associated Method Blank:	SS116
Associated Equipment Blank:	-
Associated Field Blank:	-

Site: SOIL BORING WATERS

GROUNDWATER RESULTS (SEPTEMBER 1995)

OLIN ROCHESTER
SEMIANNUAL MONITORING - 2nd ROUND 1995

WELL:	B-1	B-17	B-6	BR-1	BR-101	BR-102	BR-103	BR-104
TYPE:								
DATE:	12-Sep-95	13-Sep-95	12-Sep-95	12-Sep-95	11-Sep-95	12-Sep-95	11-Sep-95	11-Sep-95
PARAMETER								
VOCs (ug/l)								
1,1,1-Trichloroethane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
1,1,2-Trichloroethane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
1,1-Dichloroethane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
1,1-Dichloroethene	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
1,2-Dichloroethane	10 U	1000 U	10 U	10 U	1700 J	25 U	10 U	10 U
1,2-Dichloroethene (Total)	10 U	1000 U	2 J	10 U	2500 U	25 U	24	10 U
1,2-Dichloropropane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
2-Butanone	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
2-Hexanone	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
Acetone	10 U	1000 U	62	10 U	2500 U	15 J	10 U	10 U
Benzene	10 U	1000 U	30	10 U	400 J	30	2 J	10 U
Bromodichloromethane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
Bromoform	10 U	770 J	10 U	10 U	2500 U	25 U	10 U	10 U
Bromomethane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
Carbon Disulfide	10 U	1800	10 U	10 U	2500 U	25 U	10 U	10 U
Carbon Tetrachloride	10 U	100000 D	10 U	10 U	2500 U	19 J	10 U	10 U
Chlorobenzene	10 U	420 J	210 D	10 U	13000	77	10 U	10 U
Chloroethane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
Chloroform	10 U	35000 D	10 U	10 U	5400	340	10 U	10 U
Chloromethane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
Dibromochloromethane	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
Ethylbenzene	10 U	1000 U	3 J	10 U	790 J	25 U	10 U	10 U
Methylene Chloride	10 U	2800	10 U	10 U	31000	220	10 U	10 U
Styrene	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
Tetrachloroethene	10 U	3100	10 U	10 U	2500 U	17 J	10 U	10 U
Toluene	10 U	280 J	70	10 U	26000	21 J	10 U	10 U
Total Xylenes	10 U	1000 U	2 J	10 U	3800	25 U	10 U	10 U
Trichloroethene	10 U	1000 U	10 U	10 U	2500 U	5 J	10 U	10 U
Vinyl Chloride	10 U	1000 U	10 U	10 U	2500 U	25 U	3 J	10 U
Cis-1,3-Dichloropropene	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
Trans-1,3-Dichloropropene	10 U	1000 U	10 U	10 U	2500 U	25 U	10 U	10 U
Chloropyridines (ug/l)								
2,6-Dichloropyridine	24	19000 DJ	11000 D	10 U	2300 D	110 D	0.5 J	59
2-Chloropyridine	12	120000 D	42000 D	14	6700 D	660 D	15	140 D
3-Chloropyridine	10 U	6200 D	770 D	10 U	560	10	10 U	10 U
p-Fluoroaniline	10 U	400 E	180 DJ	10 U	200 U	17	10 U	10 U
Misc. (ug/l)								
Methanol	1000 U	2900	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U

OLIN ROCHESTER
SEMIANNUAL MONITORING - 2n

WELL:	BR-4	BR-4	BR-5A	BR-6	BR-8	BR-8	E-1	E-3
TYPE:		Duplicate				Duplicate		
DATE:	12-Sep-95	12-Sep-95	12-Sep-95	12-Sep-95	13-Sep-95	13-Sep-95	12-Sep-95	12-Sep-95
PARAMETER								
VOCs (ug/l)								
1,1,1-Trichloroethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
1,1,2-Trichloroethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
1,1-Dichloroethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
1,1-Dichloroethene	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
1,2-Dichloroethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
1,2-Dichloroethene (Total)	2 J	2 J	610	500 U	17 J	18 J	10 J	7 J
1,2-Dichloropropane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
2-Butanone	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
2-Hexanone	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Acetone	10 U	10 U	40 U	370 J	50 U	50 U	50 U	10 U
Benzene	10 U	10 U	82	500 U	68	66	50 U	44
Bromodichloromethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Bromoform	10 U	10 U	40 U	94 J	50 U	50 U	50 U	10 U
Bromomethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Carbon Disulfide	1 J	10 U	40 U	280 J	8 J	7 J	50 U	10 U
Carbon Tetrachloride	10 U	10 U	40 U	750	50 U	50 U	420	10 U
Chlorobenzene	2 J	2 J	40 U	500 U	1400 D	1500 D	50 U	4 J
Chloroethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Chloroform	10 U	10 U	65	6700	50 U	50 U	680	10 U
Chloromethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Dibromochloromethane	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Ethylbenzene	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Methylene Chloride	3 J	3 J	40 U	1400	50 U	50 U	33 J	10 U
Styrene	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Tetrachloroethene	10 U	10 U	40 U	190 J	50 U	50 U	17 J	10 U
Toluene	10 U	10 U	26 J	260 J	43 J	45 J	12 J	10 U
Total Xylenes	10 U	10 U	40 U	500 U	50 U	50 U	31 J	10 U
Trichloroethene	10 U	10 U	75	500 U	50 U	50 U	50 U	2 J
Vinyl Chloride	18	17	47	500 U	50 U	50 U	50 U	10 U
Cis-1,3-Dichloropropene	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Trans-1,3-Dichloropropene	10 U	10 U	40 U	500 U	50 U	50 U	50 U	10 U
Chloropyridines (ug/l)								
2,6-Dichloropyridine	77	68	82 D	8800 DJ	1200 D	1100 D	350 D	120 D
2-Chloropyridine	220 D	190 D	230 D	74000 D	4900 D	4400 D	1400 D	82 D
3-Chloropyridine	8 J	8 J	2 J	3300 D	130 D	72 DJ	79 D	10 U
p-Fluoroaniline	10 U	10 U	37	25 J	180 D	210 D	6 J	29
Misc. (ug/l)								
Methanol	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U

GROUNDWATER DATA FROM NEW WELLS/POINTS (NOVEMBER-DECEMBER 1995)

Table 1
Laboratory Report of Analysis

	LOCATION:	BR-111	BR-111D	BR-112A	BR-112D	BR-113	BR-113D	BR-113 FD	BR-114
	LAB NUMBER:	A5649106	A5649107	A5649108	A5649109	A5649110	A5649111	A5649110 FD	A5649104
	DATE SAMPLED:	12/07/95	12/07/95	12/07/95	12/07/95	12/07/95	12/07/95	12/07/95	12/07/95
	DATE EXTRACTED:	12/11/95	12/11/95	12/11/95	12/11/95	12/11/95	12/11/95	12/11/95	12/11/95
	DATE ANALYZED:	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95	12/14/95
ANALYTE	RL								
Pyridine	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloropyridine	10	10 U	10 U	10 U	4 J	2 J	76	2 J	12
3-Chloropyridine	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	8 J
4-Chlropyridine	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dichloropyridine	10	10 U	10 U	10 U	10 U	10 U	1 J	10 U	6 J
p-Fluoroaniline	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Sample Volume\Weight (ml\g):		1000	1000	1000	1000	1000	1000	1000	1000
Associated Method Blank:		Z25621.RR	Z25621.RR	Z25621.RR	Z25621.RR	Z25621.RR	Z25621.RR	Z25621.RR	Z25621.RR
Associated Equipment Blank:		FIELD RINSE	FIELD RINSE	FIELD RINSE	FIELD RINSE	FIELD RINSE	FIELD RINSE	FIELD RINSE	FIELD RINSE
Associated Field Blank:		-	-	-	-	-	-	-	-

Site: MONITORING WELLS

Table 1
Laboratory Report of Analysis

SAMPLE LOCATION:	BR-111	BR-111D	BR-112A	BR-112D	BR-113	BR-113 FD	BR-113D	BR-114
LAB NUMBER:	A5576405	A5576406	A5579706	A5579705	A5576402	A5576402 FD	A5576403	A5579703
DATE SAMPLED:	10/26/95	10/26/95	10/27/95	10/27/95	10/26/95	10/26/95	10/26/95	10/27/95
DATE ANALYZED:	10/31/95	10/31/95	10/31/95	10/31/95	10/31/95	10/31/95	10/31/95	10/31/95
ANALYTE RL								
Acetone 10	21	100 U	10 U	10 U	50 U	50 U	10 U	10 U
Benzene 0.50	1.6	240	0.50 U	22	31	30	24	0.58
Bromodichloromethane 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
Bromoform 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
Bromomethane 1.0	1.0 U	10 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U
2-Butanone 1.0	1.0 U	10 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U
Carbon Disulfide 0.50	0.69	5.5	0.60	3.7	2.5 U	2.5 U	1.7	0.34 J
Carbon Tetrachloride 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
Chlorobenzene 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
Chloroethane 1.0	1.0 U	10 U	1.0 U	3.0	5.0 U	5.0 U	1.0 U	1.0 U
Chloroform 0.50	0.50 U	5.0 U	0.41 J	0.50 U	2.5 U	2.5 U	1.0	0.50 U
Chloromethane 1.0	1.0 U	10 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U
Dibromochloromethane 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
1,1-Dichloroethane 0.50	0.50 U	5.0 U	0.50 U	35	2.5 U	2.5 U	35	0.95
1,2-Dichloroethane 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
1,1-Dichloroethene 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
1,2-Dichloroethene (total) 0.50	0.50 U	5.0 U	0.50 U	48	2.5 U	2.5 U	36	0.50 U
1,2-Dichloropropane 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
cis-1,3-Dichloropropene 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
trans-1,3-Dichloropropene 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
Ethylbenzene 0.50	1.1	38	0.50 U	3.2	61	62	1.3	1.1
2-Hexanone 1.0	1.0 U	10 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U
Methylene Chloride 3.0	3.0 U	30 U	3.0 U	3.0 U	15 U	15 U	3.0 U	3.0 U
4-Methyl-2-Pentanone 1.0	1.0 U	10 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U
Styrene 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
Tetrachloroethene 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
Toluene 0.50	0.59	14	0.24 J	0.54	130	140	1.1	0.25 J
1,1,1-Trichloroethane 0.50	0.50 U	5.0 U	0.50 U	0.89	2.5 U	2.5 U	0.85	0.50 U
1,1,2-Trichloroethane 0.50	0.50 U	5.0 U	0.50 U	0.50 U	2.5 U	2.5 U	0.50 U	0.50 U
Trichloroethene 0.50	0.50 U	5.0 U	0.50 U	2.4	2.5 U	2.5 U	1.6	0.50 U
Vinyl Acetate 5.0	5.0 U	50 U	5.0 U	5.0 U	25 U	25	5.0 U	5.0 U
Vinyl Chloride 1.0	1.0 U	10 U	1.0 U	67	5.0 U	5.0 U	33	1.0 U
Total Xylenes 0.50	2.8	41	0.28 J	1.8	340	340	2.0	2.1
Dilution Factor:	1.00	10.0	1.00	1.00	5.00	5.00	1.00	1.00
Sample Volume\Weight (ml\g):	25	25	25	25	25	25	25	25
Associated Method Blank:	L8060.RR	L8060.RR	L8060.RR	L8060.RR	L8060.RR	L8060.RR	L8060.RR	L8060.RR
Associated Equipment Blank:	RINSE BLANK	RINSE BLANK	FIELD RINSE	FIELD RINSE	RINSE BLANK	RINSE BLANK	RINSE BLANK	FIELD RINSE
Associated Field Blank:	-	-	-	-	-	-	-	-
Associated Trip Blank:	TRIPBLANK10/26	TRIPBLANK10/26	TRIPBLANK10/27	TRIPBLANK10/27	TRIPBLANK10/26	TRIPBLANK10/26	TRIPBLANK10/26	TRIPBLANK10/27

Site: MONITORING WELLS

Table 1
Laboratory Report of Analysis

SAMPLE LOCATION:		BR-111	BR-111D	BR-112A	BR-112D	BR-113	BR-113 FD	BR-113D	BR-114
LAB NUMBER:		A5576405	A5576406	A5579706	A5579705	A5576402	A5576402FD	A5576403	A5579703
DATE SAMPLED:		10/26/95	10/26/95	10/27/95	10/27/95	10/26/95	10/26/95	10/26/95	10/27/95
DATE EXTRACTED:		11/01/95	11/01/95	11/02/95	11/02/95	11/01/95	11/01/95	11/01/95	11/02/95
DATE ANALYZED:		11/19/95	11/19/95	11/06/95	11/06/95	11/19/95	11/19/95	11/19/95	11/06/95
ANALYTE	RL								
Acenaphthene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)Anthracene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)Fluoranthene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)Fluoranthene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)Pyrene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzoic Acid	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzyl Alcohol	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10	10 U	5 J	10 U	4 J	1 J	2 J	2 J	10 U
4-Bromophenyl-phenylether	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10	0.7 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)Anthracene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10	10 U	0.8 J	10 U	10 U	10 U	10 U	2 J	10 U
1,2-Dichlorobenzene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10	10 U	2 J	10 U	10 U	10 U	10 U	10 U	10 U
Dimethylphthalate	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrophenol	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 1
Laboratory Report of Analysis

SAMPLE LOCATION:	MW-114	NESS-E	NESS-E FD	NESS-W
LAB NUMBER:	A5579704	A5621202	A5621202FD	A5621203
DATE SAMPLED:	10/27/95	11/20/95	11/20/95	11/20/95
DATE EXTRACTED:	11/02/95	11/21/95	11/21/95	11/21/95
DATE ANALYZED:	11/06/95	11/27/95	11/27/95	11/27/95

ANALYTE	RL				
Acenaphthene	10	10 U	10 U	10 U	10 U
Acenaphthylene	10	10 U	10 U	10 U	10 U
Anthracene	10	10 U	10 U	10 U	10 U
Benzo(a)Anthracene	10	10 U	10 U	10 U	10 U
Benzo(b)Fluoranthene	10	10 U	10 U	10 U	10 U
Benzo(k)Fluoranthene	10	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	10 U	10 U	10 U	10 U
Benzo(a)Pyrene	10	10 U	10 U	10 U	10 U
Benzoic Acid	50	50 U	50 U	50 U	50 U
Benzyl Alcohol	10	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether	10	10 U	9 J	6 J	10 U
bis(2-Chloroisopropyl)ether	10	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10	4 J	5 J	2 J	16
4-Bromophenyl-phenylether	10	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10	10 U	10 U	10 U	10 U
4-Chloroaniline	10	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10	10 U	10 U	10 U	10 U
2-Chloronaphthalene	10	10 U	10 U	10 U	10 U
2-Chlorophenol	10	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10	10 U	10 U	10 U	10 U
Chrysene	10	10 U	10 U	10 U	10 U
Dibenzo(a,h)Anthracene	10	10 U	10 U	10 U	10 U
Dibenzofuran	10	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10	10 U	4 J	3 J	10 U
1,3-Dichlorobenzene	10	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20	10 U	20 U	20 U	20 U
2,4-Dichlorophenol	10	10 U	10 U	10 U	10 U
Diethylphthalate	10	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10	10 U	10 U	10 U	10 U
Dimethylphthalate	10	10 U	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol	50	50 U	50 U	50 U	50 U
2,4-Dinitrophenol	50	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	10	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10	10 U	10 U	10 U	10 U
Di-n-octylphthalate	10	10 U	10 U	10 U	10 U
Fluoranthene	10	10 U	10 U	10 U	10 U

Table 1
Laboratory Report of Analysis

ANALYTE	RL	SAMPLE LOCATION: BR-111 LAB NUMBER: A5576405 DATE SAMPLED: 10/26/95	BR-111D A5576406 10/26/95	BR-112A A5579706 10/27/95	BR-112D A5579705 10/27/95	BR-113 A5576402 10/26/95	BR-113 FD A5576402 FD 10/26/95	BR-113D A5576403 10/26/95	BR-114 A5579703 10/27/95
Aluminum	90	16600 E	4660 E	240	3090	7950 E	7760 E	1940 E	235
Antimony	30	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.4 B	5.1 U
Arsenic	4	16.1	54.8	5.3 U	5.3 U	9 B	6.2 B	5.3 U	5.3 U
Barium	30	102 B	81 B	36.7 B	99 B	174 B	163 B	60 B	279
Beryllium	3	0.82 B	0.2 U	0.2 U	0.3 B	0.65 B	0.6 B	0.2 U	0.2 U
Cadmium	10	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	1000	316000	1220000	193000	234000	191000	193000	177000	135000
Chromium	10	27.4	2 B	1 U	9.5 B	13	10.8	1 U	1 U
Cobalt	30	7.1 B	1.7 B	1.6 U	1.6 U	5.7 B	5.2 B	1.6 U	1.6 U
Copper	10	26.5	9.1 B	1.1 U	3.9 B	20.4 B	20.7 B	4.8 B	1.6 B
Iron	40	25200 N	5520 N	2830 N	9400 N	18500 N	18100 N	3870 N	2540 N
Lead	30	47.4	13.1	2.3 B	9	49	40	9	1.4 U
Magnesium	400	151000	305000	58900	82000	81300	81200	54200	28800
Manganese	5	695	128	54.1	412	925	920	221	119
Mercury	0.2	0.2 U	0.2 U	7.7	0.54	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	20	28.3 B	2.3 B	1.4 U	9.5 B	13.7 B	12.9 B	1.6 B	1.4 U
Potassium	400	24600 E	171000 E	4040 BE	9310 E	18800 E	17000 E	9220 E	4880 BE
Selenium	4	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Silver	0.5	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Sodium	1000	23900	6490000	12200	161000	60700	61700	151000	97200
Thallium	4	3 U	3 U	7.1 U	7.1 U	3 U	3 U	3 U	7.1 U
Vanadium	10	21.3 B	5.2 B	1.6 U	4.2 B	14.7 B	13.5 B	3.9 B	1.6 U
Zinc	10	93.7	51.8	18 B	38	153	127	58.3	17.6 B
Cyanide	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Associated Method Blank:		BR111	BR111	BR111	BR111	BR111	BR111	BR111	BR111
Associated Equipment Blank:		RINSE BLANK	RINSE BLANK	FIELD RINSE	FIELD RINSE	RINSE BLANK	RINSE BLANK	RINSE BLANK	FIELD RINSE
Associated Field Blank:		-	-	-	-	-	-	-	-

Site: MONITORING WELLS

SURFACE WATER RESULTS (NOVEMBER 1994 TO NOVEMBER 1995)

OLIN ROCHESTER
QUARTERLY SURFACE WATER MONITORING RESULTS = NOVEMBER 1994 - MAY 1995

LOCATION:	SW-1	SW-1	SW-1	SW-2	SW-2 Duplicate	SW-2	SW-2 Duplicate
TYPE:							
DATE SAMPLED:	2-Nov-94	27-Mar-95	17-May-95	2-Nov-94	2-Nov-94	27-Mar-95	27-Mar-95
ANALYTE (ug/l)							
2,6-Dichloropyridine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloropyridine	10 U	5 J	10 U	10 U	10 U	4 J	5 J
3-Chloropyridine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
p-Fluoroaniline	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyridine	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 2
Validation / Summary Table

	LOCATION:	SW-1	SW-2	SW-3	SW-3 Field Duplicate
	ISIS ID:	SW-1	SW-2	SW-3	SW-3 FD
	LAB NUMBER:	A5472205	A5472206	A5472207	A5472207 FD
	DATE SAMPLED:	09/06/95	09/06/95	09/06/95	09/06/95
	DATE EXTRACTED:	09/08/95	09/08/95	09/08/95	09/08/95
	DATE ANALYZED:	09/13/95	09/13/95	09/13/95	09/13/95
ANALYTE	RL				
Pyridine	10	10 U	10 U	10 U	10 U
2-Chloropyridine	10	10 U	10 U	10 U	10 U
3-Chloropyridine	10	10 U	10 U	10 U	10 U
4-Chlropyridine	10	10 U	10 U	10 U	10 U
2,6-Dichloropyridine	10	10 U	10 UJ	10 U	10 U
p-Fluoroaniline	10	10 U	10 UJ	10 U	10 U
Dilution Factor:		1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):		1000	1000	1000	1000
Associated Method Blank:		Z24261.RR	Z24261.RR	Z24261.RR	Z24261.RR
Associated Equipment Blank:		FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK
Associated Field Blank:		-	-	-	-

Site: BARGE CANAL SURFACE WATER

Table 2
Validation / Summary Table

	LOCATION:	SW-1	SW-2	SW-2 FD	SW-3
	LAB NUMBER:	A5621302	A5621303	A5621303FD	A5621304
	DATE SAMPLED:	11/20/95	11/20/95	11/20/95	11/20/95
	DATE EXTRACTED:	11/21/95	11/21/95	11/21/95	11/21/95
	DATE ANALYZED:	11/25/95	11/25/95	11/25/95	11/25/95
ANALYTE	RL				
Pyridine	10	10 UJ	10 UJ	10 UJ	10 UJ
2-Chloropyridine	10	1 J	2 J	3 J	1 J
3-Chloropyridine	10	10 U	10 U	10 U	10 U
4-Chloropyridine	10	10 U	10 U	10 U	10 U
2,6-Dichloropyridine	10	0.2 J	0.3 J	0.3 J	0.2 J
p-Fluoroaniline	10	10 U	10 U	10 U	10 U
Dilution Factor:		1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):		1000.0	1000.0	1000.0	1000
Associated Method Blank:		Z25371.RR	Z25371.RR	Z25371.RR	Z25371.RR
Associated Equipment Blank:		RINSE BLANK	RINSE BLANK	RINSE BLANK	RINSE BLANK
Associated Field Blank:		-	-	-	-

Site: BARGE CANAL SURFACE WATER

QUARRY SEEP, COLLECTION POND AND OUTFALL RESULTS

Table 2
Validation / Summary Table

	LOCATION:	QS-1	QS-2	QS-3	QS-4
	ISIS ID:	QS-1	QS-2	QS-3	QS-4
	LAB NUMBER:	A5472201	A5472202	A5472203	A5472204
	DATE SAMPLED:	09/06/95	09/06/95	09/06/95	09/06/95
	DATE EXTRACTED:	09/08/95	09/08/95	09/08/95	09/11/95
	DATE ANALYZED:	09/13/95	09/13/95	09/13/95	09/13/95
ANALYTE	RL				
Pyridine	10	10 U	10 U	10 U	10 U
2-Chloropyridine	10	10 U	4 J	40	1300
3-Chloropyridine	10	10 U	10 U	10 U	7 J
4-Chlropyridine	10	10 U	10 U	10 U	10 U
2,6-Dichloropyridine	10	10 U	10 U	4 J	140 J
p-Fluoroaniline	10	10 U	10 U	10 U	2 J
Dilution Factor:		1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):		1000	1000	1000	1000
Associated Method Blank:		Z24261.RR	Z24261.RR	Z24261.RR	Z24245.RR
Associated Equipment Blank:		FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK
Associated Field Blank:		-	-	-	-

Site: QUARRY SEEPS

Table 1
Laboratory Report of Analysis

	SAMPLE LOCATION:	QS-4	QS-4 FD
	LAB NUMBER:	A5573902	A5573902 FD
	DATE SAMPLED:	10/25/95	10/25/95
	DATE EXTRACTED:	10/27/95	10/27/95
	DATE ANALYZED:	11/17/95	11/17/95
ANALYTE	RL		
Pyridine	10	10 U	10 U
2-Chloropyridine	10	550	610
3-Chloropyridine	10	7 J	7 J
4-Chlropyridine	10	10 U	10 U
2,6-Dichloropyridine	10	55	58
p-Fluoroaniline	10	5 J	5 J
Dilution Factor:		1.00	1.00
Sample Volume\Weight (ml\g):		1000	1000
Associated Method Blank:		Z25208.RR	Z25208.RR
Associated Equipment Blank:		RINSE BLANK	RINSE BLANK
Associated Field Blank:		-	-

Site: QUARRY SEEPS

TENTATIVELY IDENTIFIED COMPOUNDS

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Olin Rochester - Phase II RI/FS; FILE: 7311-05
AQUEOUS (ug/L)

VOLATILE

	BR-111	BR-111D	BR-112D	BR-113	BR-113D
Unknown	20 J(4)	2600 J(4)	6 J(2)	250 J(2)	74 J(2)
Pentane	3 JN			62 JN	14 JN
Hexane	1 JN				3 JN
Saturated Hydrocarbon	3 J	78 J		140 J	
Unsaturated Hydrocarbon	5 J(2)	240 J(2)	10 J(3)	67 J	44 J(4)
Trimethylbenzene Isomer	1 J			260 J(2)	
Dimethyl Sulfide		60 JN			
2-(Methylthio)-Propane		190 JN			
Alkyl Substituted Compound		68 J			
Methylcyclobutane			5 JN		
Aromatic Derivative			2 J		
1,2-Dichloro-1,1,2-Trifluoroethane			6 JN		9 JN
1,1,2-Trichloro-1,2,2-Trifluoroethane			10 JN		16 JN
2-Methyl Butane			5 JN		
Ethylmethylbenzene Isomer				160 J	
Benzene Derivative				54 J	
Alkyl Benzene Derivative				58 J	

	BR-114	FIELD RINSE	MW-114	BR-112A	BR-113FD
Unknown	1 J		4 J	20 J(4)	230 J(2)
Unsaturated Hydrocarbon	1 J		2 J	2 J(2)	80 J
2-Methly Butane	2 JN				
Ethylmethylbenzene Isomer	2 J				170 J
Trimethlybenzene Isomer	4 J(2)				250 J(2)
Aromatic Derivative	5 J(2)				
Alkyl Substituted Compound	4 J			3 J(2)	110 J(2)
Benzene Derivative	4 J				
Trichlorofluoromethane		1 JN			
Pentane				4 JN	
Saturated Hydrocarbon				8 J	130 J
Diethylbenzene Isomer					60 J

No volatile TIC's were identified in the following samples:

RINSE BLANK
TRIP BLANK 10/26
TRIP BLANK 10/27

TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY
FOR Olin Rochester - Phase II RI/FS; FILE: 7311-07
AQUEOUS (ug/L)

VOLATILE

	NESS-E	NESS-E FD	NESS-W
Unknown Hydrocarbon	6 J(2)	6 J(2)	62 J
Dichloropyridine Isomer	4 J(2)	5 J(2)	
2-Methyl Butane	2 JN	2 JN	94 JN
Hexane	2 JN	2 JN	
Cycloalkyl Compound	3 J	3 J	11 J
Chloropyridine Isomer	24 J	28 J	
Fluorobenzene	3 JN	3 JN	
1,2-Dichlorobenzene	10 JN	11 JN	
Isobutane			10 JN
Isopropylbenzene			9 JN
N-Propylbenzene			16 JN
Methly Ethyl Benzene Isomer			10 J
Tetramethylbenzene Isomer			11 J
1,2,4-Trimethylbenzene			15 JN
1,2-Dichloro-1,1,2-Trifluoro-Ethane			13 JN

No volatile TIC's were identified in the following samples:

RINSE BLANK
TRIP BLANK

SEMIVOLATILE

	NESS-E	NESS-E FD	NESS-W
Unknown	11 J(2)	10 J(2)	30 J(4)
Unknown Acid	60 J(2)	44 J	15 J
Dichloropyridine Isomer	94 J(2)	85 J(2)	9 J
Chloropyridine Isomer	730 J	620 J	240 J
Trimethlybenzene Isomer			4 J
Tetramethylbenzene Isomer			8 J
p-Fluoroaniline			6 JN

No Semivolatile TIC's were identified in the following samples:

RINSE BLANK

QA/QC RESULTS OCTOBER/NOVEMBER 1995

Table 1
Laboratory Report of Analysis

SAMPLE LOCATION:	TRIP BLANK	TRIP BLANK 10/26	TRIP BLANK 10/27
LAB NUMBER:	A5621201	A5576401	A5579705
DATE SAMPLED:	11/20/95	10/26/95	10/27/95
DATE ANALYZED:	11/21/95	10/31/95	10/31/95

ANALYTE	RL			
Acetone	10	10	10 U	10 U
Benzene	0.50	0.50	0.50 U	0.50 U
Bromodichloromethane	0.50	0.50	0.50 U	0.50 U
Bromoform	0.50	0.50	0.50 U	0.50 U
Bromomethane	1.0	1.0	1.0 U	1.0 U
2-Butanone	1.0	1.0	1.0 U	1.0 U
Carbon Disulfide	0.50	0.50	0.50 U	0.50 U
Carbon Tetrachloride	0.50	0.50	0.50 U	0.50 U
Chlorobenzene	0.50	0.50	0.50 U	0.50 U
Chloroethane	1.0	1.0	1.0 U	1.0 U
Chloroform	0.50	0.50	0.50 U	0.50 U
Chloromethane	1.0	1.0	1.0 U	1.0 U
Dibromochloromethane	0.50	0.50	0.50 U	0.50 U
1,1-Dichloroethane	0.50	0.50	0.50 U	0.50 U
1,2-Dichloroethane	0.50	0.50	0.50 U	0.50 U
1,1-Dichloroethene	0.50	0.50	0.50 U	0.50 U
1,2-Dichloroethene (total)	0.50	0.50	0.50 U	0.50 U
1,2-Dichloropropane	0.50	0.50	0.50 U	0.50 U
cis-1,3-Dichloropropene	0.50	0.50	0.50 U	0.50 U
trans-1,3-Dichloropropene	0.50	0.50	0.50 U	0.50 U
Ethylbenzene	0.50	0.50	0.50 U	0.50 U
2-Hexanone	1.0	1.0	1.0 U	1.0 U
Methylene Chloride	3.0	3.0	3.0 U	3.0 U
4-Methyl-2-Pentanone	1.0	1.0	1.0 U	1.0 U
Styrene	0.50	0.50	0.50 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50	0.50	0.50 U	0.50 U
Tetrachloroethene	0.50	0.50	0.50 U	0.50 U
Toluene	0.50	0.50	0.50 U	0.50 U
1,1,1-Trichloroethane	0.50	0.50	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50	0.50	0.50 U	0.50 U
Trichloroethene	0.50	0.50	0.50 U	0.50 U
Vinyl Acetate	5.0	5.0	5.0 U	5.0 U
Vinyl Chloride	1.0	1.0	1.0 U	1.0 U
Total Xylenes	0.50	0.50	0.50 U	0.50 U
Dilution Factor:		1.0	1.0	1.0
Sample Volume\Weight (ml\g):		25.0	25	25
Associated Method Blank:		L8499.RR	L8060.RR	L8060.RR
Associated Equipment Blank:		-	-	-
Associated Field Blank:		-	-	-
Associated Trip Blank:		-	-	-

TRIP BLANKS

Table 1
Laboratory Report of Analysis

SAMPLE LOCATION:	FIELD RINSE	RINSE BLANK	RINSE BLANK
LAB NUMBER:	A5579702	A5576404	A5621204
DATE SAMPLED:	10/27/95	10/26/95	11/20/95
DATE EXTRACTED:	11/02/95	11/01/95	11/21/95
DATE ANALYZED:	11/04/95	11/19/95	11/27/95

ANALYTE	RL			
Acenaphthene	10	10 U	10 U	10 U
Acenaphthylene	10	10 U	10 U	10 U
Anthracene	10	10 U	10 U	10 U
Benzo(a)Anthracene	10	10 U	10 U	10 U
Benzo(b)Fluoranthene	10	10 U	10 U	10 U
Benzo(k)Fluoranthene	10	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	10 U	10 U	10 U
Benzo(a)Pyrene	10	10 U	10 U	10 U
Benzoic Acid	50	50 U	50 U	50 U
Benzyl Alcohol	10	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10	10 U	10 U	10 U
bis(2-Chloroethyl)ether	10	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	10	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10	10 U	10 U	10 U
4-Bromophenyl-phenylether	10	10 U	10 U	10 U
Butylbenzylphthalate	10	10 U	10 U	10 U
4-Chloroaniline	10	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10	10 U	10 U	10 U
2-Chloronaphthalene	10	10 U	10 U	10 U
2-Chlorophenol	10	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10	10 U	10 U	10 U
Chrysene	10	10 U	10 U	10 U
Dibenzo(a,h)Anthracene	10	10 U	10 U	10 U
Dibenzofuran	10	10 U	10 U	10 U
Di-n-butylphthalate	10	10 U	10 U	10 U
1,2-Dichlorobenzene	10	10 U	10 U	10 U
1,3-Dichlorobenzene	10	10 U	10 U	10 U
1,4-Dichlorobenzene	10	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20	20 U	20 U	20 U
2,4-Dichlorophenol	10	10 U	10 U	10 U
Diethylphthalate	10	10 U	10 U	10 U
2,4-Dimethylphenol	10	10 U	10 U	10 U
Dimethylphthalate	10	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol	50	50 U	50 U	50 U
2,4-Dinitrophenol	50	50 U	50 U	50 U
2,4-Dinitrotoluene	10	10 U	10 U	10 U
2,6-Dinitrotoluene	10	10 U	10 U	10 U
Di-n-octylphthalate	10	10 U	10 U	10 U
Fluoranthene	10	10 U	10 U	10 U

Table 1
Laboratory Report of Analysis

	SAMPLE LOCATION:	RINSE BLANK	RINSE BLANK
	LAB NUMBER:	A5573901	A5621301
	DATE SAMPLED:	10/25/95	11/20/95
	DATE EXTRACTED:	10/27/95	11/21/95
	DATE ANALYZED:	11/17/95	11/25/95
ANALYTE	RL		
Pyridine	10	10 U	10 U
2-Chloropyridine	10	10 U	10 U
3-Chloropyridine	10	10 U	10 U
4-Chlropyridine	10	10 U	10 U
2,6-Dichloropyridine	10	10 U	10 U
p-Fluoroaniline	10	10 U	10 U
Dilution Factor:		1.00	1.00
Sample Volume\Weight (ml\g):		1000	1000.0
Associated Method Blank:		Z25208.RR	Z25371.RR
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

EQUIPMENT RINSATE

Table 1
Laboratory Report of Analysis

	SAMPLE LOCATION:	FIELD RINSE	RINSE BLANK	RINSE BLANK
	LAB NUMBER:	A5579702	A5576404	A5621204
	DATE SAMPLED:	10/27/95	10/26/95	11/20/95
ANALYTE	RL			
Aluminum	90	95.6 B	90 UE	72.2 B
Antimony	30	5.1 U	5.1 U	9.2 B
Arsenic	4	5.3 U	5.3 U	5.3 U
Barium	30	29.3 B	4.8 U	10.4 B
Beryllium	3	0.2 U	0.2 U	0.20 U
Cadmium	10	0.4 U	0.4 U	0.40 U
Calcium	1000	8170	8660	1040 B
Chromium	10	1 U	1 U	1.0 U*
Cobalt	30	1.6 U	1.6 U	2.3 B
Copper	10	1.1 U	1.1 U	4.0 BEN*
Iron	40	402 N	16.2 UN	1830 *
Lead	30	1.4 U	1.4 U	4.2 *
Magnesium	400	804 B	43.4 B	204 B
Manganese	5	38.7	0.4 U	8.7 BN*
Mercury	0.2	0.2 U	0.2 U	0.20 U
Nickel	20	1.4 U	1.4 U	1.4 U
Potassium	400	194 BE	57 BE	168 BEN
Selenium	4	5 U	5 U	7.9 *
Silver	0.5	1.1 U	1.1 U	1.2 BN
Sodium	1000	3500 B	1380 B	512000
Thallium	4	7.1 U	3 U	3.0 U
Vanadium	10	1.6 U	1.6 U	2.7 B
Zinc	10	13.4 B	6.6 B	40.8 E*
Cyanide	10	10 U	10 U	10.0 U
Associated Method Blank:		BR111	BR111	6212
Associated Equipment Blank:		-	-	-
Associated Field Blank:		-	-	-

EQUIPMENT RINSATE

VALIDATION MEMORANDA

MEMORANDUM

To: Tom Eschner

From: Paul C. Smith PCS

Date: October 23, 1995

Subject: Validation: Olin - Rochester Phase II RI/FS
Project No.: 07311-33
Sampling Date: September 6th, 1995

Review is complete for the data package generated by RECRA Environmental, Inc. concerning the quarry seep and surface water samples collected during the Phase II RI/FS field program. Review was performed following USEPA-CLP National Functional Guidelines. Samples were evaluated for holding time, surrogate recovery, field and laboratory blank contamination, duplicate results, internal standards, instrument performance check, initial and continuing calibrations, and matrix spike results. Samples were analyzed for selected pyridines in accordance with 1991 New York Analytical Services Protocol. The data tables referred to in this memo consist of the following:

Table 1: Laboratory Report of Analysis
Table 2: Validation / Summary Table

The following subsection summarize the qualifications/edits that have been detected by validation. For organic analyses, compound results below the reprting limit (RL) were flagged with a (J) by the laboratory on Table 1. These results were considered estimated and qualified (J) on Table 2.

Selected Pyridine Analyses - Qualifications/Edits

1. Due to results of 2-chloropyridine and 2,6-dichloropyridine exceeding the calibration range in quarry seep (QS-4) the sample was reanalyzed at a dilution of 20:1. At the 20:1 dilution 2-chloropyridine still exceeded the calibration range and was subsequently reanalyzed at a 80:1 dilution. The diluted results that were within the calibration range were replaced into the original sample (undiluted) along with any required qualifiers. The diluted sample results have been deleted from Table 2 for clarification.

2. The matrix spike/matrix spike duplicate (MS/MSD) recovery criteria were not met for 2,6-dichloropyridine and p-fluoroaniline resulting in sample SW-2 to be qualified as estimated (J) for those compounds.

SEMIVOLATILE DATA - CHLOROPYRIDINES

Semivolatile sample and standard areas are listed on the corresponding data system printouts.

Semivolatile data was processed utilizing Teknivant Datasystem and Recra Environmental's Inc.'s Analytical Information Management Systems (AIMS). All compounds determined to be present by the computer-generated auto quantitation were subjected to a manual ion search for secondary and tertiary ions. If contract laboratory protocol spectral identification criteria were not met, those compounds were deleted from the quantitation report.

Sample QS-4 required a dilution of 20 due to the high concentrations of 2-Chloropyridine and 2,6-Dichloropyridine. A further dilution of 80 was required.

The MSB exhibits the spike recoveries for spiking compounds 2,6-Dichloropyridine and p-Fluoroaniline that were below Recra QAP limits.

Samples SW-2 MS and SW-2 MSD exhibits the spike recoveries of 2,6-Dichloropyridine and p-Fluoroaniline as below Recra QAP limits. .

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

for K.E.K.

Kenneth E. Kasperek
Laboratory Director

MEMORANDUM

To: Tom Eschner

From: Paul C. Smith PCS

Date: December 5, 1995

Subject: Validation: Olin - Rochester Phase II RI/FS
Project No.: 07311-33
Sampling Date: September 19th, 1995

Review is complete for the data package generated by RECRA Environmental, Inc. concerning the soil boring water samples collected during the Phase II RI/FS field program. Samples were evaluated to determine if multiple analyses (i.e.,dilutions) were conducted on any samples. If dilution's were performed, results from the multiple analyses were composited so that one analysis appears on the data table. Samples were analyzed for volatiles (8240), semivolatiles (8270), and selected pyridines (8270). The data tables referred to in this memo consist of the following:

Table 1: Laboratory Report of Analysis

No dilution's were performed during the volatile analyses, therefore no compositing of sample results was required.

The hexachloroethane result for sample 01BW003XXXX1XX exceeded the calibration range in the original analysis. The result from the diluted (2:1) analysis was within the calibration range and replaced the original sample results.

For selected pyridine analysis, results for 2-chloropyridine and 2,6-dichloropyridine for sample 01BW002XXXX1XX were above the calibration range. The results from the diluted (10:1) sample were used to replace the results outside the calibration range in the original analysis.

MEMORANDUM

To: Tom Eschner

From: Paul C. Smith PCS

Date: December 28, 1995

Subject: Validation: Olin - Rochester Phase II RI/FS
Project No.: 07311-33
Sampling Date: October 25th, 1995

Review is complete for the data package generated by RECRA Environmental, Inc. concerning the Dolomite Products Quarry aqueous samples collected during the Phase II RI/FS field program. Samples were evaluated to determine if multiple analyses (i.e.,dilutions, reanalysis) were conducted on any samples. If dilution's or reanalyses were performed, results from the multiple analyses were composited so that one analysis appears on the data table. Samples were analyzed for selected pyridines (8270). The data tables referred to in this memo consist of the following:

Table 1: Laboratory Report of Analysis

Samples QS-4 and QS-4 FD in their original analysis contained 2-chloropyridine above the calibration range. The diluted (10:1) sample results of 2-chloropyridine were incorporated into the original results.

Re: QO - 1
QP - 1
QS-4
QS-4 FD

cc: J. Connolly
N. Breton
J. Frank (file)

1/4/96

olmroch5

MEMORANDUM

To: Tom Eschner

From: Paul C. Smith PCS

Date: January 4, 1996

Subject: Validation: Olin - Rochester Phase II RI/FS
Project No.: 07311-33
Sampling Date: November 20th, 1995

Review is complete for the data package generated by RECRA Environmental, Inc. concerning the surface water samples collected during the Phase II RI/FS field program. Review was performed following USEPA-CLP National Functional Guidelines. Samples were evaluated for holding time, surrogate recovery, field and laboratory blank contamination, duplicate results, internal standards, instrument performance check, initial and continuing calibrations, and matrix spike results. Samples were analyzed for selected pyridines in accordance with 1991 New York Analytical Services Protocol. The data tables referred to in this memo consist of the following:

Table 1: Laboratory Report of Analysis

The following subsection summarizes the qualifications/edits that have been detected by validation. For organic analyses, compound results below the reporting limit (RL) were flagged with a (J) by the laboratory on Table 1. These results were considered estimated and qualified (J) on Table 2.

Selected Pyridine Analyses - Qualifications/Edits

1. The matrix spike/matrix spike duplicate/matrix spike blank (MS/MSD/MSB) percent recovery criteria were not met for the laboratory reported limit of 75-125%. These limits do not accurately represent the analyzed fraction. A method study by the laboratory should be run to provided limits for the specific analytes of concern. No qualification was performed based on the MS/MSD/MSB results.

2. The percent relative standard deviation (%RSD) for pyridine in the initial calibration was above the acceptable limit. Since the %RSD was out of criteria, all sample results were qualified as estimated (J).

Re: Surface Waters collected 11/20/95.

cc: J. Connolly
N. Breton
J. Frank (file)

Attachment I - Definition of Laboratory Qualifiers
(for Table 1 - Laboratory Report of Analysis)

Organic Data Qualifiers

J - Indicates an estimated concentration below the contract required detection level (CRQL) but greater than 0 or when estimating a concentration for TICs.

U - Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.

B - Indicates analyte was detected in both the sample and the associated laboratory method blank for all analyses except inorganics. The B qualifier for inorganics data indicates that the result was between the IDL and the CRDL. The B qualifier is removed and replaced with a J qualifier on Table 2.

E - Indicates that the analyte concentration exceeded the calibration range of the GC/MS and that a re-analysis of a diluted sample is required.

D - Indicates that sample concentration was obtained by dilution to bring result within calibration range.

N - Indicates presumptive evidence of a compound. This flag is used for TICs were the identification is based on a library search and is applied to all TIC results. For general classes of compounds (hydrocarbons, etc.) this flag is not used.

P - This flag is used for pesticides/PCBs when there is greater than 25% difference between the concentrations on the two columns used for analysis. The lower value is reported.

C - This flag applies to pesticide/PCBs results when the identification has been confirmed by GC/MS.

A - Indicates that a TIC is a suspected aldol-condensation product.

X - Laboratory-defined qualifier used to provide additional information not covered by the other qualifiers.

Inorganic Data Qualifiers

E - The reported concentration is estimated because of the presence of an interference.

M - Duplicate injection precision criteria were not met.

N - Spiked sample recovery not within control limits.

S - The reported concentration was determined by the method of standard additions.

W - Post-digestion spike for furnace atomic absorption analysis is outside control limits.

B - Concentration reported is below CRDL but greater than the IDL.

* - Duplicate analysis not within control limits.

+ - Correlation coefficient for the method of standard additions was less than 0.995

U - Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.

OFFSITE HISTORICAL RESULTS

PROJECT: Olin Rochester **SITE:** Jackson Welding 04/25/96

	Location:	BR-114	MW-114
	Date:	07-DEC-95	07-DEC-95
	Type:		
	Sample Name:	BR-114	MW-114
PYRIDINE	(ug/L)		
2,6-Dichloropyridine		6 J	10 U
2-Chloropyridine		12	10 U
3-Chloropyridine		8 J	10 U
4-Chloropyridine		10 U	10 U
Pyridine		10 U	10 U
p-Fluoroaniline		10 U	10 U

'A' = Not Analyzed

PROJECT: Olin Rochester **SITE:** Jackson Welding 04/25/96

	Location:	BR-114	MW-114
	Date:	27-OCT-95	27-OCT-95
	Type:		
	Sample Name:	BR-114	MW-114
SVOCs	(ug/L)		
1,2,4-Trichlorobenzene		10 U	10 U
1,2-Dichlorobenzene		10 U	10 U
1,3-Dichlorobenzene		10 U	10 U
1,4-Dichlorobenzene		10 U	10 U
2,4,5-Trichlorophenol		25 U	25 U
2,4,6-Trichlorophenol		10 U	10 U
2,4-Dichlorophenol		10 U	10 U
2,4-Dimethylphenol		10 U	10 U
2,4-Dinitrophenol		50 U	50 U
2,4-Dinitrotoluene		10 U	10 U
2,6-Dinitrotoluene		10 U	10 U
2-Chloronaphthalene		10 U	10 U
2-Chlorophenol		10 U	10 U
2-Methylnaphthalene		10 U	10 U
2-Methylphenol		10 U	10 U
2-Nitroaniline		50 U	50 U
2-Nitrophenol		10 U	10 U
3,3'-Dichlorobenzidine		10 U	10 U
3-Nitroaniline		50 U	50 U
4,6-Dinitro-2-methylphenol		50 U	50 U
4-Bromophenyl-phenylether		10 U	10 U
4-Chloro-3-Methylphenol		10 U	10 U
4-Chloroaniline		10 U	10 U
4-Chlorophenyl-phenylether		10 U	10 U
4-Methylphenol		10 U	10 U
4-Nitroaniline		50 U	50 U
4-Nitrophenol		50 U	50 U
Acenaphthene		10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Jackson Welding 04/25/96

	Location:	BR-114	MW-114
	Date:	27-OCT-95	27-OCT-95
	Type:		
	Sample Name:	BR-114	MW-114
SVOCs	(ug/L)		
Isophorone		10 U	10 U
N-Nitroso-di-n-propylamine		10 U	10 U
N-Nitrosodiphenylamine		10 U	10 U
Naphthalene		10 U	10 U
Nitrobenzene		10 U	10 U
Pentachlorophenol		50 U	50 U
Phenanthrene		10 U	10 U
Phenol		10 U	10 U
Pyrene		10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Jackson Welding 04/25/96

Location:	BR-114	MW-114
Date:	27-OCT-95	27-OCT-95
Type:		
Sample Name:	BR-114	MW-114
VOCs (ug/L)		
Total Xylenes	2.1	0.59
Trichloroethene	0.5 U	5.1
Vinyl acetate	5 U	5 U
Vinyl chloride	1 U	1 U
cis-1,3-Dichloropropene	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	BR-106	BR-106	BR-106	BR-106	BR-106	BR-108	BR-108	BR-108
Date:	22-MAR-94	01-JUL-94	01-OCT-94	04-APR-95	11-SEP-95	23-MAR-94	01-JUL-94	01-OCT-94
Type:								
Sample Name:	BR-106	BR-106	BR-106	BR-106	BR106	BR-108	BR-108	BR-108
METHANOL (ug/L)								
Methanol	150 J	550 U	550 U	1000 U	1000 U	550 U	550 U	550 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	BR-106	BR-106	BR-106	BR-106	BR-106	BR-106	BR-106	BR-106
Date:	02-FEB-94	04-APR-94	04-APR-94	04-APR-94	12-JUL-94	13-JUL-94	19-OCT-94	20-OCT-94
Type:								
Sample Name:	BR-106	BR-106	BR-106D2	BR-106DL	BR-106	BR-106DL	BR-106	BR-106DL
PYRIDINE (ug/L)								
2,6-Dichloropyridine	710	520 E	560 DJ	580 D	580 E	1000 DJ	310 E	310 D
2-Chloropyridine	7500	3200 E	7700 D	5300 DE	2700 E	11000 D	1400 E	2100 DE
3-Chloropyridine	180	100 E	78 DJ	120 D	85 E	240 DJ	73	89 DJ
4-Chloropyridine	5 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
p-Fluoroaniline	280	31	36 DJ	64 DJ	37	2000 U	7 J	5 DJ

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	BR-108	BR-108	BR-108	MW-106	MW-106	MW-106	MW-106	MW-106
Date:	30-MAR-94	13-JUL-94	14-APR-95	02-FEB-94	28-MAR-94	28-MAR-94	29-MAR-94	29-MAR-94
Type:								
Sample Name:	BR-108	BR-108	BR-108	MW-106	MW-106D2	MW-106DL	MW-106	MW-106D3
PYRIDINE (ug/L)								
2,6-Dichloropyridine	10 U	0.9 J	10 U	4200	3300 DJ	4100 DE	4400 E	3200 DJ
2-Chloropyridine	2 J	8 J	14	60000	60000 DE	67000 DE	51000 E	62000 D
3-Chloropyridine	10 U	10 U	10 U	1500	670 DJ	1100 D	880 E	660 DJ
4-Chloropyridine	N/A	N/A	N/A	6 U	N/A	N/A	N/A	N/A
Pyridine	N/A	N/A	N/A	640	N/A	N/A	N/A	N/A
p-Fluoroaniline	10 U	10 U	10 U	2100	560 DJ	850 D	830 E	580 DJ

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	MW-106	MW-106	MW-106	MW-106	MW-106	MW-108	MW-108
Date:	10-APR-95	10-APR-95	11-SEP-95	11-SEP-95	11-SEP-95	30-MAR-94	14-APR-95
Type:							
Sample Name:	MW-106 DL	MW-106 RE	MW106	MW106 D2	MW106 DL	MW-108	MW-108
PYRIDINE (ug/L)							
2,6-Dichloropyridine	9100 DE	5700 E	N/A	15000 DJ	N/A	10 U	2 J
2-Chloropyridine	43000 DE	12000 E	N/A	84000 D	N/A	0.9 J	26
3-Chloropyridine	3000 D	2100 E	N/A	N/A	4000 D	10 U	10 U
4-Chloropyridine	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	N/A	N/A	N/A	N/A	N/A	N/A	N/A
p-Fluoroaniline	110 DJ	380 E	320	N/A	N/A	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	BR-106	BR-108	MW-106
Date:	02-FEB-94	02-FEB-94	02-FEB-94
Type:			
Sample Name:	BR-106	BR-108	MW-106
SVOCs (ug/L)			
Benzo(a)anthracene	2 U	2 U	2 U
Benzo(a)pyrene	1 U	1 U	1 U
Benzo(b)fluoranthene	2 U	2 U	2 U
Benzo(g,h,i)perylene	1 U	2 U	2 U
Benzo(k)fluoranthene	2 U	2 U	2 U
Benzoic acid	9 U	11 U	59
Benzyl alcohol	2 U	3 U	3 U
Bis(2-Chloroethoxy)methane	1 U	1 U	1 U
Bis(2-Chloroethyl)ether	6	2 U	25
Bis(2-Chloroisopropyl)ether	1 U	2 U	2 U
Bis(2-ethylhexyl)phthalate	7 U	1 J	2
Butylbenzylphthalate	3 U	4 U	4 U
Chrysene	1 U	1 U	1 U
Di-n-butylphthalate	1 U	1 U	1 U
Di-n-octylphthalate	1 U	2 U	2 U
Dibenzo(a,h)Anthracene	1 U	1 U	1 U
Dibenzofuran	1 U	1 U	1 U
Diethylphthalate	2 U	2 U	2 U
Dimethylphthalate	4 U	5 U	5 U
Fluoranthene	1 U	2 U	2 U
Fluorene	1 U	2 U	2 U
Hexachlorobenzene	1 U	1 U	1 U
Hexachlorobutadiene	2 U	3 U	3 U
Hexachlorocyclopentadiene	1 U	2 U	2 U
Hexachloroethane	2 U	3 U	3 U
Indeno(1,2,3-c,d)Pyrene	1 U	1 U	1 U
Isophorone	1 U	1 U	1 U
N-Nitroso-di-n-propylamine	1 U	1 U	1 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	BR-106	BR-106	BR-106	BR-106	BR-106	BR-106	BR-106	BR-106
Date:	02-FEB-94	19-MAR-94	01-JUL-94	01-JUL-94	30-SEP-94	30-SEP-94	29-MAR-95	11-SEP-95
Type:								
Sample Name:	BR-106	BR-106	BR-106	BR-106DL	BR-106	BR-106DL	BR-106	BR106
VOCs (ug/L)								
1,1,1-Trichloroethane	8 U	25 U	10 U	100 U	8 J	200 U	20 U	40 U
1,1,2,2-Tetrachloroethane	3 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
1,1,2-Trichloroethane	3 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
1,1-Dichloroethane	25	19 J	10 U	100 U	91 J	77 DJ	26	28 J
1,1-Dichloroethene	10 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
1,2-Dichlorobenzene	85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	6 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
1,2-Dichloroethene (total)	580	360	32	25 DJ	2800 E	2500 D	300	490
1,2-Dichloropropane	5 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
1,3-Dichlorobenzene	4 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	2 J	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Butanone	16 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
2-Chloroethyl Vinyl Ether	6 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Hexanone	10 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
4-Methyl-2-pentanone	8 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
Acetone	28 U	25 U	130	100 U	100 U	200 U	20 U	100
Benzene	77	72	63	60 DJ	120	110 DJ	67	86
Bromodichloromethane	6 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
Bromoform	4 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
Bromomethane	5 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
Carbon disulfide	16 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
Carbon tetrachloride	8 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
Chlorobenzene	100	120	220 BE	240 BD	85 BJ	87 BDJ	72	160
Chloroethane	12 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
Chloroform	6 U	5 J	4 J	4 DJ	8 J	200 U	6 J	7 J
Chloromethane	4 U	25 U	2 J	100 U	100 U	200 U	20 U	40 U
Dibromochloromethane	5 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
Ethylbenzene	4	4 J	2 J	100 U	100 U	200 U	6 J	4 J

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	MW-106	MW-106	MW-106	MW-106	MW-106	MW-106	MW-108	MW-108
Date:	01-JUL-94	30-SEP-94	30-SEP-94	29-MAR-95	11-SEP-95	11-SEP-95	02-FEB-94	21-MAR-94
Type:								
Sample Name:	MW-106DL	MW-106	MW-106DL	MW-106	MW106	MW106 DL	MW-108	MW-108
VOCs (ug/L)								
1,1,1-Trichloroethane	50 U	50 U	100 U	50 U	50 U	N/A	2 U	10 U
1,1,2,2-Tetrachloroethane	50 U	50 U	100 U	50 U	50 U	N/A	0.7 U	10 U
1,1,2-Trichloroethane	50 U	50 U	100 U	50 U	50 U	N/A	0.8 U	10 U
1,1-Dichloroethane	50 U	50 U	100 U	50 U	50 U	N/A	2 U	10 U
1,1-Dichloroethene	50 U	50 U	100 U	50 U	50 U	N/A	2 U	10 U
1,2-Dichlorobenzene	N/A	N/A	N/A	N/A	N/A	N/A	1 U	N/A
1,2-Dichloroethane	50 U	50 U	100 U	50 U	50 U	N/A	1 U	10 U
1,2-Dichloroethene (total)	13 DJ	5 J	100 U	50 U	9 J	N/A	2 U	10 U
1,2-Dichloropropane	50 U	50 U	100 U	50 U	50 U	N/A	1 U	10 U
1,3-Dichlorobenzene	N/A	N/A	N/A	N/A	N/A	N/A	1 U	N/A
1,4-Dichlorobenzene	N/A	N/A	N/A	N/A	N/A	N/A	0.7 U	N/A
2-Butanone	50 U	50 U	100 U	50 U	50 U	N/A	4 U	10 U
2-Chloroethyl Vinyl Ether	N/A	N/A	N/A	N/A	N/A	N/A	2 U	N/A
2-Hexanone	50 U	50 U	100 U	50 U	50 U	N/A	2 U	10 U
4-Methyl-2-pentanone	50 U	50 U	100 U	50 U	50 U	N/A	2 U	10 U
Acetone	87 D	460	440 D	260	N/A	1200 D	7 U	10 U
Benzene	150 D	210	210 D	120	190	N/A	0.8 U	10 U
Bromodichloromethane	50 U	50 U	100 U	50 U	50 U	N/A	1 U	10 U
Bromoform	50 U	50 U	100 U	50 U	50 U	N/A	1 U	10 U
Bromomethane	50 U	50 U	100 U	50 U	50 U	N/A	1 U	10 U
Carbon disulfide	50 U	50 U	100 U	50 U	50 U	N/A	4 U	10 U
Carbon tetrachloride	50 U	50 U	100 U	50 U	50 U	N/A	2 U	10 U
Chlorobenzene	620 BD	970 B	1000 BD	640	N/A	1400 D	1 U	10 U
Chloroethane	50 U	50 U	100 U	50 U	50 U	N/A	3 U	10 U
Chloroform	50 U	28 J	27 DJ	26 J	89	N/A	1 U	10 U
Chloromethane	50 U	50 U	100 U	50 U	50 U	N/A	1 U	10 U
Dibromochloromethane	50 U	50 U	100 U	50 U	50 U	N/A	1 U	10 U
Ethylbenzene	50 U	50 U	100 U	50 U	8 J	N/A	0.9 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	BR-106	BR-106	BR-106	BR-106	BR-106	BR-106	BR-106	BR-106
Date:	02-FEB-94	19-MAR-94	01-JUL-94	01-JUL-94	30-SEP-94	30-SEP-94	29-MAR-95	11-SEP-95
Type:								
Sample Name:	BR-106	BR-106	BR-106	BR-106DL	BR-106	BR-106DL	BR-106	BR106
VOCs (ug/L)								
Methylene chloride	330	83	1300 E	1300 D	50 J	42 DJ	20 U	40 U
Styrene	5 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
Tetrachloroethene	8 U	25 U	0.8 J	100 U	100 U	200 U	20 U	40 U
Toluene	120	140	310 BE	270 BD	120 B	120 DJ	90	230
Total Xylenes	4 J	6 J	4 J	100 U	100 U	200 U	7 J	6 J
Trichloroethene	14	12 J	10	8 DJ	25 J	25 DJ	9 J	9 J
Vinyl acetate	5 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vinyl chloride	230	190	24	16 DJ	1200	1100 D	250	350
cis-1,3-Dichloropropene	6 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U
trans-1,3-Dichloropropene	6 U	25 U	10 U	100 U	100 U	200 U	20 U	40 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	MW-106	MW-106	MW-106	MW-106	MW-106	MW-106	MW-108	MW-108
Date:	01-JUL-94	30-SEP-94	30-SEP-94	29-MAR-95	11-SEP-95	11-SEP-95	02-FEB-94	21-MAR-94
Type:								
Sample Name:	MW-106DL	MW-106	MW-106DL	MW-106	MW106	MW106 DL	MW-108	MW-108
VOCs (ug/L)								
Methylene chloride	30 DJ	50 U	100 U	50 U	50 U	N/A	1 U	10 U
Styrene	50 U	50 U	100 U	50 U	50 U	N/A	1 U	10 U
Tetrachloroethene	50 U	50 U	100 U	50 U	50 U	N/A	2 U	10 U
Toluene	310 BD	1100 BE	1100 D	870	N/A	2300 D	1 U	10 U
Total Xylenes	7 DJ	19 J	17 DJ	14 J	27 J	N/A	2 U	10 U
Trichloroethene	22 DJ	28 J	29 DJ	50 U	50 U	N/A	2 U	10 U
Vinyl acetate	N/A	N/A	N/A	N/A	N/A	N/A	1 U	N/A
Vinyl chloride	6 DJ	5 J	100 U	6 J	8 J	N/A	1 U	10 U
cis-1,3-Dichloropropene	50 U	50 U	100 U	50 U	50 U	N/A	2 U	10 U
trans-1,3-Dichloropropene	50 U	50 U	100 U	50 U	50 U	N/A	2 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

	Location:	PZ-101	PZ-102	PZ-103
	Date:	24-JAN-94	03-FEB-94	01-FEB-94
	Type:			
	Sample Name:	PZ-101	PZ-102	PZ-103
INORGs	(ug/L)			
Aluminum		1500	340	170
Antimony		4 U	3 U	3 U
Arsenic		4 U	5 B*	18
Barium		340	490	600
Beryllium		3 U	3 U	3 U
Cadmium		1.2 B	0.2 U	0.2
Calcium		240000	120000	87000 E
Chromium		10 U	10 U	11
Cobalt		20 U	20 U	20 U
Copper		10 U	10 U*	10 U
Cyanide		10 U	18	48
Iron		3000	850	180
Lead		2 B	2 UN	3 N
Magnesium		87000	57000	74000
Manganese		1000	89	50
Mercury		0.4 U	0.4 UN	0.4 U
Nickel		30 U	30 U	30 U
Potassium		6400	10000	15000
Selenium		3 UN	3 UN	3 UN
Silver		10 U	10 UN	0.5 UN
Sodium		730000	1200000	1800000
Thallium		4 U	4 UN	3 UN
Vanadium		20 U	20 U	20 U
Zinc		18 B	10 U	13

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	PZ-101	PZ-102	PZ-103
Date:	24-JAN-94	03-FEB-94	01-FEB-94
Type:			
Sample Name:	PZ-101	PZ-102	PZ-103
SVOCs (ug/L)			
1,2,4-Trichlorobenzene	2 U	2 U	2 U
1,3-Dichlorobenzene	2 U	2 U	2 U
1,4-Dichlorobenzene	2 U	34	2 U
2,4,5-Trichlorophenol	4 U	4 U	4 U
2,4,6-Trichlorophenol	7 U	7 U	6 U
2,4-Dichlorophenol	5 U	5 U	4 U
2,4-Dimethylphenol	4 U	4 U	3 U
2,4-Dinitrophenol	6 U	6 U	6 U
2,4-Dinitrotoluene	1 U	1 U	1 U
2,6-Dinitrotoluene	1 U	1 U	1 U
2-Chloronaphthalene	1 U	1 U	1 U
2-Chlorophenol	4 J	5 U	5 U
2-Methylnaphthalene	2 U	2 U	2 U
2-Methylphenol	5 U	9	5 U
2-Nitroaniline	1 U	1 U	1 U
2-Nitrophenol	5 U	5 U	5 U
3,3'-Dichlorobenzidine	1 U	1 U	1 U
3-Nitroaniline	0.7 U	0.7 U	0.7 U
4,6-Dinitro-2-methylphenol	10 U	10 U	10 U
4-Bromophenyl-phenylether	1 U	1 U	1 U
4-Chloro-3-Methylphenol	4 U	4 U	4 U
4-Chloroaniline	42	120 D	310 D
4-Chlorophenyl-phenylether	1 U	1 U	1 U
4-Methylphenol	4 U	17	4 U
4-Nitroaniline	1 U	1 U	1 U
4-Nitrophenol	5 U	5 U	4 U
Acenaphthene	2 U	2 U	2 U
Anthracene	1 U	1 U	1 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Aid to Hospitals 04/25/96

Location:	PZ-101	PZ-102	PZ-103
Date:	24-JAN-94	03-FEB-94	01-FEB-94
Type:			
Sample Name:	PZ-101	PZ-102	PZ-103
SVOCs (ug/L)			
N-Nitrosodiphenylamine	1 U	1 U	1 U
Naphthalene	2 U	2 U	1 U
Nitrobenzene	1 U	1 U	1 U
Pentachlorophenol	10 U	10 U	9 U
Phenanthrene	2 U	2 U	2 U
Phenol	3 U	3 U	3 U
Pyrene	2 U	2 U	2 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE: Aid to Hospitals** 04/25/96

	Location:	PZ-101	PZ-102	PZ-103
	Date:	24-JAN-94	03-FEB-94	01-FEB-94
	Type:			
	Sample Name:	PZ-101	PZ-102	PZ-103
VOCs	(ug/L)			
Methylene chloride		1 U	10000	4700 D
Styrene		1 U	130 U	26 U
Tetrachloroethene		2 U	200 U	16 J
Toluene		7	940 B	2200
Total Xylenes		2 U	230 U	38 J
Trichloroethene		2 U	200 U	69
Vinyl acetate		1 U	120 U	24 U
Vinyl chloride		1 U	120 U	37
cis-1,3-Dichloropropene		2 U	160 U	32 U
trans-1,3-Dichloropropene		2 U	160 U	32 U

N/A = Not Analyzed

PROJECT: Olin Rochester

SITE: Dolomite Products, Inc.

04/25/96

Location:	QP-1
Date:	25-OCT-95
Type:	
Sample Name:	QP-1

PYRIDINE (ug/L)	
2,6-Dichloropyridine	3 J
2-Chloropyridine	19
3-Chloropyridine	10 U
4-Chloropyridine	10 U
Pyridine	10 U
p-Fluoroaniline	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Erie Barge Canal 04/25/96

Location:	BR-111	BR-111D	BR-112A	BR-112D	BR-113	BR-113	BR-113D
Date:	07-DEC-95	07-DEC-95	07-DEC-95	07-DEC-95	07-DEC-95	07-DEC-95	07-DEC-95
Type:					Duplicate		
Sample Name:	BR-111	BR-111D	BR-112A	BR-112D	BR-113FD	BR-113	BR-113D
PYRIDINE (ug/L)							
2,6-Dichloropyridine	10 U	10 U	10 U	10 U	10 U	10 U	1 J
2-Chloropyridine	10 U	10 U	10 U	4 J	2 J	2 J	76
3-Chloropyridine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloropyridine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyridine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
p-Fluoroaniline	10 U	10 U	10 U	10 U	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Erie Barge Canal 04/25/96

Location:	BR-111	BR-111D	BR-112A	BR-112D	BR-113	BR-113	BR-113D
Date:	26-OCT-95	26-OCT-95	27-OCT-95	27-OCT-95	26-OCT-95	26-OCT-95	26-OCT-95
Type:					Duplicate		
Sample Name:	BR-111	BR-111D	BR-112A	BR-112D	BR-113FD	BR-113	BR-113D
SVOCs (ug/L)							
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzoic acid	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzyl alcohol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-Chloroisopropyl)ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	10 U	5 J	10 U	4 J	2 J	1 J	2 J
Butylbenzylphthalate	0.7 J	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 U	0.8 J	10 U	10 U	10 U	10 U	2 J
Di-n-octylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-c,d)Pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Erie Barge Canal 04/25/96

Location:	BR-111	BR-111D	BR-112A	BR-112D	BR-113	BR-113	BR-113D
Date:	26-OCT-95	26-OCT-95	27-OCT-95	27-OCT-95	26-OCT-95	26-OCT-95	26-OCT-95
Type:					Duplicate		
Sample Name:	BR-111	BR-111D	BR-112A	BR-112D	BR-113FD	BR-113	BR-113D
VOCs (ug/L)							
1,1,1-Trichloroethane	0.5 U	5 U	0.5 U	0.89	2.5 U	2.5 U	0.85
1,1,2,2-Tetrachloroethane	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,1-Dichloroethane	0.5 U	5 U	0.5 U	35	2.5 U	2.5 U	35
1,1-Dichloroethene	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,2-Dichloroethane	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
1,2-Dichloroethene (total)	0.5 U	5 U	0.5 U	48	2.5 U	2.5 U	36
1,2-Dichloropropane	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
2-Butanone	1 U	10 U	1 U	1 U	5 U	5 U	1 U
2-Hexanone	1 U	10 U	1 U	1 U	5 U	5 U	1 U
4-Methyl-2-pentanone	1 U	10 U	1 U	1 U	5 U	5 U	1 U
Acetone	21	100 U	10 U	10 U	50 U	50 U	10 U
Benzene	1.6	240	0.5 U	22	30	31	24
Bromodichloromethane	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Bromoform	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Bromomethane	1 U	10 U	1 U	1 U	5 U	5 U	1 U
Carbon disulfide	0.69	5.5	0.6	3.7	2.5 U	2.5 U	1.7
Carbon tetrachloride	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Chlorobenzene	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Chloroethane	1 U	10 U	1 U	3	5 U	5 U	1 U
Chloroform	0.5 U	5 U	0.41 J	0.5 U	2.5 U	2.5 U	1
Chloromethane	1 U	10 U	1 U	1 U	5 U	5 U	1 U
Dibromochloromethane	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Ethylbenzene	1.1	38	0.5 U	3.2	62	61	1.3
Methylene chloride	3 U	30 U	3 U	3 U	15 U	15 U	3 U
Styrene	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Tetrachloroethene	0.5 U	5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U
Toluene	0.59	14	0.24 J	0.54	140	130	1.1

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Erie Barge Canal 04/25/96

Location:	QO-1	SW-1	SW-1	SW-1	SW-1	SW-1	SW-2	SW-2
Date:	25-OCT-95	02-NOV-94	11-APR-95	17-MAY-95	06-SEP-95	20-NOV-95	02-NOV-94	02-NOV-94
Type:							Duplicate	
Sample Name:	QO-1	01SW001000XXXX	SW-1	SW-1	SW-1	SW-1	01SW002000X1DXFD	01SW002000X1XX
PYRIDINE (ug/L)								
2,6-Dichloropyridine	11 U	10 U	10 U	10 U	10 U	0.2 J	10 U	10 U
2-Chloropyridine	11 U	10 U	5 J	10 U	10 U	1 J	10 U	10 U
3-Chloropyridine	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloropyridine	11 U	N/A	N/A	N/A	10 U	10 U	N/A	N/A
Pyridine	11 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U
p-Fluoroaniline	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Erie Barge Canal 04/25/96

Location:	SW-3	SW-3	SW-3	SW-3	SW-3
Date:	11-APR-95	17-MAY-95	06-SEP-95	06-SEP-95	20-NOV-95
Type:			Duplicate		
Sample Name:	SW-3	SW-3	SW-3FD	SW-3	SW-3
PYRIDINE (ug/L)					
2,6-Dichloropyridine	10 U	10 U	10 U	10 U	0.2 J
2-Chloropyridine	6 J	10 U	10 U	10 U	1 J
3-Chloropyridine	10 U	10 U	10 U	10 U	10 U
4-Chloropyridine	N/A	N/A	10 U	10 U	10 U
Pyridine	10 U	10 U	10 U	10 U	10 UJ
p-Fluoroaniline	10 U	10 U	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Firth Rixson 04/25/96

	Location:	BR-107	BR-107	BR-107	BR-107	BR-107	MW-107	MW-107	MW-107
	Date:	22-MAR-94	01-JUL-94	30-SEP-94	08-APR-95	11-SEP-95	22-MAR-94	01-JUL-94	03-OCT-94
	Type:								
	Sample Name:	BR-107	BR-107	BR-107	BR-107	BR107	MW-107	MW-107	MW-107
METHANOL	(ug/L)								
Methanol		550 U	340 BJ	550 U	1000 U	1000 U	550 U	550 U	550 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Firth Rixson 04/25/96

Location:	BR-107	BR-107	MW-107
Date:	21-JAN-94	21-JAN-94	21-JAN-94
Type:	Duplicate		
Sample Name:	BR-107FD	BR-107	MW-107
SVOCs (ug/L)			
1,2,4-Trichlorobenzene	3 U	3 U	2 U
1,3-Dichlorobenzene	3 U	3 U	2 U
1,4-Dichlorobenzene	2 U	2 U	2 U
2,4,5-Trichlorophenol	5 U	5 U	4 U
2,4,6-Trichlorophenol	8 U	8 U	7 U
2,4-Dichlorophenol	5 U	5 U	4 U
2,4-Dimethylphenol	4 U	4 U	4 U
2,4-Dinitrophenol	7 U	7 U	6 U
2,4-Dinitrotoluene	1 U	1 U	1 U
2,6-Dinitrotoluene	1 U	1 U	1 U
2-Chloronaphthalene	2 U	2 U	1 U
2-Chlorophenol	6 U	6 U	5 U
2-Methylnaphthalene	2 U	2 U	2 U
2-Methylphenol	6 U	6 U	5 U
2-Nitroaniline	1 U	1 U	1 U
2-Nitrophenol	6 U	6 U	5 U
3,3'-Dichlorobenzidine	2 U	2 U	1 U
3-Nitroaniline	0.8 U	0.8 U	0.7 U
4,6-Dinitro-2-methylphenol	12 U	12 U	10 U
4-Bromophenyl-phenylether	2 U	2 U	1 U
4-Chloro-3-Methylphenol	N/A	4 U	4 U
4-Chloroaniline	2 U	2 U	2 U
4-Chlorophenyl-phenylether	1 U	1 U	1 U
4-Methylphenol	5 U	5 U	4 U
4-Nitroaniline	1 U	1 U	1 U
4-Nitrophenol	5 U	5 U	5 U
Acenaphthene	2 U	2 U	2 U
Anthracene	2 U	2 U	1 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Firth Rixson 04/25/96

Location:	BR-107	BR-107	BR-107	BR-107	BR-107	BR-107	BR-107	MW-107
Date:	21-JAN-94	21-JAN-94	29-MAR-94	13-JUL-94	18-OCT-94	10-APR-95	11-SEP-95	21-JAN-94
Type:	Duplicate							
Sample Name:	BR-107FD	BR-107	BR-107	BR-107	BR-107	BR-107	BR107	MW-107
PYRIDINE (ug/L)								
2,6-Dichloropyridine	6 U	6 U	10 U	10 U	10 U	10 U	10 U	0.6 J
2-Chloropyridine	5 J	4 J	5 J	4 J	10 U	5 J	17	2 J
3-Chloropyridine	6 U	6 U	10 U	10 U	10 U	10 U	10 U	5 U
4-Chloropyridine	6 U	6 U	N/A	N/A	N/A	N/A	N/A	5 U
Pyridine	6 U	6 U	N/A	N/A	N/A	N/A	N/A	5 U
p-Fluoroaniline	6 U	6 U	10 U	10 U	10 U	10 U	10 U	5 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Firth Rixson 04/25/96

Location:	BR-107	BR-107	MW-107
Date:	21-JAN-94	21-JAN-94	21-JAN-94
Type:	Duplicate		
Sample Name:	BR-107FD	BR-107	MW-107
SVOCs (ug/L)			
N-Nitrosodiphenylamine	1 U	1 U	1 U
Naphthalene	3	2	1 U
Nitrobenzene	1 U	1 U	1 U
Pentachlorophenol	11 U	11 U	10 U
Phenanthrene	2 U	2 U	2 U
Phenol	N/A	4 U	3 U
Pyrene	2 U	2 U	2 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Firth Rixson 04/25/96

Location:	MW-107	MW-107	MW-107	MW-107	MW-107	MW-107
Date:	21-JAN-94	18-MAR-94	01-JUL-94	30-SEP-94	31-MAR-95	11-SEP-95
Type:						
Sample Name:	MW-107	MW-107	MW-107	MW-107	MW-107	MW107
VOCs (ug/L)						
1,1,1-Trichloroethane	2 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	0.7 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	0.8 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	2	10 U	10 U	10 U	10 U	2 J
1,1-Dichloroethene	2 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	1 U	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	1 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	2 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	1 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	1 U	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	0.7 U	N/A	N/A	N/A	N/A	N/A
2-Butanone	4 U	10 U	10 U	10 U	10 U	10 U
2-Chloroethyl Vinyl Ether	2 U	N/A	N/A	N/A	N/A	N/A
2-Hexanone	2 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	2 U	10 U	10 U	10 U	10 U	10 U
Acetone	7 U	10 U	10 U	10 U	10 U	10 U
Benzene	0.8 U	10 U	0.4 J	10 U	10 U	10 U
Bromodichloromethane	1 U	10 U	10 U	10 U	10 U	10 U
Bromoform	1 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	1 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	4 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	2 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	1 U	10 U	1 BJ	10 U	10 U	10 U
Chloroethane	3 U	10 U	10 U	10 U	10 U	10 U
Chloroform	1 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	1 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	1 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	0.9 U	10 U	10 U	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Firth Rixson 04/25/96

Location:	MW-107	MW-107	MW-107	MW-107	MW-107	MW-107
Date:	21-JAN-94	18-MAR-94	01-JUL-94	30-SEP-94	31-MAR-95	11-SEP-95
Type:						
Sample Name:	MW-107	MW-107	MW-107	MW-107	MW-107	MW107
VOCs (ug/L)						
Methylene chloride	1 U	10 U	10 U	10 U	10 U	10 U
Styrene	1 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	2 U	10 U	10 U	10 U	10 U	10 U
Toluene	1 U	10 U	0.7 BJ	10 U	10 U	10 U
Total Xylenes	2 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	2 U	10 U	10 U	10 U	10 U	10 U
Vinyl acetate	1 U	N/A	N/A	N/A	N/A	N/A
Vinyl chloride	1 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	2 U	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	2 U	10 U	10 U	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester

SITE: Griffith Oil

04/25/96

Location:	MW-G6	MW-G8	MW-G9
Date:	19-JAN-94	19-JAN-94	18-JAN-94
Type:			
Sample Name:	MW-G6	MW-G8	MW-G9
PYRIDINE (ug/L)			
2,6-Dichloropyridine	5 U	6 U	6 U
2-Chloropyridine	5 U	6 U	6 U
3-Chloropyridine	5 U	6 U	6 U
4-Chloropyridine	5 U	6 U	6 U
Pyridine	5 U	6 U	6 U
p-Fluoroaniline	5 U	6 U	6 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Griffith Oil 04/25/96

Location:	MW-G6	MW-G8	MW-G9
Date:	19-JAN-94	19-JAN-94	18-JAN-94
Type:			
Sample Name:	MW-G6	MW-G8	MW-G9
SVOCs (ug/L)			
Benzo(a)anthracene	2 U	2 U	2 U
Benzo(a)pyrene	1 U	1 U	1 U
Benzo(b)fluoranthene	2 U	2 U	2 U
Benzo(g,h,i)perylene	1 U	2 U	2 U
Benzo(k)fluoranthene	2 U	2 U	3 U
Benzoic acid	10 U	11 U	12 U
Benzyl alcohol	2 U	3 U	3 U
Bis(2-Chloroethoxy)methane	1 U	1 U	1 U
Bis(2-Chloroethyl)ether	1 U	2 U	2 U
Bis(2-Chloroisopropyl)ether	1 U	2 U	2 U
Bis(2-ethylhexyl)phthalate	1 U	2 U	2
Butylbenzylphthalate	3 U	4 U	4 U
Chrysene	1 U	1 U	1 U
Di-n-butylphthalate	1 U	1 U	2 U
Di-n-octylphthalate	1 U	2 U	2 U
Dibenzo(a,h)Anthracene	1 U	1 U	1 U
Dibenzofuran	1 U	1 U	3
Diethylphthalate	1 J	2 U	2 U
Dimethylphthalate	4 U	5 U	5 U
Fluoranthene	1 U	2 U	2 U
Fluorene	1 U	2 U	5
Hexachlorobenzene	1 U	1 U	2 U
Hexachlorobutadiene	3 U	3 U	3 U
Hexachlorocyclopentadiene	1 U	2 U	2 U
Hexachloroethane	2 U	3 U	3 U
Indeno(1,2,3-c,d)Pyrene	1 U	1 U	1 U
Isophorone	1 U	1 U	1 U
N-Nitroso-di-n-propylamine	1 U	1 U	1 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Griffith Oil 04/25/96

Location:	MW-G6	MW-G8	MW-G9
Date:	19-JAN-94	19-JAN-94	18-JAN-94
Type:			
Sample Name:	MW-G6	MW-G8	MW-G9
VOCs (ug/L)			
1,1,1-Trichloroethane	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	0.7 U	0.7 U	0.7 U
1,1,2-Trichloroethane	0.8 U	0.8 U	0.8 U
1,1-Dichloroethane	2 U	2 U	2 U
1,1-Dichloroethene	2 U	2 U	2 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
1,2-Dichloroethene (total)	2 U	16	2 U
1,2-Dichloropropane	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	0.7 U	0.7 U	0.7 U
2-Butanone	4 U	4 U	4 U
2-Chloroethyl Vinyl Ether	2 U	2 U	2 U
2-Hexanone	2 U	2 U	2 U
4-Methyl-2-pentanone	2 U	2 U	2 U
Acetone	7 U	7 U	7 U
Benzene	150	0.8 U	4
Bromodichloromethane	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U
Carbon disulfide	4 U	4 U	4 U
Carbon tetrachloride	2 U	2 U	2 U
Chlorobenzene	1 U	1 U	1 U
Chloroethane	3 U	3 U	3 U
Chloroform	1 U	1 U	1 U
Chloromethane	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
Ethylbenzene	5	0.9 U	8

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Kodak (52 McKee Road) 04/25/96

	Location:	PZ-104	PZ-108
	Date:	01-FEB-94	24-JAN-94
	Type:		
	Sample Name:	PZ-104	PZ-108
INORGs	(ug/L)		
Aluminum		570	2000
Antimony		3 U	4 U
Arsenic		4 U	4 B
Barium		140	85 B
Beryllium		3 U	3 U
Cadmium		0.3	1.5 B
Calcium		130000 E	140000
Chromium		10 U	10 U
Cobalt		20 U	20 U
Copper		10 U	10 U
Cyanide		30	10 U
Iron		1200	13000
Lead		2 N	2 B
Magnesium		40000	36000
Manganese		160	17000
Mercury		0.4 U	0.4 U
Nickel		30 U	130
Potassium		9800	1300 B
Selenium		3 UN	3 UN
Silver		0.5 UN	10 U
Sodium		290000	23000
Thallium		3 UN	4 U
Vanadium		20 U	20 U
Zinc		37	20 B

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Kodak (52 McKee Road) 04/25/96

	Location:	PZ-104	PZ-108
	Date:	01-FEB-94	24-JAN-94
	Type:		
	Sample Name:	PZ-104	PZ-108
SVOCs	(ug/L)		
1,2,4-Trichlorobenzene		2 U	3 U
1,3-Dichlorobenzene		2 U	2 U
1,4-Dichlorobenzene		2 U	2 U
2,4,5-Trichlorophenol		4 U	5 U
2,4,6-Trichlorophenol		6 U	8 U
2,4-Dichlorophenol		4 U	5 U
2,4-Dimethylphenol		3 U	4 U
2,4-Dinitrophenol		6 U	7 U
2,4-Dinitrotoluene		1 U	1 U
2,6-Dinitrotoluene		1 U	1 U
2-Chloronaphthalene		1 U	2 U
2-Chlorophenol		0.4 J	6 U
2-Methylnaphthalene		2 U	2 U
2-Methylphenol		4 U	6 U
2-Nitroaniline		0.9 U	1 U
2-Nitrophenol		5 U	6 U
3,3'-Dichlorobenzidine		1 U	2 U
3-Nitroaniline		0.6 U	0.8 U
4,6-Dinitro-2-methylphenol		9 U	12 U
4-Bromophenyl-phenylether		1 U	2 U
4-Chloro-3-Methylphenol		3 U	4 U
4-Chloroaniline		7	2 U
4-Chlorophenyl-phenylether		1 U	1 U
4-Methylphenol		4 U	5 U
4-Nitroaniline		1 U	1 U
4-Nitrophenol		4 U	5 U
Acenaphthene		1 U	2 U
Anthracene		1 U	2 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Kodak (52 McKee Road) 04/25/96

	Location:	PZ-104	PZ-108
	Date:	01-FEB-94	24-JAN-94
	Type:		
	Sample Name:	PZ-104	PZ-108
SVOCs	(ug/L)		
N-Nitrosodiphenylamine		1 U	1 U
Naphthalene		1 U	2 U
Nitrobenzene		1 U	1 U
Pentachlorophenol		9 U	11 U
Phenanthrene		1 U	2 U
Phenol		3 U	4 U
Pyrene		2 U	2 U

N/A = Not Analyzed

PROJECT: Olin Rochester

SITE: Kodak (52 McKee Road)

04/25/96

Location:	PZ-104	PZ-108
Date:	01-FEB-94	24-JAN-94
Type:		
Sample Name:	PZ-104	PZ-108
VOCs (ug/L)		
Methylene chloride	1 U	1 U
Styrene	1 U	1 U
Tetrachloroethene	1 J	2 U
Toluene	16	3
Total Xylenes	2 U	2 U
Trichloroethene	4	1 J
Vinyl acetate	1 U	1 U
Vinyl chloride	2	1 U
cis-1,3-Dichloropropene	2 U	2 U
trans-1,3-Dichloropropene	2 U	2 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Kodak (formerly Gerber) 04/25/96

	Location:	BR-103	BR-103	BR-103	BR-103	BR-103	MW-103	MW-103	MW-103
	Date:	22-MAR-94	30-JUN-94	30-SEP-94	04-APR-95	11-SEP-95	22-MAR-94	01-JUL-94	30-SEP-94
	Type:								
	Sample Name:	BR-103	BR-103	BR-103	BR-103	BR103	MW-103	MW-103	MW-103
METHANOL	(ug/L)								
Methanol		550 U	550 U	550 U	1000 U	1000 U	550 U	550 U	550 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Kodak (formerly Gerber) 04/25/96

Location:	BR-103	BR-103	BR-103	BR-103	BR-103	BR-103	BR-103	MW-103
Date:	20-JAN-94	23-MAR-94	11-JUL-94	18-OCT-94	06-APR-95	10-APR-95	11-SEP-95	20-JAN-94
Type:								
Sample Name:	BR-103	BR-103	BR-103	BR-103	BR-103	BR-103 DL	BR103	MW-103
PYRIDINE (ug/L)								
2,6-Dichloropyridine	6 U	10 U	10 U	10 U	32	18 DJ	0.5 J	6 U
2-Chloropyridine	6	7 J	4 J	12	350 E	350 D	15	6 U
3-Chloropyridine	6 U	10 U	10 U	10 U	27	23 DJ	10 U	6 U
4-Chloropyridine	6 U	N/A	N/A	N/A	N/A	N/A	N/A	6 U
Pyridine	6 U	N/A	N/A	N/A	N/A	N/A	N/A	6 U
p-Fluoroaniline	6	4 J	10 U	10 U	0 J	100 U	10 U	6 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Kodak (formerly Gerber) 04/25/96

	Location:	BR-103	MW-103
	Date:	20-JAN-94	20-JAN-94
	Type:		
	Sample Name:	BR-103	MW-103
SVOCs	(ug/L)		
1,2,4-Trichlorobenzene		2 U	2 U
1,3-Dichlorobenzene		2 U	2 U
1,4-Dichlorobenzene		2 U	2 U
2,4,5-Trichlorophenol		4 U	4 U
2,4,6-Trichlorophenol		7 U	7 U
2,4-Dichlorophenol		5 U	5 U
2,4-Dimethylphenol		4 U	4 U
2,4-Dinitrophenol		6 U	6 U
2,4-Dinitrotoluene		1 U	1 U
2,6-Dinitrotoluene		1 U	1 U
2-Chloronaphthalene		1 U	1 U
2-Chlorophenol		5 U	5 U
2-Methylnaphthalene		2 U	2 U
2-Methylphenol		5 U	5 U
2-Nitroaniline		1 U	1 U
2-Nitrophenol		5 U	5 U
3,3'-Dichlorobenzidine		1 U	1 U
3-Nitroaniline		0.7 U	0.7 U
4,6-Dinitro-2-methylphenol		10 U	10 U
4-Bromophenyl-phenylether		1 U	1 U
4-Chloro-3-Methylphenol		4 U	4 U
4-Chloroaniline		2 U	2 U
4-Chlorophenyl-phenylether		1 U	1 U
4-Methylphenol		4 U	4 U
4-Nitroaniline		1 U	1 U
4-Nitrophenol		5 U	5 U
Acenaphthene		2 U	2 U
Anthracene		1 U	1 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Kodak (formerly Gerber) 04/25/96

	Location:	BR-103	MW-103
	Date:	20-JAN-94	20-JAN-94
	Type:		
	Sample Name:	BR-103	MW-103
SVOCs	(ug/L)		
N-Nitrosodiphenylamine		1 U	1 U
Naphthalene		2 U	2 U
Nitrobenzene		1 U	1 U
Pentachlorophenol		10 U	10 U
Phenanthrene		2 U	2 U
Phenol		3 U	3 U
Pyrene		2 U	2 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Kodak (formerly Gerber) 04/25/96

Location:	MW-103	MW-103	MW-103	MW-103
Date:	29-JUN-94	29-SEP-94	29-MAR-95	11-SEP-95
Type:				
Sample Name:	MW-103	MW-103	MW-103	MW103
VOCs (ug/L)				
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
1,1-Dichloroethane	2 J	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	N/A	N/A	N/A	N/A
1,2-Dichloroethane	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	N/A	N/A	N/A	N/A
2-Butanone	10 U	10 U	10 U	10 U
2-Chloroethyl Vinyl Ether	N/A	N/A	N/A	N/A
2-Hexanone	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U
Carbon tetrachloride	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U
Chloromethane	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Kodak (formerly Gerber) 04/25/96

Location:	MW-103	MW-103	MW-103	MW-103
Date:	29-JUN-94	29-SEP-94	29-MAR-95	11-SEP-95
Type:				
Sample Name:	MW-103	MW-103	MW-103	MW103
VOCs (ug/L)				
Methylene chloride	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U
Total Xylenes	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U
Vinyl acetate	N/A	N/A	N/A	N/A
Vinyl chloride	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Mark IV 04/25/96

Location:	MW-2	MW-3
Date:	19-JAN-94	19-JAN-94
Type:		
Sample Name:	MW-2	MW-3
PYRIDINE (ug/L)		
2,6-Dichloropyridine	5 U	5 U
2-Chloropyridine	0.9 J	4 J
3-Chloropyridine	5 U	5 U
4-Chloropyridine	5 U	5 U
Pyridine	5 U	5 U
p-Fluoroaniline	5 U	5 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Mark IV 04/25/96

	Location:	MW-2	MW-3
	Date:	19-JAN-94	19-JAN-94
	Type:		
	Sample Name:	MW-2	MW-3
SVOCs	(ug/L)		
Benzo(a)anthracene		2 U	2 U
Benzo(a)pyrene		1 U	1 U
Benzo(b)fluoranthene		2 U	2 U
Benzo(g,h,i)perylene		1 U	1 U
Benzo(k)fluoranthene		2 U	2 U
Benzoic acid		10 U	10 U
Benzyl alcohol		2 U	2 U
Bis(2-Chloroethoxy)methane		1 U	1 U
Bis(2-Chloroethyl)ether		1 U	1 U
Bis(2-Chloroisopropyl)ether		1 U	1 U
Bis(2-ethylhexyl)phthalate		2	1 U
Butylbenzylphthalate		3 U	3 U
Chrysene		1 U	1 U
Di-n-butylphthalate		1 U	1 U
Di-n-octylphthalate		1 U	1 U
Dibenzo(a,h)Anthracene		1 U	1 U
Dibenzofuran		1 U	1 U
Diethylphthalate		2 U	2 U
Dimethylphthalate		4 U	4 U
Fluoranthene		1 U	1 U
Fluorene		1 U	1 U
Hexachlorobenzene		1 U	1 U
Hexachlorobutadiene		3 U	3 U
Hexachlorocyclopentadiene		1 U	1 U
Hexachloroethane		2 U	2 U
Indeno(1,2,3-c,d)Pyrene		1 U	1 U
Isophorone		1 U	1 U
N-Nitroso-di-n-propylamine		1 U	1 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Mark IV 04/25/96

Location:	MW-2	MW-3
Date:	19-JAN-94	19-JAN-94
Type:		
Sample Name:	MW-2	MW-3
VOCs (ug/L)		
1,1,1-Trichloroethane	2 U	2 U
1,1,2,2-Tetrachloroethane	0.7 U	0.7 U
1,1,2-Trichloroethane	0.8 U	0.8 U
1,1-Dichloroethane	2 U	2 U
1,1-Dichloroethene	2 U	2 U
1,2-Dichlorobenzene	1 U	1 U
1,2-Dichloroethane	1 U	1 U
1,2-Dichloroethene (total)	2 U	2 U
1,2-Dichloropropane	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U
1,4-Dichlorobenzene	0.7 U	0.7 U
2-Butanone	4 U	4 U
2-Chloroethyl Vinyl Ether	2 U	2 U
2-Hexanone	2 U	2 U
4-Methyl-2-pentanone	2 U	2 U
Acetone	7 U	7 U
Benzene	0.8 U	0.8 U
Bromodichloromethane	1 U	1 U
Bromoform	1 U	1 U
Bromomethane	1 U	1 U
Carbon disulfide	4 U	4 U
Carbon tetrachloride	2 U	2 U
Chlorobenzene	1 U	1 U
Chloroethane	3 U	3 U
Chloroform	1 U	1 U
Chloromethane	1 U	1 U
Dibromochloromethane	1 U	1 U
Ethylbenzene	0.9 U	0.9 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Ness Precision Products 04/25/96

	Location:	NESS-E	NESS-E	NESS-W
	Date:	20-NOV-95	20-NOV-95	20-NOV-95
	Type:	Duplicate		
	Sample Name:	NESS-EFD	NESS-E	NESS-W
INORGs	(ug/L)			
Aluminum		378	2270	86.6 B
Antimony		5.1 U	57.6 B	5.1 U
Arsenic		29.3	371	9.2 B
Barium		290	1540	88.1 B
Beryllium		0.2 U	2.1 B	0.2 U
Cadmium		8.8	98.4	1.2 B
Calcium		175000	277000	212000
Chromium		1 U*	102 *	12 *
Cobalt		4 B	34.6 B	5 B
Copper		8460 EN*	70700 EN*	470 EN*
Cyanide		10 U	10 U	10 U
Iron		117000 *	864000 *	433000 *
Lead		598 *	4750 *	22 *
Magnesium		357000	41100	44100
Manganese		1790 N*	5970 N*	1660 N*
Mercury		0.2 U	0.2 U	0.2 U
Nickel		58	514	24 B
Potassium		11300 EN	13200 EN	14400 EN
Selenium		5 U*	17.7 *	7.1 *
Silver		4.5 BN	33.4 N	1.1 BN
Sodium		193000	185000	676000
Thallium		3 U	3 U	3 U
Vanadium		8.9 B	74.8	7.4 B
Zinc		351000 E*	2780000 E*	4710 E*

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Ness Precision Products 04/25/96

Location:	NESS-E	NESS-E	NESS-E	NESS-E	NESS-E	NESS-E	NESS-E	NESS-E
Date:	29-AUG-94	29-AUG-94	12-APR-95	15-APR-95	15-APR-95	12-SEP-95	12-SEP-95	12-SEP-95
Type:								
Sample Name:	NESS-E	NESS-EDL	NESS E	NESS E D2	NESS E DL	NESS-E	NESS-E D2	NESS-E DL
PYRIDINE (ug/L)								
2,6-Dichloropyridine	80	73 DJ	150 E	160 DJ	150 D	N/A	N/A	140 D
2-Chloropyridine	1000 E	4900 D	2000 E	2400 D	3500 DE	N/A	2200 D	N/A
3-Chloropyridine	19	21 DJ	13	500 U	50 U	8 J	N/A	N/A
4-Chloropyridine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
p-Fluoroaniline	2 J	1000 U	10 U	500 U	50 U	2 J	N/A	N/A

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Ness Precision Products 04/25/96

Location:	NESS-E	NESS-E	NESS-W
Date:	20-NOV-95	20-NOV-95	20-NOV-95
Type:	Duplicate		
Sample Name:	NESS-EFD	NESS-E	NESS-W
SVOCs (ug/L)			
1,2,4-Trichlorobenzene	10 U	10 U	10 U
1,2-Dichlorobenzene	3 J	4 J	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U
2,4,6-Trichlorophenol	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U
2,4-Dinitrophenol	50 U	50 U	50 U
2,4-Dinitrotoluene	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U
2-Nitrophenol	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20 U	20 U	20 U
3-Nitroaniline	50 U	50 U	50 U
4,6-Dinitro-2-methylphenol	50 U	50 U	50 U
4-Bromophenyl-phenylether	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	8 J
4-Nitroaniline	50 U	50 U	50 U
4-Nitrophenol	50 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Ness Precision Products 04/25/96

	Location:	NESS-E	NESS-E	NESS-W
	Date:	20-NOV-95	20-NOV-95	20-NOV-95
	Type:	Duplicate		
	Sample Name:	NESS-EFD	NESS-E	NESS-W
SVOCs	(ug/L)			
Isophorone		10 U	10 U	10 U
N-Nitroso-di-n-propylamine		10 U	10 U	10 U
N-Nitrosodiphenylamine		10 U	10 U	10 U
Naphthalene		10 U	10 U	2 J
Nitrobenzene		10 U	10 U	10 U
Pentachlorophenol		50 U	50 U	50 U
Phenanthrene		10 U	10 U	10 U
Phenol		10 U	10 U	10 U
Pyrene		10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Ness Precision Products 04/25/96

Location:	NESS-W	NESS-W	NESS-W
Date:	06-APR-95	12-SEP-95	20-NOV-95
Type:			
Sample Name:	NESS W	NESS-W	NESS-W
VOCs (ug/L)			
1,1,1-Trichloroethane	10 U	10 U	0.5 U
1,1,2,2-Tetrachloroethane	4 J	10 U	0.5 U
1,1,2-Trichloroethane	3 J	10 U	0.5 U
1,1-Dichloroethane	10	7 J	6.3
1,1-Dichloroethene	10 U	10 U	0.5 U
1,2-Dichloroethane	10 U	10 U	0.5 U
1,2-Dichloroethene (total)	23	14	46
1,2-Dichloropropane	10 U	10 U	0.5 U
2-Butanone	60	55	1 U
2-Hexanone	10 U	10 U	1 U
4-Methyl-2-pentanone	10 U	10 U	1 U
Acetone	43	10 U	10 U
Benzene	44	34	35
Bromodichloromethane	10 U	10 U	0.5 U
Bromoform	10 U	10 U	0.5 U
Bromomethane	10 U	10 U	1 U
Carbon disulfide	10 U	10 U	0.5 U
Carbon tetrachloride	1 J	10 U	0.5 U
Chlorobenzene	2 J	2 J	1.4
Chloroethane	10 U	10 U	1 U
Chloroform	8 J	10 U	1.4
Chloromethane	10 U	10 U	1 U
Dibromochloromethane	10 U	10 U	0.5 U
Ethylbenzene	11	10	7.3
Methylene chloride	4 J	3 J	2.8 J
Styrene	10 U	10 U	0.5 U
Tetrachloroethene	27	2 J	1.3
Toluene	5 J	4 J	3.1

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** Ness Precision Products 04/25/96

	Location:	NESS-W	NESS-W	NESS-W
	Date:	06-APR-95	12-SEP-95	20-NOV-95
	Type:			
	Sample Name:	NESS W	NESS-W	NESS-W
VOCs	(ug/L)			
Total Xylenes		8 J	5 J	5.2
Trichloroethene		44	2 J	1.5
Vinyl acetate		N/A	N/A	5 U
Vinyl chloride		26	9 J	60
cis-1,3-Dichloropropene		10 U	10 U	0.5 U
trans-1,3-Dichloropropene		10 U	10 U	0.5 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	BR-104	BR-104	BR-104	BR-104	BR-104	BR-105	BR-105	BR-105
Date:	22-MAR-94	30-JUN-94	30-SEP-94	04-APR-95	11-SEP-95	21-MAR-94	01-JUL-94	30-SEP-94
Type:								
Sample Name:	BR-104	BR-104	BR-104	BR-104	BR104	BR-105	BR-105	BR-105
METHANOL (ug/L)								
Methanol	550 U	550 U	550 U	1000 U	1000 U	550 U	170 BJ	550 U

N/A = Not Analyzed

PROJECT: Olin Rochester

SITE: RG+E Right of Way

04/25/96

Location:	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1
Date:	26-JUN-90	17-DEC-90	19-MAR-91	11-JUN-91	26-MAR-92	18-JUN-92	18-SEP-92	22-MAR-93
Type:								
Sample Name:	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1
METHANOL (ug/L)								
Methanol	1000 U	2000 U	1000 U	1000 U	550 U	550 U	550 U	550 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	EC-1
Date:	11-JUN-91
Type:	
Sample Name:	EC-1

PEST/PCB	(ug/L)
delta-BHC	11 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	BR-104	BR-104	BR-104	BR-104	BR-105	BR-105	BR-105	BR-105
Date:	06-APR-95	10-APR-95	11-SEP-95	11-SEP-95	27-JAN-94	23-MAR-94	24-MAR-94	24-MAR-94
Type:								
Sample Name:	BR-104	BR-104 DL	BR104	BR104 DL	BR-105	BR-105	BR-105D2	BR-105DL
PYRIDINE (ug/L)								
2,6-Dichloropyridine	140 E	91 DJ	59	N/A	1800 J	1300 E	970 DJ	1400 D
2-Chloropyridine	810 E	740 D	N/A	140 D	21000 J	9700 E	13000 D	17000 DE
3-Chloropyridine	2 J	200 U	10 U	N/A	540 J	350 E	240 DJ	380 D
4-Chloropyridine	N/A	N/A	N/A	N/A	6 UJ	N/A	N/A	N/A
Pyridine	N/A	N/A	N/A	N/A	35 J	N/A	N/A	N/A
p-Fluoroaniline	0 J	200 U	10 U	N/A	220 J	54	2000 U	33 DJ

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	BR-105	BR-105	BR-105	BR-105	BR-105D	BR-105D	BR-105D	BR-105D
Date:	10-APR-95	11-SEP-95	11-SEP-95	11-SEP-95	04-FEB-94	04-FEB-94	30-MAR-94	30-MAR-94
Type:					Duplicate			
Sample Name:	BR-105 DL	BR105	BR105 D2	BR105 DL	BR-105DFD	BR-105D	BR-105D	BR-105DDL
PYRIDINE (ug/L)								
2,6-Dichloropyridine	800 D	N/A	N/A	750 D	54	62	64	34 DJ
2-Chloropyridine	8000 DE	N/A	12000 D	N/A	2100	2100	4000 E	3400 D
3-Chloropyridine	270 D	N/A	N/A	210 D	32	32	58	500 U
4-Chloropyridine	N/A	N/A	N/A	N/A	5 U	6 U	N/A	N/A
Pyridine	N/A	N/A	N/A	N/A	6	8	N/A	N/A
p-Fluoroaniline	200 U	14	N/A	N/A	11	14	9 J	500 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	BR-105D	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1
Date:	11-SEP-95	26-JUN-90	17-DEC-90	17-DEC-90	19-MAR-91	11-JUN-91	26-MAR-92	18-JUN-92
Type:								
Sample Name:	BR105D DL	EC-1	EC-1	EC-1D	EC-1	EC-1	EC1	EC1
PYRIDINE (ug/L)								
2,6-Dichloropyridine	N/A	14 U	14 U	14 U	10 U	N/A	12 U	10 U
2-Chloropyridine	1300 D	14 U	14 U	14 U	10 U	11 U	12 U	10 U
3-Chloropyridine	N/A	14 U	14 U	14 U	10 U	11 U	12 U	10 U
4-Chloropyridine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
p-Fluoroaniline	N/A	14 U	14 U	14 U	10 U	11 U	12 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104
Date:	11-JUL-94	18-OCT-94	19-OCT-94	06-APR-95	11-SEP-95	11-SEP-95
Type:						
Sample Name:	MW-104	MW-104	MW-104DL	MW-104	MW104	MW104 DL
PYRIDINE (ug/L)						
2,6-Dichloropyridine	68	91 E	71 D	54	51	N/A
2-Chloropyridine	12	5 J	20 U	9 J	N/A	130 D
3-Chloropyridine	10 U	10 U	20 U	10 U	10 U	N/A
4-Chloropyridine	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	N/A	N/A	N/A	N/A	N/A	N/A
p-Fluoroaniline	10 U	10 U	20 U	10 U	10 U	N/A

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	BR-104	BR-105	BR-105D	BR-105D	EC-1	EC-1	MW-104
Date:	26-JAN-94	27-JAN-94	04-FEB-94	04-FEB-94	26-MAR-90	24-JAN-94	26-JAN-94
Type:			Duplicate				
Sample Name:	BR-104	BR-105	BR-105DFD	BR-105D	EC-1	EC-1	MW-104
SVOCs (ug/L)							
Benzo(a)anthracene	2 U	2 UJ	2 U	2 U	N/A	2 U	2 U
Benzo(a)pyrene	1 U	1 UJ	1 U	1 U	N/A	1 U	1 U
Benzo(b)fluoranthene	2 U	2 UJ	2 U	2 U	N/A	2 U	2 U
Benzo(g,h,i)perylene	2 U	1 UJ	1 U	1 U	N/A	1 U	1 U
Benzo(k)fluoranthene	3 U	2 UJ	2 U	2 U	N/A	3 U	2 U
Benzoic acid	11 U	10 UJ	3 J	1 J	N/A	11 U	10 U
Benzyl alcohol	3 U	25 U	2 U	2 U	N/A	3 U	2 U
Bis(2-Chloroethoxy)methane	1 U	1 UJ	1 U	1 U	N/A	1 U	1 U
Bis(2-Chloroethyl)ether	27	17 J	1 U	1 U	N/A	2 U	0.7 J
Bis(2-Chloroisopropyl)ether	2 U	1 UJ	1 U	1 U	N/A	2 U	1 U
Bis(2-ethylhexyl)phthalate	2 U	2 UJ	50	33	N/A	3	2 U
Butylbenzylphthalate	4 U	3 UJ	1 J	3 U	N/A	4 U	3 U
Chrysene	1 U	1 UJ	1 U	1 U	N/A	1 U	1 U
Di-n-butylphthalate	1 U	1 UJ	26	27	15 U	1 U	1 U
Di-n-octylphthalate	2 U	2 UJ	1 U	2 U	N/A	2 U	2 U
Dibenzo(a,h)Anthracene	1 U	1 UJ	1 U	1 U	N/A	2 U	1 U
Dibenzofuran	1 U	1 UJ	1 U	1 U	N/A	1 U	1 U
Diethylphthalate	2 U	2 UJ	2 U	2 U	15 U	2 U	2 U
Dimethylphthalate	5 U	4 UJ	4 U	4 U	15 U	5 U	4 U
Fluoranthene	2 U	1 UJ	1 U	1 U	15 U	2 U	1 U
Fluorene	2 U	2 UJ	1 U	2 U	15 U	2 U	2 U
Hexachlorobenzene	2 U	1 UJ	1 U	1 U	15 U	2 U	1 U
Hexachlorobutadiene	3 U	3 UJ	3 U	3 U	15 U	3 U	3 U
Hexachlorocyclopentadiene	2 U	1 UJ	1 U	1 U	N/A	2 U	1 U
Hexachloroethane	3 U	3 UJ	2 U	3 U	15 U	3 U	3 U
Indeno(1,2,3-c,d)Pyrene	1 U	1 UJ	1 U	1 U	N/A	1 U	1 U
Isophorone	1 U	1 UJ	1 U	1 U	N/A	1 U	1 U
N-Nitroso-di-n-propylamine	1 U	1 UJ	1 U	1 U	N/A	1 U	1 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	BR-104	BR-104	BR-104	BR-104	BR-104	BR-104	BR-105	BR-105
Date:	26-JAN-94	17-MAR-94	28-JUN-94	29-SEP-94	30-MAR-95	11-SEP-95	27-JAN-94	17-MAR-94
Type:								
Sample Name:	BR-104	BR-104	BR-104	BR-104	BR-104	BR104	BR-105	BR-105
VOCs (ug/L)								
1,1,1-Trichloroethane	2 U	10 U	10 U	10 U	10 U	10 U	2 U	10 U
1,1,2,2-Tetrachloroethane	0.7 U	10 U	10 U	10 U	10 U	10 U	0.7 U	10 U
1,1,2-Trichloroethane	0.8 U	10 U	10 U	10 U	10 U	10 U	0.8 U	10 U
1,1-Dichloroethane	3	10 U	1 J	10 U	10 U	10 U	2	2 J
1,1-Dichloroethene	2 U	10 U	10 U	10 U	10 U	10 U	2 U	10 U
1,2-Dichlorobenzene	1	N/A	N/A	N/A	N/A	N/A	13	N/A
1,2-Dichloroethane	1 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U
1,2-Dichloroethene (total)	2 U	10 U	10 U	10 U	10 U	10 U	2	2 J
1,2-Dichloropropane	1 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U
1,3-Dichlorobenzene	1 U	N/A	N/A	N/A	N/A	N/A	1 U	N/A
1,4-Dichlorobenzene	0.7	N/A	N/A	N/A	N/A	N/A	0.8	N/A
2-Butanone	4 U	10 U	10 U	10 U	10 U	10 U	4 U	10 U
2-Chloroethyl Vinyl Ether	2 U	N/A	N/A	N/A	N/A	N/A	2 U	N/A
2-Hexanone	2 U	10 U	10 U	10 U	10 U	10 U	2 U	10 U
4-Methyl-2-pentanone	2 U	10 U	10 U	10 U	10 U	10 U	2 U	10 U
Acetone	7 U	10 U	10 U	10 U	10 U	10 U	7 U	10 U
Benzene	3	10 U	2 J	1 J	10 U	10 U	16	12
Bromodichloromethane	1 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U
Bromoform	1 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U
Bromomethane	1 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U
Carbon disulfide	4 U	10 U	1 J	10 U	10 U	10 U	4	10 U
Carbon tetrachloride	2 U	10 U	0.7 J	10 U	10 U	10 U	2 U	10 U
Chlorobenzene	2	10 U	0.9 BJ	10 U	10 U	10 U	46	38
Chloroethane	3 U	10 U	10 U	10 U	10 U	10 U	3 U	10 U
Chloroform	8 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U
Chloromethane	1 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U
Dibromochloromethane	1 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U
Ethylbenzene	0.9 U	10 U	10 U	10 U	10 U	10 U	0.9 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	BR-105D	BR-105D	BR-105D	BR-105D	EC-1	EC-1	EC-1	EC-1
Date:	30-JUN-94	30-SEP-94	31-MAR-95	11-SEP-95	26-MAR-90	26-JUN-90	17-DEC-90	19-MAR-91
Type:								
Sample Name:	BR-105D	BR-105D	BR-105D	BR105D	EC-1	EC-1	EC-1	EC-1
VOCs (ug/L)								
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	N/A	5 U	5 U	5 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	12	6 J	6 J	6 J	5 U	5 U	5 U	5 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	N/A	N/A	N/A	N/A	5 U	N/A	N/A	N/A
1,2-Dichloroethane	10 U	10 U	10 U	10 U	5 U	5 U	5 U	5 U
1,2-Dichloroethene (total)	78	55	72	59	5 U	5 U	5 U	5 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	N/A	N/A	N/A	N/A	5 U	N/A	N/A	N/A
1,4-Dichlorobenzene	N/A	N/A	N/A	N/A	5 U	N/A	N/A	N/A
2-Butanone	10 U	10 U	10 U	10 U	N/A	10 U	10 U	10 U
2-Chloroethyl Vinyl Ether	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2-Hexanone	10 U	10 U	10 U	10 U	N/A	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	N/A	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	N/A	10 U	10 U	10 U
Benzene	14	11	13	10	5 U	5 U	5 U	5 U
Bromodichloromethane	10 U	10 U	10 U	10 U	N/A	5 U	5 U	5 U
Bromoform	10 U	10 U	10 U	10 U	N/A	5 U	5 U	5 U
Bromomethane	10 U	10 U	10 U	10 U	N/A	10 U	10 U	10 U
Carbon disulfide	10 U	3 J	10 U	36	N/A	5 U	5 U	5 U
Carbon tetrachloride	10 U	10 U	10 U	10 U	5 U	5 U	5 U	5 U
Chlorobenzene	0.8 BJ	0.8 BJ	10 U	10 U	5 U	5 U	5 U	5 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	2 J	1 J	2 J	10 U	5 U	5 U	5 U	5 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	N/A	5 U	5 U	5 U
Ethylbenzene	10 U	10 U	10 U	10 U	5 U	5 U	5 U	5 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	EC-1	EC-1	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104
Date:	22-SEP-93	24-JAN-94	26-JAN-94	17-MAR-94	28-JUN-94	29-SEP-94	30-MAR-95	11-SEP-95
Type:								
Sample Name:	EC-1	EC-1	MW-104	MW-104	MW-104	MW-104	MW-104	MW104
VOCs (ug/L)								
1,1,1-Trichloroethane	5 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	5 U	0.7 U	0.7 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	5 U	0.8 U	0.8 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	5 U	2 U	0.6 J	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	5 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	N/A	1 U	6	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	5 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	5 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	5 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	N/A	1 U	1 U	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	N/A	0.7 U	3	N/A	N/A	N/A	N/A	N/A
2-Butanone	10 U	4 U	4 U	10 U	10 U	10 U	10 U	10 U
2-Chloroethyl Vinyl Ether	N/A	2 U	2 U	N/A	N/A	N/A	N/A	N/A
2-Hexanone	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	7 U	7 U	10 U	10 U	10 U	10 U	10 U
Benzene	5 U	0.8 U	0.8 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	5 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U
Bromoform	5 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	5 U	4 U	4 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	5 U	2 U	2 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	5 U	1 U	5	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	3 U	3 U	10 U	10 U	10 U	10 U	10 U
Chloroform	5 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	10 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5 U	0.9 U	0.9 U	10 U	10 U	10 U	10 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	BR-105	BR-105	BR-105	BR-105	BR-105	BR-105D	BR-105D	BR-105D
Date:	30-JUN-94	29-SEP-94	30-MAR-95	11-SEP-95	12-SEP-95	04-FEB-94	04-FEB-94	18-MAR-94
Type:						Duplicate		
Sample Name:	BR-105	BR-105	BR-105	BR105	BR105	BR-105DFD	BR-105D	BR-105D
VOCs (ug/L)								
Methylene chloride	51	10 U	10 U	10 U	N/A	3 J	3	10 U
Styrene	10 U	10 U	10 U	10 U	N/A	1 U	1 U	10 U
Tetrachloroethene	19	6 J	10 U	2 J	N/A	2 U	2 U	10 U
Toluene	6 BJ	2 J	2 J	2 J	N/A	42 J	41	26
Total Xylenes	10 U	0.6 J	10 U	10 U	N/A	15 J	16	13
Trichloroethene	4 J	2 J	3 J	4 J	N/A	2 U	2 U	10 U
Vinyl acetate	N/A	N/A	N/A	N/A	N/A	1 U	1 U	N/A
Vinyl chloride	19	5 J	3 J	2 J	N/A	17 J	6 J	94
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	N/A	2 U	2 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	N/A	2 U	2 U	10 U

N/A = Not Analyzed

PROJECT: Olin Rochester **SITE:** RG+E Right of Way 04/25/96

Location:	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1	EC-1
Date:	11-JUN-91	19-DEC-91	26-MAR-92	18-JUN-92	18-SEP-92	10-DEC-92	19-MAR-93	25-JUN-93
Type:								
Sample Name:	EC-1	EC1	EC-1	EC1	EC1	EC1	EC-1	EC-1
VOCs (ug/L)								
Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Total Xylenes	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl acetate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

N/A = Not Analyzed

APPENDIX B-2

GROUNDWATER FIELD PARAMETERS - NEW WELLS

APPENDIX B-2
SUMMARY OF FIELD SAMPLING PARAMETERS

OLIN CHEMICALS PHASE II RI REPORT
ROCHESTER, N.Y.

LOCATION	TYPE	DATE	TIME	PH	CONDUCTIVITY (umhos/cm)	TEMP (C)	TURBIDITY	DEPTH (FT)	COMMENTS
BR-111	WELL	26-Oct-95	1320	8.06	460	14.7	N/A	29.39	TURBID, GRAY
			1321	8.09	460	14.7	N/A	29.39	TURBID, GRAY
BR-111D	WELL	26-Oct-95	1335	6.98	44000	14.4	N/A	29.74	SLIGHTLY TURBID, GRAY TINT
			1336	7.98	44000	14.4	N/A	29.74	SLIGHTLY TURBID, GRAY TINT
BR-112A	WELL	27-Oct-95	1335	7.19	1100	11.2	N/A	32.42	CLEAR
			1336	7.18	1100	11.2	N/A	32.42	CLEAR
BR-112D	WELL	27-Oct-95	1234	7.36	1800	10.9	N/A	37.17	SLIGHTLY TURBID
			1235	7.38	1800	10.9	N/A	37.17	SLIGHTLY TURBID
BR-113	WELL	26-Oct-95	1125	8.16	800	13.7	N/A	32.13	TURBID, GRAY
			1126	8.12	800	13.7	N/A	32.13	TURBID, GRAY
BR-113D	WELL	26-Oct-95	1138	7.41	1600	14.0	N/A	31.99	SLIGHTLY TURBID, GRAY TINT
			1138	7.42	1600	14.0	N/A	31.99	SLIGHTLY TURBID, GRAY TINT
BR-114	WELL	27-Oct-95	1059	7.15	1500	13.8	N/A	15.15	SLIGHTLY TURBID
			1100	7.15	1500	13.8	N/A	15.15	SLIGHTLY TURBID
MW-114	WELL	27-Oct-95	1310	7.80	1000	15.0	N/A	12.89	TURBID
			1311	7.79	1000	15.0	N/A	12.89	TURBID
QO-1	UARRY OUTFAL	25-Oct-95	1343	7.72	140	11.0	N/A	N/A	CLEAR; DIFFICULT ACCESS
QP-1	QUARRY POND	25-Oct-95	1413	7.18	2200	11.4	N/A	N/A	CLEAR
			1414	7.24	2200	11.4	N/A	N/A	CLEAR
QS-4	QUARRY SEEP	25-Oct-95	1435	7.92	2000	10.4	N/A	N/A	CLEAR
			1436	7.95	2000	10.4	N/A	N/A	CLEAR
SW-1	CANAL WATER	20-Nov-95	1202	7.80	800	5.8	N/A	N/A	CLEAR
SW-2	CANAL WATER	20-Nov-95	1140	7.55	810	5.2	N/A	N/A	CLEAR
			1141	7.55	810	5.2	N/A	N/A	CLEAR
SW-3	CANAL WATER	20-Nov-95	1123	8.19	800	8.0	N/A	N/A	CLEAR
			1124	8.20	800	8.0	N/A	N/A	CLEAR
NESS-E	WELL	20-Nov-95	1336	7.21	2000	12.0	N/A	31.70	TURBID; GRAY-BLACK
			1337	7.19	2000	12.0	N/A	31.70	TURBID; GRAY-BLACK
NESS-W	WELL	20-Nov-95	1438	7.68	5000	10.7	N/A	40.00	TURBID; BLACK
			1439	7.70	5000	10.7	N/A	40.00	TURBID; BLACK