The electronic version of this file/report should have the file name:

Type of document.Spill Number.Year-Month.File *Year-Year* or Report name.pdf

letter._____._____-_____.File spillfile.pdf

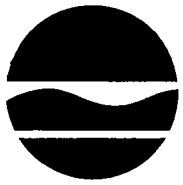
report.hw905024._2003-03-07.HISTORICAL MONITORING WELL AND GROUNDWATER DATA.pdf

Project Site numbers will be proceeded by the following:

Municipal Brownfields - b
Superfund - hw
Spills - sp
ERP - e
VCP - v
BCP - c

non-releasable - put .nf.pdf
Example: letter.sp9875693.1998-01.Filespillfile.nf.pdf

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York, 14203-2999
Phone: (716) 851-7220 • **FAX:** (716) 851-7226
Website: www.dec.state.ny.us



Erin M. Crotty
Commissioner

MEMORANDUM

TO: File - Farwell Road Landfill, #905024, Ischua (T), Erie County

FROM: David Locey

SUBJECT: Historical Monitoring Well and Groundwater Data

DATE: March 7, 2003

The attached records were copied from files kept by Region 9 Division of Solid Waste (M. McIntosh).

DPL

Cattaraugus Landfill No.2
Cattaraugus County Refuse Departme
Atlantic Testing Laboratories CD-

TABULATION OF GROUNDWATER OBSERVATIONS

PIEZOMETER (BORING) NO. - year	TOP OF CASING ELEV.	GROUND ELEV.	SCREENED ELEVATION FROM	TO
1A-79	1543.4	1541.0	1465.0	1475.0
2-79	1527.3	1525.0	1510.0	1515.0
3-79	1536.0	1535.0	1466.0	1471.0
4	1599.0	1597.0	1533.0	1538.0
5A-79	1642.0	1640.0	1560.0	1570.0
6-83	1623.0	1621.2	1463,0	1473.0

DATES/LEVELS

Stratum	12-20-79	4-23-80	8-22-80	11-14-80	1-19-81	10-2-81	4-12-82	7-23-82	9-24-82
1	1492.4	1490.0	1489.4	1491.4	1492.4	1491.1	1494.4	1490.0	1490.9
1	1512.3	1513.3	1510.8	1515.4	1511.7	1514.1	1516.0	1510.7	1517.9
1	1489.8	1489.5	----	1490.0	1491.6	1490.5	1493.0	1489.2	1489.3
1	dry	dry	dry	dry	dry	dry	dry	dry	dry
2	1613.0	1608.5	1606.5	1613.0	1609.0	1614.2	1623.5	1606.5	1607.0
3									

continued

Stratum	Date/Level 2-17-83	4-8-83	7-11-83	10-28-83
1	1492.2	1492.5	1491.9	1490.7
1	1516.9	1518.6	1516.1	1515.8
1	1491.7	1491.8	1490.8	1488.5
1	dry	dry	dry	dry
2	1612.1	1618.8	1609.1	1607.0
3			1496.6	1480.0

*water level reading taken on 8-18-83

Stratum Descriptions

1	Glacial Till
2	Grey to dark Grey calcareous Shale
3	Grey calcareous Shale with siltstone and sandstone

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL 05502 Location Ischua

Exact Sampling Point Well # 1-A SEF 2 MW-1A County Cattaraugus

Date / Parameter	GW Stds / Unit	12/20/84	4/24/85	8/1/85	10/17/85	1/28/86	3/17/86	6/25/86		12/1/86	4/15/87	7/15/87
ARSONIC mg/l	0.025											
Chrome (T) mg/l	~~0.050~~											
Copper td/sol mg/l	1.0	0.010				0.032						
Lead mg/l	.025											
Mercury ug/l	2											
Selenium mg/l	.02											
ZINC mg/l	5											
phenol mg/l	.001	0.13	DRY	DRY		0.051	DRY	DRY	DRY	DRY	DRY	DRY
Conductance umhos/cm		850				2200						
chlorides mg/l	250	64				[illegible]14						
aluminum mg/l												
TOC mg/l		330				130						
pH su	6.5 to 8.5	7.61				7.04						
IRON td/sol mg/l	0.3	6.7				50						
TKN mg/l												
NITRATE "												
SULFATE "	~~250~~											
manganese	0.3											
Cyanide												
Water elev USGS	ft	1494.1				[illegible] 1473.5						

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL Location

Exact Sampling Point WELL # 4 County CATTARAUGUS

Date			12/20/79	1/29/80	4/23/80	8/1/80	11/14/80	1/28/81	4/12/82 (4/27/82)	7/23/82	9/24/82	2/11/83	4/8/83	7/11/83	9/26/83	12/16/83	3/14/84	6/20/84	10/4/84
Parameter	Unit																		
BOD5	mg/l		<4	–	–	–													
COD	mg/l		16	–	–	–													
PHENOLS	mg/l	.001	<.01	–	.02	.03	<.01	0.2	<0.01	0.01	<0.01	0.010	<0.01	<0.01	0.090			0.52	0.102
METHYLENE BLUE ACTIVE SUBSTANCES	mg/l	.5	<.02	–	–	–													
AMMONIA	mgN/l		<.5	–	–	–													
TKN	mgN/l		<.5	–	<.1	–			0.94				0.68						
NITRATE	mgN/l	10.0	.53	–	.16	–			<0.1				0.13						
NITRITE	mgN/l		<.03	–	–	–													
TOTAL PHOSPHOROUS	mg P/l		<.01	–	–	–													
SULFATE	mg/l	250	4.4	–	7.3	–			2.0				3.6						
TOTAL ALUMINUM	mg/l		.4	–	.1	–			0.1				<0.06						
TOTAL ARSENIC	ug/l	25	<2	–	<1	–			<0.004				<0.005						
TOTAL BERYLLIUM	mg/l		<.003	–	–	–													
TOTAL CHROMIUM	mg/l		.008	–	<.003	–			<0.006				0.008						
TOTAL COPPER	mg/l	1.0	<.003	–	<.003	.014	.006	.02	<0.01 (<0.006)	<0.004	0.012	<0.004	<0.004	<0.004	0.010			0.028	0.006
TOTAL LEAD	mg/l	.025	<.02	–	<.02	–			<0.08				<0.005						
TOTAL LITHIUM	mg/l		<.5	–	–	–													
TOTAL CALCIUM	mg/l		8.0	–	–	–													
TOTAL MERCURY	ug/l	2	<.6	–	<.6	–			<1				<0.0009						
TOTAL SILVER	mg/l	.05	<.005	–	–	–													
TOTAL POTASSIUM	mg/l		1.2	–	–	–													
TOTAL TITANIUM	mg/l		<.07	–	–	–													

DRY

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

2/

Refuse Disposal Area FARNUM LANDFILL Location

Exact Sampling Point WELL #1A County CATTARAUGUS

Water level trend

Date			12/20/79	1/29/80	4/23/80	8/11/80	11/14/80	1/28/81	4/12/82 (1/27/82)	7/13/82	9/24/82	2/17/83	4/18/83	7/11/83	9/26/83	12/16/83		5/20/84	10/4/84
Parameter	Unit																		
TOTAL SODIUM	mg/l		6.8	—	—	—													
TOTAL COLIFORM	MPN/100ml	4	—	<20	—	—													
PH			—	—	8.41	8.38	8.78	7.86 (7.5)	8.00	7.52	7.53	7.45	7.70	7.18	7.33			7.71	6.70
CONDUCTANCE	micromho/cm		—	—	240	200	195	210 (318)	290	324	304	288	290	265	520			4800	400
TOC	mg/l		—	—	7.9	4.0	1.5	2.5 (40)	2.5	<1	2.6	2.0	19	20	27			638	98
CHLORIDES	mg/l	20	—	—	33	33	33	30 (6.2)	6.4	5.0	4.8	6.0	4.0	4.6	5.9			22	19
TOTAL CYANIDE	mg/l	.2	—	—	<.03	—			<0.02				<0.01						
TOTAL IRON	mg/l	.3	—	—	(205)	(47)	<.02	(7.1) (2.9)	(7.3)	6.1	73	2.8	4.5	7.9	21	DRY		(52)	(15)
TOTAL MANGANESE	mg/l	.3	—	—	.17	—			0.16				6.15						
TOTAL ZINC	mg/l	5	—	—	<.003	—			0.058				0.026						
Water elev.									1494.41	1490.04	1491.9	1492.20	1492.5	1491.90	1490.60				1491.58

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Fennell Landfill Location Ischua

Exact Sampling Point well 2 SCR 2 W2, County Cattaraugus

Parameter	Unit	Standard	10/15/12	12/11/86	4/15/87	7/15/87	9/29/87
pH	S.U.	6.5-8.5	6.86	7.47	7.32	6.65	6.77
specific conductance	umhos/cm		588	250	200	420	400
chloride	mg/l	250	2.3	2.0	<1	<0.5	1.2
TOC	mg/l		16	1.4	75	19	16
tot. recov. phenolics	mg/l	.001	0.0175	<0.01	<0.01	<0.010	0.034
total copper / tot/sol	mg/l	1.0	0.005	<0.005	<0.005 / <0.005	<0.005 / <0.005	0.01 / <0.005
total iron / tot/sol	mg/l	.3	9.4	2.5	2.4 / 0.12	13 / 0.12	35 / .23
nitrate	mg/l as N				<0.05		
gw el.			1518.49	1520.66	1518.49	1517.57	1518.57
aluminum tot/sol	mg/l				0.20 / 0.20		
arsenic tot/sol	mg/l				<0.005 / <0.005		
chromium tot/sol	mg/l				<0.005 / <0.005		
lead tot/sol	mg/l				<0.005 / <0.005		
manganese tot/sol	mg/l				0.10 / 0.07		
mercury tot/sol	mg/l				<0.0005 / <0.0005		
zinc tot/sol	mg/l				0.014 / 0.015		
TKN	mg/l				0.47		
sulfate	mg/l				6.0		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

1/2

Refuse Disposal Area FARWELL LANDFILL Location

Exact Sampling Point WELL #2 County Cattaraugus.

Parameter	Unit	GW. Std.	7/23/82	9/24/82	2/17/83	4/18/83	7/11/83	9/26/83	12/16/83	3/14/84	6/20/84	10/4/84	12/20/84	4/24/85	8/1/85	10/17/85	1/24/86	3/17/86	6/25/86
Date																			
ARSENIC	mg/l	.025				<0.105				<0.005				<0.005 tot				<0.005 tot	
BARIUM	"	1.0																	
BERYLLIUM	"																		
BORON	"																		
CADMIUM	"	.01																	
Chromium(T)	"					0.010				<0.005				<0.005 tot				<0.008 tot	
Copper	"	1.0	<0.004	0.006	<0.004	<0.004	<0.004	0.012	0.006	<0.006	0.015	<0.005	0.006	0.005 tot	0.144	0.045	0.012	<0.007 tot	<0.005 tot
Lead	"	.025				<0.015				<0.005				0.164 tot				<0.005 tot	
Mercury	ug/l	2				<0.9				<0.001				<0.0005 tot				<0.002 tot	
Selenium	mg/l	.02																	
Silver	"	.05																	
Zinc	"	5				0.036				<0.008				0.040 tot				0.026 tot	
phenols	"	.001	0.015	<0.01	0.02	<0.01	~~0.011~~	0.016	0.094	0.011	0.017	<0.01	<0.01	0.032	<0.01	<0.01	<0.01	<0.02	<0.01
phosphate(T) MOLYBDATE	"																		
ALKALINITY	mg/l																		
TURBIDITY	Nephel																		
ALKALINITY ELEC. pH 4.5	mg/l																		
Color	A-Co																		
Conductance	umhos/cm		270	356	231	311	257	550	410	335	275	450	265	210	440	480	160	280	320
Total Solids	mg/l																		
Turbidity	FTU																		
BOD	mg/l																		
Chlorides	mg/l	250	3.4	19	1.7	2.2	11	40	3.3	12	12	44	43	8.8	90	23	21	17	1.4

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

2/2

Refuse Disposal Area FAREWELL LANDFILL Location _____

Exact Sampling Point WELL #2 County CATTARAUGUS

Date		GW std.	7/23/82	9/24/82	2/17/83	4/6/83	7/11/83	9/26/83	12/16/83	3/14/84	6/20/84	10/4/84	12/26/84	4/24/85	8/1/85	10/17/85	1/21/86	3/27/86	6/25/86
Parameter	Unit																		
METHYLENE BLUE ACTIVE SUBSTANCES	mg/l	.5																	
Aluminum	"					2.9				0.18				1.1				2.29 tot	
Lithium	"																		
Calcium	"																		
Titanium	"																		
Total Col. Form	"	4																	
IRON & MANG	"	.5									(7.89)								
TOC	"		3	8.0	6.5	10	30	34	41	39	19	15	1.8	10	26	21	6.8	35	22
pH	SU.	6.5 to 8.5	7.19	6.86	7.31	7.39	7.02	7.11	6.60	7.17	7.37	8.34	7.19	6.69	6.82	6.73	7.42	7.52	6.81
Water elev.	USGS elev		1510.70	1517.84	1516.86	1518.69	1516.06	1517.64	1518.84	1518.84		1515.66	1518.24	1516.46	13'11"	14'4"	5'11"	1516.24	1516.82
IRON tot/sol	0.3	mg/l	1.3	10	110	16	25	31	6.7	9.3	7.89	2.2	4.5	9.3 tot	275 tot	64 tot	7.18	67	14
TKN						0.34				2.1				0.63				1.5	
NITRATE						<0.05				0.05				<0.5				<0.05	
SULFATE						41				41				13				10	
MANGANESE	0.3					0.76				1.3				0.627				0.73 tot	
CYANIDE						<0.01				<0.01				<0.03				<0.01 tot	

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL - Location ______

Exact Sampling Point WELL #2 County CATTARAUGUS

Date / Parameter	Unit		3/4/75	10/10/75	12/10/75	2/27/76	6/24/76	9/30/76	7/26/77	10/21/77	3/1/78	5/2/79	12/[illegible]/79	1/29/80	4/23/80	8/1/80	11/14/80	1/27/8[illegible]	4/12/82
COLOR (APPARENT)			17.	700	484.	2900	1100.	1400	1040.	2500.	72.	—	—	—	—	—			
TURBIDITY	JTU		27	210	100.	210.	600.	—	—	—	—	—	—	—	—	—			
ODOR, HOT			1.0044	1.0044	1.0044	1,VEG	1,VEG	—	—	—	1,EARTHY	—	—	—	—	—			
ODOR, COLD			1.0044	3.0016	2.0045	1,EARTHY	1,VEG	1,[illegible]	1,[illegible]	3,DISAGREE	3,[illegible]	—	—	—	—	—			
AMMONIA	mgN/l		<.02	.80	.10	.85	.02	.08	.06	.26	.91	—	<.5	—	—	—			
NITRITE	mg/l		.003	.011	.004	.024	.01	.005	.003	.002	.005	—	<.03	—	—	—			
NITRATE	mgN/l	10.0	3.5	<.1	<.1	.10	<.09	<.015	<.097	.0238	<.095	—	.81	—	.15	—			<0.1
CHLORIDES	mg/l	250	2.7	1.0	1.0	1.0	1.0	1.1	1.0	—	8.5	—	—	—	4.3	1.8	2.6	<1	[<5.0] 22
HARDNESS AS $CaCO_3$	mg/l		112	64.	66.	52.	44.	58.	64.	—	160	186	—		—	—			
ALKALINITY AS $CaCO_3$	mg/l		69	48.	48.	30.	28.	—	—	—	—	—	—		—	—			
pH		6.5-8.5	7.9	8.1	7.8	7.8	7.4	7.6	7.4	7.8	7.6	7.65	—	—	7.83	7.04	7.47	7.67	[7.30] 7.46
KJELDAHL NITROGEN	mgN/l		.25	—	.55	—	—	—	—	—	—	—	<.5	—	.13	—			2.2
COD	mg/l		15	32.	11.	24.	6.	10.	8.	—	—	—	9.8		—	—			
IRON	mg/l	.3	~~1.5~~	140.	60.	54.	120.	3.5	23.	—	24.	20	—	—	(2.0)	39	2.0	8.1	84.
MANGANESE	mg/l	.3	.10	3.7	1.0	.15	1.3	.19	.77	—	.58	—	—	—	.13	—			4.3
SODIUM	mg/l		2.	2.	3.	1.	<1.	3.	1.	1.	7.	—	2.2	—	—	—			
POTASSIUM	mg/l		—	1.6	1.0	.7	1.1	.8	1.7	—	3.6	—	1.8	—	—	—			
FLUORIDES	mg/l	1.5			.14	—	—	—	—	.1		—		—	—	—			
TDS	mg/l				66.	—	—	—	—	—	—	—		—	—	—			
SULFATES AS SO_4	mg/l	250			16.	—	—	—	—	—	—	—	7.6	—	12	—			7.3
CYANIDE AS CN	mg/l	.2	—	—	<.1	—	—	—	—	—	—	—	—	—	<.02	—			<0.020
MBAS AS LAS SURFACTANTS	mg/l				<.04	—	—	—	—	—	—	—	—	—	—	—			

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL Location

Exact Sampling Point WELL #1 **County** CATTARAUGUS

11/27/82

Date			3/14/75	6/6/75	12/1/75	2/27/76	6/29/76	9/30/76	7/26/77	10/21/77	3/6/78	5/2/79	12/20/79	11/29/80	4/23/80	8/1/80	11/14/80	1/28/81	4/14/82
Parameter	Unit																		
ARSENIC	mg/l	.025	—	—	<.03	—	—	—	—	—	—	—	<.002	—	<.001	—			<0.006
BARIUM	mg/l	1.0	—	—	<.5	—	—	—	—	—	—	—	—	—	—	—			
BERYLLIUM	mg/l		—	—	<.02	—	—	—	—	—	—	—	<.003	—	—	—			
BORON	mg/l		—	—	.25	—	—	—	—	—	—	—	—	—	—	—			
CADMIUM	mg/l	.01	—	—	.002	—	—	—	—	—	—	—	—	—	—	—			
TOTAL CHROMIUM	mg/l		—	—	<.01	—	—	—	—	—	—	—	<.003	—	.006	—			<0.006
COPPER	mg/l	1.0	—	—	<.05	—	—	—	—	—	—	—	.018	—	<.003	.026	.010	.006 <0.01	0.026
LEAD	mg/l	.025	—	—	.01	—	—	—	—	—	—	—	<.02	—	.02	—			<0.08
MERCURY	ug/l	2	—	—	<.4	—	—	—	—	—	—	—	<.6	—	<.6	—			<0.001
SELENIUM	mg/l	.02	—	—	<.005	—	—	—	—	—	—	—			—	—			
SILVER	mg/l	.05	—	—	<.02	—	—	—	—	—	—	—	<.005	—	—	—			
ZINC	mg/l	5	—	—	.01	—	—	—	—	—	—	—			<.003	—			
PHENOLS	mg/l	.001	—	—	.001	—	—	—	—	—	—	—	<.01		.060	.01	.01	.01 <0.01	0.133
TOTAL PHOSPHATE	mgP/l		—	—	.06	—	—	—	—	—	—	—	<.01	—	—	—			
M'ORANGE ALKALINITY	mg/l		—	—	—	—	—	44.	60.	—	—	—			—	—			
NTU TURBIDITY	NUPHEL		—	—	—	—	—	140.	180.	140.	720.	—			—	—			
ELECTROM PH4.5 ALKALINITY	mg/l		—	—	—	—	—	—	—	132.	139.	179			—	—			
COLOR	Pt-Co		—	—	—	—	—	—	—	—	—	30			—	—			
CONDUCTANCE	umhos/cm		—	—	—	—	—	—	—	—	—	327			200	305	215	200 168	335
TOTAL SOLIDSS	mg/l		—	—	—	—	—	—	—	—	—	500			—	—			
TURBIDITY	FTU		—	—	—	—	—	—	—	—	—	140			—	—			
BOD	mg/l		—	—	—	—							<4						

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area [illegible] Location

Exact Sampling Point WELL #2 County CATTARAUGUS

Date / Parameter	Unit		3/1/75	10/10/75	12/10/75	2/27/76	6/24/76	9/3/76	7/[illegible]/77	10/27/77	3/9/78	5/2/79	12/20/79	1/29/80	4/23/80	8/1/80	11/14/80	1/25/82	4/12/82 (1/27/82)
METHYLENE BLUE ACTIVE SUBSTANCES	mg/l	.5	—	—	—	—	—	—	—	—	—	—	<.02	—	—	—			
TOTAL ALUMINUM	mg/l		—	—	—	—				—		—	1.0		.6	—			1.7
TOTAL LITHIUM	mg/l		—	—	—	—						—	<.5	—	—	—			
TOTAL CALCIUM	mg/l		—	—	—	—	—	—				—	25	—	—	—			
TOTAL TITANIUM	mg/l		—	—	—	—						—	<.07		—	—			
TOTAL COLIFORM	mg/l	4	—		—					—			—	~~170~~	—	—			
IRON + MANGANESE	mg/l	.5	1.6	143.7	61.0	59.75	121.3	3.49	23.77	—	24.58	—	—	—	—	—			
TOC	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	7.7	8.5	2.7	<2 5.5	77
Water elev.																			1515.96

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point Well 3 SLF 2 W3 County Cattaraugus

Parameter	Unit	Standard	7/15/87	9/29/87
pH	SU	6.5-8.5	7.44	7.24
specific conductance	umhos/cm		430	430
chloride	mg/l	250	17	20
TOC	mg/l		13	3.8
phenols	mg/l	.001	<0.010	<0.01
TKN	mgN/l			
nitrate	mgN/l	10		
sulfate	mg/l	250		
iron	mg/l	.3	8.1 / 0.21	10 / 0.19
aluminum	mg/l			
chromium	mg/l			
zinc	mg/l	5		
lead	mg/l	.025		
mercury	mg/l	.002		
copper	mg/l	1.0	0.008 / <0.005	0.010 / <0.005
manganese	mg/l	.3		
cyanide	mg/l	.2		
arsenic	mg/l	.025		
gw level			1491.70	1491.12

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: FARWELL LANDFILL   Location: ISCHUA (T) CATT. CO.

Exact Sampling Point: Well #3   SLF 2 1.3   County: -

Date / Parameter	Unit	GW Std.	4/8/83	7/11/83	9/26/83	12/16/83	3/14/84	6/20/84	10/4/84	12/20/84	4/24/85	8/1/85	10/17/85	1/21/86	3/27/86	6/25/86	10/15/86	12/11/86	4/15/87
pH	6.5 to 8.5	6.5 to 8.5	8.68	8.28	8.77	8.81	8.95	8.53	8.31	8.69	7.49	7.43	7.86	7.31	7.23	8.30	7.37	7.66	7.55
Specific Conductance	umhos/cm		424	418	440	450	460	520	1010	173	320	590	450	540	600	460	640	550	380
Chloride	mg/l	250	39	41	52	26	40	37	<1	4.3	15	31	26	32	33	19	34	31	25
TOC	"		17	18	20	2.0	12	2.8	11	<1	<1	3.2	6.0	7.5	8.5	9.0	27	<1	3.0
Phenols	"	0.001	<0.01	<0.01	0.021	<0.01	<0.01	0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TKN	mg N/l		<0.1				1.5				0.17				1.6				1.7
Nitrate	mg N/l	10	<0.05				<0.05				0.11				<0.05				0.085
Sulfate	mg/l	250	4.3				<1				5.9				1.0				2.5
Total Iron	"	0.3	2.1	5.7	21	2.3	1.0	0.190	8.3	2.3	2.1	12	14	12	13	6.2	1.27	9.2	2.6 / 0.034
Total Aluminum	"		<0.06				0.18				0.80				0.09				0.22 / 0.20
Total Chromium	"		0.010				<0.005				<0.005				<0.008				<0.005 / <0.005
Total Zinc	"	5	0.014				0.017				0.029				<0.004				<0.03 / <0.005
Total Lead	"	0.025	<0.005				<0.005				<0.005				<0.005				<0.005 / <0.005
Total Mercury	ug/l	2	[illegible]				<0.001				<0.0005				<0.002				<0.0005 / <0.0005
Total Copper	mg/l	1.0	<0.004	<0.004	0.014	0.006	<0.006	<0.01	0.005	0.009	<0.005	0.009	0.027	0.012	<0.007	<0.005	<0.005	0.005	<0.005 / <0.005
Total Manganese	mg/l	0.3	0.76				0.11				0.228				0.41				0.13 / 0.10
Total Cyanide	mg/l	0.2	<0.01				<0.01				<0.03				<0.01				
Total Arsenic	mg/l	0.025	<0.005				<0.005				<0.005				<0.005				<0.005 / <0.005
Water el ev.				1490.80	1489.30	1482.0'	1482.0		1479.65	1478.2	1483.10	[illegible]	[illegible]	46'3"	1493.12	1492.20	1491.75	1493.95	1494.04

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

1/

Refuse Disposal Area FARWELL LANDFILL Location

Exact Sampling Point WELL # 3 County CATTARAUGUS

Date			1/30/75	12/[illegible]/75	2/21/76	6/24/76	9/30/76	1/26/77	10/27/77	3/9/78	5/2/79	12/6/79	1/29/80	4/23/80	11/14/80	4/12/82	7/20/82	9/24/82	2/17/83
Parameter	Unit																		
COLOR (APPARENT)			90	180	120	130.	30.	55.	20.	50.	—		—	—					
TURBIDITY	JTU		28	30	96.	4.	—	—	—	—	—			—					
ODOR, HOT			1.00/4	1.00/4	1, VEG	1, VEG	—	—	—	1, VEG	—			—					
ODOR, COLD			1.00/4	2.00/6	1, EARTHY	1, VEG	1, VEG	1, Formal	3, DISPEAT	1, Kerosene	—								
AMMONIA	mgN/l		3.2	4.3	4.3	3.4	3.4	3.6	3.7	2.4	—	1.1		—					
NITRITE	mgN/l		.015	.006	.002	.003	.004	.002	.001	.007	—	2.4		—					
NITRATE	mgN/l	10.0	.10	<.1	<.1	<.997	<.096	<.098	<.044	<.093	—	.31		.22		<0.1			
CHLORIDES	mg/l	250	9.2	10.	9.0	10.	11.	8.6	5.1	15.	—			18	13	45	35	37	40
HARDNESS AS $CaCO_3$	mg/l		74.	74.	60.	74.	56.	46.	—	50.	42.3			—					
METHYL ORANGE AS $CaCO_3$ ALKALINITY	mg/l		57.	48.	50.	47.	—	—	—	—	—			—					
pH		6.5-8.5	9.1	8.4	9.0	8.2	8.6	9.1	9.3	8.2	8.62			7.36	8.53	7.53	7.35	8.06	8.26
KJELDAHL NITROGEN	mgN/l		3.5	6.4	—	—	—	—	—	—	—	1.0		.48		1.7			
COD	mg/l		26.	8.	<4.	<4.	5.	<4.	—	—	—	13		—					
IRON	mg/l	.3	10.	11.	7.6	14.	2.3	2.0	—	3.4	2.4			3.3	2.1	45	7.0	9.5	3.1
MANGANESE	mg/l	.3	.013	.25	.24	.41	.12	.13	—	.18	—			.22		0.70			
SODIUM	mg/l		7.	7.	4.	4.	11.	5.	—	4.	—	4.0	—	—					
FLUORIDES	mg/l	1.5	—	<.1	—	—	—	—	.1	—	—		—	—					
TDS	mg/l	500	—	73.	—	—	—	—	—	—	—		—	—					
SULFATES AS SO_4	mg/l	250	—	20.	—	—	—	—	—	—	—	1.8	—	4.1		6.5			
CYANIDE (CN)	mg/l	.2	—	<.1	—	—	—	—	—	—	—		—	<.04		<0.020			
MBAS AS LAS SURFACTANTS	mg/l		—	<.04	—	—	—	—	—	—	—		—	—					
ARSENIC	mg/l	.025	—	<.03	—	—	—	—	—	—	—	<2		<.001		<0.006			

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

2/

Refuse Disposal Area [illegible] Location

Exact Sampling Point Well # 3 County [illegible] 1/27/82 correct

Date / Parameter	Unit		1/20/75	12/10/75	2/27/76	6/24/76	9/30/76	7/20/77	10/20/77	3/9/78	5/2/79	12/[illegible]/79	1/29/80	4/23/80	11/14/80	4/12/82	7/23/82	9/2[illegible]/82	2/17/83
Barium	mg/l	1.0	—	<.5	—	—	—	—	—	—	—			—					
Beryllium	mg/l		—	<.02	—	—	—	—	—	—	—	<.002		—					
Boron	mg/l		—	<.1	—	—	—	—	—	—	—			—					
Cadmium	mg/l	.01	—	<.002	—	—	—	—	—	—	—			—					
Total Chromium	mg/l		—	<.01	—	—	—	—	—	—	—	.012		<.003		<0.004			
Copper	mg/l	1.0	—	<.05	—	—	—	—	—	—	—	.036		<.003	.008	<0.006 0.032	<0.004	<0.004	<0.004
Lead	mg/l	.025	—	.01	—	—	—	—	—	—	—	<.02		<.02		<0.08			
Mercury	ug/l	2	—	<.4	—	—	—	—	—	—	—	.7		<.6		<1			
Potassium	mg/l		—	1.6	1.5	1.2	.6	1.6	—	1.3	—	1.5		—					
Selenium	mg/l	.02	—	<.005	—	—	—	—	—	—	—			—					
Silver	mg/l	.05	—	<.02	—	—	—	—	—	—	—	<.005		—					
Zinc	mg/l	5	—	<.05	—	—	—	—	—	—	—			<.003		0.078			
Total [illegible] Phosphates	mgP/l		—	<.01	—	—	—	—	—	—	—	.03		—					
Bicarb as $CaCO_3$ Alkalinity	mg/l		—	32.	30.	—	24.	36.	—	—	—			—					
Carb as $CaCO_3$ Alkalinity	mg/l		—	16.	20.	—	6.	18.	—	—	—			—					
Phenols	mg/l	.001	—	<.001	—	—	—	—	—	—	—	<.01		.02	<.01	<0.01 <0.01	<0.01	0.015	0.027
M'Orange Alkalinity	mg/l		—	—	—	—	35.	54.	—	—	—			—					
N.T.U. Turbidity	NEPHEL		—	—	—	—	9.	13.	9.	35.	—			—					
Electrom pH 4.5 Alkalinity			—	—	—	—	—	—	40.	46.	45.1			—					
Total Solids (103°C)	mg/l		—	—	—	—	—	—	—	—	96			—					
Color	Pt-Co		—	—	—	—	—	—	—	—	13			—					
Conductance	umhos/cm		—	—	—	—	—	—	—	—	115			340	190	860 880	818	515	400

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area [illegible] Location _____

Exact Sampling Point [illegible] County [illegible]

Date			11/20/75	12/4/75	2/27/76	6/24/76	9/20/76	11/26/77	10/11/77	2/9/78	6/2/77	12/20/79	1/29/80	4/23/80	11/14/80	4/12/82	7/23/82	9/24/82	2/17/83
Parameter	Unit																		
TURBIDITY	FTU		—	—	—	—	—	—	—	—	—	8.6	—	—					
BOD5	mg/l		—	—	—	—	—	—	—	—	—	4	—	—					
METHYLENE BLUE ACTIVE SUBSTANCES	mg/l	.5	—		—	—	—	—	—	—	—	<.02	—	—					
TOTAL ALUMINUM	mg/l		—	—	—	—	—	—	—	—	—	.1	—	.2		0.3			
TOTAL LITHIUM	mg/l		—	—	—	—	—	—	—	—	—	<.5	—	—					
TOTAL CALCIUM	mg/l		—	—	—	—	—	—	—	—	—	4.1	—	—					
TOTAL TITANIUM	mg/l		—	—	—	—	—	—	—	—	—	<.01	—	—					
TOTAL COLIFORM	MPN/100ml	4	—	—	—	—				—			<20	—					
IRON & MANGANESE	mg/l	.5	10.23	11.25	7.44	14.41	2.42	3.13	—	8.58	—	—	—	—					
TOC	mg/l		—	—	—	—	—	—	—	—	—	—	—	5.5	2.5	1.95	3	25	14
Water elev.																1493.00	1489.26	1484.3	1491.70

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill - Location

Exact Sampling Point well 5a County Cattaraugus

te / rameter	Unit	standard	10/4/84	12/20/84	4/24/85	8/1/85	10/17/85	1/21/86	3/27/86	6/25/86	9/3/86	12/11/86	4/15/87	7/15/87	9/29/87
BOD5	mg/l														
COD	mg/l														
phenols	mg/l	0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01
methylene blue active substances	mg/l														
ammonia	mg N/l														
TKN	mg N/l				<0.1				<0.5				0.40		
nitrate	mg N/l				0.07				0.058				<0.05		
nitrite	mg N/l														
total phosphorus	mg P/l														
sulfate	mg/l				17				9.5				11		
tot. aluminum	mg/l				2.3				0.18				0.19 / 0.19		
tot. arsenic	mg/l	0.025			<0.005				0.008				<0.005 / <0.005		
tot. beryllium	mg/l														
tot. chromium	mg/l				<0.005				<0.008				<0.005 / <0.005		
tot. copper	mg/l	1.0	0.006	0.006	<0.005	0.013	<0.005	0.014	<0.007	<0.005	<0.05	0.007	<0.005 / <0.005	0.011 / <0.005	0.007 / <0.005
tot. lead	mg/l	0.025			<0.005				0.024				<0.005 / <0.03		
tot. lithium	mg/l														
tot. calcium	mg/l														
tot. mercury	mg/l	2			<0.0005				<0.002				<0.0005 / <0.0005		
tot. silver	mg/l														
tot. potassium	mg/l														

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill   Location: ______

Exact Sampling Point: Well 5A (SII 2 [illegible])   County: Cattaraugus

Date / Parameter	Unit	standard	10/4/84	12/21/84	4/24/85	8/1/85	10/17/85	1/21/86	3/27/86	6/25/86	10/15/86	12/11/86	4/15/87	7/15/87	9/29/87
tot titanium	mg/l														
tot sodium	mg/l														
tot coliform	MPN/100ml														
pH		6.5 to 8.5	8.11	7.49	6.83	7.42	7.40	7.26	7.72	6.93	6.73	7.16	6.58	6.73	6.76
conductance	umhos/cm		163	92	130	220	270	110	100	360	160	61	110	140	140
TOC	mg/l		9.8	<1	1.1	<1	26	5.0	<1	9.5	4.0	13	5.2	2.0	3.1
chloride	mg/l	250	1.2 (~~163~~)	1.2	<1	1.2	1.0	6.2	<1	1.2	2.2	3.2	<1	<0.5	<1
tot cyanide	mg/l				<0.03				<0.01						
tot iron	mg/l		17	6.1	(13)	149	2.3	3.95	17	9.8	6.03	2.4	3.0/0.28	13/0.19	9.5/0.28
tot manganese	mg/l				0.094				0.22				0.11/0.10		
tot zinc	mg/l	5.			0.026				0.005				<0.005/<0.005		
water el.			1609.00	1613.1	1619.83	33'6"	[illegible]'1"	28'1"	1621.62	1614.79	1614.12	1620.45	1625.20	1611.20	1615.45

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARRELL LANDFILL Location

Exact Sampling Point WELL #5A County CATTARAUGUS

Date				4/23/80	8/1/80	11/14/80	1/28/81	4/12/82	7/23/82	9/24/82	2/17/83	4/8/83	7/11/83	9/26/83	12/16/83	2/24/84	3/14/84	6/26/84
Parameter	Unit																	
BODS	mg/l		<2	—	—	—												
COD	mg/l		15	—	—	—												
PHENOLS	mg/l	.001	<.01	.02	.02	<.01	0.01 (0.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.01		<0.01	0.52
METHYLENE BLUE ACTIVE SUBSTANCES	mg/l	.5	<.01	—	—	—												
AMMONIA	mgN/l		<.5	—	—	—												
TKN	mgN/l		<.5	<.1	—	—		0.56				<0.1					0.37	
NITRATE	mgN/l	10.0	.15	.93	—	—		12				0.61					<0.01	
NITRITE	mgN/l		.08	—	—	—												
TOTAL PHOSPHOROUS	mgP/l		.09	—	—	—												
SULFATE	mg/l	250	6.8	16	—	—		12				43					<1	
TOTAL ALKALINITY	mg/l		1.6	.3	—	—		0.8				0.80					0.12	
TOTAL ARSENIC	mg/l	.025	<.2	<1	—	—		<0.006				<0.005					<0.005	
TOTAL BERYLLIUM	mg/l		<.003	—	—	—												
TOTAL CHROMIUM	mg/l		.006	<.003	—	—		<0.006				0.006					<0.005	
TOTAL COPPER	mg/l	1.0	.06	<.003	.011	.008	.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.004	0.010	0.007		<0.026	<0.01
TOTAL LEAD	mg/l	.025	<.02	<.02	—	—		<0.08				<0.005					<0.025	
TOTAL LITHIUM	mg/l		<.5	—	—	—												
TOTAL CALCIUM	mg/l		4.5	—	—	—												
TOTAL MERCURY	ug/l	2	<.6	<.6	—	—		<1				<0.0009					<0.001	
TOTAL SILVER	mg/l	.05	<.005	—	—	—												
TOTAL POTTASIUM	mg/l		1.6	—	—	—												
TOTAL TITANIUM	mg/l		<.07	—	—	—												

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

2/

Refuse Disposal Area [illegible] Location

Exact Sampling Point [illegible] County CATTARAUGUS

4/27/82

Parameter	Unit		[illegible]	[illegible]	4/23/80	8/1/80	11/14/80	4/[illegible]	4/17/82	7/23/82	9/24/82	2/17/83	4/8/83	7/11/83	9/26/83	12/16/83	2/24/84	3/14/84	6/20/84
							–												
TOTAL SODIUM	mg/l		2.6	–	–	–	–												
TOTAL COLIFORMS	MF/100ml	4	–	20	–	–	–												
pH		6.5-8.5	–	–	7.30	7.43	6.57		6.54 6.93	7.14	7.42	7.12	6.73	7.00	7.59	3.08	6.54	7.25	7.62
CONDUCTIVITY	umhos/cm		–	–	212	240	88	154	145 105	220	194	578	136	174	279	220		71	190
TOC	mg/l		–	–	7.5	4.4	<1	<1	<2	<1	4.5	<1	3.0	<2	18	<1		11	1.4
CHLORIDE	mg/l	250	–	–	3.83	3.6	3.6	1.1	<5 <1	1.6	<1	0.7	<0.5	<1	<2	<1		<1	1.0
TOTAL CYANIDE	mg/l	.2	–	–	<.02	–	–	<40	<.020				<0.01					<0.01	
TOTAL IRON	mg/l	.3	–	–	1.7	110	6.0	14	240 85	51	17	190	57	33	133	11.8		0.40	2.18
TOTAL MANGANESE	mg/l	.3	–	–	.18	–	–	0.12	0.35				0.16					<0.02	
TOTAL ZINC	mg/l	5	–	–	<.003	–	–	0.013	0.047				0.020					<0.008	
Water Elev.									1623.50	1606.8	1607.0	1617.10	1618.80	1609.10	1608.09	1616.25		1614.6	

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua (T)

Exact Sampling Point Well 6 SLF2 W61 County Cattaraugus

te / rameter	Unit	standard	9/29/87
pH	S.U.	6.5-8.5	6.44
conductance	umhos		970
chlorides	mg/l	250	2.2
TOC	"		12
phenols	"	.001	<0.01
Iron	"	~~.3~~	1.6 ~~1.2~~
copper	"	~~1.0~~	0.012 ~~<0.005~~
nitrate	"		
sulfate	"		
TKN	"		
cyanide	"		
aluminum	"		
arsenic	"		
chromium	"		
lead	"		
manganese	"		
mercury	"		
zinc	"		
gw el.			1497.86

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL - 05502 Location Ischua (T)

Exact Sampling Point Well #6 County Cattaraugus

e ameter	Unit	GW std	12/16/83	10/4/84	12/20/84	4/24/85	8/1/85	10/17/85	1/21/86	3/27/86	6/25/86	10/15/86	12/11/86	4/15/87	7/15/87
pH	S.U.	6.5 to 8.5	7.02		6.72	6.41	6.57	6.30	6.52	6.68	6.61	6.53	6.82	6.49	6.52
specific conductivity	µmhos/cm		780		840	1200	1000	800	700	900	910	1100	910	930	980
chloride	mg/l	250	3.6		<1	1.8	1.6	<1	1.2	2.0	2.2	[illegible]	11	1.0	0.8
TOC	"		26	N/A	<1	<1	2.4	3.4	2.0	53	28	6.5	1.9	11	89
phenols	"	0.001	0.052		0.040	<0.01	0.021	<0.01	<0.02	<0.01	<0.01	<0.01	0.012	<0.01	<0.010
Total Copper	"	1.0	0.026		0.009	<0.02	0.021	0.012	0.016	<0.007	<0.005	<0.005	0.006	0.008 / <0.005	0.007 / <0.005
Total Iron	"	0.30	6.4		2.0	5.4	5.0	0.29	0.26	4.9	3.3	2.04	2.1	1.8 / 1.1	1.8 / 0.96
well elevation			1500.35		1500.9	1499.34	[illegible]	1.5'	121'4"	1498.19	1499.52	[illegible]	1499.11	1497.36	1498.27
nitrate	mgN/l					<0.85 1.8				<0.05				<0.05	
sulfate	mg/l					22				20				16	
TKN	mgN/l					10				<0.5				1.1	
tot. cyanide						<0.03				<0.01					
tot. aluminum	mg/l					0.43				0.92				0.20 / 0.20	
tot. arsenic	mg/l					<0.005				0.008				<0.005 / <0.005	
tot. chromium	mg/l					<0.005				<0.008				<0.005 / <0.005	
tot. lead	mg/l					<0.005				0.006				<0.005 / <0.03	
tot. manganese	mg/l					0.473				4.8				1.5 / 0.28	
tot. mercury	mg/l					<0.0005				<0.002				<0.0005 / <0.0005	
tot. zinc	mg/l					0.054				0.039				0.121 / 0.117	

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point Well 17 County Cattaraugus

Parameter	Unit	Standard	3/27/86	6/15/86	11/13/86	12/11/86	4/15/87	7/15/87	9/29/87
pH	SU	6.5-8.5							
conductance	umhos/cm								
TOC	mg/l								
chloride	mg/l	250							
tot rec. phenolics	mg/l	0.001							
tot Kjeldahl nitrogen	mgN/l								
nitrate	mgN/l	10							
sulfate	mg/l	250	DF	DF	DF	DF	DF	DF	DF
tot cyanide	mg/l								
tot aluminum	mg/l								
tot arsenic	mg/l								
tot chromium	mg/l								
tot copper	mg/l								
tot iron	mg/l								
tot lead	mg/l								
tot manganese	mg/l								
tot mercury	mg/l								
tot zinc	mg/l								
gw el.									

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point Farwell Farm Well, County Cattaraugus

Site																			
												filter	filter	filter	filter	filter		pre	post
Parameter	Unit											12/6/89	12/6/89	3/6/90	3/6/90	6/4/90	6/4/90	9/10/90	9/10/90
4-methyl-2-pentanone												<10	<10	<10	<10	<10	<10	<100	<10
styrene												<3	<3	<3	<3	<3	<3	<100	<10
vinylacetate												<10	<10	<10	<10	<10	<10	<100	<10
tetrachloro ethylene														<3	<3	<3	<3	<30	<3
turbidity																9.5	3	5.9	5.1

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill-05502 Location Ischua

Exact Sampling Point Farwell Farm well SCF2 FW County Cattaraugus

Parameter	Unit	standard	9/29/87	Field
pH	S.U.	6.5-8.5	7.29	
conductance	umhos/cm		760	
chloride	mg/l	250	39	
TOC	"		4.7	
phenols	"	0.001	<0.01	
copper	"	1.0	.009 <0.005	
iron	"	.30	1.6 0.020	
TKN	"			See new sheet for
nitrate	"	10		
sulfate	"	250		
aluminum	"			
chrome	"			
zinc	"	5		
arsenic	"	.025		
lead	"	.025		
mercury	"	.002		
cyanide	"	.2		
manganese	"	.3		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point Well 8 County Cattaraugus

Parameter	Unit	Standard	3/27/86	6/10/82	11/15/82	12/11/86	4/15/87	7/15/87	9/29/87
pH	SU	6.5-8.5	10.28			7.93	7.82		
conductance	umhos/cm		370			4.0	360		
TOC	mg/l		3.0			1.5	<1		
chloride	mg/l	250	1.7			1.5	<1		
tot. rec. phenolics	mg/l	0.001	<0.01			<0.02	<0.01		
total Kjeldahl nitrogen	mgN/l		1.8				0.80		
nitrate	mgN/l	10	0.26				0.35	X	X
sulfate	mg/l	250	91				48	DC	DC
tot. cyanide	mg/l		<0.01	X	X		/		
tot. aluminum	mg/l		35	DRY	DRY		0.22 / 0.18		
tot. arsenic	mg/l		0.049				<0.005 / <0.005		
tot. chromium	mg/l		0.064				<0.005 / <0.005		
tot. copper	mg/l		0.049			0.039	<0.005 / <0.005		
tot. iron	mg/l		71			58	0.09 / <0.015		
tot. lead	mg/l		0.028				<0.005 / <0.005		
tot. manganese	mg/l		2.3				<0.01 / <0.01		
tot. mercury	mg/l		<0.002				<0.0005 / <0.0005		
tot. zinc	mg/l		0.217				0.005 / 0.005		
gwel.			1621.66			1619.33	1624.66		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL Location ISCHUA (T) CATT. CO.

Exact Sampling Point BUILDING WELL County -

Parameter	Unit	GW Std.	4/8/83	7/11/83	9/26/83	12/16/83	6/20/84	12/21/84	4/24/85	8/1/85	10/17/85	1/21/86	3/27/86	6/25/86	10/15/86	12/11/86	4/15/87	7/15/87	9/29/87
pH	S.U.	6.5 to 8.5	7.05	6.86	6.97	6.86	8.23	7.18	6.84	6.91	6.90	6.79	7.02	7.01	7.12	7.53	7.04	7.01	7.04
Specific Conductance	umhos/cm		1090	1120	1220	1220	1180	1160	1300	1300	1300	1100	1300	1410	980	770	1190	1250	760
Chloride	mg/l	250	20	76	72	61	51	60	56	67	61	50	<1	<1	8.5	55	26	47	33
TOC	"		45	6.2	11	3.0	3.8	7.3	4.2	1.2	6.0	15	27	110	9.0	<1	30	47	3.1
Phenols	"	0.001	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01
TKN	mg N/l		<0.10						<0.1				<0.5				1.3		
Nitrate	mg N/l	10	0.08						<0.05				<0.05				<0.05		
Sulfate	mg/l	250	4.9						6.7				8.5				18		
Total Iron	"	0.3	<0.08	0.93	1.4	0.39	0.975	0.25	0.23	0.18	0.13	0.18	0.14	0.23	0.08	0.05	0.15	0.26 / 0.07	0.047 / 0.029
Total Aluminum	"		<0.06						0.08				<0.06				0.19		
Total Chromium	"		<0.006						<0.005				<0.008				<0.005		
Total Zinc	"	5	0.004						0.067				0.011				0.010		
Total Lead	"	0.025	<0.005						<0.005				0.011				<0.005		
Total Mercury	ug/l	2	<0.9	[illegible]					<0.005				<0.002				<0.0005		
Total Copper	mg/l	1.0	0.004	0.008	0.021	0.018	0.412	0.012	0.020	0.012	0.007	0.012	<0.007	<0.005	<0.005	0.008	0.005	0.012 / <0.005	0.022 / 0.012
Total Manganese	mg/l	0.3	<0.02						0.047				0.04				0.03		
Total Cyanide	mg/l	0.2	<0.01						<0.03				<0.01						
Total Arsenic			<0.005						<0.005				<0.005				<0.005		

— RCRA STANDARD — IF DIFFERENT
O " " PROPOSED

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area [illegible] LANDFILL — Location

Exact Sampling Point BUILDING WELL County CATTARAUGUS

Date / Parameter	Unit	STANDARDS	12/?/75	9/30/76	?/1/77	7/26/77	10/?/77	3/9/78	5/?/79	[illegible]	[illegible]	4/23/80	8/1/80	11/25/80	1/28/81	1/27/82 4/12/82	7/23/82	9/24/82	2/17/83
COLOR (APPARENT)			[illegible]	4.	3.	1.	1.	2.	—	—	—	—							
TURBIDITY	JTU		1.	—	—	—	—	—	—	—	—	—							
ODOR, HOT			1,0044	—	—	—	—	1 VEG	—			—							
ODOR, COLD			1.0044	1, MUSTY	1, VEG	1, AROM	3, ROTTEN	1, VEG	—	-		—							
FLUORIDES	mg/l	1.5	<.1	—	.1	—	.1	—	—			—							
AMMONIA	mg/l		<.02	.02	.06	<.02	<.02	<.02	—	<.5		—							
NITRITE	mg/l		.002	.015	.006	.001	.001	.00?	—	.22									
NITRATE	mg/l	10.0	.44	5.485	4.994	3.994	3.694	?.898	—	<.1		.87				0.95			
CHLORIDES	mg/l	(250)	1.0	90.	15.	18.	19.	20.	—			<1	74	1.7	61 69	68	64	89	75
TOTAL AS $CaCO_3$ HARDNESS	mg/l		82.	300.	260.	240	—	390.	497			—							
... OR AS $CaCO_3$ ALKALINITY	mg/l		58.	—	—	—	—	—	—										
pH		(6.5-8.5)	7.2	7.8	7.7	8.0	7.7	7.8	7.52			7.25	7.07	7.00	7.75	213 7.51	7.25	7.92	6.95
TDS	mg/l	(500)	66.	—	243.	—	—	—	—										
AS SO_4 SULFATES	mg/l	(250)	16.	—	18.	—	—	—	—	16		17				14			
CYANIDE AS CN	mg/l	.2	<.1	—	<.2	—	—	—	—			<.01				<0.020			
MBAS AS LAS SURFACTANTS	mg/l		<.04	—	<.04	—	—	—	—			—							
KJELDAHL NITROGEN	mg/l		<.04	—	.06	—	—	—	—	<.5		.13				<0.1			
COD	mg/l		<4.	<4.	<1.	5.	—	—	—	8.1		—							
ARSENIC	mg/l	.05 .025	<.03	—	<.02	—	—	—	—	<2		<.001				<0.006			
BARIUM	mg/l	1.0	<.5	—	1.0	—	—	—	—			—							
BERYLLIUM	mg/l		<.02	—	<.02	—	—	—	—	<.003		—							
BORON	mg/l		<.1	—	—	—	—	—	—			—							

2/

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL Location

Exact Sampling Point BUILDING WELL County CATTARAUGUS

Date / Parameter	Unit	STANDARDS	12/2/75	9/30/76	1/4/77	7/26/77	10/20/77	3/9/78	5/2/79	12/20/79	1/4/8[illegible]	4/23/80	8/1/80	11/14/80		4/12/82 (1/27/82)	7/23/82	9/24/82	2/17/83
CADMIUM	mg/l	.01	<.002	—	<.002	—	—	—	—	.		—	—						
TOTAL CHROMIUM	mg/l	.05	<.01	—	<.01	—	—	—	—	.006		<.003	—			<.006 <0.006			
COPPER	mg/l	(1.0)	.09	—	.05	—	—	—	—	.016		.122	.048	.078	.046	0.014	<0.004	0.020	0.006
IRON	mg/l	(.3)	.47	.13	.18	.05	—	.84	.17			<.02	.02	<.02	0.05	0.12 0.26	<0.03	0.03	0.36
LEAD	mg/l	.05 .025	.01	—	<.01	—	—	—	—	<.02		<.02	—			<0.08			
MANGANESE	mg/l	(.05) .3	<.02	<.02	<.02	<.02	—	.02	—			<.02	—			<0.02			
MERCURY	ug/l	2	<.4	—	<.4	—	—	—	—	<.6		<.6	—			<1			
POTASSIUM	mg/l		.6	2.5	.6	.7	—	.8	—	1.4		—	—						
SELENIUM	mg/l	.01 .02	<.005	—	<.005	—	—	—	—			—	—						
SILVER	mg/l	.05	<.02	—	.02	—	—	—	—	<.005		—	—						
SODIUM	mg/l		4.	<1.	5.	4.	4.	5.	—	7.5		—	—						
ZINC	mg/l	(5)	<.05	—	<.05	—	—	—	—			.021				0.054			
TOTAL PHOSPHATES	mg/l		.02	—	.04	—	—	—	—	<.01		—	—						
M'ORANGE ALKALINITY	mg/l		—	146	144.	192.	—	—	—			—	—						
NTU TURBIDITY	JCAHCL		—	2.	2.	.2	.5	.5	—			—	—						
PHENOLS	mg/l	.001	—	—	<.001	—	—	—	—	<.01		(.01	<.01	.02	<0.01	~~0.023~~ <0.01	<0.01	<0.01	<0.01
ELECTRON PHUS ALKALINITY	mg/l		—	—	—	—	242.	323.	477			—	—						
COLOR	Pt-Co		—	—	—	—	—	—	2.5			—	—						
CONDUCTANCE	umhos/cm		—	—	—	—	—	—	860			1220	1290	1400	12,500	1201 900	1050	1230	1090
TOTAL SOLIDS	mg/l		—	—	—	—	—	—	600			—	—						
TURBIDITY	FTU		—	—	—	—	—	—	.81			—	—						
BOD5	[illegible]						—			<10		—	—						

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL - Location

Exact Sampling Point BORING WELL County CATTARAUGUS

Date / Parameter	Unit	Standards	12/1/75	9/3/76	1/4/77	7/26/77	11/29/77	3/1/78	5/[illegible]/79	[illegible]	1/29/80	4/23/80	8/1/80	11/14/80	1/28/81 1/29/82	4/12/82	7/23/82	9/24/82	2/17/83
METHYLENE BLUE ACTIVE SUBSTANCES	mg/l	.5	-							<.02	-	-	-						
TOTAL ALUMINUM	mg/l									.1	-	<.1	-			0.1			
TOTAL LITHIUM	mg/l					-				<.5	-	-	-						
TOTAL CALCIUM	mg/l					-				49	-	-	-						
TOTAL TITANIUM	mg/l									<.01	-	-	-						
TOTAL COLIFORMS	MPN/100ml	4	-	-	-	-	-	-		-	<20	-	-						
IRON + MANGANESE	mg/l	.5mg/l	.49	.15	.20	.07	-	.86	-	-	-	-	-						
TOC			-	-	-	-	-	-	-	-	-	4.6	2.7	1.0	2.5	1.0 2	<1	28	2.0

Investigation Rept - Oct. '87

(b) in blank too

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point Farwell Farm Well County Cattaraugus

(upgrade of carbon filter ↓ at 1/12/89 and 4/5/89)

Parameter	Unit	Standard	9/30/88	1/12/89	4/5/89	7/29/89 DOH	8/9/89 DOH bef filters	8/21/89 DOH after filters	6/28/89 pre filters	12/6/89 pre filter	12/6/89 post filters	3/6/90 pre filter	3/6/90 post filter	6/4/90 pre filter	6/4/90 post filter	9/10/90 pre filter	9/10/90 post filter
pH	S.U.	6.5-8.5	6.90	7.20	6.88				6.96	(6.00)	6.50	7.34	7.27	7.80	7.70	7.32	7.22
Conductance	umhos/cm		671	533	760				400	740	750	575	550	235	245	500	600
Temp	°C		15.0	8.0	10				20	6	6	7	8.6	12.3	14.3	14	20
TOC	mg/l		1.8	35.6	22.2				1.6	<1.0	<1.0	<1.0	<1.0	<5	<5	1	<1
COD	mg/l		10.8	8.5	7.2				<1.0	<10	140(b)	<10	10	<10	<10	10	<10
Iron	mg/l	.3	1.10 / 0.84	1.36 / 0.73	0.30 / 0.10	1.43	<0.010	<0.010	<0.30 / <0.30	0.67 / <0.03	<0.03 / <0.03	0.08 / 0.04	0.05 / <0.03	0.05 / <0.03	<0.03 / <0.03	1.8 / 0.78	<0.03 / <0.03
Manganese	mg/l	.3	<0.10 / <0.10	<0.10 / <0.10	<0.1 / <0.1				<0.10 / <0.10	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02
Ammonia	mg/l		<0.01	<0.01	0.01				0.63	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfate	mg/l	250	16.6	4.5	22				25	17	21	27	9	19	22	12	13
Alkalinity	mg/l		475	338	287				160	250	260	160	170	150	150	280	290
Hardness	mg/l		580	240	360				188	300	300	180	190	140	160	330	370
Tot/sol [illegible]ium	mg/l		<5.00 / <5.00	<5.00 / <5.00	<5.0 / <5.0				<5.00 / <5.00	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5
Antimony	mg/l		<0.020 / <0.020	<0.020 / <0.020	<0.020 / <0.020				<0.020 / <0.020	<0.01 / <0.01	<0.01 / <0.01	<0.01 / <0.01	<0.01 / <0.01	<0.003 / <0.003	0.005 / <0.003	0.007 / <0.003	<0.003 / <0.003
Arsenic	mg/l	.05	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005				<0.005 / <0.005	<0.001 / <0.001	<0.001 / <0.001	0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	0.001 / <0.001	0.001 / <0.001
Beryllium	mg/l		<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.02				<0.001 / <0.001	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Cadmium	mg/l	.01	<0.04 / <0.04	<0.04 / <0.04	<0.005 / <0.005				<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Chromium	mg/l		<0.50 / <0.50	<0.50 / <0.50	<0.50 / <0.50				<0.005 / <0.005	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05
Copper	mg/l	1.0	<0.20 / <0.20	<0.20 / <0.20	<0.20 / <0.20				<0.20 / <0.20	0.03(b) / 0.03	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02
Lead	mg/l	.025	<1.00 / <1.00	<1.00 / <1.00	0.029 / 0.012				0.015 / 0.018	0.001 / 0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	0.002 / <0.001	0.001 / <0.001	<0.001 / <0.001
Mercury	mg/l	.002	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001				<0.001 / <0.001	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004
Nickel	mg/l		<0.30 / <0.30	<0.30 / <0.30	<0.30 / <0.30				<0.30 / <0.30	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03
Selenium	mg/l	.02	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005				<0.005 / <0.005	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	0.003 / 0.002	0.002 / <0.001

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill — Location: Ishua

Exact Sampling Point: Farwell Farm well — County: Cattaraugus

Parameter	Unit	Standard	9/30/88	1/12/89	4/5/89	8/24/89 DOH analysis	8/24/89 DOH	8/24/89	6/28/89		12/6/89 pre filter	12/6/89 post filter	3/16/90 pre filter	3/16/90 post filter	6/4/90 post filter J	6/4/90	9/10/90 pre	9/10/90 post
silver	mg/l	.05	<0.10 <0.10	<0.10 <0.10	<0.001 <0.001				<0.001 <0.001		<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05
thallium	mg/l		<1.00 <1.00	<1.00 <1.00	<1.00 <1.00				<0.005 <0.005		<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.001 <0.001	<0.01 <0.01	<0.003 <0.003	<0.003 <0.003
zinc	mg/l	5	0.25 0.24	0.28 0.14	0.30 0.27				<0.05 <0.05		0.041 (B) 0.038	0.14 0.14 (B)	0.025 0.031	0.074 0.069	0.015 0.025	0.073 0.074	0.048 0.048	0.17 0.16
appearance									clear	clear	clear	clear	clear	clear				
chloromethane	ug/l		<10	<10	<10	<0.5	<0.5	<0.5	<10		<3	<3	<3	<3	<3	<3	<30	<3
vinyl chloride			<10	<10	<10	40	45	80	<10		<3	4	<3	<3	<3	5	<30	21
bromomethane			<10	<10	<10	50	20	100	<10		10	35	<3	19	<3	23	<30	26
chloroethane			<10	<10	<10	<0.5	<0.5	<0.5	<10		<3	<3	<3	<3	<3	<3	<30	<3
methylene chloride			<10	<10	<10	<0.5	<0.5	<0.5	<10		<3	<3	<3	<3	<3	<3	<30	<3
chloroform			<5	<5	<5				<5		<3	<3	<3	<3	<3	<3	<30	<3
carbon tetrachloride			<5	<5	<5	3	2	2	<5		<3	<3	<3	<3	<3	<3	<30	<3
benzene			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
1,2-dichloroethylene			<5	<5	<5	2	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
trichloroethylene		guidance 50	85	200	340	47	90	2	9.1		66	<3	23	<3	13	6	150	29
benzene 1,2-dichloroethylene			<5	<5	<5		<0.5	<0.5	<5		<3	<3	<3	<3	4	<3	30	<3
chloroform			<5	<5	<5	<0.5	1	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
1,2-dichloroethane			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
1,1,1-trichloroethane		guidance 50	78	62	120	50	<0.5	<0.5	29		58	<3	22	<3	<3	<3	70	<3
carbon tetrachloride			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
bromodichloromethane			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
1,2-dichloropropane			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
cis-1,3-dichloropropene			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ithaca

Exact Sampling Point Farwell Farm well, County Tompkins

Parameter	Unit	Standard	9/30/88	1/12/89	4/5/89	8/29/89	8/29/89	8/29/89	6/28/89	12	12/4/89 pre filter	12/6/89 post filter	3/6/90 pre filter	3/6/90 post filter	6/4/90 pre filter	6/4/90 post filter	9/10/90 pre filter	9/10/90 post filter
trichloroethylene	ug/l		66	29	32	23	<0.5	<0.5	<5		27	<3	5	<3	4	<3	30	<3
benzene			<5	<5	<5				<5		<3	<3	<3	<3	<3	<3	<30	<3
cis-1,3 dichloropropene			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
1,1,2 trichloroethane			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
dibromochloromethane			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
bromoform			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
[illegible]																		
[illegible]	as above sanitary																	
1,1,2,2 tetrachloroethylene	ug/l		<5	<5	<5				<5									
1,1,2,2 tetrachloroethane			<5	<5	<5	<0.5	<0.5	<0.5	<5		<3	<3	<3	<3	<3	<3	<30	<3
toluene			<5	<5	<5				<5		<3	<3	<3	<3	<3	<3	<30	<3
trichlorofluoromethane			<5	<5		10	15	<0.5			<3	<3	<3	<3	<3	<3	<30	<3
appearance				clear	clear													
dichlorodifluoromethane						<0.5	<0.5	<0.5			<3	<3	<3	<3	<3	<3	<100	<10
dibromomethane						<0.5	<0.5	<0.5			<10	<10	<10	<10	<10	<10	<100	<10
2,3 dichloropropene						<0.5	<0.5	<0.5										
1,3 dichloropropene						<0.5	<0.5	<0.5										
1,2 dibromomethane						<0.5												
1,2,3 trichloropropane						<0.5	<0.5	<0.5			<3	<3	<3	<3	<3	<3	<100	<10
1,1,1,2 tetrachloroethane						<0.5	<0.5	<0.5										
tetrachloroethane						<0.5	<0.5	<0.5			<3	<3						
pentachloroethane						<0.5	<0.5	<0.5										

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point Farwell Farm Well County Cattaraugus

	Unit	8/29/89	8/29/89	8/29/89	6/28/89	12/6/89	12/6/89	3/6/90	3/6/90	6/4/90	6/4/90	9/10/90	9/10/90
						Filter	gas			Filter			
1 chlorocyclohexene-1	ug/l	<0.5	<0.5	<0.5									
bis(2 chloroethyl)ether		<0.5	<0.5	<0.5									
1,2 dibromo-3-chloropropane		<0.5	<0.5	<0.5									
bromobenzene		<0.5	<0.5	<0.5									
o-chloro toluene		<0.5	<0.5	<0.5									
bis(2-chloro isopropyl)ether		<0.5	<0.5	<0.5									
1,3 dichloro benzene		<0.5	<0.5	<0.5									
1,2 dichloro benzene		<0.5	<0.5	<0.5		<3	<3	<3	<3	<3	<3	<30	<3
1,4 dichloro benzene		<0.5	<0.5	<0.5		<3	<3	<3	<3	<3	<3	<30	<3
cis 1,2 dichloro ethene		<0.5	<0.5	<0.5		<3	<3	<3	<3	<3	<3	<30	<3
1,2 dibromo-(EDB) ethane			<0.5	<0.5									
tot xylenes			<0.5	<0.5									
acetone						<3	<3	<3	<3	<3	<3	<30	<3
acrolein						<10	<10	<10	<10		<10	<100	<10
acrylonitrile						<100	<100	<100	<100		<100	<1000	<100
2 butanone						<100	<100	<100	<100	<100	<100	<1000	<100
carbon disulfide						<10	<10	<10	<10	<10	<10	<100	<10
1,4 dichloro-2-butene						<10	<10	<10	<10	<10	<10	<100	<10
ethanol						<10	<10	<10	<10	<10	<10	<100	<10
ethyl methacrylate						<10,000	<10,000	<10,000	<10,000	<10,000	<10,000	<10,000	<10,000
2 hexanone						<10	<10	<10	<10	<10	<10	<100	<10
iodomethane						<10	<10	<10	<10	<10	<10	<100	<10
						<10	<10	<10	<10	<10	<10	<100	<10

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL 05S02 Location ______

Exact Sampling Point FARWELL FARM WELL County CATTARAUGUS

Date / Parameter	Unit	G.W. stds	9/24/82	2/17/83	4/8/83	7/11/83	9/26/83	12/16/83	12/20/84	4/24/85	8/1/85	10/17/85	1/21/86	3/27/86	6/25/86	10/15/86	12/11/86	4/15/87	7/15/87
pH	S.U.	6.5 to 8.5	7.92	7.76	7.84		7.64	6.94	7.66	7.71	7.34	7.29	7.48	7.59	7.21	[illegible]	7.70	7.58	7.41
Conductance	umho/cm.		415	275	271		585	600	600	330	640	690	490	400	410	730	760	400	750
Chloride	mg/l	250	21	8.7	6.2	NOT	27	28	31	6.1	31	42	30	8.8	9.4	41	39	6.8	38
TOC	mg/l		4.5	<1	1.0		6.0	<1	<1	<1	<1	3.5	11	21	44	5.5	<1	8.2	31
Phenols	mg/l	0.001	<0.01	0.025	<0.01		0.024	0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010
Total Copper	mg/l	1.0	0.104	<0.004	0.014		<0.005	0.009	0.014	0.006	0.051	<0.009	0.012	<0.007	<0.005	<0.005	0.007	0.008 / <0.005	0.006 / <0.005
Total Iron	mg/l	0.30	0.14	<0.05	<0.08	DONE	2.7	0.17	0.040	0.35	<0.02	0.49	<0.04	<0.04	0.03	0.09	0.04	0.03 / <0.005	0.11 / <0.02
TKN	"				<0.1					<0.1				<0.5				0.49	
Nitrate	"	10			5.1					3.4				2.0				1.3	
Sulfate	"	250			21					22				23				23	
Total Aluminum	"				<0.06					<0.04				<0.06				0.18 / 0.18	
Total Chrome	"				<0.006					<0.005				<0.008				<0.005 / <0.005	
Total Zinc	"	5			0.353					0.057				0.131				0.24 / 0.24	
Total Arsenic	"	0.025			<0.005					<0.005				<0.005				<0.005 / <0.005	
Total Lead	"	0.025			<0.005					<0.005				0.006				<0.005 / <0.03	
Total Mercury	"	.002			<0.0009					<0.005				<0.002				<0.0005 / <0.0005	
Total Cyanide	"	0.2			0.006					0.055				<0.01					
Manganese tot	"	0.3			<0.02					0.021				<0.02				<0.01 / <0.01	

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL - Location ____

Exact Sampling Point FARWELL FARM WELL County CATTARAUGUS

Date / Parameter	Unit	NYS Groundwater Standards	1/16/74	3/6/74	6/24/75	10/6/75	12/1/75	3/21/76	6/24/76	9/30/76	3/30/77	11/26/77	12/27/77	3/19/78	5/2/79	11/26/79	[illegible]	4/12/82 (1/27/82)	7/23/82
Color (Apparent)			[illegible]	1	1	3	4	5.	5.	3.	2.	3.	1.	1.	—	—	—		
Turbidity	JTU		1	<.5	<.2	.2	<.2	<.2	<.2	—	—	.	—	—	—				
Odor, Hot			1.0044	1.0044	1.0044	1.0044	1.0044	1,VEG	1,VEG	—	—	—	—	1,VEG	—	—			
Odor, Cold			1.0044	1.0044	1.0044	1.0044	1.0044	1,VEG	1,GRASS	1,VEG	1,VEG	1,SWEET	3,ROTTEN	1,VEG	—	—			
Ammonia	mgN/l		.002	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	—	<.5			
Albuminoid Nitrogen	mgN/l		.014	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Nitrite	mgN/l		.002	.002	.001	.001	.006	.001	.001	.001	.001	.001	.052	.002	—	<.03			
Nitrate	mgN/l	10.0	5.4	4.7	6.3	3.4	5.0	7.7	6.099	5.799	4.199	6.599	6.998	6.718	—	1.9		2.3	
COD	mg/l		.1	10	<4	<4.	<4.	<4.	<4.	7.	<4.	4.	—	—	—	<5			
Chlorides	mg/l	250	7.5	5.9	6.9	8.1	8.0	8.5	7.4	8.5	8.1	9.0	6.3	8.5	—	—		6.7 7.6	8.7
Hardness as $CaCO_3$	mg/l		172	164	168	172	168	176.	152.	152.	152.	156.	—	140.	142	—			
Alkalinity as $CaCO_3$	mg/l		112	120	97	121	121	108.	100.	—	—	—	—	—		—			
pH		6.5-8.5	8.1	7.9	8.2	8.1	7.8	8.0	8.0	8.0	8.0	8.1	7.9	8.0	7.98	—		7.26 8.51	7.79
Iron	mg/l	.3	.06	<.02	—	.1	<.05	.19	<.05	.05	<.05	<.05	—	.33	<.02	—		<0.05 0.14	<0.03
Manganese	mg/l	.3	<.02	<.02	—	<.02	<.02	.02	<.02	<.02	.02	<.02	—	<.02	—	—		<0.02	
Sodium	mg/l		1.0	4.	3	3.	4.	2.	3.	4.	3.	3.	3.	2.	—	2.7			
Conductivity	mg/l		237	—	—	—	—	—	—	—	—	—	—	—	312	—		325 255	380
Kjeldahl Nitrogen	mgN/l			<.02	<.04	—	<.04	—	—	—	—	—	—	—	—	<.5		<0.1	
Total PO4 P Phosphates	mgP/l		—	.03	—	—	<.01	—	—	—	—	—	—	—	—	<.01			
Potassium	mg/l		—	—	.5	.7	.9	.7	.5	1.6	.6	.6	—	.5	—	.64			
Fluorides	mg/l	1.5	—	—	—	—	<.1	—	—	—	—	—	.1	—	—	—			
TDS	mg/l	500	.	—	—	—	185	—	—	—	—	—	—	—	—	—			

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area CARROLL LANDFILL Location

Exact Sampling Point FARRELL FARM WELL **County** CHAUTAUQUA

ate			1/14/74	8/6/74	6/24/75	10/10/75	12/9/75	2/12/76	6/24/76	9/30/76	3/30/77	12/20/77	10/12/78	3/9/79	5/2/79	11/14/79	1/29/80	4/12/82	7/23/82
arameter	Unit																		
AS SO4 SULFATES	mg/l	250	—	—	—	—	16.	—	—	—	—	—	—	—	—	21	—	24	
CYANIDE AS CN	mg/l	.2	—	—	—	—	<.1	—	—	—	—	—	—	—	—	—	—		
MBAS AS LAS SURFACTANTS	mg/l		—	—	—	—	<.04	—	—	—	—	—	—	—	—	—	—	<0.020	
ARSENIC	mg/l	.025	—	—	—	—	<.03	—	—	—	—	—	—	—	—	<2	—	0.017	
BARIUM	mg/l	1.0	—	—	—	—	<.5	—	—	—	—	—	—	—	—	—	—		
BERYLLIUM	mg/l		—	—	—	—	<.02	—	—	—	—	—	—	—	—	<.003	—		
BORON	mg/l		—	—	—	—	<.1	—	—	—	—	—	—	—	—	—	—		
CADMIUM	mg/l	.01	—	—	—	—	.002	—	—	—	—	—	—	—	—	—	—		
TOTAL CHROMIUM	mg/l		—	—	—	—	<.01	—	—	—	—	—	—	—	—	.006		<0.006	
COPPER	mg/l	1.0	—	—	—	—	.05	—	—	—	—	—	—	—	—	<.003		0.020 0.022	0.006
LEAD	mg/l	.025	—	—	—	—	.02	—	—	—	—	—	—	—	—	<.02	—	<0.08	
MERCURY	ug/l	2	—	—	—	—	<.4	—	—	—	—	—	—	—	—	<.6	—	<1	
SELENIUM	mg/l	.02	—	—	—	—	.005	—	—	—	—	—	—	—	—	—	—		
SILVER	mg/l	.05	—	—	—	—	<.02	—	—	—	—	—	—	—	—	<.005	—		
ZINC	mg/l	5	—	—	—	—	.15	—	—	—	—	—	—	—	—	—			
PHENOLS	mg/l	.001	—	—	—	—	<.001	—	—	—	—	—	—	—	—	<.01		<0.01 0.224	<0.01
M-ORANGE ALKALINITY	mg/l		—	—	—	—	—	—	—	101.	105.	104.	—	—	—	—	—		
N.T.U. TURBIDITY	DEPTH		—	—	—	—	—	—	—	.9	<.2	<.2	<.2	.3	—	—	—		
ELECTROM. PH 4.5 ALKALINITY	mg/l		—	—	—	—	—	—	—	—	—	—	92.	95.	106	—	—		
COLOR	At-Co		—	—	—	—	—	—	—	—	—	—	—	—	2.5	—	—		
TOTAL SOLIDS	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	160	—	—		
TURBIDITY	FTU		—	—	—	—	—	—	—	—	—	—	—	—	.30	—	—		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

3/

Refuse Disposal Area FARWELL LANDFILL - Location

Exact Sampling Point FARWELL FARM [illegible] County CATTARAUGUS

1/27/82

Date			1/14/74	8/6/74	6/24/75	10/14/75	12/9/75	3/21/76	5/24/76	9/30/76	3/30/77	9/26/77	10/27/77	3/9/78	5/2/79	12/20/79	1/29/80	4/12/82	7/23/82
Parameter	Unit																		
BOD5	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	<4	—		
METHYLENE BLUE ACTIVE SUBSTANCES	mg/l	.5	—	—	—	—	—	—	—	—	—	—	—	—	—	<.02	—		
TOTAL ALUMINUM	mg/l		—	—	—	—							—	—	—	<.1	—	0.2	
TOTAL LITHIUM	mg/l		—	—	—	—							—	—	—	<.5	—		
TOTAL CALCIUM	mg/l		—	—	—	—		—	—			—	—	—	—	27	—		
TOTAL TITANIUM	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	<.07	—		
TOTAL COLIFORM	MF/100ml	4	—	—	—	—	—			—			—	—	—	—	<20		
IRON + MANGANESE	mg/l	.5	.08	.04	—	.12	.07	.21	.07	.07	.07	.07	—	.35	—	—	—		
TOC																		41	41

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Ferrell Landfill Location Ischua

Exact Sampling Point Ischua Creek DB surface water County Cattaraugus

upstream

Parameter	Unit	Standard	6/15/86	10/1/86	12/11/86	4/15/87	7/15/87	9/29/87
pH	SU	6.5-8.5	7.86	7.65	7.42	7.66	7.69	7.66
conductance	umhos/cm		300	240	130	190	220	290
chloride	mg/l	250	14	34	6.9	9.9	8.8	13
TOC	mg/l		39	6.5	<1	<1	7.0	3.3
phenols	mg/l	0.001	<0.02	<0.01	<0.01	<0.02	<0.010	<0.01
copper tot/sol	mg/l	1.0	<0.005	0.007	0.006	0.006 / <0.005	0.005 / <0.005	0.009 / <0.005
iron tot/sol	mg/l	0.3	0.41	0.34	0.30	0.21 / 0.088	0.95 / 0.11	0.44 / 0.097
TKN	mgN/l					1.2		
nitrate	mgN/l	10				0.75		
sulfate	mg/l	250				12		
cyanide tot/sol	mg/l	0.2						
iron tot/sol	mg/l	0.3						
aluminum tot/sol	mg/l					0.30 / 0.28		
chromium tot/sol	mg/l					<0.005 / <0.005		
zinc tot/sol	mg/l	5				<0.005 / <0.005		
arsenic tot/sol	mg/l	.025				<0.005 / <0.005		
lead tot/sol	mg/l	.025				<0.005 / <0.005		
mercury tot/sol	mg/l					<0.0005 / <0.0005		
manganese tot/sol	mg/l	0.3				0.06 / 0.05		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Fanwell Landfill Location

Exact Sampling Point Ischua Creek @ DB County Cattaraugus
upstream

Parameter	Unit	1/25/82	1/27/82	7/23/82	9/24/82	2/17/83	4/6/83	7/11/83	9/26/83	12/16/83	3/14/84	6/14/84	10/4/84	12/24/84	4/24/85	8/1/85	10/17/85	4/21/86	3/27/86
pH	std units	7.85	8.68	8.01	7.84	7.56	7.67	6.90	8.24	5.31	7.84	7.50	8.27	7.39	8.17	7.89	7.76	6.47	7.92
Conductance		255	130	330	185	195	150	1050	360	255	245	123	220	190	220	340	340	100	230
Chloride	250	9.1	9.2	13	8.6	11	6.0	15	13	4.9	11	4.0	14	59	11	19	19	7.4	9.8
T.O.C.		<2	<2	<1	3.2	<1	7.0	9.5	7.5	3.0	36	4.0	4.0	<1	1.5	<1	6.5	12	3.2
Phenolics	0.001	0.02	0.021	<0.01	<0.01	<0.01	<0.01	0.041	<0.01	0.057	0.034	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
tot Copper	1.0	0.009	0.012	<0.004	<0.004	<0.004		0.006	0.012	0.006	<0.006	<0.01	0.008	0.008	<0.006	0.008	0.011	0.009	<0.007
tot Iron	0.3	0.19	0.35	0.30	0.42	0.25	0.20	0.42	0.59	0.87	0.10	1.08	6.35	0.13	0.44	0.20	0.29	0.47	0.22
T.KN	mg N/l		<0.1				<0.1				0.80				0.19				<0.5
Nitrate	mg N/l	10	0.88				0.45				1.0				0.74				0.80
Sulfate	mg/l	250	14				12				14				15				13
Total CN	0.2		<0.020				<0.01				<0.01				<0.05				<0.01
Total Fe	0.3		0.35				0.20												
Total Pb	"		0.1				0.14				0.22				0.34				0.19
Total Cr	"		<0.006				<0.006				<0.005				<0.005				<0.008
Total Zn	5		0.039				0.013				<0.008				0.026				<0.004
Total As	0.025		<6				<0.005				<0.005				<0.005				<0.005
Total Lead	0.25		<0.08				<0.005				<0.005				<0.005				<0.005
Total Hg	0.2		<1				<0.9	<2			<0.001				<0.005				<0.002
Total Mn	mg/l		<0.02				0.03				<0.02				0.064				0.04

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL NORTH Location

Exact Sampling Point ISCHUA CREEK @ DUTCH HILL RD. County CATTARAUGUS

Date			1/14/74	5/30/74	8/1/74	11/7/74	10/1/75	2/4/76	6/24/76	9/30/76	12/6/77	10/21/77	3/9/78	5/2/79	10/10/79	4/23/80	8/1/80	11/14/80
Parameter	Unit																	
COLOR (APPARENT)			15.	12.	20.	—	15.	17.	25.	14.	25.	22.	10.	5.	—	—	—	—
TURBIDITY	JTU		3	3	5	—	2	3	8.	4.	—	—	—	—	—	—	—	—
ODOR, HOT			1.0044	1.0044	1.0044	—	1.0044	1.0044	1, VEG	1, VEG	—	—	—	1, VEG	—	—	—	—
ODOR, COLD			2.0035	1.0044	1.0044	—	2.0044	1.0044	1, MUSTY	1, GARBAGE	1, VEG	2, Algae	3, SEWAGE	1, VEG	—	—	—	—
AMMONIA	mgN/l		.006	<.02	<.02	—	<.02	<.02	<.02	.02	<.02	.07	<.02	<.02	—	<.5	—	—
ALBUMINOID NITROGEN	mgN/l		.078	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NITRITE	mgN/l		.005	.008	.005	—	.008	.001	.005	.010	.004	.018	.001	.003	—	<.03	—	—
NITRATE	mgN/l		1.4	.10	1.0	—	.75	.56	.86	.59	4.16	1.282	.816	.932	—	.75	.38	—
COD	mg/l		12	14	4.	—	<4.	5.	<4.	8.	7.	10.	—	—	—	6.7	—	—
CHLORIDES	mg/l		8.4	8.0	8.2	—	8.1	5.4	4.6	8.2	7.3	12.	6.7	12.	—	—	9.2	15	9.3
AS $CaCO_3$ HARDNESS AS $CaCO_3$	mg/l		128	136	140	—	136.	76.	47.	112.	76.	140.	—	112	102	—	—	—
ALKALINITY	mg/l		86	95	113	—	100.	52.	30.	87.	—	—	—	—	—	—	—	—
pH			7.8	7.1	7.9	—	8.3	7.6	7.	7.9	7.6	8.0	7.5	7.4	8.34	—	8.61	7.94	7.31
IRON	mg/l		<.02	.37	.46	.43	.32	.18	.50	.34	.18	.35	—	.11	.12	—	.11	.29	.10
MANGANESE	mg/l		<.02	.15	.1	.06	.04	<.02	.01	.06	.02	.05	—	.05	—	—	.08	—
SODIUM	mg/l		5	7	10.	—	9.	5.	3.	5.	3.	1.	5.	6.	—	4.9	—	—
CONDUCTIVITY	umhos/cm		174	—	—	—	—	—	—	—	—	—	—	—	218	—	225	315	220
KJELDAHL NITROGEN	mg/l		—	.12	.35	—	—	.18	—	—	—	—	—	—	—	<.5	.14	—
TOTAL AS P PHOSPHATES	mgP/l		—	.01	.05	—	—	.03	—	—	—	—	—	—	—	.02	—	—
CADMIUM	mg/l		—	—	—	<.02	—	<.02	—	—	—	—	—	—	—	—	—	—
TOTAL CHROMIUM	mg/l		—	—	—	<.1	—	<.01	—	—	—	—	—	—	—	.004	<.003	—
COPPER	mg/l		—	—	—	.05	—	<.05	—	—	—	—	—	—	—	<.003	<.003	.016	.016

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

2/

Refuse Disposal Area FARWELL LANDFILL - Location

Exact Sampling Point ISCHUA CREEK @ DUTCH HILL RD County CATTARAUGUS

Date			1/14/74	5/30/74	8/6/74	11/7/74	10/1/75	12/9/75	3/1/76	6/24/76	9/30/76	7/26/77	10/27/77	3/1/78	5/1/79	11/14/79	4/23/80	8/1/80	11/14/80
Parameter	Unit																		
LEAD	mg/l		—	—	—	<.1	—	.01	—	—	—	—	—	—	—	.02	(.03)	—	
MERCURY	ug/l		—	—	—	<.4	—	<.4	—	—	—	—	—	—	—	<.6	<.6	—	
ZINC	mg/l		—	—	—	<.05	—	<.05	—	—	—	—	—	—	—	—	<.003	—	
NICKEL	mg/l		—	—	—	.05	—	—	—	—	—	—	—	—	—	—	—	—	
POTASSIUM	mg/l		—	—	—	—	1.6	1.0	.9	11.	1.4	1.4	—	1.0	—	1.0	—	—	
FLUORIDES	mg/l		—	—	—	—	—	<.1	—	—	—	—	.1	—	—	—	—	—	
TDS	mg/l		—	—	—	—	—	94.	—	—	—	—	—	—	—	—	—	—	
SULFATES AS SO_4	mg/l		—	—	—	—	—	14.	—	—	—	—	—	—	—	15	15	—	
CYANIDE AS CN	mg/l		—	—	—	—	—	<.1	—	—	—	—	—	—	—	—	<.02	—	
MBAS AS LAS SURFACTANTS	mg/l		—	—	—	—	—	<.04	—	—	—	—	—	—	—	—	—	—	
ARSENIC	mg/l		—	—	—	—	—	<.03	—	—	—	—	—	—	—	<2	<.001	—	
BARIUM	mg/l		—	—	—	—	—	<.5	—	—	—	—	—	—	—	—	—	—	
BERYLLIUM	mg/l		—	—	—	—	—	<.02	—	—	—	—	—	—	—	<.003	—	—	
BORON	mg/l		—	—	—	—	—	<.1	—	—	—	—	—	—	—	—	—	—	
SELENIUM	mg/l		—	—	—	—	—	<.005	—	—	—	—	—	—	—	—	—	—	
SILVER	mg/l		—	—	—	—	—	<.02	—	—	—	—	—	—	—	.005	—	—	
PHENOL	mg/l	.001	—	—	—	—	—	<.001	—	—	—	—	—	—	—	<.01	(.01)	<.01	.01
M ORANGE ALKALINITY	mg/l		—	—	—	—	—	—	—	—	74.	112.	92.	—	—	—	—	—	
NTU TURBIDITY	NEPHEL		—	—	—	—	—	—	—	—	3.	7.	2.7	2.6	—	—	—	—	
ELECTROM PH 4.5 ALKALINITY	mg/l		—	—	—	—	—	—	—	—	—	—	—	94.	82.6	—	—	—	
COLOR	PT-CO		—	—	—	—	—	—	—	—	—	—	—	—	7.5	—	—	—	
TOTAL SOLIDS	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	260	—	—	—	

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

3/

Refuse Disposal Area [illegible] Location _____

Exact Sampling Point ISCHUA CREEK @ DUTCH HILL RD County [illegible]

Date			11/4/74	5/30/74	8/6/74	11/5/74	10/16/75	2/9/75	5/27/76	6/24/76	9/30/76	7/26/77	10/21/77	4/19/78	5/1/79	12/14/79	4/23/80	8/1/80	11/4/80
Parameter	Unit																		
TURBIDITY	FTU		—	—	—	—	—	—	—	—	—	—	—	—	—	2.4	—	—	
BOD5	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	<2	—	—	
METHYLENE BLUE ACTIVE SUBSTANCES	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	<.02	—	—	
TOTAL ALUMINUM	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	.2	.2	—	
TOTAL LITHIUM	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	<.5	—	—	
TOTAL CALCIUM	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	13	—	—	
TOTAL TITANIUM	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	<.07	—	—	
TOC	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	2.7	<1

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill [illegible] Location Ischua

Exact Sampling Point Ischua Creek [illegible] County Cattaraugus

Parameter	Unit	[illegible]	10/1/82	12/11/82	4/15/87	7/15/87	9/23/87
pH	S.U.		7.73	7.44	7.41	7.75	7.68
sp. cond. conductance	umhos/cm		230	140	190	260	270
chloride	mg/l		[illegible]	8.1	9.5	11	12
TOC	mg/l		[illegible]	1.8	<1	6.0	4.1
tot. rec. phenolics	mg/l		<0.01	<0.01	<0.01	<0.010	<0.01
copper td/sol	mg/l		[illegible]	0.006	0.011 / <0.005	<0.005 / <0.005	<0.005 / <0.005
iron td/sol	mg/l		[illegible]	0.26	0.27 / 0.062	0.86 / 0.12	0.38 / 0.072
aluminum td/sol	mg/l				0.30 / 0.24		
arsenic td/sol	mg/l				<0.005 / <0.005		
chromium td/sol	mg/l				<0.005 / <0.005		
lead td/sol	mg/l				<0.005 / <0.005		
manganese td/sol	mg/l				0.03 / 0.01		
mercury td/sol	mg/l				<0.0005 / <0.0005		
zinc td/sol	mg/l				0.007 / 0.006		
nitrate	mg/l				0.66		
TKN	mg/l				0.82		
sulfate	mg/l				11		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL Location _____

Exact Sampling Point Ischua Creek - Downstream, RD Kent Rd. Bridge County CATTARAUGUS

Date		Cold Std.	7/23/82	9/24/82	2/17/83	4/18/83	7/11/83	9/26/83	12/16/83	3/21/84	6/20/84	10/1/84	12/20/84	4/24/85	8/1/85	10/17/85	1/21/86	3/27/86	6/25/86
Parameter	Unit																		
pH	S.U.	6.5 to 8.5	7.57	8.01	8.09	7.69	8.01	8.29	5.57	2.19	7.41	8.38	7.58	8.21	7.87	7.98	6.87	7.04	7.89
Conductance	umhos/cm		315	200	189	151	228	382	218	8100	142	276	195	210	3100	330	110	220	230
Chlorides	mg/l	250	13	9.9	11	6.5	15	14	4.9	9.5	5.0	13	6.5	11	18	21	12	12	14
TOC	"		<1	3.5	<1	6.0	11	12	<1	20	5.0	27	<1	1.0	<1	4.0	9.6	1.3	35
phenols	"	0.001	<0.01	<0.01	0.018	<0.01	<0.01	<0.01	0.057	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper tot.	"	1.0	<0.004	0.004	<0.004	<0.004	0.004	0.014	0.008	<0.006	0.017	0.010	0.008	<0.005	<0.01 tot	0.007	0.009	<0.007 tot	<0.005 tot
Iron tot.	"	0.3	0.14	0.22	0.09	00.24	0.34	2.6	0.66	0.07	(0.950)	0.39	0.15	0.49	0.27 tot	0.18	0.39	1.83	0.25 tot
TKN	"					<0.1				0.30				0.11				<1	
Nitrate	"	10				0.46				0.91				0.66				0.67	
Sulfate	"	250				12				14				15				13	
Aluminum	"					<0.06				0.10				0.22				1.46	
Total Chromium	"					<0.006				<0.005				<0.005				<0.008	
Total Zinc	"					0.008				0.010				0.028				0.017	
Total Arsenic	"	0.025				<0.005				<0.005				<0.005				<0.005	
Total Lead	"	0.025				<0.005				<0.005				<0.005				<0.005	
Total mercury	mg/l	2				3.9 ~~<0.002~~				<0.001				<0.0005				<0.002	
Total manganese	mg/l	0.3				0.03				0.021				0.014				0.10	
Total Cyanide	mg/l	0.2				<0.01				<0.01				<0.03				<0.01	

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL - Location

Exact Sampling Point SCHOOL CREEK AT [illegible] RD. County CATTARAUGUS

Date / Parameter	Unit	5/2/74	8/6/74	11/7/74	6/24/75	12/9/75	2/27/76	6/21/76	9/30/76	1/26/77	10/?/77	3/9/78	5/2/79	11/?/79	4/23/80	8/1/80	11/14/80	4/12/82
COLOR (APPARENT)		15.	10.	—	30.	15.	21.	23.	20.	20.	10.	5.	—	—	—	—		
TURBIDITY	JTU	3.	2.	—	17.	3.	6.	4.	—	—	—	—	—		—	—		
ODOR, HOT		1,OILY	1,OILY	—	1,OILY	1,OILY	1,VEG	1,VEG	—	—	—	1,VEG	—		—	—		
ODOR, COLD		1,OILY	—	—	1,OILY	1,OILY	1,VEG	1,VEG	1,EARTHY	?,SEWAGE	3,SEWAGE	1,DISAGREE	—		—	—		
AMMONIA	mgN/l	.15	.02	—	.03	<.02	<.02	.03	<.02	.02	<.02	<.02	—	<.5	—	—		
NITRITE	mgN/l	.006	.012	—	.013	.003	.003	.008	.003	.010	.006	.006	—	.03	—	—		
NITRATE	mgN/l	.65	1.0	—	1.7	.54	.74	.492	.457	1.29	.814	.954	—	.19	.38	—		0.89
CHLORIDES	mg/l	8.5	9.4	—	7.7	5.1	4.5	8.4	7.2	11.	6.3	12.	—	—	9.2	14	9.8	9.7
HARDNESS AS $CaCO_3$	mg/l	134	136	—	140	86.	46.	128.	104.	128.	—	120.	94.8	—	—	—		
ALKALINITY AS $CaCO_3$	mg/l	98	117	—	81	53.	38.	90.	—	—	—	—	—		—	—		
pH		7.7	8.1	—	8.7	7.6	7.5	7.8	7.7	8.1	7.8	7.9	8.11		8.62	7.90	7.52	8.33
KJELDAHL NITROGEN	mgN/l	.21	.23	—	.34	.16	—	—	—	—	—	—	—	<.5	.14	—		0.19
COD	mg/l	7.	8.	—	9.	<4.	<4.	<4.	8.	<4.	—	—	—	8.6	—	—		
IRON	mg/l	.36	.32	.30	—	.12	.36	.12	.18	.33	—	.14	.14	—	.11	.25	.15	0.39
MANGANESE	mg/l	<.02	<.02	.04	—	<.02	.05	.01	<.02	.02	—	.02	—	—	.08	—		<0.02
SODIUM	mg/l	8.	12.	—	7.	6.	3.	6.	<1.	6.	5.	6.	—	4.9	—	—		
TOTAL PHOSPHATES	mgP/l	.01	.04	—	—	.03	—	—	—	—	—	—	—	.03	—	—		
CADMIUM	mg/l	—	—	<.02	—	<.002	—	—	—	—	—	—	—	—	—	—		
TOTAL CHROMIUM	mg/l	—	—	<.1	—	<.01	—	—	—	—	—	—	—	.008	<.003	—		0.006
COPPER	mg/l	—	—	<.05	—	<.05	—	—	—	—	—	—	—	.003	<.003	.026	.006	0.008
LEAD	mg/l	—	—	<.1	—	.02	—	—	—	—	—	—	—	<.02	.03	—		<0.08
MERCURY	ug/l	—	—	<.4	—	<.4	—	—	—	—	—	—	—	<.6	<.6	—		<1

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL - Location

Exact Sampling Point ISCHUA CREEK @ KENT RD County CATTARAUGUS

Date / Parameter	Unit		5/3/74	8/6/74	11/7/74	6/24/75	12/9/75	2/27/76	6/24/76	9/30/76	1/26/77	10/7/77	3/9/78	5/2/79	12/10/79	4/23/80	8/1/80	11/14/80	4/12/82
ZINC	mg/l		—	—	<.05	—	<.05	—	—	—	—	—	—	—	—	<.003	—		0.020
NICKEL	mg/l		—	—	<.05	—	—	—	—	—	—	—	—	—	—	—	—		
BICARB AS $CACO_3$ ALKALINITY	mg/l		—	—	—	73	—	—	—	—	—	—	—	—	—	—			
CARB AS $CACO_3$ ALKALINITY	mg/l		—	—	—	8	—	—	—	—	—	—	—	—	—	—			
POTASSIUM	mg/l		—	—	—	1.5	1.3	.9	1.2	.9	1.4	—	1.0	—	1.0	—	—		
FLUORIDES	mg/l		—	—	—	—	<.1	—	—	—	—	.01	—	—	—	—	—		
TDS	mg/l		—	—	—	—	87.	—	—	—	—	—	—	—	—	—	—		
SULFATES AS SO_4	mg/l	250	—	—	—	—	13.	—	—	—	—	—	—	—	12	15	—		14
CYANIDE AS CN	mg/l		—	—	—	—	<.1	—	—	—	—	—	—	—	—	<.02	—		<0.02
MBAS AS LAS SURFACTANTS	mg/l		—	—	—	—	<.04	—	—	—	—	—	—	—	—	—	—		
ARSENIC	mg/l		—	—	—	—	<.03	—	—	—	—	—	—	—	<2	<.001	—		<0.006
BARIUM	mg/l		—	—	—	—	<.5	—	—	—	—	—	—	—	—	—	—		
BERYLLIUM	mg/l		—	—	—	—	<.02	—	—	—	—	—	—	—	<.003	—	—		
BORON	mg/l		—	—	—	—	<.1	—	—	—	—	—	—	—	—	—	—		
SELENIUM	mg/l		—	—	—	—	<.005	—	—	—	—	—	—	—	—	—	—		
SILVER	mg/l		—	—	—	—	<.02	—	—	—	—	—	—	—	<.005	—	—		
PHENOL	mg/l		—	—	—	—	<.001	—	—	—	—	—	—	—	<.01	(.01)	<.01	<.01	<0.01
MODIFIED ALKALINITY	mg/l		—	—	—	—	—	—	—	75.	108.	—	—	—	—	—	—		
N.T.U. TURBIDITY	NEPHEL		—	—	—	—	—	—	—	3.	6.	2.7	1.5	—	—	—	—		
ELECTRON, PH 4.5 ALKALINITY	mg/l		—	—	—	—	—	—	—	—	—	92.	95.	84.2	—	—	—		
COLOR	Pt-Co		—	—	—	—	—	—	—	—	—	—	—	7.5	—	—	—		
CONDUCTANCE	umhos/cm		—	—	—	—	—	—	—	—	—	—	—	220	—	200	305	225	179

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

3/

Refuse Disposal Area CARLOCK LANDFILL - Location

Exact Sampling Point ISCHUA CREEK @ KEAN RD County CATTARAUGUS

Date			5/28/74	8/6/74	11/7/74	6/24/75	12/9/75	3/29/76	6/24/76	9/20/76	11/26/77	10/11/77	3/9/78	5/2/79	12/20/79	4/23/80	8/11/80	11/14/80	4/17/82
Parameter	Unit																		
BOD_5	mg/l		—												<2	—	—		
METHYLENE BLUE ACTIVE SUBSTANCES	mg/l		—												<.03	—			
TOTAL NITROGEN	mg/l		—												.3	.2			0.1
TOTAL LITHIUM	mg/l														<.5	—	—		
TOTAL CALCIUM	mg/l														13	—	—		
TOTAL TITANIUM	mg/l														<.07	—	—		
TURBIDITY	FTU		—	—	—	—	—	—	—	—	—	—	—	90	—	—	—		
TOTAL SOLIDS	mg/l		—	—	—	—						—	—	150	—	—	—		
TOC	mg/l		—	—	—	—	—	—	—	—	—	—	—	—	—	10	1.8	1.5	2.2

1/

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area FARWELL LANDFILL - Location

Exact Sampling Point ISCHUA CREEK @ FARWELL RD. County CATTARAUGUS

Date / Parameter	Unit		1/14/74	5/30/74	8/6/74	11/7/74	6/24/75	10/16/75	12/9/15	3/2/76	6/24/76	9/3/76	7/20/77	10/2/77	5/2/79	7/12/79			
COLOR (APPARENT)			10	18	15	—	35	15	16	17.	26.	25.	20.	11.	—	—			
TURBIDITY	JTU		2	4	3	—	9.	3	3	7.	7.	—	—	—	—	—			
ODOR, HOT			1.0044	1.0044	1.0044	—	1.0044	1.0044	1.0044	1,VEG	1,VEG	—	—	—	—	—			
ODOR, COLD			1.0044	1.0044	1.0044	—	1.0044	1.0010	1.0044	1,EARTHY	2,PEATY	1,VEG	1,SEWAGE	2,SEWAGE	—	1,VEG			
AMMONIA	mgN/l		.006	<.02	.04	—	.03	<.02	<.02	<.02	.01	<.02	.04	<.02	—	—			
ALBUMINOID NITROGEN	mgN/l		.014	—	—	—	—	—	—	—	—	—	—	—	—	—			
NITRITE	mgN/l		.004	.006	.015	—	.014	.006	.003	.006	.01	.003	.014	.006	—	—			
NITRATE	mgN/l		1.3	.60	1.	—	1.0	.64	.52	.70	.49	.517	1.386	.914	—	.9			
COD	mg/l		.1	5.	10.	—	10.	<4.	4.	5.	14.	10.	<4.	—	—	7			
CHLORIDES	mg/l		8.2	8.0	9.1	—	7.5	9.0	5.5	4.4	8.2	7.4	12.	6.4	—	13			
HARDNESS AS $CACO_3$	mg/l		116	116	144	—	124	132	88.	34.	120.	100.	144.	—	90.5	128			
ALKALINITY AS $CACO_3$	mg/l		88	96	110	—	83	95	53.	32.	97.		—	—	—	—			
pH			7.9	7.6	7.9	—	8.0	8.6	7.6	7.3	7.8	7.7	8.0	7.7	8.22	7.8			
IRON	mg/l		.15	.34	.39	.24	—	.40	.13	.40	.47	.22	.25	—	.09	.20			
MANGANESE	mg/l		<.02	.13	.1	.04	—	.03	<.02	.03	.08	[illegible]	.03	—	—	.07			
SODIUM	mg/l		7	6	12	—	7.	10.	6.	2.	5.		7.	5.	—	—			
CONDUCTIVITY	umhos/cm		151	—	—		—	—	—	—	—		—	—	215	—			
KJELDAHL NITROGEN	mg/l		—	.15	.36	—	.35	—	.23	—	—		—	—	—	—			
TOTAL PHOSPHATES AS P	mg/l		—	.01	.04	—	—	—	<.01	—	—		—	—	—	—			
CADMIUM	mg/l		—	—	—	<.02	—	—	<.002	—	—		—	—	—	—			
TOTAL CHROMIUM	mg/l		—	—	—	<.1	—	—	<.01	—	—		—	—	—	.01			
COPPER	mg/l			—	—	.05	—	—	<.05	—	—		—	—	—	—			

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

2/

Refuse Disposal Area FARNELL LANDFILL - Location

Exact Sampling Point ISCHUA CREEK @ FARNELL RD. County CATTARAUGUS

Date			11/1/74	5/30/74	8/6/74	11/1/74	6/24/75	10/10/75	12/9/75	3/21/76	6/24/76	9/30/76	7/26/77	10/27/77	5/2/79	7/12/79		
Parameter	Unit																	
LEAD	mg/l		—	—	—	<.1	—	—	.02	—	—	—	—	—	—	—		
MERCURY	ug/l				—	<.4	—	—	<.4	—	—	—	—	—	—	—		
ZINC	mg/l		—	—	—	<.05	—	—	<.05	—	—	—	—	—	—	<.05		
NICKEL	mg/l		—	—	—	<.05	—	—	—	—	—	—	—	—	—	—		
POTASSIUM	mg/l		—	—	—	—	1.3	1.6	1.3	.9	1.1	.6	1.4	—	—	—		
BICARB AS $CaCO_3$ ALKALINITY	mg/l		—	—	—	—	—	85	—	—	—	—	—	—	—	—		
CARB AS $CaCO_3$ ALKALINITY	mg/l		—	—	—	—	—	10	—	—	—	—	—	—	—	—		
FLUORIDES	mg/l		—	—	—	—	—	—	.19	—	—	—	—	.1	—	—		
TDS	mg/l		—	—	—	—	—	—	88.	—	—	—	—	—	—	193		
SULFATES AS SO_4	mg/l		—			—	—	—	13.	—	—	—	—	—	—	—		
CYANIDE AVAIL	mg/l		—			—	—	—	<.1	—	—	—	—	—	—	—		
MBAS AS LAS SURFACTANTS	mg/l		—			—	—	—	<.04	—	—	—	—	—	—	—		
ARSENIC	mg/l		—				—	—	<.03	—	—	—	—	—	—	—		
BARIUM	mg/l		—				—	—	<.5	—	—	—	—	—	—	—		
BERYLLIUM	mg/l		—			—	—	—	<.02	—	—	—	—	—	—	—		
BORON	mg/l		—	—	—	—	—	—	<.1	—	—	—	—	—	—	—		
SELENIUM	mg/l		—	—	—	—	—	—	<.005	—	—	—	—	—	—	—		
SILVER	mg/l		—	—	—	—	—	—	<.02	—	—	—	—	—	—	—		
PHENOL	mg/l		—	—	—	—	—	—	.001	—	—	—	—	—	—	<.005		
M ORANGE ALKALINITY	mg/l		—	—	—	—	—	—	—	—	—	74	113.	—	—	—		
P.T.O. TURBIDITY	DEPTH		—	—	—	—	—	—	—	—	—	3.	7.	3.5	—	—		
ELECTRON pH #5 ALKALINITY	mg/l		—	—	—	—	—	—	—	—	—	—	—	92.	83.3	122		
TOTAL PHOS	mg/l																	

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location

Exact Sampling Point Leachate Tank LT County Cattaraugus

Date		GW standard	4/24/85	8/1/85	10/17/85	1/21/86	3/17/86	6/25/86	10/15/86	12/11/86	4/15/87	7/15/87	9/29/87
Parameter	Unit												
pH	s.u	6.5-8.5	5.73	5.86	8.79	6.41	7.48		7.27	6.89	7.57	7.39	7.77
conductance	umhos		13,000	6900	550	860	1000		1550	1730	2740	2520	1680
chlorides	mg/l	250	1070	433	92	84	109		180	186	400	502	250
TOC	"		10,500	4600	68	201	133		412.3	408	620	285	86
phenols	"	.001	5.4	2.3	<0.01	0.089	0.074		0.179	0.209	0.37	0.13	0.016
copper tot	"	1.0	0.526	0.087	0.010	0.018	0.009		0.006	0.013	0.008 / <0.005	0.017 / <0.005	0.0095 / <0.005
iron tot	"	0.3	11,300	478	5.0	22	11		8.95	40	38 / 2.4	20 / 0.52	7.4 / 0.50
TKN	"		794				12				54		
nitrate	"	10	<0.5				0.065				<0.05		
sulfate	"	250	595				38				22		
aluminum tot/sol	"		253				1.13				0.63 / 0.21		
tot. chromium tot/sol	"		0.422				0.012				0.009 / <0.005		
tot. zinc tot/sol	"		.27				0.169				0.21 / 0.11		
tot. arsenic tot/sol	"	0.025	0.310				<0.005				<0.005 / <0.005		
tot. lead tot/sol	"	0.025	0.380				<0.005				<0.005 / <0.005		
tot. mercury tot/sol	ug/l	2	0.0007				<0.002				<0.0005 / <0.0005		
tot. manganese tot/sol	mg/l	0.3	141				3.6				6.7 / 3.8		
tot. cyanide tot/sol	"	0.2	0.026				<0.01						

see also data in Hydrogeo [illegible] Oct. 87

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Fanwell Landfill Location Ischua

Exact Sampling Point 95 County Cattaraugus

Parameter	Unit	Standard	7/29/88	11/2/89	4/5/89	6/27/89	12/6/89	3/5/90	6/4/90	9/10/90	12/14/90	3/18/91	6/17/91	9/17/91
pH	S.U.	6.5-8.5												
Spec. Conductance	umhos/cm													
temp	°C													
TOC	mg/l													
COD	mg/l													
iron	mg/l	.3												
manganese	mg/l	.3	J	J	J	J	J	J	J	J	J	J	J	J
ammonia	mg/l													
sulfate	mg/l	250	J	J	J	J	J	J	J	J	J	J	J	J
tot. alkalinity	mg/l		DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF
tot. hardness	mg/l		DF											
aluminum tot/sol	mg/l													
antimony	mg/l													
arsenic	mg/l	.025												
beryilium	mg/l													
cadmium	mg/l	.001												
chromium	mg/l													
copper	mg/l	1.0												
lead	mg/l	.025												
mercury	mg/l	.002												
nickel	mg/l													
selenium	mg/l	.02												

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 95 County Cattaraugus

[illegible]ter	Unit	Standard																	
silver	mg/l	.05																	
thallium	mg/l																		
zinc	mg/l	5																	
chloromethane	ug/l																		
vinyl chloride																			
chloroethane																			
bromo methane																			
2 chloroethyl vinyl ether																			
ethyl benzene																			
methylene chloride																			
chloro-benzene																			
1,1 dichloro-ethylene																			
1,1 dichloro ethane		guidance 50																	
trans 1,2-dichloroethylene																			
chloroform																			
1,2 dichloro ethane																			
1,1,1 tri-chloroethane		guidance 50																	
carbon tetra-chloride																			
bromodi-chloromethane																			
1,2 dichloro propane																			
trans-1,3 dichloropro-pene																			

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill   Location: Ischua

Exact Sampling Point: 95   County: Cattaraugus

Parameter	Unit	standard
trichloroethylene	ug/l	
benzene	↓	
cis-1,3 dichloropropene	↓	
1,1,2-trichloroethane	↓	
dibromochloromethane	↓	
bromoform	↓	
gw elevation (?)	ft above sea level	

see also station in Hydrogeo

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Fanwell Landfill. Location Ogden

Exact Sampling Point 9D County Chautauqua

Parameter	Unit	Standard	9/29/88	9/29/88	4/12/89	4/5/89	6/27/89	12/6/89	3/5/90	3/5/90	6/4/90	9/10/90	12/12/90	3/18/91	6/19/91	9/17/91
pH	S.U.	6.5-8.5	10.88		10.20	9.53	10.02	7.40	7.74		7.40	7.08	7.40	7.14	7.13	7.2
Specific Conductance	umhos/cm		513		268	300	300	725	965		490	605	690	680	760	803
Temp	°C		10.5		10	11.0	21	6	8.6		17.0	16.0	9.0	8.0	14.0	12
TOC	mg/l		43.4	36.6	6.1	10.9	1.9	1.4	2.5	2.4	2.6	2	8.8	1.3	<1.0	<1.0
COD	mg/l		126	106	15.9	21.9	9.8	<10	20	51	91	10	122	133	8.2	<5.0
Iron	mg/l	.3	0.32 / <0.30	0.35 / <0.30	0.98 / <0.30	4.65 / <0.10	1.69 / <0.30	0.11 / <0.03	1.6 / 0.05	1.62 / <0.03	4.0 / 0.25	2.7 / 0.22	44 / 8.19	19.4 / 0.06	1.4 / 0.31	9.24 / 0.54
Manganese	mg/l	.3	<0.10 / <0.10	<0.10 / <0.10	0.11 / <0.10	0.30 / 0.1	<0.10 / <0.10	0.69 / 0.63	0.77 / 0.59	0.73 / 0.59	0.82 / 0.79	0.66	18 / 4.3	9.21 / 1.2	1.6 / 0.0	1.5 / 1.3
Ammonia	mg/l		0.12	0.15	0.08	0.14	0.14	<0.5	0.6	0.6	<0.5	<0.5	0.35	0.39	0.23	0.26
Sulfate	mg/l	250	19.4	21.0	15.9	18	24	16	25	24	<5	11	30.6	37	39	32
Total Alkalinity	mg/l		260	150	100	90	75	300	310	300	400	430	362	301	330	373
Hardness	mg/l		30	20	16.0	26	18	290	290	290	350	440	1490	860	351	388
Total/Sol Aluminum	mg/l		<5.00 / <5.00	<5.00 / <5.00	<5.00 / <5.00	<5.0 / <5.0	<5.00 / <5.00	<0.5 / <0.5	1.7 / <0.5	1.2 / <0.5	<0.5 / <0.5	0.7 / <0.5	16 / 0.05	13 / <0.005	5.4 / <0.005	2.7 / <0.2
Antimony	mg/l		<0.020 / <0.020	<0.020 / <0.020	<0.020 / <0.020	<0.020 / <0.020	<0.020 / <0.020	<0.01 / <0.01	<0.01 / <0.01	<0.01 / <0.01	<0.003 / <0.003	<0.003 / <0.003	<0.01 / <0.01	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Arsenic	mg/l	.025	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.001 / <0.001	0.002 / <0.001	<0.001 / <0.001	0.002 / <0.001	0.006 / <0.001	0.02 / <0.005	0.019 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Beryllium	mg/l		<0.05 / <0.05	<0.005 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.001	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	0.007 / <0.005	0.007 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Cadmium	mg/l	.01	<0.04 / <0.04	<0.04 / <0.04	<0.04 / <0.04	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Chromium	mg/l		<0.50 / <0.50	<0.50 / <0.50	<0.50 / <0.50	<0.50 / <0.50	<0.50 / <0.005	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	0.11 / <0.01	0.01 / <0.01	0.01 / <0.01	<0.01 / <0.01
Copper	mg/l	1.0	<0.20 / <0.20	<0.20 / <0.20	<0.10 / <0.20	<0.20 / <0.20	<0.20 / <0.20	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	0.4 / <0.005	0.18 / <0.005	0.016 / <0.005	0.014 / <0.01
Lead	mg/l	.025	<1.00 / <1.00	<1.00 / <1.00	<1.00 / <1.00	1.48 / 0.01	0.07 / <0.005	<0.001 / <0.001	<0.001 / <0.001	0.13 / <0.001	0.003 / <0.001	0.003 / <0.001	0.35 / <0.003	0.18 / <0.003	0.019 / <0.003	0.01 / <0.003
Mercury	mg/l	.002	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	0.0013 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004
Nickel	mg/l		<0.30 / <0.30	<0.30 / <0.30	<0.30 / <0.30	<0.30 / <0.30	<0.30 / <0.30	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	0.54 / <0.04	0.28 / <0.03	0.022 / 0.623	<0.04 / <0.04
Selenium	mg/l	.02	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	0.002 / 0.002	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 9D County Cattaraugus

Parameter	Unit	Standard	9/21/88	9/29/88	1/12/89	4/5/89	6/29/89	12/6/89	3/5/90	3/5/90	6/4/90	9/10/90	12/12/90	3/18/91	6/19/91	9/17/91
Silver	mg/l	.05	<0.10 / <0.10	<0.10 / <0.10	<0.10 / <0.10	0.080 / <0.001	<0.001 / <0.001	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.006 / <0.005	<0.01 / <0.01
Beryllium	mg/l		<1.00 / <1.00	<1.00 / <1.00	<1.00 / <1.00	<1.00 / <1.00	<0.005 / <0.005	<0.01 / <0.01	<0.01 / <0.01	<0.01 / <0.01	<0.001 / <0.001	<0.003 / <0.003	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Zinc	mg/l	5	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	0.67 / <0.05	0.63 / <0.05	<0.005 / 0.017	0.006 / 0.021	0.006 / 0.020	0.011 / 0.044	<0.005 / <0.005		0.57 / <0.01	0.033 / <0.005	0.096 / 0.03
Turbidity					turbid		clear	cloudy	clear			56	152.3	200+	200+	7200
Chloromethane	ug/l		<10	<10	<10	<10	<10	<3	<15	<15	<3	<30	<10	<10	<10	<10
Vinyl chloride			<10	<10	<10	<10	<10	3	<15	<15	<3	<30	6	4	5	31
Chloroethane			<10	<10	<10	<10	<10	80	<15	<15	55	<30	51	38	62	23
Bromomethane			<10	<10	<10	<10	<10	<3	<15	<15	<3	<30	<10	<10	<10	<10
Chloroethyl vinyl ether			<10	<10	<10	<10	<10	<3	<15	<15	<3	<30	<10	<10	<10	<10
Methylene chloride			<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
Chloroform			<5	<5	<5	<5	<5.0	<3	<15	<15	21	<30	2	2	2	0.97
1,2-Dichloroethylene			<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
1,1,1-Trichloroethane		guidance 50	85	81	220	550	180	160	440	370	220	440	300	300	270	200
Carbon tetrachloride			<5	<5	<5	<5	<5.0	<3	<15	<15	110	<30				23
Bromodichloromethane			<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
1,2-Dichloropropane			<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	3	2	<5	1.4
Trichloroethylene		guidance 50	28	23	33	36	44	96	140	130	74	110	94	67	78	61
Dibromochloromethane			<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
1,1,2-Trichloroethane			<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
Benzene			<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
trans-1,3-Dichloropropene			<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	0.9	<5	<5	<5
Bromoform			<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 9D County Cattaraugus

Parameter	Unit	Standard	9/29/88	9/29/88	1/12/89	4/5/89	6/29/89	12/6/89	3/5/90	3/5/90	6/4/90	9/10/90	12/12/90	3/18/91	6/4/91	9/17/91
trichloroethylene	ug/l		<5	<5	<5	<5	<5.0	15	<15	<15	24	<30	11	8	9	8.2
benzene	ug/l		<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	2	1	1	0.85
cis 1,3 dichloropropene	ug/l		<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
1,2 dichloroethane	ug/l		<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
dibromochloromethane	ug/l		<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
bromoform	ug/l		<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
Depth to water	ft above sea level		1488.34		1491.45	1493.89	1493.28	1491.39	1491.63		1491.21	1490.93	1490.81	1490.61	1489.91	1489.31
1,1,2,2 tetrachloroethylene	ug/l		<5	<5	<5	<5	<5.0					<30				
1,1,2,2 tetrachloroethane	ug/l		<5	<5	<5	<5	<5.0	<3	<15	<15	<3		<5	<5	<5	<5
toluene	ug/l		<5	<5	<5	<5	<5.0	<3	<15	<15	<3	<30	<5	<5	<5	<5
trichlorofluoromethane	ug/l		<5	<5	<5			<3	<15	<15	<3	<30	8.1	<5	0.7	0.77
appearance					turbid	cloudy										
tetrachloroethylene								<3	<15	<15	<3	<30	<5	<5	<5	<5
1,2 dichlorobenzene								<3	<15	<15	<3	<30		<5	<5	<5
1,3 dichlorobenzene								<3	<15	<15	<3	<30		<5	<5	<5
1,4 dichlorobenzene								<3	<15	<15	<3	<30		<5	<5	<5
tot xylenes								<3	<15	<15	<3	<30	<5	<5	<5	<5
dichlorodifluoromethane								<3	<15	<15	<3	<100	ND	<10	<10	<10
acetone								<10	<50	<50	<10	<100	<10	<10	<10	<10
acrolein								<100	<500	<500	<100	<1000	<100	<100	<100	<100

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Bchuyler

Exact Sampling Point 9D County Chemung

Site																					
Parameter	Unit									12/6/89	3/5/90	3/5/90	6/4/90	9/10/90	12/12/90	3/18/91	6/19/91	9/17/91			
acrylonitrile										<100	<500	<500	<100	<1000	<100	<100	<100	<100			
2 butanone										<10	<50	<50	<10	<100	<10	<10	<10				
carbon disulfide										<10	<50	<50	<10	<100	<5	<5	<5	<5			
1,4 dichloro-2-butene										<10		<50	<10	<100	ND			<5			
ethanol										<10 000		<10,000	<10,000	<10,000	ND	<600	<600	<600			
ethyl methacrylate										<10	<50	<50	<10	<100	ND	<5	<5	<5			
2-hexanone										<10	<50	<50	<10	<100	<10	<10	<10	<10			
iodomethane										<10	<50	<50	<10	<100	ND	<5	<5	<5			
4-methyl-2-pentanone										<10	<50	<50	<10	<100	<10	<10	<10	<10			
styrene										<3	<15	<15	<3	<100	<5	<5	<5	<5			
1,2,3 trichloropropane										<3	<15	<15	<3	<100	ND	<5	<5	<5			
vinyl acetate										<10	<50	<50	<10	<100	<10	<10	<10	<10			
dibromomethane										<10	<50	<50	<10	<100	ND	<5	<5	<5			
trans-1,4 dichloro-2-butene										4	<50					<5	<5				
ethanol											<10,000										
1,2 dichloroethene (total)															31	30	25				
magnesium															120/21						
TKN	mg/l														6.9	4.4	0.33	0.43			
MEK																		<10			

see also data in Hydrogeo. Investigation dtd Oct. 87

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Fanwell Landfill Location Ischua

Exact Sampling Point 105 County Cattaraugus

Parameter	Unit	Standard	9/30/88	1/13/89	4/5/89	6/28/89	12/6/89	3/5/90	6/4/90	9/10/90	12/12/90	3/18/91	6/19/91	9/17/91
pH	S.U.	6.5-8.5	6.44	6.35	6.09	6.68	6.15	6.52	6.82	6.59	6.47	6.37		7.0
Spec. Cond.	umhos/cm		945	839	1045	1138	900	1038	570	790	1100	1000		1170
Temp	°C		14.0	11	10.0	21	9	9.1	16.5	16	10.0	8.0		11
TOC	mg/l		6.6	84.4	73	15	6.0	46	4.8	6	4.3	30		4.5
COD	mg/l		43.9	8.5	2.2	34.4	30	61	20	30	20.0	82		51
Iron	mg/l	.3	6.20 3.88	15.20 1.59	4.17 <0.1	58.2 <0.30	<0.03 <0.41	3.4 1.1	0.96 0.13	9.9 1.86	33 1.4	278 0.85		13 0.22
Manganese	mg/l	.3	1.59 1.44	2.01 1.52	1.38 1.22	1.83 1.18	<0.89 1.2	0.1 0.96	0.96 0.89	2.1 2.9	1.7 2.2	6.4 1.6	J	1.9 0.35
Ammonia	mg/l		2.5	2.75	2.36	1.8	1.4	6.8	2.3	1.8	2.1	2.2	U	1.5
Nitrate	mg/l	250	43.7	49.0	56	133	33	21	19	12	16.0	16	U	34
Total Alkalinity	mg/l		530	540	480	530	440	430	440	520	665	535		538
Hardness	mg/l		740	700	490	580	470	400	380	540	632	1430		1030
Total/Sol Aluminum	mg/l		<5.00 <5.00	<5.00 <5.00	<5.0 <5.0	<5.00 <5.00	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	7.7 <0.05	101 <0.05		4.3 <0.2
Antimony	mg/l		<0.020 <0.020	<0.020 <0.020	<0.020 <0.020	<0.020 <0.020	<0.01 <0.01	<0.01 <0.01	0.004 <0.01	0.003 <0.01	<0.01 <0.01	<0.005 <0.005		<0.005 <0.005
Arsenic	mg/l	.025	0.013 <0.005	<0.005 <0.005	<0.005 <0.005	0.039 <0.005	0.003 <0.005	0.014 <0.005	0.006 <0.005	0.002 <0.005	0.04 <0.005	0.061 <0.005		0.018 <0.005
Beryllium	mg/l		<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.001 <0.001	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005		<0.005 <0.005
Cadmium	mg/l	.01	<0.04 <0.04	<0.04 <0.04	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005		<0.005 <0.005
Chromium	mg/l		<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	0.053 0.033	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.01 <0.01	0.15 <0.01		<0.01 <0.01
Copper	mg/l	1.0	<0.20 <0.20	<0.20 <0.20	<0.20 <0.20	<0.20 <0.20	<0.02 <0.02	<0.02 <0.02	<0.02 <0.02	<0.02 <0.02	0.029 <0.005	0.54 0.006		0.025 <0.01
Lead	mg/l	.025	<1.00 <1.00	<1.00 <1.00	4.25 0.055	0.042 <0.005	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	0.019 <0.003	0.28 <0.003		0.03 <0.003
Mercury	mg/l	.002	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004		<0.0004 <0.0004
Nickel	mg/l		<0.30 <0.30	<0.30 <0.30	<0.30 <0.2	<0.30 <0.30	<0.03 <0.03	<0.03 <0.03	<0.03 <0.03	<0.03 <0.03	0.04 <0.04	0.31 <0.03		0.04 <0.04
Selenium	mg/l	.02	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.001 <0.001	<0.001 <0.001	<0.001 <0.002	<0.002 <0.002	<0.005 <0.005	<0.005 <0.005		<0.005 <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farewell Landfill Location Ischua

Exact Sampling Point 105 County Cattaraugus

		Standard	9/30/88	3/13/89	4/6/89	6/28/89		12/6/89	3/5/90	6/4/90	9/10/90	12/12/90	3/18/91		9/17/91
Parameter	Unit														
Silver	mg/l	.05	<0.10 <0.10	<0.10 <0.10	0.002 <0.001	<0.001 <0.001		<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.005 <0.005	<0.005 <0.005		<0.01 <0.01
Thallium	mg/l		<1.00 <1.00	<1.00 <1.00	<1.00 <1.00	<0.005 <0.005		<0.01 <0.01	<0.01 <0.01	<0.001 <0.001	<0.003 <0.003	<0.005 <0.005	<0.005 <0.005		<0.005 <0.005
Zinc	mg/l	5	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05		<0.005 0.011	0.006 0.037	0.007 0.038	0.010 0.010		0.91 <0.01		0.084 0.018
Turbidity	NTU										37	15.75	200+	*	7.200
Dichlorodifluoromethane	ug/l		<10	<10	<10	<10		<3	<3	<3	<3	<10	<10		<10
Chloroethyl vinyl ether			<10	<10	<10	<10		<3	<3	<3	26	16	5		<10
Bromomethane			<10	<10	<10	<10		<3	<3	<3	72	16	4		<10
Chloromethane			<10	<10	<10	<10		<3	<3	<3	<3	<10	<10		<10
Trichlorofluoromethane			<10	<10	<10	<10		<3	<3	<3	<3	<10	<10		<10
Acrolein			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
Methylene chloride			<5	<5	<5	<5		<3	<3	<3	<3	0.5	<5		<5
Acrylonitrile			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
1,1-Dichloroethylene			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
1,1-Dichloroethane		guidance 50	25	43	75	35		44	36	9	120	110	68		32
trans 1,2-Dichloroethylene			<5	<5	<5	<5		<3	<3	21	30				0.77
Chloroform			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
1,2-Dichloroethane			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
1,1,1-Trichloroethane		guidance 50	<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
Carbon tetrachloride			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
Vinyl chloride			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
Bromodichloromethane			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
1,2-Dichloropropane			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5
trans 1,3-Dichloropropene			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill Location: Ischua

Exact Sampling Point: 10S County: Cattaraugus

Parameter	Unit	standard	9/30/88	1/13/89	4/6/89	6/28/89		12/6/89	3/5/90	6/4/90	9/10/90	12/12/90	3/15/91		9/17/91				
trichloroethylene	ug/l		<5	<5	<5	<5		<3	<3	<3	<3	2	<5		<5				
benzene			<5	<5	<5	<5		<3	<3	<3	<3	5	2		<5				
cis-1,3-dichloropropene			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5				
1,1,2-trichloroethane			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5				
dibromochloromethane			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5				
bromoform			<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5				
ground elevation (GE)	ft above sea level		1497.92	1498.97	1498.06	1498.33		1500.69	1500.66	1499.21	1502.96	1501.29	1498.49		1495.29				
1,1,2,2-tetrachloroethylene	ug/l		<5	<5	<5	<5			<3										
1,1,2,2-tetrachloroethane	ug/l		<5	<5	<5	<5		<3		<3	<3	<5	<5		<5				
toluene	ug/l		<5	<5	<5	<5		<3	<3	<3	<3	<5	<5		<5				
trichlorofluoromethane	ug/l		<5	<5				<3	<3	<3	<3	1.1	<5		<5				
appearance					turbid	turbid		turbid	clear	turbid									
tetrachloroethylene								<3	<3	<3	<3	<5	<5		<5				
1,2 dichlorobenzene								<3	<3	<3	<3		<5		<5				
1,3 dichlorobenzene								<3	<3	<3	<3		<5		<5				
1,4 dichlorobenzene								<3	<3	<3	<3		<5		<5				
total xylenes								<3	<3	<3	<3	<5	<5		<5				
dichlorodifluoromethane								<3	<3	<3	<10	ND	<10		<10				
acetone								<10	<10	<10	<10	<10	<10		<10				
acrolein								<100	<100	<100	<100	<100	<100		<100				
acrylonitrile								<100	<100	<100	<100	<100	<100		<100				

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Bath

Exact Sampling Point 10S County Cattaraugus

Parameter	Unit	12/6/89	3/5/90	6/4/90	9/10/90	12/12/90	3/18/91	9/17/91
2 butanone	ug/l	<10	<10	<10	<10	<10		
carbon disulfide		<10	<10	<10	<10	<5	<5	<5
1,4 dichloro-2-butene		<10		<10	<10	ND		<5
ethanol		<10,000		<10,000	<10,000	ND	<600	<600
ethyl methacrylate		<10	<10	<10	<10	ND	<5	<5
2-hexanone		<10	<10	<10	<10	<10	<10	<10
iodomethane		<10	<10	<10	<10	ND	<5	<5
4-methyl-2-pentanone		<10	<10	<10	<10	<10	<10	<10
styrene		<3	<3	<3	<10	<5	<5	<5
1,2,3 tri-chloropropane		<3	<3	<3	<10	ND	<5	<5
vinyl acetate		<10	<10	<10	<10	<10	<10	<10
dibromo-methane		<10	<10	<10	<10	ND	<5	<5
trans-1,4 di-chloro-2-butene		<	<10				<5	
ethanol	ug/l		<10,000					
magnesium	mg/l					24 15		
1,2 dichloro-ethene (trans)	ug/l					17	8	
TKN						2,6	11	6,0
MEK								<10

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farnell Landfill Location Ischua

Exact Sampling Point 10D County Cattaraugus

Parameter	Unit	Standard	9/30/88	1/12/89	dup 1/12/89	4/5/89	dup 4/5/89	6/28/89	12/6/89	3/5/90	6/4/90	9/10/90	dup 9/10/90	12/12/90	3/18/91	6/19/91	9/17/91
pH	S.U.	6.5-8.5	6.74	6.56		6.85		6.81	6.40	6.49	6.75	6.73		6.57	6.71	6.80	8.0
Specific Conductance	umhos/cm		850	820		850		850	950	126.3	690	800		1100	1000	1215	950
Temp	°C		12.0	10°		17.0		20	9	9.8	18	19		10.0	8.0	11.0	11
TOC	mg/l		5.0	91.8	81.3	32.6	19.9	15	8.2	8.6	5.9	4	<1	4.8	8.3	2.4	1.6
COD	mg/l		24.0	22.8	24.8	12.3	2.2	17	<10	<10	20	50	80	15.0	16	7.8	6.4
Iron	mg/l	.3	<0.30 <0.30	12.2 5.30	12.2 6.00	1.30 0.20	1.50 0.20	1.72 0.38	12 11	4.4 5.3	5.7 3.8	1.4 1.1	1.3 1.0	1.1 1.1	1.5 1.3	2.1 0.03	0.94 <0.05
Manganese	mg/l	.3	1.37 1.27	1.96 1.73	2.02 1.97	0.91 0.95	0.88 0.91	0.72 0.78	1.8 0.89	2.1 2.1	1.8 1.8	2.1 2.1	2.1 2.1	2.3 2.3	2.0 1.9	1.1 1.0	1.1 1.0
Ammonia	mg/l		0.72	2.3	2.1	0.60	0.60	0.72	2.9	0.6	5.0	1.5	1.3	2.4	2.4	0.81	0.59
Sulfate	mg/l	250	16.9	10.4	21.0	22	22	19	30	25	11	11	12	14.0	13	19	18
Total Alkalinity	mg/l		430	600	580	415	420	390	520	570	730	520	490	587	654	417	409
Hardness	mg/l		80	520	680	400	410	370	570	490	410	520	520	622	538	528	178
Total/Sol Aluminum	mg/l		<5.00 <5.00	<5.00 <5.00	<5.00 <5.00	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	0.3 <0.05	0.79 <0.05	0.12 <0.05	<0.2 <0.2
Antimony	mg/l		<0.020 <0.020	<0.020 <0.020	<0.020 <0.020	<0.020 <0.020	<0.020 <0.020	<0.020 <0.020	<0.01 <0.01	<0.01 <0.01	0.004 <0.004	0.003 <0.003	0.005 <0.005	<0.01 <0.01	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
Arsenic	mg/l	.025	<0.005 <0.005	0.016 0.014	0.064 0.016	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	0.026 0.024	0.014 0.017	0.013 0.008	0.016 0.013	0.014 0.012	0.026 0.02	0.049 0.04	0.006 <0.005	<0.005 <0.005
Beryllium	mg/l		<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	0.004 <0.001	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
Cadmium	mg/l	.01	<0.04 <0.04	<0.04 <0.01	<0.04 <0.04	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
Chromium	mg/l		<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.005 <0.005	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01
Copper	mg/l	1.0	<0.20 <0.20	<0.20 <0.20	<0.20 <0.20	<0.20 <0.20	<0.20 <0.20	<0.20 <0.20	<0.02 <0.02	<0.02 <0.02	<0.02 <0.02	<0.02 <0.02	<0.02 <0.02	0.005 <0.005	0.012 <0.005	0.11 0.007	0.01 <0.01
Lead	mg/l	.025	<1.00 <1.00	<1.00 <1.00	<1.00 <1.00	0.013 0.013	1.14 <0.005	0.011 <0.005	<0.001 <0.001	<0.001 <0.001	0.002 <0.001	<0.001 <0.001	<0.001 <0.001	0.003 <0.003	0.013 <0.003	0.006 0.006	0.003 <0.003
Mercury	mg/l	.002	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004
Nickel	mg/l		<0.30 <0.30	<0.03 <0.03	<0.30 <0.30	<0.30 <0.30	<0.30 <0.30	<0.30 <0.30	<0.03 <0.03	<0.03 <0.03	<0.03 <0.03	<0.03 <0.03	<0.04 <0.04	0.035 <0.005	<0.02 <0.02	<0.02 <0.02	<0.04 <0.04
Selenium	mg/l	.02	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.001 <0.001	<0.001 <0.001	<0.002 <0.002	<0.002 <0.002	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 10D County Cattaraugus

Parameter	Unit	Standard	9/30/88	1/12/89	1/16/89	4/5/89	4/5/89	6/28/89	12/6/89	3/5/90	6/4/90	9/10/90	9/10/90	12/12/90	3/18/91	6/19/91	9/17/91
Silver	mg/l	.05	<0.10 <0.10	<0.10 <0.10	<0.10 <0.10	<0.001 <0.001	0.019 <0.001	<0.001 <0.001	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.005 <0.005	<0.005 <0.005	<0.006 <0.006	<0.01 <0.01
Beryllium	mg/l		<1.00 <1.00	<1.00 <1.00	<1.00 <1.00	<1.00 <1.00	<1.00 <1.00	<0.005 <0.005	<0.01 <0.01	<0.01 <0.01	<0.001 <0.001	<0.003 <0.003	<0.003 <0.003	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
Zinc	mg/l	5	<0.05 <0.05	<0.05 <0.05	0.07 <0.05	0.07 0.06	0.16 <0.05	<0.05 <0.05	0.02 0.020	<0.005 <0.018	0.006 0.010	0.007 0.007	<0.005 <0.005		0.011 0.015	0.061 <0.005	<0.005 0.017 0.02
Chloromethane	ug/l		<10	<10	<10	<10	<10	<10	<3	<3	<3	<30	<30	<10	<10	<10	<10
Bromomethane			<10	<10	<10	<10	<10	<10	<3	<3	<3	<30	<30	<10	<10	<10	<10
Vinyl chloride			<10	<10	<10	37	40	<10	<3	<3	6	<30	<30	11	6	5	1.7
Chloroethane			<10	<10	<10	<10	<10	<10	<3	<3	<3	<30	<30	20	7	86	48
Methylene chloride			<10	<10	<10	<10	<10	<10	<3	<3	<3	<30	<30	<10	<10	<10	<10
Trichlorofluoromethane			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<10	<10	<10	<10
1,1-Dichloroethylene			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
1,1-Dichloroethane		guidance 50	130	170	150	1000	990	350	59	49	56	<30	130	100	72	300	230
trans 1,2-Dichloroethylene			<5	<5	<5	<5	<5	<5	<3	<3	13	<30	<30				33
Chloroform			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
1,2-Dichloroethane			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	0.2	<5	<5	1.6
1,1,1-Trichloroethane		guidance 50	15	6.9	5.7	60	56	140	<3	<3	<3	<30	<30	2	0.6	34	32
Carbon tetrachloride			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
Bromodichloromethane			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
1,2-Dichloropropane			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
trans-1,3-Dichloropropene			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farrell Landfill Location Ischua

Exact Sampling Point 10D County Cattaraugus

Parameter	Unit	Standard	9/30/88	1/12/89	1/16/89	4/3/89	4/5/89	6/28/89	12/6/89	3/5/90	6/4/90	9/10/90	9/10/90	12/12/90	3/18/91	6/19/91	9/17/91
trichloro ethylene	ug/l		7.0	<5	<5	<5	<5	11	<3	<3	<3	<30	<30	2	0.6	6	6.8
benzene			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	3	2	2	1.5
cis 1,3 dichloropropene			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
1,1,2 trichloro ethane			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
dibromochloro methane			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
bromoform			<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
ground water elevation @	ft above sea level		1488.74	1490.79		1493.18		1492.78	1490.93	1491.46	1491.01	1490.46		1491.32	1491.42	1489.32	1489.82
1,1,2,2 tetra chloroethylene	ug/l		<5	<5	<5	<5	<5	<5									
1,1,2,2 tetra chloroethane	ug/l		<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	<5	<5	<5	<5
toluene	ug/l		<5	<5	<5	<5	<5	<5	<3	<3	<3	<30	<30	0.1	<5	<5	<5
trichloro fluoromethane	ug/l		<5	<5	<5				<3	<3	<3	<30	<30	0.78	<5	1	<5
appearance						clear		clear	clear	clear							
tetrachloro ethylene									<3	<3	<3	<30	<30	<5	<5	<5	<5
1,2 dichloro benzene									<3	<3	<3	<30	<30		<5	<5	<5
1,3 dichloro benzene									<3	<3	<3	<30	<30		<5	<5	<5
1,4 dichloro benzene									<3	<3	<3	<30	<30		<5	<5	<5
total xylenes									<3	<3	<3	<30	<30	<5	<5	<5	<5
dichloro fluoromethane									<3	<3	<3	<30	<30	ND	<10	<10	<10
acetone									<10	<10		<100	<100	<10	<10	<10	<10
acrolein									<100	<100		<1000	<1000	<100	<100	<100	<100
acrylo nitrile									<100	<100	<100	<1000	<1000	<100	<100	<100	<100

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 10D County Cattaraugus

Site																					
Parameter	Unit								12/6/89	3/5/90	6/4/90	9/10/90	9/10/90 dup	12/12/90	3/18/91	6/19/91	9/17/91				
2 butanone	ug/l								<10	<10	<10	<100	<100	<10	<10	<10					
carbon disulfide									<10	<10	<10	<100	<100	<5	<5	<5	<5				
1,4 dichloro-2-butene									<10	<10	<10	<100	<100	ND	trans <5	trans <5	<5				
ethanol									<10,000	<10,000	<10,000	<10,000	<10,000	ND	<600	<600	<600				
ethyl methacrylate									<10	<10	<10	<100	<100	ND	<5	<5	<5				
2-hexanone									<10	<10	<10	<100	<100	<10	<10	<10	<10				
iodomethane									<10	<10	<10	<100	<100	ND	<5	<5	<5				
4 methyl-2 pentanone									<10	<10	<10	<100	<100	<10	<10	<10	<10				
styrene									<3	<3	<3	<100	<100	<5	<5	<5	<5				
1,2,3 trichloro propane									<3	<3	<3	<100	<100	ND	<5	<5	<5				
vinyl acetate									<10	<10	<10	<100	<100	<10	<10	<10	<10				
dibromo methane									<10	<10	<10	<100	<100	ND	<5	<5	<5				
bromo methane										<3											
turbidity	NTU										6	12		23.1	200+	5.5	1.2				
1,2 dichloro-ethene (tot)														15	9	31					
magnesium	mg/l													30/23							
TKN														2.2	4.6	0.92	0.62				
MEK																	<10				

see also data in [illegible] Investigation Rep. Oct. 81

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 11S County Cattaraugus

Parameter	Unit	Standard	7/30/88	1/14/89	4/6/89	6/28/89		12/6/89	3/5/90	6/5/90	7/11/90	12/13/90	3/18/91	6/21/91	9/17/91
pH	S.U.	6.5-8.5		6.66	6.53	6.24			6.74	6.95		6.68	6.47	7.0	
spec. conductance	umhos/cm			941	1430	1493			1670	800		1500	1400	1315	
temp	°C			10.0	10.0	22		Insufficient volume	7.6	11		9.0	8.0	14.0	
TOC	mg/l			29.1	4.2	44			4.5	2.0		5.0	10		
COD	mg/l			22.8	<1.0	7.4			<10	<10	Insufficient volume	19.4	38		
iron	mg/l	.3	Dry	37.6 / <0.30	1.58 / 0.1	0.98 / <0.3			0.28 / 0.04	0.08 / <0.03		90 / 0.088	50 / <0.04		
manganese	mg/l	.3		0.51 / <0.10	<0.1 / <0.1	<0.1 / <0.1			0.38 / 0.36	0.17 / 0.04		7.3 / 6.59	1.8 / 0.88		
ammonia	mg/l			0.12	2.28	2.0			0.7	<0.5		0.41	1.2		
sulfate	mg/l	250		115	100	83			67	78		80.4	72	No sample - insufficient recovery	Dry
tot. alkalinity	mg/l			525	570	645			620	680		702	740		
tot. hardness	mg/l			800	680	590			680	620		1060	876		
aluminum (tot/sol)	mg/l			<5.00 / <5.00	<5.0 / <5.0	<5.0 / <5.0			<0.5 / <0.5	<0.5 / <0.5		34 / <0.05	20 / <0.05		
antimony	mg/l			<0.020 / <0.020	<0.020 / <0.020	<0.020 / <0.020			<0.01 / <0.01	<0.003 / <0.003		<0.01 / <0.01	<0.005 / <0.005		
arsenic	mg/l	.025		0.104 / <0.005	<0.005 / <0.005	<0.005 / <0.005			0.001 / <0.001	0.001 / <0.001		0.15 / <0.005	0.061 / <0.005		
beryllium	mg/l			<0.05 / <0.05	<0.05 / <0.05	<0.001 / <0.001			<0.005 / <0.005	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005		
cadmium	mg/l	0.01		<0.04 / <0.04	<0.0005 / <0.0005	<0.0005 / <0.0005			<0.005 / <0.005	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005		
chromium	mg/l			<0.50 / <0.50	<0.50 / <0.50	<0.005 / <0.005			<0.05 / <0.05	<0.05 / <0.05		0.052 / <0.01	0.026 / <0.01		
copper	mg/l	1.0		<0.20 / <0.20	<0.20 / <0.20	0.2 / <0.2			<0.02 / <0.02	<0.02 / <0.02		0.1 / <0.005	0.069 / 0.006		
lead	mg/l	.025		<1.00 / <1.00	0.031 / 0.028	0.008 / 0.009			<0.001 / <0.001	<0.001 / <0.001		0.055 / <0.003	0.056 / <0.003		
mercury	mg/l	.002		<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001			<0.0004 / <0.0004	<0.0004 / <0.0004		<0.0004 / <0.0004	<0.0004 / <0.0004		
nickel	mg/l			<0.30 / <0.30	<0.30 / <0.30	<0.30 / <0.30			<0.03 / <0.03	<0.03 / <0.03		0.1 / <0.04	0.068 / <0.03		
selenium	mg/l	.02		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005			<0.001 / <0.001	<0.001 / <0.001		<0.005 / <0.005	<0.005 / <0.005		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point MS County Cattaraugus

		Standard	9/30/88	1/12/89	4/6/89	6/28/89		12/6/89	3/5/90	6/5/90	9/11/90	12/13/90	3/18/91						
...ter	Unit																		
silver	mg/l	.05		<0.10 <0.10	<0.001 <0.001	<0.001 <0.001			<0.05 <0.05	<0.05 <0.05		<0.005 <0.005	<0.005 <0.005						
thallium	mg/l			<1.00 <1.00	1.00 <1.00	<0.005 <0.005			<0.01 <0.01	<0.001 <0.001		<0.005 <0.005	<0.005 <0.005						
zinc	mg/l	5		<0.05 <0.05	<0.05 <0.05	<0.05 <0.05			0.006 0.027	<0.005 0.040			0.29 <0.01						
chloromethane	ng/l			<10	<10	<10			<3	<3		<10	<10						
nyl chloride				<10	<10	<10			<3	<3		<10	<10						
chloroethane				<10	<10	<10			<3	<3		<10	<10						
bromo methane				<10	<10	<10			<3	<3		<10	<10						
chloroethyl nyl ether				<10	<10	<10			<3	<3		<10	<10						
ethyl nzene				<5	<5	<5			<3	<3		<5	<5						
methylene chloride				<5	<5	<5			<3	<3		<5	<5						
chloro nzene				<5	<5	<5			<3	<3		<5	<5						
1,1-dichloro thylene				<5	<5	<5			<3	<3		<5	<5						
1,1-dichloro ethane		guidance 50		<5	<5	<5			<3	<3		<5	<5						
trans 1,2-dichloro thylene				<5	<5	<5			5	4		<5	<5						
chloroform				<5	<5	<5			<3	<3									
1,2-dichloro ethane				<5	<5	<5			<3	<3		<5	<5						
1,1,1-tri- chloroethane		guidance 50		<5	<5	<5			<3	<3		<5	<5						
carbon tetra- chloride				<5	<5	<5			<3	<3		1	1						
bromo- dichloro methane				<5	<5	<5			<3	<3		<5	<5						
1,2-dichloro propane				<5	<5	<5			<3	<3		<5	<5						
cis-1,3 dichloro pro- pene				<5	<5	<5			<3	<3		<5	<5						

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill Location: Ischua

Exact Sampling Point: 11S County: Cattaraugus

Parameter	Unit	Standard	9/30/88	1/12/89	4/6/89	6/28/89		12/6/89	3/5/90	6/5/90	9/11/90	12/13/90	3/18/91					
trichloroethylene	ug/l			<5	<5	<5			<3	<3		2	1					
benzene	↓			<5	<5	<5			<3	<3		<5	<5					
cis-1,3-dichloropropene				<5	<5	<5			<3	<3		<5	<5					
1,1,2-trichloroethane				<5	<5	<5			<3	<3		<5	<5					
dibromochloromethane				<5	<5	<5			<3	<3		<5	<5					
bromoform	↓			<5	<5	<5			<3	<3		<5	<5					
[illegible] elevation (ft)	ft above sea level			1492.97	1496.35	1497.03			1496.35	1496.43		1496.79	1491.49	1490.99				
appearance				turbid orange	turbid brown	turbid			clear									
1,1,2,2 tetrachloroethylene	ug/l			<5	<5	<5							<5					
1,1,2,2 tetrachloroethane	↓			<5	<5	<5			<3	<3		<5						
toluene				<5	<5	<5			<3	<3		<5	<5					
trichlorofluoromethane	↓			<5					<3	<3		0.72	<5					
acetone									<10	25		<10	<10					
acrolein									<100	<100		<100	<100					
acrylonitrile									<100	<100		<100	<100					
2 butanone									<10	<10		<10	<10					
carbon disulfide									<10	<10		<5	<5					
t-1,4 dichloro-2-butene									<10	<10		ND	<5					
ethanol									<10,000	<10,000		ND	<600					
ethyl methacrylate									<10	<10		ND	<15					
2 hexanone									<10	<10		<10	<10					

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 11S County Cattaraugus

Parameter	Unit	std							3/5/90	6/5/90	9/11/90	12/13/90	3/18/91	6/21/91				
iodomethane	ug/l																	
4-methyl-2-pentanone									<10	<10		ND	<5					
styrene		.005							<10	<10		<10	<10					
1,2,3 trichloropropane		.005							<3	<3		<5	<5					
vinyl acetate									<3	<3		ND	<5					
tetrachloroethylene		.005							<10	<10		<10	<10					
1,2 dichlorobenzene									<3	<3		<5	<5					
1,3 dichlorobenzene		.005							<3	<3			<5					
1,4 dichlorobenzene									<3	<3			<5					
tot. xylenes		.005							<3	<3			<5					
dichlorodifluoromethane		.005							<3	<3		<5	<5					
dibromomethane		.005							<3	<3		ND	<10					
turbidity		50 g							<10	<10		ND	<5					
magnesium	mg/l									>100		>200	200+	200+				
TKN	mg/l											67 / 49						
1,2 dichloroethylene(tot)	ug/l											0.62	7.1					
												0.8	<5					

see also data in Hydrogeo Investigation Rpt. Oct. '87

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farnell Landfill Location Jasper

Exact Sampling Point 11D County Chautauqua

61.2nd Sample

Parameter	Unit	Standard	4/21/88	1/12/89	4/6/89	6/20/89	12/6/89	3/5/90	6/4/90	9/10/90	12/13/90	12/13/90	3/18/91	6/20/91	9/17/91
pH	S.U.	6.5-8.5	6.65	6.54	6.57	6.13	6.25	6.73	6.90	6.99	6.88		7.39	7.05	7.95
Spec. Conductance	umhos/cm		726	619	1025	1025	1150	1355	700	790	1100		1200	1135	1152
Temp	°C		11.0	9.0	9.5	22	6	7.6	11	15	9.0		8.0	14.0	11
TOC	mg/l		6.4	<1.0	20.7	67	3.1	10	1.5	3	1.4	<1.0	7.6	5.0	1.7
COD	mg/l		15.5	33.4	9.8	21	10	<10	5	31	18	17.3	15	21	4.8
Iron	mg/l	.3	<0.30 / <0.30	4.73 / <0.30	0.20 / <0.1	1.01 / 0.64	0.07 / 0.06	0.11 / <0.06	0.21 / 0.19	0.15 / 0.10	0.89 / <0.058	0.73 / 0.53	0.94 / <0.64	1.0 / <0.03	0.3 / <0.05
Manganese	mg/l	.3	0.16 / 0.14	0.20 / 0.19	0.10 / 0.14	0.73 / 0.57	0.10 / 0.01	0.11 / 0.09	0.16 / 0.16	0.09 / 0.08	0.17 / 0.099	0.12 / 0.11	0.35 / 0.48	0.14 / 0.12	0.38 / 0.36
Ammonia	mg/l		0.09	0.02	0.02	0.37	<0.5	<0.5	<0.5	<0.5	0.24	0.23	0.18	0.24	0.21
Sulfate	mg/l	250	5.9	8.4	9.0	18.0	7	9	<1	13	10.1	1.0	18	17	14
Total Alkalinity as CaCO3	mg/l		370	473	430	470	480	510	490	1500	543	544	538	520	498
Hardness	mg/l		600	500	480	470	500	530	470	550	595	566	559	532	746
Total/Sol. Aluminum	mg/l		<5.00 / <5.00	<5.00 / <5.00	<5.0 / <5.0	<5.0 / <5.0	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	0.57 / <0.005	0.37 / <0.005	0.12 / <0.005	0.47 / <0.005	<0.2 / <0.3
Antimony	mg/l		<0.020 / <0.20	<0.020 / <0.20	<0.020 / <0.020	<0.020 / <0.020	<0.01 / <0.01	<0.01 / <0.01	<0.003 / <0.003	<0.003 / <0.003	<0.01 / <0.01	<0.01 / <0.01	<0.003 / <0.003	<0.003 / <0.003	<0.003 / <0.003
Arsenic	mg/l	.025	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Beryllium	mg/l		<0.005 / <0.05	<0.005 / <0.05	<0.005 / <0.05	<0.005 / <0.001	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Cadmium	mg/l	.01	<0.04 / <0.04	<0.04 / <0.04	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Chromium	mg/l		<0.50 / <0.50	<0.50 / <0.50	<0.50 / <0.50	0.005 / <0.005	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	0.012 / <0.01	0.011 / <0.01	<0.01 / <0.01	<0.01 / <0.01	<0.01 / <0.01
Copper	mg/l	1.0	<0.20 / <0.20	<0.20 / <0.20	<0.20 / <0.20	<0.2 / <0.2	0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	<0.02 / <0.02	0.006 / <0.005	<0.005 / <0.005	0.011 / <0.005	0.02 / <0.005	<0.01 / <0.01
Lead	mg/l	.025	<1.00 / <1.00	<1.00 / <1.00	0.067 / 0.073	0.011 / 0.009	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	0.003 / <0.003	<0.003 / <0.003	0.004 / <0.003	0.012 / <0.003	<0.003 / <0.003
Mercury	mg/l	.002	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004
Nickel	mg/l		<0.30 / <0.30	<0.30 / <0.30	<0.30 / <0.30	<0.3 / <0.3	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	<0.03 / <0.03	<0.04 / <0.04	<0.04 / <0.04	<0.03 / <0.03	<0.02 / <0.02	0.06 / <0.04
Selenium	mg/l	.02	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ithaca

Exact Sampling Point 11D County Cattaraugus

Parameter	Unit	Standard	7/30/88	1/12/89	4/6/89	6/20/89	12/6/89	3/5/90	6/4/90	9/10/90	12/13/90	12/13/90	3/18/91	6/20/91	9/17/91
silver	mg/l	.05	<0.10 / <0.10	<0.10 / <0.10	<0.001 / <0.001	<0.001 / <0.001	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.006 / <0.006	<0.01 / <0.01
thallium	mg/l		<1.00 / <1.00	<1.00 / <1.00	<1.00 / <1.00	<0.005 / <0.005	<0.01 / <0.01	<0.01 / <0.01	<0.001 / <0.001	<0.003 / <0.003	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
zinc	mg/l	5	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.05 / <0.05	<0.005 / <0.005	<0.005 / <0.027	<0.005 / 0.009	<0.005 / <0.005			0.014 / <0.012	0.035 / 0.009	0.038 / 0.022
chloromethane	ug/l		<10	<10	<10	<10	<15	<15	<3	<30	<10	<20	<10	<10	<10
vinyl chloride			<10	<10	<10	<10	<15	<15	<3	<30	9	7	4	7	4.1
chloroethane			34	30	200	21	75	35	130	90	170	140	69	140	81
bromomethane			<10	<10	<10	<10	<15	<15	<3	<30	<10	<20	<10	<10	<10
chloroethyl vinyl ether			<10	<10	<10	<10	<15	<15	<3	<30	<10	<10	<10	<10	<10
methylene chloride			<5	<5	<5	<5	<15	<15	<3	<30	<5	<10	<5	<5	<5
trichlorofluoromethane			<5	<5	<5	<5	<15	<15	<3	<30	2	2	2	2	1.6
1,1-dichloroethylene			<5	<5	<5	<5	<15	<15	<3	<30	<5	<10	<5	<5	<5
1,1-dichloroethane	guidance 50		<5	<5	<5	<5	<15	<15	4	<30	4	4	2	2	2.5
trans-1,2-dichloroethylene			170	290	960	220	250	310	180	450	290	260	200	240	200
chloroform			<5	<5	<5	<5	<15	<15	<3	<30					23
1,2-dichloroethane			<5	<5	<5	<5	<15	<15	<3	30	0.5	0.4	<5	<5	<5
1,1,1-trichloroethane	guidance 50		<5	<5	<5	<5	<15	<15	<3	<30	2	<10	0.5	<5	1.1
carbon tetrachloride			110	72	300	170	100	120	43	95	110	93	55	76	68
bromodichloromethane			<5	<5	<5	<5	<15	<15	<3	<30	<5	<10	<5	<5	<5
1,2-dichloropropane			<5	<5	<5	<5	<15	<15	<3	<30	<5	<10	<5	<5	<5
trans-1,3-dichloropropene			<5	<5	<5	<5	<15	<15	<3	<30	1	0.9	<5	<5	0.54
cis-1,3-dichloropropene			<5	<5	<5	<5	<15	<15	<3	<30	<5	<10	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill   Location: Ischua

Exact Sampling Point: 11D   County: Cattaraugus

Parameter	Unit	standard	9/30/88	1/12/89	4/6/89	6/28/89		12/6/89	3/5/90	6/4/90	9/10/90	12/13/90	12/13/90	3/18/91	6/20/91	9/17/91
trichloroethylene	ug/l		130	48	85	43		70	50	60	46	66	58	26	43	39
benzene			<5	<5	<5	<5		<15	<15	<3	<30	2	2	1	0.7	0.9
cis-1,3-dichloropropene			<5	<5	<5	<5		<15	<15	<3	<30	<5	<10	<5	<5	<5
1,1,2-trichloroethane			<5	<5	<5	<5		<15	<15	<3	<30	<5	<10	<5	<5	<5
dibromochloromethane			<5	<5	<5	<5		<15	<15	<3	<30	<5	<10	<5	<5	<5
bromoform	↓		<5	<5	<5	<5		<15	<15	<3	<30	<5	<10	<5	<5	<5
groundwater elevation ft	ft above sea level		1489.38	1489.39	1491.68	1491.86		1489.61	1490.17	1489.81	1488.22	1489.92		1485.82	1488.17	1486.47
1,1,2,2 tetrachloroethylene	ug/l		<5	<5	<5	<5										
1,1,2,2 tetrachloroethane	ug/l		<5	<5	<5	<5		<15	<15	<3	<30	<5	<10	<5	<5	<5
toluene	ug/l		<5	<5	<5	<5		<15	<15	<3	<30	<5	<10	<5	<5	<5
trichlorofluoromethane	ug/l		<5	<5				<15	<15	<3	<30	4.7	4.5	<5	3	1.8
appearance				clear	clear	clear		clear	clear							
tetrachloroethylene								<15	<15	<3	<30	2	1	0.2	0.9	0.54
1,2 dichlorobenzene								<15	<15	<3	<30			<5	<5	<5
1,3 dichlorobenzene								<15	<15	<3	<30			<5	<5	<5
1,4 dichlorobenzene								<15	<15	<3	<30			<5	<5	<5
total xylenes								<15	<15	<3	<30	<5	<10	<5	<5	<5
dichlorodifluoromethane								<15	<15	<3	<100	det.	ND	<10	<10	<10
acetone								<50	<50	<10	<100	<10	<20	<5	<10	<10
acrolein								<500	<500	<100	<1000	<100	<100	<100	<100	<100
acrylonitrile								<500	<500	<100	<1000	<100	<100	<100	<100	<100

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farnell Landfill Location Tschua

Exact Sampling Point 111 County Chemung

Parameter	Unit	12/6/89	3/5/90	6/4/90	9/10/90	12/13/90	12/13/90	3/18/91	6/24/91	9/17/91
2-butanone	ug/l	<50	<50	<10	<100	<10	<20	<10	<10	
carbon disulfide		<50	<50	<10	<100	<5	<10	<5	<5	<5
1,4 dichloro 2-butene		<50	<50	<10	<100	ND	ND	trans <5	trans <5	<5
ethanol		<50,000	<10,000	<10,000	<100,000	det.	ND	<600	<600	<600
ethyl methacrylate		<50	<50	<10	<100	ND	ND	<5	<5	<5
2-hexanone		<50	<50	<10	<100	<10	<20	<10	<10	<10
iodomethane		<50	<50	<10	<100	ND	ND	<5	<5	<5
4-methyl-2-pentanone		<50	<50	<10	<100	<10	<20	<10	<10	<10
styrene		<15	<15	<3	<100	<5	<10	<5	<5	<5
1,2,3 trichloropropane		<15	<15	<3	<100	ND	ND	<5	<5	<5
vinyl acetate		<50	<50	<10	<100	<10	<20	<10	<10	<10
dibromomethane		<50	<50	<10	<100	ND	ND	<5	<5	<5
turbidity	NTU			10	7	21.4		25.5	25.0	8.2
magnesium	mg/l					15/44	46/43			
1,2 dichloroethylene (tot)						27	26	18	20	
TKN	mg/l					0.26	0.25	1.6	0.7	0.78
MEK										<10

See also data on Hydrogeological Investigation Rep. - Oct. 87

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farnell Landfill Location Ischua

Exact Sampling Point 13D (background) County Cattaraugus

Parameter	Unit	Standard	9/30/88	1/12/89	4/6/89	6/28/89	12/6/89	3/5/90	6/4/90	9/10/90	6/4/90	12/13/90	3/20/91	6/21/91	9/17/91
pH	S.U.	6.5-8.5	7.69	8.34	8.82	(6.19)	6.55	7.45	7.80	7.69		7.60	7.51	7.6	7.0
Spec. Conductance	umhos/cm		396	320	440	400	380	695	252	350		480	530	515	598
Temp	°C		14.0	8.0	10	21	6	6.5	11.5	17		8.0	8.0	14.0	10
TOC	mg/l		1.2	20.8	19.3	7.6	<1.0	<1.0	<5	1	<1	<1.0	1.5	1.8	1.3
COD	mg/l		12	33.4	9.8	12	<10	<10	<10	52	<10	12.3	<5.0	8.5	<5.0
Iron	mg/l	.3	<0.30 <0.30	0.83 <0.30	0.30 <0.1	0.3 <0.3	0.14 0.03	0.29 <0.03	0.07 <0.03	0.09 0.06	<0.03 <0.03	6.46 <0.03	1.38 <0.04	0.48 <0.04	0.21 <0.05
Manganese	mg/l	.3	<0.10 <0.10	<0.10 <0.10	<0.1 <0.1	<0.1 <0.1	0.03 <0.02	0.04 <0.02	0.02 0.02	<0.02 <0.02	<0.02 <0.02	0.02 0.01	0.02 0.006	0.061 0.012	0.014 0.023
Ammonia	mg/l		0.05	0.03	0.10	0.14	<0.5	<0.5	<0.05	<0.5	<0.5	0.17	0.1	0.28	0.18
Sulfate	mg/l	250	21.0	21.5	22	19.0	16	17	15	12	15	18.2	19	21	20
Total Alkalinity	mg/l		180	140	130	145	170	200	210	220	230	247	310	230	231
Total Hardness	mg/l		224	230	110	60	180	200	170	220	200	250	260	286	238
Total/Sol Aluminum	mg/l		<5.00 <5.00	<5.00 <5.00	<5.0 <5.0	<5.0 <5.0	<0.5 <0.5	0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	0.3 <0.05	0.26 <0.05	0.3 <0.05	<0.2 <0.2
Antimony	mg/l		<0.020 <0.020	<0.020 <0.020	<0.020 <0.020	<0.020 <0.020	<0.01 <0.01	<0.01 <0.01	<0.003 <0.003	<0.003 <0.003	<0.003 <0.003	<0.01 <0.01	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
Arsenic	mg/l	.025	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
Beryllium	mg/l		<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.001 <0.001	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
Cadmium	mg/l	.001	<0.04 <0.04	<0.01 <0.04	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
Chromium	mg/l		<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.005 <0.005	<0.03 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01
Copper	mg/l	1.0	<0.20 <0.20	<0.20 <0.20	<0.20 <0.20	<0.2 <0.2	<0.02 <0.02	<0.02 <0.02	<0.02 <0.02	<0.02 <0.02	<0.02 <0.02	0.005 <0.005	0.019 <0.005	0.02 0.01	0.014 <0.01
Lead	mg/l	.025	<1.00 <1.00	<1.00 <1.00	0.002 <0.005	0.011 <0.008	0.002 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	0.003 <0.003	0.009 <0.003	0.009 <0.003	<0.003 <0.003
Mercury	mg/l	.002	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004
Nickel	mg/l		<0.30 <0.30	<0.30 <0.30	<0.30 <0.30	<0.3 <0.3	<0.03 <0.03	<0.03 <0.03	<0.03 <0.03	<0.03 <0.03	<0.03 <0.04	<0.04 <0.03	<0.03 <0.02	<0.02 <0.02	<0.04 <0.04
Selenium	mg/l	.02	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 13D County Cattaraugus

Parameter	Unit	Standard	9/30/88	12/12/89	1/6/89	6/28/89	12/6/89	3/5/90	6/5/90	9/13/90	6/5/90	12/13/90	3/20/91	6/21/91	9/17/91
Silver	mg/l	.05	<0.10 <0.10	<0.10 <0.10	<0.001 <0.001	<0.001 <0.001	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.005 <0.005	<0.005 <0.005	0.03 <0.005	<0.01 <0.01
Thallium	mg/l		<1.00 <1.00	<1.00 <1.00	<1.00 <1.00	<0.005 <0.005	<0.01 <0.01	<0.01 <0.01	<0.001 <0.001	<0.003 <0.003	<0.001 <0.001	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
Zinc	mg/l	5	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	0.005 0.007	0.010 0.007	<0.005 0.009	<0.005 <0.005	0.014 0.016		0.27 0.077	0.016 <0.005	0.031 0.019
Chloromethane	ug/l		<10	<10	<10	<10	<3	<3	<3	<3	<3	<10	<10	<10	<10
Vinyl chloride			<10	<10	<10	<10	<3	<3	<3	8	<3	4	4	2	1.5
Chloroethane			<10	<10	<10	<10	<3	<3	<3	<3	<3	7	5	6	3.9
Bromomethane			<10	<10	<10	<10	<3	<3	<3	<3	<3	<10	<10	<10	<10
Chloroethyl vinyl ether			<10	<10	<10	<10	<3	<3	<3	<3	<3	<10	<10	<10	<10
Methyl benzene			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
Methylene chloride			<5	<5	<5	<5	<3	<3	<3	<3	<3	3	2	0.7	0.6
Chloro-benzene			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
1,1 Dichloro-ethylene			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
1,1 Dichloro ethane		guidance 50	<5	<5	<5	<5	5	7	<3	13	11	11	13	10	8.8
trans 1,2-Dichloroethylene			<5	<5	<5	<5	<3	<3	<3	<3	<3				26
Chloroform			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
1,2 Dichloro ethane			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<8	<5
1,1,1 Tri-chloroethane		guidance 50	<5	<5	<5	<5	6	<3	<3	5	<3	7	8	5	5.
Carbon tetra-chloride			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
Bromodi-chloromethane			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
1,2 Dichloro propane			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
trans-1,3 Dichloropro-pene			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farrell Landfill Location Dishman

Exact Sampling Point 13D County Cattaraugus

Parameter	Unit	Standard	9/30/88	1/12/89	4/6/89	6/28/89	12/6/89	3/5/90	6/5/90	9/10/90	6/5/90	12/13/90	3/20/91	6/26/91	9/17/91
trichloro ethylene	ug/l		<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
benzene			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
cis-1,3 dichloropropene			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
1,1,2 trichloroethane			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
dibromochloromethane			<5	<5	<5	<5	<3	9	<3	<3	<3	<5	<5	<5	<5
bromoform			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
							<3	<3	<3	<3	<3	<5	<5	<5	<5
gw elevation (MP)	ft above sea level		1487.78	1491.75	1492.00	1492.94	1490.35	1491.62	1491.25	1487.98		1490.85	1491.65	1483.65	1486.45
1,1,2,2 tetrachloroethylene	ug/l		<5	<5	<5	<5							<5		
1,1,2,2 tetrachloroethane			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5		<5	<5
toluene			<5	<5	<5	<5	<3	<3	<3	<3	<3	<5	<5	<5	<5
trichloro-fluoromethane			<5	<5			<3	<3	<3	<3	5	4.5	6	5	5.0
appearance				clear	clear	clear	clear	clear							
tetrachloro ethylene							<3	<3	<3	<3	<3	<5	<5	<5	<5
1,2 dichloro benzene							<3	<3	<3	<3	<3		<5	<5	<5
1,3 dichloro benzene							<3	<3	<3	<3	<3		<5	<5	<5
1,4 dichloro benzene							<3	<3	<3	<3	<3		<5	<5	<5
total xylenes							<3	<3	<3	<3	<3	<5	<5	<5	<5
dichlorodi-fluoromethane							<3	<3	<3	<10	<3	dt	<10	<10	<10
acetone							<10	<10	<10	<10		<10	<10	<10	<10
acrolein							<100	<100	<100	<100		<100	<100	<100	<100
acrylo-nitrile							<100	<100	<100	<100	<100	<100	<100	<100	<100

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dschua

Exact Sampling Point 131D County Cattaraugus

Parameter	Unit	12/6/89	3/5/90	6/4/90	9/10/90	12/5/90	12/13/90	3/20/91	6/21/91	9/17/91
2 butanone		<10	<10	<10	<10	<10	<10	<10	<10	
carbon disulfide		<10	<10	<10	<10	<10	<5	<5	<5	<5
1,4 dichloro-2-butene		<10	<10	<10	<10	<10	ND	trans <5	trans <5	<5
ethanol		<10,000	<10,000	<10,000	<10,000	<10,000	ND	<600	<600	<600
ethyl methacrylate		<10	<10	<10	<10	<10	ND	<5	<5	<5
2 hexanone		<10	<10	<10	<10	<10	<10	<10	<10	<10
iodomethane		<10	<10	<10	<10	<10	ND	<5	<5	<5
4-methyl-2-pentanone		<10	<10	<10	<10	<10	<10	<10	<10	<10
styrene		<3	<3	<3	<10	<3	<5	<5	<5	<5
1,2,3 trichloropropane		<3	<3	<3	<10	<3	ND	<5	<5	<5
Vinylacetate		<10	<10	<10	<10	<10	<10	<10	<10	<10
dibromomethane		<10	<10	<10	<10	<10	ND	<5	<5	<5
turbidity	NTU						15.2	7.10	1.7	22.5
magnesium	mg/l						20/18			
1,2 dichloroethylene (1,2)	ug/l						3	3	2	
TKN	mg/l						0.16	<0.1	0.34	0.67
MEK										<10

note: stds based on Sept 25, 1990 Div of Water, TOG
- gc guidance value per above

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dalton

Exact Sampling Point 145 County Cattaraugus

Parameter	Unit	std	3/19/91	6/21/91	9/17/91
pH	SU	6.5-8.5	6.79	6.65	7.4
specific conductance	umhos/cm		1400	1325	1283
temp	°C		7.0	11.0	10
TOC	mg/l		40	6.0	5.5
COD	mg/l		5.5	67	22
iron	mg/l	.3	151 / <0.04	203 / <0.04	60 / 0.054
manganese	mg/l	.3	16 / 0.7	28 / 0.34	8.5 / 0.38
ammonia	mg/l	2	0.39	0.22	0.34
sulfate	mg/l	250	18	19	31
tot alkalinity	mg/l		600	564	598
tot hardness	mg/l		780	802	662
aluminum	mg/l		76 / <0.05	107 / <0.05	31 / <0.05
antimony	mg/l	.0394	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
arsenic	mg/l	.025	0.034 / <0.005	0.091 / <0.005	0.021 / <0.005
beryllium	mg/l	.0394	<0.005 / <0.005	0.003 / <0.005	<0.005 / <0.005
cadmium	mg/l	.01	0.064 / <0.005	<0.005 / <0.005	0.009 / <0.005
chromium	mg/l	.05	0.1 / <0.01	0.15 / <0.01	0.041 / <0.01
copper	mg/l	.2	0.22 / <0.005	0.28 / <0.005	0.1 / <0.01
lead	mg/l	.0125	0.19 / <0.003	0.28 / <0.003	0.074 / <0.003
mercury	mg/l	.0002	0.001 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004
nickel	mg/l		0.32 / <0.03	0.43 / <0.02	0.18 / <0.02
selenium	mg/l	.010	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farnell Landfill Location Ischua

Exact Sampling Point 14S County Cattaraugus

Parameter	Unit	Std mg/l	3/19/91	6/21/91	9/17/91
silver	mg/l	.05	0.009 <0.005	<0.005 <0.005	0.059 <0.01
thallium	mg/l	.0013	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
zinc	mg/l		0.49 <0.01	0.16 <0.005	0.25 <0.01
chloromethane	ug/l		<10	<10	<10
vinyl chloride		.002	3	2	1.5
chloroethane		.005	78	140	62
bromo methane		.005	<10	<10	<10
2 chloroethyl vinyl ether			<10	<10	<10
ethyl benzene		.005	<5	<5	<5
methylene chloride		.005	<5	0.9	0.7
chloro-benzene		.005	<5	<5	<5
1,1 dichloro-ethylene		.005	0.6	<5	<5
1,1 dichloro-ethane		.005	120	190	98
trans-1,2-dichloroethylene		.005			5.7
chloroform		.1	<5	<5	<5
1,2 dichloro ethane		.005	0.3	<5	<5
1,1,1 tri-chloroethane		.005	43	30	17
carbon tetra-chloride		.005	<5	<5	<5
bromodi-chloromethane		.059	<5	<5	<5
1,2 dichloro propane		.005	<5	<5	<5
trans-1,3 dichloro-propene	↓	.005	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dix

Exact Sampling Point 145 County Cattaraugus

Parameter	Unit	Std	3/19/91	6/4/91	9/17/91
trichloro-ethylene	ug/l	.005	7	9	5.8
benzene		ND	1	1	1.0
cis-1,3 di-chloropropene		.005	<5	<5	<5
1,1,2 trichloro-ethane		.005	<5	<5	<5
dibromochloro-methane		.05	<5	<5	<5
bromoform		.05	<5	<5	<5
gw el.			1491.22	1488.02	1486.72
appearance					
1,1,2,2-tetra-chloroethylene	ug/l				
1,1,2,2 tetra-chloroethane		.005	<5	<5	<5
toluene		.005	<5	<5	<5
trichloro-fluoromethane		.005	6	4	1.4
acetone			<10	<10	<10
acrolein		.005	<100	<100	<100
acrylo-nitrile		.005	<100	<100	<100
2 butanone			<10	<10	
carbon disulfide			<5	<5	<5
trans-1,4-dichloro-2-butene			<5	<5	<5
ethanol			<600	<600	<600
ethyl methacrylate			<5	<5	<5
2hexanone			<10	<10	<10

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dix

Exact Sampling Point 145 County Chemung

	Unit	Std	3/19/81	6/21/81	9/17/81
iodomethane	ug/l		<5	<5	<5
4 methyl-2 pentanone			<10	<10	<10
styrene		.005	<5	<5	<5
1,2,3 trichloro propane		.005	<5	<5	<5
vinyl acetate		1	<10	<10	<10
tetrachloro-ethylene		.005	0.3	<5	<5
1,2 dichloro benzene			<5	<5	<5
1,3 dichloro benzene		.005	<5	<5	<5
1,4 dichloro benzene			<5	<5	<5
tri xylenes		.005	<5	<5	<5
dichlorodi-fluoromethane		.005	<10	<10	<10
dibromo methane		.005	<5	<5	<5
turbidity	NTU	50	200	200	7200
1,2 dichloro ethene (tot)			6	7	
TKN	mg/l		1.3	49	0.29
MEK					<10

note: stds based on Sept 25, 1990 Div of Water, TOG
gc guidance value per chart above

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill Location: Dsehua

Exact Sampling Point: 145 County: Cattaraugus

Parameter	Unit	std	3/1/90	3/19/91	6/19/91	9/19/91
pH	SU	6.5-8.5	7.1	6.71	6.51	7.3
spec. conductance	umhos/cm		1415	1200	1524	1275
temp	°C		8	7.0	11.0	10
TOC	mg/l		4.7	1.9	2.3	4.3
COD	mg/l		6.0	14	27	43
iron	mg/l	.3	60 / 0.04	99 / 0.42	60 / 0.041	65 / <0.03
manganese	mg/l	.3	2.2 / <0.74	3.2 / 0.39	3.1 / 0.67	3.4 / <0.91
ammonia	mg/l	2	0.25	0.48	0.28	0.31
sulfate	mg/l	250	31	34	23	38
tot. alkalinity	mg/l		490	557	585	670
tot. hardness	mg/l		980	1560	1440	971
aluminum	mg/l		2.2 / 0.18	42 / <0.05	24 / <0.05	28 / <0.05
antimony	mg/l	.039	<0.01 / <0.01	<0.005 / <0.005	<0.005 / <0.005	0.007 / <0.005
arsenic	mg/l	.025	<0.005 / <0.005	0.019 / <0.005	0.009 / <0.005	0.017 / <0.005
beryllium	mg/l	.039	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
cadmium	mg/l	.01	0.008 / <0.005	0.043 / <0.005	<0.005 / 0.008	0.008 / <0.005
chromium	mg/l	.05	<0.01 / <0.01	0.055 / <0.01	0.04 / <0.005	0.034 / <0.01
copper	mg/l	.2	0.039 / <0.01	0.24 / <0.005	0.13 / 0.007	0.16 / <0.01
lead	mg/l	.025	<0.005 / <0.005	0.23 / <0.003	0.089 / <0.003	0.19 / <0.003
mercury	mg/l	.002	<0.0004 / <0.0004	<0.0004 / <0.0004	0.0005 / <0.0004	<0.0004 / <0.0004
nickel	mg/l		<0.04 / <0.04	0.19 / <0.03	0.084 / <0.02	0.1 / <0.02
selenium	mg/l	.010	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farnell Landfill Location Ischua

Exact Sampling Point 1-I County Cattaraugus

Parameter	Unit	Std mg/l	3/1/90	3/19/91	6/19/91	9/16/91
silver	mg/l	.05	<0.005 / <0.005	0.007 / <0.005	<0.006 / <0.006	<0.01 / <0.01
thallium	mg/l	.0013	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
zinc	mg/l		0.062 / 0.10	0.5 / <0.01	0.31 / <0.005	0.35 / <0.01
chloromethane	ug/l		<10	<10	<10	<10
vinyl chloride		.002	<5	3	4	1.4
chloroethane		.005	27	28	100	77
bromomethane		.005	<10	<10	<10	<10
2 chloroethyl vinyl ether			<10	<10	<10	<10
ethyl benzene		.005	<7.2	<5	<5	<5
methylene chloride		.005	<2.8	<5	1	0.7
chloro-benzene		.005	<6.0	<5	<5	<5
1,1 dichloro-ethylene		.005	<2.8	0.7	1	<5
1,1 dichloro-ethane		.005	71	59	120	110
trans-1,2-dichloroethylene		.005	7.2			5.6
chloroform		.1	<1.6	<5	<5	<5
1,2 dichloro ethane		.005	<2.8	<5	<5	<5
1,1,1 tri-chloroethane		.005	63	49	45	16
carbon tetra-chloride		.005	<2.8	<5	<5	<5
bromodi-chloromethane		.059	<2.2	<5	<5	<5
1,2 dichloro propane		.005	<6.0	<5	<5	<5
trans-1,3 dichloro-propene	↓	.005	<5.0	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Jasper

Exact Sampling Point 14J County Cattaraugus

Parameter	Unit	Std	3/1/90	3/19/91	6/19/91	9/19/91
trichloroethylene	ug/l	.005	9.4	6	9	7.0
benzene		ND	<4.4	0.5	1	1.7
cis-1,3 dichloropropene		.005	<5.0	<5	<5	<5
1,1,2 trichloroethane		.005	<5.0	<5	<5	<5
dibromochloromethane		.05	<3.1	<5	<5	<5
bromoform		.05	<4.7	<5	<5	<5
gw el.			1492.09	1492.49	1488.29	1486.59
appearance						
1,1,2,2-tetrachloroethylene	ug/l					
1,1,2,2 tetrachloroethane		.005	<6.9	<5	<5	<5
toluene		.005	<6.0	<5	<5	<5
trichlorofluoromethane		.005		9	5	1.3
acetone				<10	<10	<10
acrolein		.005	<400	<100	<100	<100
acrylonitrile		.005	<400	<100	<100	<100
2 butanone				<10	<10	
carbon disulfide				<5	<5	<5
trans-1,2 dichloro 2-butene				<5	<5	<5
ethanol				<600	<600	<600
ethyl methacrylate				<5	<5	<5
2hexanone				<10	<10	<10

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 14I County Cattaraugus

	Unit	std	3/1/90	3/19/91	6/19/91	9/19/91
iodomethane	ug/l			<5	<5	<5
4 methyl-2-pentanone				<10	<10	<10
styrene		.005		<5	<5	<5
1,2,3 trichloro propane		.005		<5	<5	<5
vinyl acetate				<10	<10	<10
tetrachloro-ethylene		.005	<4.1	<5	<5	<5
1,2 dichloro benzene			<2.2	<5	<5	<5
1,3 dichloro benzene		.005	<2.1	<5	<5	<5
1,4 dichloro benzene			<2.5	<5	<5	<5
total xylenes		.005		<5	<5	<5
dichlorodi-fluoromethane		.005		<10	<10	<10
1,2 dibromo methane		.005		<5	<5	<5
turbidity	NTU	5	7100	200+	200+	7200
1,2 dichloro ethylene (total)				6	8	
TKN	mg/l			1.4	1.5	2.1
MEK					~~<10~~	<10

note: stds based on Sept 25, 1990 Div of Water, TOG
c = gc guidance value per above

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 155 County Cattaraugus

Parameter	Unit	Std		9/16/90	3/19/91	6/19/91	6/19/91	9/18/91	9/18/91
							blind dup		blind dup
pH	SU	6.5-8.5		8.24	7.84	7.50		7.5	
specific conductance	umhos/cm			250	360	371		345	
temp	°C			16	8.0	10.0		10	
TOC	mg/l				2.7	2.7	<1.0	<1.0	<1.0
COD	mg/l				17	26	27	13	21
iron	mg/l	.3			(47) 0.04	88 <0.03	83 <0.03	(14) 0.15	(42) 0.08
manganese	mg/l	.3			(2.9) 0.14	(5.4) 0.1	(5.3) 0.1	(0.4) 0.14	(3.5) 0.11
ammonia	mg/l	2			0.24	0.31	0.3	0.16	0.15
sulfate	mg/l	250			10	8.0	8.0	86	84
tot alkalinity	mg/l				172	143	141	212	210
tot hardness	mg/l				380	449	496	386	390
aluminum	mg/l				(22) <0.05	(37) <0.05	(35) <0.05	(0.8) <0.2	(23) <0.2
antimony	mg/l	.0399			<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
arsenic	mg/l	.025			0.009 <0.005	0.007 <0.005	0.021 <0.005	<0.005 <0.005	0.008 <0.005
beryllium	mg/l	.0039			<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
cadmium	mg/l	.01			0.012 <0.005	<0.005 <0.005	<0.005 <0.005	0.01 <0.006	0.012 <0.005
chromium	mg/l	.05			0.033 <0.01	0.061 <0.005	0.054 <0.005	<0.01 <0.01	0.032 <0.01
copper	mg/l	.2			0.14 <0.005	0.26 0.01	0.24 <0.005	<0.01 <0.01	0.14 <0.01
lead	mg/l	.025			(0.084) <0.003	0.18 <0.003	0.16 <0.003	<0.003 <0.003	0.076 <0.003
mercury	mg/l	.0002			0.0007 <0.0004	<0.0004 <0.0004	0.0008 <0.0004	<0.0004 <0.0004	<0.0004 <0.0004
nickel	mg/l				0.076 <0.05	0.13 <0.02	0.14 <0.02	<0.04 <0.04	0.06 <0.04
selenium	mg/l	.010			<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farnell Landfill Location: Ischua

Exact Sampling Point: 155 County: Cattaraugus

Parameter	Unit	Std mg/l		9/12/90	3/19/91	4/19/91	6/19/91	9/18/91	9/18/91
silver	mg/l	.05			<0.005 <0.005	<0.006 <0.006	0.006 <0.006	<0.01 <0.01	<0.01 <0.01
thallium	mg/l	.0019			<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
zinc	mg/l	/			0.25 <0.01	0.51 0.016	0.46 <0.005	0.017 0.021	0.33 <0.01
chloromethane	ug/l			<3	<10	<10	<10	<10	
vinyl chloride		.002		<3	<10	<10	<10	<10	
chloroethane		.005		<3	11	4	4	<10	
bromomethane		.005		<3	<10	<10	<10	<10	
2 chloroethyl vinyl ether				<3	<10	<10	<10	<10	
ethyl benzene		.005		<3	<5	<5	<5	<5	
methylene chloride		.005		<3	<5	<5	<5	<5	
chloro-benzene		.005		<3	<5	<5	<5	<5	
1,1 dichloro-ethylene		.005		<3	<5	<5	<5	<5	
1,1 dichloro-ethane		.005		5	28	10	10	1.0	
trans-1,2-dichloroethylene		.005		<3				<5	
chloroform		.1		<3	<5	<5	<5	<5	
1,2 dichloro ethane		.005		<3	<5	<5	<5	<5	
1,1,1 tri-chloroethane		.005		<3	1	<5	<5	<5	
carbon tetra-chloride		.005		<3	<5	<5	<5	<5	
bromodi-chloromethane		.059		<3	<5	<5	<5	<5	
1,2 dichloro propane		.005		<3	<5	<5	<5	<5	
trans-1,3 dichloro-propene		.005		<3	<5	<5	<5	<5	

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farrell Landfill Location Bath

Exact Sampling Point 155 County Cattaraugus

Parameter	Unit	Std mg/l		9/12/90	3/19/91	6/19/91	6/19/91	9/18/91	9/18/91	
trichloro-ethylene	ug/l	.005		<3	<5	<5	<5	<5		
benzene		ND		<3	<5	<5	<5	<5		
cis-1,3 di-chloropropene		.005		<3	<5	<5	<5	<5	same	
1,1,2 trichloro-ethane		.005		<3	<5	<5	<5	<5		
dibromochloro-methane		.05		<3	<5	<5	<5	<5		
bromoform		.05		<3	<5	<5	<5	<5		
gw el.				1487.90	1489.43	1487.23		1486.43		
appearance										
1,1,2,2-tetra-chloroethylene	ug/l									
1,1,2,2 tetra-chloroethane		.005		<3	<5	<5	<5	<5		
toluene		.005		<3	<5	<5	<5	<5		
trichloro-fluoromethane		.005		<3	<5	<5	<5	<5		
acetone				<10	<10	<10	<10	<10		
acrolein		.005		<100	<100	<100	<100	<100		
acrylo-nitrile		.005		<100	<100	<100	<100	<100	same	
2 butanone				<10	<10	<10	<10			
carbon disulfide				<10	<5	<5	<5	<5		
trans-1,4 dichloro-2-butene				<10	trans <5	trans <5	trans <5	<5		
ethanol				<10,000	<600	<600	<600	<600		
ethyl methacrylate				<10	<5	<5	<5	<5		
2hexanone				<10	<10	<10	<10	<10		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Jewell Landfill Location Dsehna

Exact Sampling Point 155 County Cattaraugus

	Unit	std		9/12/90	3/19/91	6/19/91	6/19/91	9/18/91	9/18/91
iodomethane	ug/l			<10	<5	<5	<5	<5	
4 methyl-2 pentanone				<10	<10	<10	<10	<10	
styrene		.005		<10	<5	<5	<5	<5	
1,2,3 trichloro propane		.005		<10	<5	<5	<5	<5	
vinyl acetate		1		<10	<10	<10	<10	<10	
tetrachloro-ethylene		.005		<3	<5	<5	<5	<5	
1,2 dichloro benzene				<3	<5	<5	<5	<5	
1,3 dichloro benzene		.005		<3	<5	<5	<5	<5	
1,4 dichloro benzene				<3	<5	<5	<5	<5	
tb xylenes		.005		<3	<5	<5	<5	<5	
dichlorodi-fluoromethane		.005		<10	<10	<10	<10	<10	
dibromo methane		.005		<10	<5	<5	<5	<5	
turbidity	NTU	52 g		7100	200+	200+		7200	
1,2 dichloro ethylene (tot)					1	<5	0.5		
TKN	mg/l				1.2	1.2	1.4	1.2	1.2
MEK								<10	

styrene

note: stds based on Sept 25, 1990 Div of Water TOG
guidance value per above

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 15I County Cattaraugus

Parameter	Unit	std	3/1/90	9/12/90	3/12/91	6/21/91	9/18/91
pH	SU	6.5 8.5	7.9	8.09	7.70	7.15	7.1
specific conductance	umhos/cm		650	265	580	595	465
temp	°C		9	14	7.0	11.0	10
TOC	mg/l		1.9		2.2	<1.0	1.7
COD	mg/l		<5		11	<5.0	<5.0
iron	mg/l	.3	0.010 / <0.03		0.81 / 0.04	0.492 / 0.04	0.14 / <0.05
manganese	mg/l	.3	0.079 / 0.074		0.15 / 0.11	0.12 / 0.1	0.069 / 0.078
ammonia	mg/l	2	<0.1		0.26	0.25	0.14
sulfate	mg/l	250	11		2.2	13	7.4
tot. alkalinity	mg/l		140		176	119	138
tot. hardness	mg/l		200		132	197	164
aluminum	mg/l		0.19 / 0.10		0.37 / <0.05	0.11 / <0.05	<0.2 / <0.2
antimony	mg/l	.0337	<0.01 / <0.01		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
arsenic	mg/l	.025	0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
beryllium	mg/l	.0039	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
cadmium	mg/l	.01	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
chromium	mg/l	.05	0.012 / <0.01		<0.01 / <0.01	<0.01 / <0.01	<0.01 / <0.01
copper	mg/l	.2	<0.01 / 0.018		0.014 / 0.006	0.007 / <0.005	0.014 / <0.01
lead	mg/l	.025	0.017 / <0.005		0.011 / <0.003	0.008 / 0.003	<0.003 / <0.003
mercury	mg/l	.002	<0.0004 / <0.0004		<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004
nickel	mg/l		<0.04 / <0.04		<0.03 / <0.03	<0.02 / <0.02	<0.04 / <0.04
selenium	mg/l	.010	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Lowell Landfill Location Ischua

Exact Sampling Point 15J County Cattaraugus

meter	Unit	std mg/l	3/1/90	9/12/90	3/19/91	6/21/91	9/18/91
silver	mg/l	.05	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005	<0.01 / <0.01
thallium	mg/l	.0017	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
zinc	mg/l		0.005 / 0.044		0.026 / 0.01	0.033 / <0.005	0.033 / 0.013
chloromethane	ug/l		<10	<3	<10	<10	<10
vinyl chloride		.002	<5	<3	<10	<10	1.0
chloroethane		.005	92	26	<10	3	32
bromo methane		.005	<10	<3	<10	<10	<10
2 chloroethyl vinyl ether			<10	<3	<10	<10	<10
ethyl benzene		.005	<7.2	<3	<5	<5	<5
methylene chloride		.005	<2.8	<3	<5	<5	0.8
chloro benzene		.005	<6.0	<3	<5	<5	<5
1,1 dichloro ethylene		.005	3.0	<3	<5	<5	1.2
1 dichloro ethane		.005	320	34	410	12	130
trans-1,2 dichloroethylene		.005	35	<3			16
chloroform		.1	<1.6	<3	<5	<5	<5
1,2 dichloro ethane		.005	<2.8	<3	<5	<5	<5
1,1,1 tri chloroethane		.005	98	5	1	<5	30
carbon tetra chloride		.005	11	<3	<5	<5	<5
bromodi chloromethane		.059	<2.2	<3	<5	<5	<5
1,2 dichloro propane		.005	<6.0	<3	<5	<5	<5
trans-1,3 dichloro propene	↓	.005	<5.0	<3	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farrell Landfill Location Ischua

Exact Sampling Point 15I County Cattaraugus

Parameter	Unit	Std	3/1/90	9/12/90	3/19/91	6/24/91	9/16/91
trichloroethylene	ug/l	.005	16	<3	<5	<5	<5
benzene		ND	<4.4	<3	<5	<5	1.3
cis-1,3 dichloropropene		.05	<5.0	<3	<5	<5	<5
1,1,2 trichloroethane		.005	<5.0	<3	<5	<5	6.9
dibromochloromethane		.05	<3.1	<3	<5	<5	<5
bromoform		.05	<4.7	<3	<5	<5	<5
gw el.			1490.28	1488.05	1489.60	1486.90	1486.3
appearance							
1,1,2,2-tetrachloroethylene	ug/l						
1,1,2,2 tetrachloroethane		.05	<6.9	<3	<5	<5	<5
toluene		.005	<6.0	<3	0.3	<5	<5
trichlorofluoromethane		.005		<3	<5	<5	2.4
acetone				<10	<10	<10	<10
acrolein		.005	<400	<100	<100	<100	<100
acrylonitrile		.05	<400	<100	<100	<100	<100
2 butanone				<10	<10	<10	
carbon disulfide				<10	<5	<5	<5
trans-1,4 dichloro-2-butene				<10	<5	trans <5	<5
ethanol				<10,000	<600	<600	<600
ethyl methacrylate				<10	<10	<5	<5
2 hexanone				<10	<10	<10	<10

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill   Location: Ischua

Exact Sampling Point: 15 I   County: Cattaraugus

	Unit	std	3/1/90	9/12/90	3/19/91	6/21/91	9/15/95
iodomethane	ug/l			<10	<5	<5	<5
4 methyl-2-pentanone				<10	<10	<10	<10
styrene		.005		<10	<5	<5	<5
1,2,3 trichloro propane		.005		<10	<5	<5	<5
vinyl acetate				<10	<10	<10	<10
tetrachloro-ethylene		.005	<4.1	<3	<5	<5	<5
1,2 dichloro benzene			<2.2	<3	<5	<5	<5
1,3 dichloro benzene		.005	<2.1	<3	<5	<5	<5
1,4 dichloro benzene			<2.5	<3	<5	<5	<5
xylenes		.005		<3	<5	<5	<5
dichlorodi-fluoromethane		.005		<10		<10	<5
dibromo methane		.005		<10	<5	<5	<5
turbidity	NTU	50g	13	6.5	38.9	1.30	0.95
1,2 dichloro ethylene (tot)					<5	<5	
TKN	mg/l				0.42	0.28	0.42
MEK	ug/l						<10

note: stds based on Sept 25, 1990 Div of Water TOG
g = guidance value per above

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 16S County Cattaraugus

Date / Parameter	Unit	std		9/12/90	3/19/91	6/19/91	9/18/91
pH	SU	6.5-8.5		7.87	7.70	7.52	8.1
specific conductance	umhos/cm			305	380	575	490
temp	°C			16	8.0	10.0	10
TOC	mg/l				<1.0	1.3	<1.0
COD	mg/l				6.2	5.2	30
iron	mg/l	.3			(4.0) / <0.04	3.4 / <0.03	(19) / <0.05
manganese	mg/l	.3			0.22 / 0.12	0.14 / 0.058	(1.1) / 0.16
ammonia	mg/l	2			0.3[illegible]	0.27	0.15
sulfate	mg/l	250			14	17	87
tot. alkalinity	mg/l				217	180	194
tot. hardness	mg/l				220	294	295
aluminum	mg/l				2.2 / <0.05	1.7 / <0.05	9.5 / <0.2
antimony	mg/l	.039			<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
arsenic	mg/l	.025			<0.005 / <0.005	<0.005 / <0.005	0.013 / <0.005
beryllium	mg/l	.039			<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
cadmium	mg/l	.01			0.007 / <0.005	0.005 / <0.005	0.006 / <0.005
chromium	mg/l	.05			<0.01 / <0.01	<0.005 / <0.005	0.011 / <0.01
copper	mg/l	.2			0.023 / <0.005	0.009 / 0.006	0.034 / <0.01
lead	mg/l	.025			(0.0[illegible]) / <0.003	0.01 / <0.003	(0.0[illegible]) / <0.003
mercury	mg/l	.002			<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004
nickel	mg/l				<0.03 / <0.03	<0.02 / <0.02	0.06 / <0.04
selenium	mg/l	.010			<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill Location: Dschua

Exact Sampling Point: 16S County: Cattaraugus

Parameter	Unit	Std mg/l		9/12/90	3/19/91	6/19/91	9/16/91
silver	mg/l	.05			<0.005 / <0.005	<0.006 / <0.006	<0.01 / <0.01
thallium	mg/l	.0019			<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
zinc	mg/l	/			0.04 / <0.01	0.024 / <0.005	0.17 / 0.026
chloromethane	ug/l			30	<10	<10	<10
vinyl chloride		.002		<30	<10	2	1.2
chloroethane		.005		<30	36	47	34
bromomethane		.005		<30	<10	<10	<10
2-chloroethyl vinyl ether				<30	<10	<10	<10
ethyl benzene		.005		<30	<5	<5	<5
methylene chloride		.005		<30	<5	1	0.8
chloro-benzene		.005		<30	<5	<5	<5
1,1 dichloro-ethylene		.005		<30	3	3	2.8
1,1 dichloro-ethane		.005		370	230	260	180
trans-1,2-dichloroethylene		.005		<30			36
chloroform		.1		<30	<5	<5	<5
1,2 dichloro ethane		.005		<30	2	<5	1.3
1,1,1 tri-chloroethane		.005		80	90	73	66
carbon tetra-chloride		.005		<30	<5	<5	<5
bromo di-chloromethane		.059		<30	<5	<5	<5
1,2 dichloro propane		.005		<30	<5	<5	<5
trans-1,3 dichloro-propene	↓	.005		<30	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farrell Landfill Location Jasper

Exact Sampling Point 16S County Cattaraugus

Parameter	Unit	Std mg/l	9/12/90	3/ /91	6/19/91	9/18/91
trichloroethylene	ug/l	.005	<30	10	8	7.2
benzene		ND	<30	1	1	1.5
cis-1,3 dichloropropene		.005	<30	<5	<5	<5
1,1,2 trichloroethane		.005	<30	<5	<5	<5
dibromochloromethane		.059	<30	<5	<5	<5
bromoform	↓	.05	<30	<5	<5	<5
gw el.			1492.59	1489.55	1488.75	1488.35
appearance						
1,1,2,2-tetrachloroethylene	ug/l					
1,1,2,2 tetrachloroethane		.005	<30	<5	<5	<5
toluene		.005	<30	<5	<5	<5
trichlorofluoromethane		.005	<30	<5	2	1.8
acetone			<100	<10	<10	<10
acrolein		.005	<1000	<100	<100	<100
acrylonitrile		.005	<1000	<100	<100	<100
2 butanone			<100	<10	<10	
carbon disulfide			<100	<5	<5	<5
trans 1,2 dichloro 2-butene			<100	<5	trans <5	<5
ethanol			<10,000	<600	<600	<600
ethyl methacrylate			<100	<5	<5	<5
2 hexanone	↓		<100	<10	<10	<10

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dix

Exact Sampling Point 16-S County Chemung

	Unit	Std		9/12/90	3/19/91	6/19/91	9/18/91
iodomethane	ug/l			<100	<5	<5	<5
4 methyl-2 pentanone				<100	<10	<10	<10
styrene		.005		<100	<5	<5	<5
1,1,2,2 tetrachloro ethane		.005		<100	<5	<5	<5
vinyl acetate		1		<100	<10	<10	<10
tetrachloro-ethylene		.005		<30	<5	<5	<5
1,2 dichloro benzene				<30	<5	<5	<5
1,3 dichloro benzene		.005		<30	<5	<5	<5
1,4 dichloro benzene				<30	<5	<5	<5
xylenes		.005		<30	<5	<5	<5
dichlorodi-fluoromethane		.005		<100	<10	<10	<10
dibromo methane		.005		<100	<5	<5	<5
turbidity	NTU	5.0		23	200+	200+	>200
1,2 dichloro ethylene (rl)					36	36	
TKN	mg/l				0.4	1.3	2.5
MEK	ug/l						<10

note: stds based on Sept 25, 1990 Div of Water TOG
GC guidance value per memo

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dsalma

Exact Sampling Point 16J County Cattaraugus

Parameter	Unit	std	3/1/90	9/12/90	3/14/91	6/21/11	7/18/91
pH	SU	6.5-8.5	7.8	7.79	7.74	7.30	7.5
specific conductance	umhos/cm		350	185	260	295	299
temp	°C		8.0	14	8.0	10.0	10
TOC	mg/l		<1		<1.0	<1.0	<1.0
COD	mg/l		<5		6.2	<5.0	<5.0
iron	mg/l	.3	1.3 / 0.040		0.53 / <0.04	0.82 / <0.04	0.46 / .06
manganese	mg/l	.3	0.20 / 0.15		0.21 / 0.2	0.28 / 0.25	0.23 / 0.18
ammonia	mg/l	2	<0.1		0.28	0.21	0.14
sulfate	mg/l	250	21		2.0	7.4	3.0
calc alkalinity	mg/l		120		155	110	118
calc hardness	mg/l		120		98	157	102
aluminum	mg/l		0.86 / 0.23		0.13 / <0.05	0.3 / <0.05	0.21 / <0.2
antimony	mg/l	.003	<0.01 / <0.01		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
arsenic	mg/l	.025	0.0091 / <0.005		0.012 / <0.005	0.007 / <0.005	0.02 / 0.014
beryllium	mg/l	.003	<0.005 / <0.005		<0.005 / <0.005	0.005 / <0.005	<0.005 / <0.005
cadmium	mg/l	.01	<0.005 / <0.005		0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
chromium	mg/l	.05	<0.01 / <0.01		<0.01 / <0.01	<0.01 / <0.01	<0.01 / <0.01
copper	mg/l	.2	0.010 / <0.01		0.008 / <0.005	0.008 / <0.005	<0.01 / <0.01
lead	mg/l	.025	<0.005 / <0.005		0.008 / <0.003	0.006 / <0.003	<0.003 / <0.003
mercury	mg/l	.002	<0.0004 / <0.0004		<0.0004 / <0.0004	<0.0004 / <0.0004	<0.0004 / <0.0004
nickel	mg/l		<0.04 / <0.04		<0.03 / <0.03	<0.02 / <0.02	<0.04 / <0.04
selenium	mg/l	.010	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Jasper

Exact Sampling Point 16 J County Cattaraugus

Parameter	Unit	Std mg/l	3/1/90	9/12/90	3/14/91	6/21/91	9/18/91
Silver	mg/l	.05	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005	<0.01 / <0.01
Thallium	mg/l	.0019	<0.005 / <0.005		<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
Zinc	mg/l	/	0.062 / 0.027		0.02 / <0.01	0.019 / <0.005	0.05 / <0.01
Dichloromethane	ug/l		<10	<3	<10	<10	<10
Vinyl chloride		.002	<5	<3	<10	<10	<10
Chloroethane		.005	<10	<3	<10	<10	<10
Bromomethane		.005	<10	<3	<10	<10	<10
2-chloroethyl vinyl ether			<10	<3	<10	<10	<10	<10
Ethylbenzene		.005	<7.2	<3	<5	<5	<5
Methylene chloride		.005	<2.8	<3	<5	<5	<5
Chlorobenzene		.005	<6.0	<3	<5	<5	<5
1,1 dichloroethylene		.005	<2.8	<3	<5	<5	<5
1,1 dichloroethane		.005	<4.7	<3	4	<5	5.2
trans-1,2-dichloroethylene		.005	<1.6	<3			<5
Chloroform		.1	<1.6	<3	<5	<5	<5
1,2 dichloroethane		.005	<2.8	<3	<5	<5	<5
1,1,1 trichloroethane		.005	<3.8	<3	<5	<5	<5
Carbon tetrachloride		.005	<2.8	<3	<5	<5	<5
Bromodichloromethane		.059	<2.2	<3	<5	<5	<5
1,2 dichloropropane		.005	<6.0	<3	<5	<5	<5
trans-1,3 dichloropropene	↓	.005	<5.0	<3	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farrell Landfill Location Jasper

Exact Sampling Point 16J County Cattaraugus

Parameter	Unit	Std	3/1/90	9/12/90	3/14/91	6/21/91	9/18/91
trichloroethylene	ug/l	.005	<1.9	<3	<5	<5	<5
benzene		ND	<4.4	<3	<5	<5	<5
cis-1,3 dichloropropene		.005	<5.0	<3	<5	<5	<5
1,1,2 trichloroethane		.005	<5.0	<3	<5	<5	<5
dibromochloromethane		.05	<3.1	<3	<5	<5	<5
bromoform		.05	<4.7	<3	<5	<5	<5
gw el.			1490.43	1489.91	1490.11	1488.71	1488.51
appearance							
1,1,2,2-tetrachloroethylene	ug/l						
1,1,2,2 tetrachloroethane		.05	<6.9	<3	<5	<5	<5
toluene		.005	<6.0	<3	0.3	<5	<5
trichlorofluoromethane		.005		<3	<5	<5	<5
acetone				<10	<10	<10	<10
acrolein		.005	<400	<100	<100	<100	<100
acrylonitrile		.005	<400	<100	<100	<100	<100
2 butanone				<10	<10	<10	
carbon disulfide				<10	<5	<5	<5
trans 1,4 dichloro 2-butene				<10	<5	trans <5	<5
ethanol				<10,000	<600	<600	<600
ethyl methacrylate				<10	<5	<5	<5
2 hexanone				<10	<10	<10	<10

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 16J County Cattaraugus

	Unit	std	3/1/90	7/12/90	3/14/91	6/21/91	9/18/91
iodomethane	ug/l			<10	<5	<5	<5
4 methyl-2 pentanone				<10	<10	<10	<10
styrene		.005		<10	<5	<5	<5
1,1,2,2 tetrachloroethane		.005		<10	<5	<5	<5
vinyl acetate		1		<10	<10	<10	<10
tetrachloroethylene		.005	<4.1	<3	<5	<5	<5
1,2 dichlorobenzene			<2.2	<3	<5	<5	<5
1,3 dichlorobenzene		.005	<2.1	<3	<5	<5	<5
1,4 dichlorobenzene			<2.5	<3	<5	<5	<5
total xylenes		.005		<3	<5	<5	<5
dichlorodifluoromethane		.005		<10	<10	<10	<10
dibromomethane		.005		<10	<5	<5	<5
tert-butyl alcohol	NTU	52.9	40	11	7.42	10.4	1.51
1,2 dichloroethylene (total)				<5		<5	
TKN	mg/l				0.18	0.29	0.35
MEK	ug/l						<10

note: stds based on Sept 25, 1990 Div of Water TOG
[illegible] guidance value per above

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dsclua

Exact Sampling Point 175 County Cattaraugus

Parameter	Unit	std	3/20/91	6/19/91	9/18/91
pH	SU	6.5 8.5	7.34	7.01	7.5
specific conductance	umhos/cm		540	525	489
temp	C		7.0	10.0	10
TOC	mg/l		<1.0	1.1	<1.0
COD	mg/l		14	19	9.6
iron	mg/l	.3	42 <0.04	59 0.03	5.2 <0.03
manganese	mg/l	.3	1.9 0.065	2.0 0.047	0.93 0.032
ammonia	mg/l	2	0.12	0.3	0.3
sulfate	mg/l	250	19	17	34
tot. alkalinity	mg/l		277	225	309
tot. hardness	mg/l		854	788	474
aluminum	mg/l		16 <0.05	23 <0.05	2.7 <0.05
antimony	mg/l	.0397	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
arsenic	mg/l	.025	0.023 <0.005	0.018 <0.005	<0.005 <0.005
beryllium	mg/l	.0397	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
cadmium	mg/l	.01	0.016 <0.005	<0.005 0.006	0.007 <0.005
chromium	mg/l	.05	0.038 <0.01	0.029 <0.005	0.011 <0.01
copper	mg/l	.2	0.091 <0.005	0.1 0.006	0.045 <0.01
lead	mg/l	.025	0.049 <0.003	0.047 <0.003	0.024 <0.003
mercury	mg/l	.0002	<0.0006 <0.0006	<0.0004 <0.0004	<0.0004 <0.0004
nickel	mg/l		0.045 <0.03	0.06 <0.02	<0.02 <0.02
selenium	mg/l	.010	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Bolivia

Exact Sampling Point 175 County Cattaraugus

Parameter	Unit	Std mg/l	3/20/91	6/19/91	9/19/91
silver	mg/l	.05	0.006 / <0.005	<0.006 / <0.006	0.011 / <0.01
thallium	mg/l	.0013	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
zinc	mg/l		0.24 / 0.045	0.28 / 0.01	0.091 / <0.01
chloromethane	ug/l		<10	<10	<10
vinyl chloride		.002	<10	<10	<10
chloroethane		.005	<10	<10	<10
bromomethane		.005	<10	<10	<10
dichloroethyl vinyl ether			<10	<10	<10
ethyl benzene		.005	<5	<5	<5
methylene chloride		.005	<5	<5	<5
chloro-benzene		.005	<5	<5	<5
1,1 dichloro-ethylene		.005	<5	<5	<5
1 dichloro-ethane		.005	10	6	4.4
trans-1,2-dichloroethylene		.005			<5
chloroform		.1	<5	<5	<5
1,2 dichloro ethane		.005	<5	<5	<5
1,1,1 tri-chloroethane		.005	1	<5	<5
carbon tetra-chloride		.005	<5	<5	<5
bromodi-chloromethane		.050	<5	<5	<5
1,2 dichloro propane		.005	<5	<5	<5
trans-1,3 dichloro-propene	↓	.005	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farrell Landfill Location Ischua

Exact Sampling Point 17S County Cattaraugus

Parameter	Unit	Std	3/20/91	6/19/91	9/19/91
trichloro-ethylene	ug/l	.005	<5	<5	<5
benzene		ND	<5	<5	<5
cis-1,3 di-chloropropene		.005	<5	<5	<5
1,1,2 trichloro-ethane		.005	<5	<5	<5
dibromochloro-methane		.05	<5	<5	<5
bromoform		.05	<5	<5	<5
gw el.			1491.24	1490.74	1490.54
appearance					
1,1,2,2-tetra-chloroethylene	ug/l				
1,1,2,2 tetra-chloroethane		.005	<5	<5	<5
toluene		.005	<5	<5	<5
trichloro-fluoromethane		.005	<5	<5	<5
acetone			<10	<10	<10
acrolein		.005	<100	<100	<100
acrylo-nitrile		.005	<100	<100	<100
2 butanone			<10	<10	
carbon disulfide			<5	<5	<5
trans 1,2 dichloro 2-butene			<5	<5	<5
ethanol			<600	<600	<600
vinyl acetate			<5	<5	<5
2 hexanone			<10	<10	<10

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dix

Exact Sampling Point 175 County Chautauqua

	Unit	std	3/20/91	6/19/91	9/19/91
iodomethane	ug/l		<5	<5	<5
4 methyl-2 pentanone			<10	<10	<10
styrene		.005	<5	<5	<5
1,2,3 trichloro propane		.005	<5	<5	<5
vinyl acetate			<10	<10	<10
tetrachloro-ethylene		.005	<5	<5	<5
1,2 dichloro benzene			<5	<5	<5
1,3 dichloro benzene		.005	<5	<5	<5
1,4 dichloro benzene			<5	<5	<5
tot. xylenes		.005	<5	<5	<5
dichlorodi-fluoromethane		.005	<10	<10	<10
dibromo methane		.005	<5	<5	<5
turbidity	NTU	5	200+	200+	>200
1,2 dichloro ethylene (tot)	ug/l		<5	20 <5	
TKN	mg/l		0.92	~~200~~ 5	0.71
MEK	ug/l				<10

note: stds based on Sept 25, 1990 Div of Water TOG
[illegible] guidance value per above

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area: Farwell Landfill   Location: Ischua

Exact Sampling Point: 17I   County: Cattaraugus

Date / Parameter	Unit	std	3/1/90	3/20/91	6/19/91	9/19/91
pH	SU	6.5-8.5	8.1	7.84	7.56	7.4
specific conductance	umhos/cm		350	250	297	272
temp	°C		7	8.0	10.0	10
TOC	mg/l		<1	<1.0	<1.0	<1.0
COD	mg/l		<5	15	20	9.9
iron	mg/l	.3	0.38 / <0.03	[illegible] / <0.04	49 / <0.03	11 / 0.19
manganese	mg/l	.3	0.12 / 0.097	1.9 / 0.12	1.2 / 0.11	0.59 / 0.13
ammonia	mg/l	2	<0.1	0.11	0.31	0.37
sulfate	mg/l	250	7.1	12	7.0	22
tot. alkalinity	mg/l		120	150	120	121
tot. hardness	mg/l		110	164	195	2.4
aluminum	mg/l		0.35 / 0.18	[illegible] / <0.05	18 / <0.05	16 / 0.04
antimony	mg/l	.039	<0.01 / <0.01	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
arsenic	mg/l	.025	0.012 / 0.0068	[illegible] / 0.019	0.052 / 0.014	0.013 / <0.005
beryllium	mg/l	.039	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
cadmium	mg/l	.01	0.006 / <0.005	[illegible] / <0.005	<0.005 / <0.005	<0.005 / <0.005
chromium	mg/l	.05	0.010 / <0.01	[illegible] / <0.01	0.028 / <0.005	0.01 / <0.01
copper	mg/l	.2	0.019 / 0.011	[illegible] / <0.005	0.032 / 0.007	0.015 / <0.01
lead	mg/l	.025	<0.005 / <0.005	[illegible] / <0.003	0.039 / 0.003	0.02 / <0.003
mercury	mg/l	.002	<0.0004 / <0.0004	[illegible] / <0.0006	0.0011 / <0.0004	<0.0004 / <0.0004
nickel	mg/l		<0.04 / <0.04	[illegible] / <0.03	0.056 / <0.02	<0.02 / <0.02
selenium	mg/l	.010	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005

New York State Department of Environmental Conservation.

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point 17J County Cattaraugus

...meter	Unit	Std mg/l	3/1/90	3/26/91	6/19/91	9/19/91
silver	mg/l	.05	<0.005 / <0.005	<0.005 / <0.005	<0.006 / <0.006	<0.01 / <0.01
thallium	mg/l	.0019	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005	<0.005 / <0.005
zinc	mg/l		0.036 / 0.027	0.15 / 0.066	0.13 / <0.005	0.08 / 0.013
...loromethane	ug/l		<10	<10	<10	<10
...yl chloride		.002	<5	<10	<10	<10
...hloroethane		.005	<10	<10	<10	<10
...bromo methane		.005	<10	<10	<10	<10
2 chloroethyl ...nyl ether			<10	<10	<10	<10
ethyl benzene		.005	<7.2	<5	<5	<5
methylene chloride		.005	<2.8	<5	<5	<5
chloro- benzene		.005	<6.0	<5	<5	<5
1,1 dichloro- ethylene		.005	<2.8	<5	<5	<5
1,1 dichloro- ethane		.005	<4.7	<5	<5	4.7
trans-1,2- dichloroethylene		.005	<1.6			<5
chloroform		.1	<1.6	<5	<5	<5
1,2 dichloro ethane		.005	<2.8	<5	<5	<5
1,1,1 tri- chloroethane		.005	<3.8	<5	<5	<5
carbon tetra- chloride		.005	11	<5	<5	<5
...bromodi- chloromethane		.05	<2.2	<5	<5	<5
1,2 dichloro propane		.005	<6.0	<5	<5	<5
trans-1,3 dichloro- propene		.005	<5.0	<5	<5	<5

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ithaca

Exact Sampling Point 17J County Cattaraugus

Parameter	Unit	Std	3/1/90	3/20/91	6/19/91	9/16/91
trichloroethylene	ug/l	.005	<1.9	<5	<5	<5
benzene		ND	<4.4	<5	<5	<5
cis-1,3 dichloropropene		.005	<5.0	<5	<5	<5
1,1,2 trichloroethane		.005	<5.0	<5	<5	<5
dibromochloromethane		.05	<3.1	<5	<5	<5
bromoform		.05	<4.7	<5	<5	<5
gw el.			1491.79	1490.45	1490.45	1490.15
appearance						
1,1,2,2-tetrachloroethylene	ug/l					<5
1,1,2,2-tetrachloroethane		.005	<6.9	<5	<5	<5
toluene		.005	<6.0	<5	<5	<5
trichlorofluoromethane		.005		<5	<5	<5
acetone				<10	<10	<10
acrolein		.005	<400	<100	<100	<100
acrylonitrile		.005	<400	<100	<100	<100
2 butanone				<10	<10	
carbon disulfide				<5	<5	<5
trans 1,2 dichloro 2-butene				<5	<5	<5
ethanol				<600	<600	<600
ethyl methacrylate				<5	<5	<5
2hexanone				<10	<10	<10

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farrell Landfill Location Ischua

Exact Sampling Point MI County Cattaraugus

	Unit	Std	3/1/90	3/20/91	6/19/91	9/19/91
iodomethane	ug/l			<5	<5	<5
4 methyl-2 pentanone				<10	<10	<10
styrene		.005		<5	<5	<5
1,1,2 trichloro ethane		.005		<5	<5	<5
vinyl acetate			<10	<10	<10	<10
tetrachloro-ethylene		.005	<41	<5	<5	<5
1,2 dichloro benzene			4.5	<5	<5	<5
1,3 dichloro benzene		.005	<2.1	<5	<5	<5
1,4 dichloro benzene			<2.5	<5	<5	<5
tri xylenes		.005		<5	<5	<5
dichlorodi-fluoromethane		.005		<10	<10	<10
dibromo methane		.005		<5	<5	<5
toxicity	pTU	50	20	200+	200+	>200
1,2 dichloro ethylene (tot)				<5	<5	
TKN	mg/l			1.4	1.0	0.47
MEK						<10

note: stds based on Sept 25, 1990 Div of Water, TOG ge guidance value per above

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point _____ County Cattaraugus

Date		std																	
Parameter	Unit																		
pH	SU	6.5 8.5																	
specific conductance	umhos/cm																		
temp	°C																		
TOC	mg/l																		
COD	mg/l																		
iron	mg/l	.3																	
manganese	mg/l	.3																	
ammonia	mg/l	2																	
sulfate	mg/l	250																	
tot alkalinity	mg/l																		
tot hardness	mg/l																		
aluminum	mg/l																		
antimony	mg/l	.03g																	
arsenic	mg/l	.025																	
beryllium	mg/l	.039																	
cadmium	mg/l	.01																	
chromium	mg/l	.05																	
copper	mg/l	.2																	
lead	mg/l	.025																	
mercury	mg/l	.002																	
nickel	mg/l																		
selenium	mg/l	.010																	

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area _____ Location _____

Exact Sampling Point _____ County _____

Parameter	Unit	std mg/l
silver	mg/l	.05
thallium	mg/l	.0019
zinc	mg/l	
chloromethane	ug/l	
vinyl chloride		.002
chloroethane		.005
bromo methane		.005
2 chloroethyl vinyl ether		
ethyl benzene		.005
methylene chloride		.005
chloro-benzene		.005
1,1 dichloro-ethylene		.005
1,1 dichloro-ethane		.005
trans-1,2-dichloroethylene		.005
chloroform		.1
1,2 dichloro ethane		.005
1,1,1 tri-chloroethane		.005
carbon tetra-chloride		.005
bromodi-chloromethane		.059
1,2 dichloro propane		.005
trans-1,3 dichloro-propene		.005

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point _____ County Cattaraugus

Parameter	Unit	Std mg/l
trichloro-ethylene	ug/l	.005
benzene		ND
cis-1,3 di-chloropropene		.005
1,1,2 trichloro-ethane		.005
dibromochloro-methane		.059
bromoform		.05
gw el.		
appearance		
1,1,2,2-tetra-chloroethylene	ug/l	
1,1,2,2 tetra-chloroethane		.005
toluene		.005
trichloro-fluoromethane		.005
acetone		
acrolein		.005
acrylo-nitrile		.005
2 butanone		
carbon disulfide		
trans-1,4 dichloro 2-butene		
ethanol		
ethyl methacrylate		
2 hexanone		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dansville

Exact Sampling Point _____ County Cattaraugus

	Unit	Std
iodomethane	ug/l	
4 methyl 2 pentanone		
styrene		.005
1,1,2 trichloro propane		.005
vinyl acetate		
tetrachloro ethylene		.005
1,2 dichloro benzene		
1,3 dichloro benzene		.005
1,4 dichloro benzene		
tri xylenes		.005
dichloro difluoromethane		.005
dibromo methane		.005
turbidity	NTU	5.0

see also data in Hydrogeo Investigation Rpt - Oct. 87

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point _____ County Cattaraugus

Parameter	Unit	Standard
pH	S.U.	6.5-8.5
specific conductance	umhos/cm	
temp	°C	
TOC	mg/l	
COD	mg/l	
iron	mg/l	.3
manganese	mg/l	.3
ammonia	mg/l	
sulfate	mg/l	250
tot alkalinity	mg/l	
tot hardness	mg/l	
tot/sol aluminum	mg/l	
antimony	mg/l	
arsenic	mg/l	.025
beryllium	mg/l	
cadmium	mg/l	0.01
chromium	mg/l	
copper	mg/l	1.0
lead	mg/l	.025
mercury	mg/l	.002
nickel	mg/l	
selenium	mg/l	.02

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point _____ County Cattaraugus

Parameter	Unit	Standard
silver	mg/l	.05
thallium	mg/l	
zinc	mg/l	5
chloromethane	ug/l	
vinyl chloride		
chloroethane		
bromo methane		
2chloroethyl vinyl ether		
ethyl benzene		
methylene chloride		
chloro-benzene		
1,1 dichloro-ethylene		
1,1 dichloro ethane		guidance 50
trans-1,2-dichloroethylene		
chloroform		
1,2 dichloro ethane		
1,1,1 tri-chloroethane		guidance 50
carbon tetra-chloride		
bromodi-chloromethane		
1,2 dichloro propane		
trans-1,3 dichloropro-pene		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point ________ County Cattaraugus

Parameter	Unit	Standard																	
trichloro ethylene	ug/l																		
benzene	↓																		
cis-1,3 di-chloropropene																			
1,1,2-trichloro ethane																			
dibromochloro methane																			
bromoform	↓																		
gw elevation (ft)	ft above sealevel																		

see also data in Hydrogeo investigation Aug-Oct 87

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point _____ County Cattaraugus

Parameter	Unit	Standard
pH	S.U.	6.5 - 8.5
specific conductance	umhos/cm	
temp	°C	
TOC	mg/l	
COD	mg/l	
iron	mg/l	.3
manganese	mg/l	.3
ammonia	mg/l	
sulfate	mg/l	250
tot alkalinity	mg/l	
tot hardness	mg/l	
tot/sol aluminum	mg/l	
antimony	mg/l	
arsenic	mg/l	.025
beryllium	mg/l	
cadmium	mg/l	.001
chromium	mg/l	
copper	mg/l	1.0
lead	mg/l	.025
mercury	mg/l	.002
nickel	mg/l	
selenium	mg/l	.02

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Ischua

Exact Sampling Point _____ County Cattaraugus

Parameter	Unit	Standard
silver	mg/l	.05
thallium	mg/l	
zinc	mg/l	5
chloromethane	ug/l	
vinyl chloride		
chloroethane		
bromo methane		
2chloroethyl vinyl ether		
ethyl benzene		
methylene chloride		
chloro-benzene		
1,1 dichloro-ethylene		
1,1 dichloro ethane		guidance 50
trans-1,2-dichloroethylene		
chloroform		
1,2 dichloro ethane		
1,1,1 tri-chloroethane		guidance 50
carbon tetra-chloride		
bromodi-chloromethane		
1,2 dichloro propane		
trans-1,3 dichloropro-pene		

New York State Department of Environmental Conservation

DIVISION OF SOLID WASTE MANAGEMENT

Refuse Disposal Area Farwell Landfill Location Dischua

Exact Sampling Point _____ County Cattaraugus

Parameter	Unit	Standard
trichloroethylene	ug/l	
benzene	↓	
cis-1,3 dichloropropene		
1,1,2 trichloroethane		
dibromochloromethane		
bromoform		
gw elevation MP	ft. above sea level	