

HYDROGEOLOGIC INVESTIGATION PHASE III

FRONTIER CHEMICAL WASTE PROCESS, INC.
NIAGARA FALLS, NEW YORK

APRIL 1990

ecco INC.

THE ENVIRONMENTAL CONSULTING COMPANY

VOLUME 3

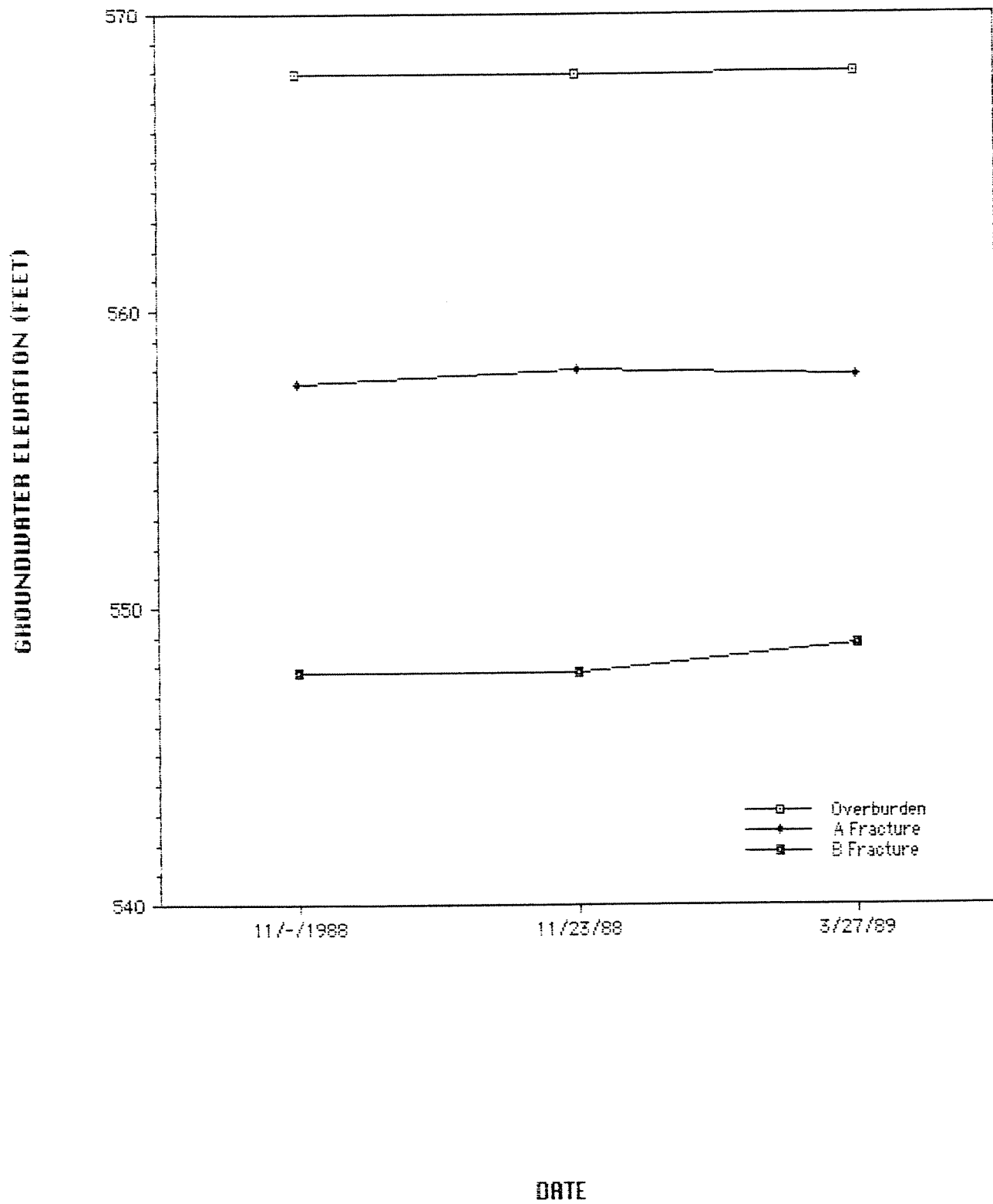
**APPENDIX D: WATER LEVEL MEASUREMENTS FOR
NOVEMBER 1988 AND MARCH 1989**

Well Number	Hydro zone	Casing elev.	Ground elev.	Depth to water 11/-/1988 EFS	Water elev. 11/-/1988 EFS	Depth to water 11/23/88 ECCO	Water elev. 11/23/88 ECCO	Depth to water 3/27/89 ECCO	Water elev. 3/27/89 ECCO
MW-81-2	A Fracture	572.98	571	18.54	554.44	18.22	554.76	17.78	555.2
MW-81-3	A Fracture	573.14	570.9			13.54	559.6	13.15	559.99
MW-81-4	A Fracture	573.18	571			DRY		DRY	
MW-81-5	Overburden	572.45	570.4			6.32	566.13	5.7	566.75
MW-81-6	Overburden	573.85	570.6			5.37	568.48	5.03	568.82
MW-81-7	Overburden	572.87	570.9	4.62	568.25	4.56	568.31	4.57	568.3
MW-81-8	Overburden	573.26	571			5.2	568.06	5.06	568.2
MW-84-9	B Fracture	573.68	571.8	27.62	546.06	27.48	546.2	27.05	546.63
MW-84-10	A Fracture	-	573.3			-			
MW-84-11	B Fracture	573.52	571.3	29.08	544.44	28.03	545.49	28.84	544.68
MW-84-12	B Fracture	573.25	571.6	29.2	544.05	28.12	545.13	28.94	544.31
MW-84-13	B Fracture	573.73	571.3	28.82	544.91	28.75	544.98	28.66	545.07
MW-84-14	A Fracture	573.21	570.8	15.12	558.09	14.67	558.54	14.61	558.6
MW-84-15	A Fracture	572.11	569.5	16.38	555.73	15.75	556.36	15.97	556.14
MW-84-16	A Fracture	572.88	571.4	19.7	553.18	17.74	555.14	17.89	554.99
MW-84-17	A Fracture	572.56	571.2	15.61	556.95	15.05	557.51	15.38	557.18
BH-87-1A	B Fracture	574.45	571.3	26.66	547.79	26.61	547.84	25.7	548.75
BH-87-1B	A Fracture	574.45	571.3	16.9	557.55	16.45	558	16.61	557.84
BH-87-1C	Overburden	574.45	571.3	6.47	567.98	6.51	567.94	6.41	568.04
BH-87-2A	B Fracture	572.9	569.75	25.47	547.43	25.18	547.72	24.58	548.32
BH-87-2B	A Fracture	572.63	569.73	17.12	555.51	16.67	555.96	16.79	555.84
BH-87-2C	Overburden	573.03	569.9	8.64	564.39	7.78	565.25	7.81	565.22
BH-87-3A	B+ Fracture	572.52	569.67	26.95	545.57	26.28	546.24	26.21	546.31
BH-87-3B	A Fracture	572.55	569.7	16.74	555.81	20.11	552.44	16.42	556.13
BH-87-3C	Overburden	572.56	569.7	6.68	565.88	6.95	565.61	6.91	565.65
BH-87-3D	B Fracture	572.51	569.81	26.26	546.25	21.05	551.46	26.01	546.5
BH-87-4A	A Fracture	573.51	571.01	22.98	550.53	22.56	550.95	22.55	550.96
BH-87-4B	Overburden	574.09	571.09	6.84	567.25	6.61	567.48	6.01	568.08
BH-87-5A	B Fracture	573.34	570.3	29.1	544.24	28.91	544.43	28.91	544.43
BH-87-5B	C Fracture	573.38	570.38	27.65	545.73	27.33	546.05	27.01	546.37
BH-87-5C	A Fracture	573.05	570.5	25.26	547.79	25.1	547.95	25.38	547.67
BH-87-5D	Overburden	573.65	570.65	6.98	566.67	7	566.65	6.53	567.12
BH-87-28	A Fracture	572.35	569.86	14.68	557.67	14.66	557.69	14.74	557.61
MW-88-1A	B Fracture	572.34	569.98	23.34	549	23.27	549.07	22.96	549.38
MW-88-1B	Overburden	572.62	570.03	DRY		DRY		12.96	559.66

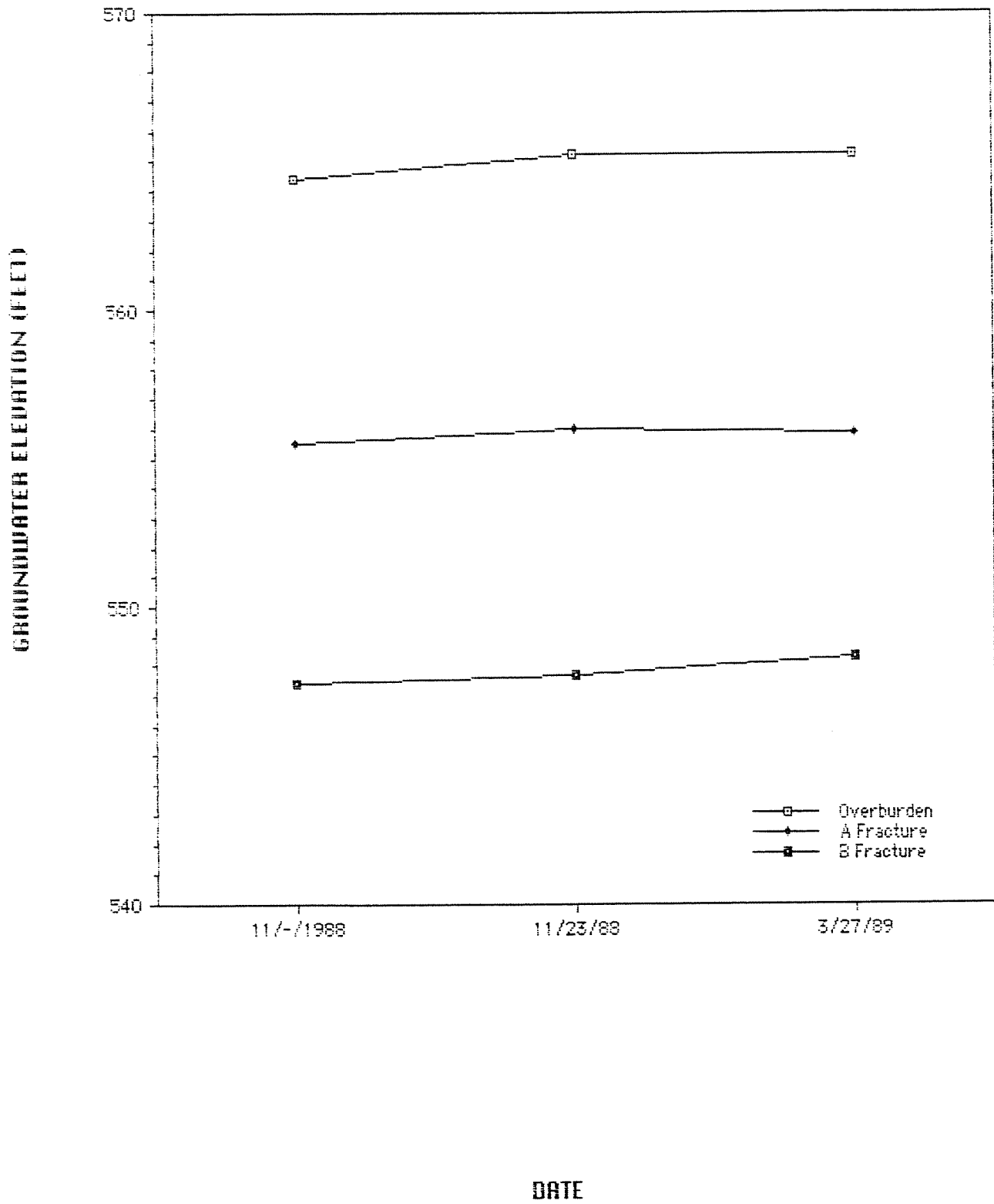
Well Number	Hydro zone	Casing elev.	Ground elev.	Depth to water 11/-/1988 EFS	Water elev. 11/-/1988 EFS	Depth to water 11/23/88 ECCO	Water elev. 11/23/88 ECCO	Depth to water 3/27/89 ECCO	Water elev. 3/27/89 ECCO
MW-88-2A	A Fracture	572.82	570.44	15.98	556.84	17.9	554.92	17.82	555
MW-88-2B	B Fracture	573.06	570.46	25.98	547.08	25.76	547.3	24.94	548.12
MW-88-2OB	Overburden	572.88	570.34	16.38	556.5	17.9	554.98	15.84	557.04
MW-88-3A	A Fracture	573.44	570.95	18.36	555.08	18.35	555.09	18.01	555.43
MW-88-3B	B Fracture	573.83	570.97	27.74	546.09	27.66	546.17	27.23	546.6
MW-88-4A	A Fracture	572.81	570.26	16.44	556.37	15.17	557.64	14.03	558.78
MW-88-4B	B Fracture	572.75	570.29	26.46	546.29	26.15	546.6	22.05	550.7
MW-88-4C	C Fracture	572.71	570.39	23.13	549.58	23.31	549.4	23.03	549.68
MW-88-4OB	Overburden	572.54	570.6	5.1	567.44	4.55	567.99	5.67	566.87
MW-88-5B	B Fracture	573.32	570.82	26.4	546.92	26.2	547.12	25.63	547.69
MW-88-5C	C Fracture	573.1	571	24.68	548.42	24.8	548.3	23.71	549.39
MW-88-6A	A Fracture	573.44	570.89	23.32	550.12	23.28	550.16	23.06	550.38
MW-88-6B	B Fracture	573.98	571.35	29	544.98	28.97	545.01	28.62	545.36
MW-88-6OB	Overburden	573.2	570.99	14.42	558.78	12.38	560.82	12.7	560.5
MW-88-7A	A Fracture	572.45	570.03	18.42	554.03	18.15	554.3	17.79	554.66
MW-88-7B	B Fracture	572.58	570.07	27.02	545.56	25.07	547.51	26.51	546.07
MW-88-7OB	Overburden	571.82	569.95	5.86	565.96	4.85	566.97	5.43	566.39
MW-88-8A	A Fracture	573.46	571.19	17.86	555.6	14.05	559.41	17.42	556.04
MW-88-8B	B Fracture	573.49	571.29	27.52	545.97	27.58	545.91	27.27	546.22
MW-88-8OB	Overburden	573.67	571.3	7.26	566.41	8.7	564.97	6.59	567.08
MW-88-9A	A Fracture	572.94	570.41	23.72	549.22	21	551.94	19.73	553.21
MW-88-9B	B Fracture	572.98	570.4	28.08	544.9	28.03	544.95	27.8	545.18
MW-88-9OB	Overburden	572.72	570.35	14.12	558.6	12.9	559.82	11.73	560.99
MW-88-10A	A Fracture	573.62	571.75	16.34	557.28	16.2	557.42	16.3	557.32
MW-88-10B	B Fracture	573.86	571.66	22.8	551.06	17.05	556.81	16.64	557.22
MW-88-10OE	Overburden	573.83	571.55	7.2	566.63	6.51	567.32	6.46	567.37
MW-88-11A	A Fracture	572.97	570.39	19.8	553.17	19.97	553	20.05	552.92
MW-88-11B	B Fracture	573.3	570.71	25.7	547.6	20.07	553.23	25.14	548.16
MW-88-11OE	Overburden	572.71	570.35	6.46	566.25	6	566.71	5.73	566.98
MW-88-12A	A Fracture	572.93	570.45	18.84	554.09	19.07	553.86	18.64	554.29
MW-88-12B	B Fracture	572.79	570.31	27.06	545.73	27.15	545.64	26.88	545.91
MW-88-12OE	Overburden	572.66	570.39	7.12	565.54	8.64	564.02	6.55	566.11
MW-88-13A	A Fracture	573.27	570.84	22.02	551.25	22.03	551.24	21.77	551.5
MW-88-14A	A Fracture	573.3	570.57	15.89	557.41	16.08	557.22	15.78	557.52
MW-88-14B	B Fracture	573.26	570.41	25.88	547.38	25.83	547.43	24.95	548.31
MW-88-14OE	Overburden	572.43	570.36	13.21	559.22	12.45	559.98	9.26	563.17

**APPENDIX E: GRAPHS:
GROUND WATER ELEVATIONS VS DATES**

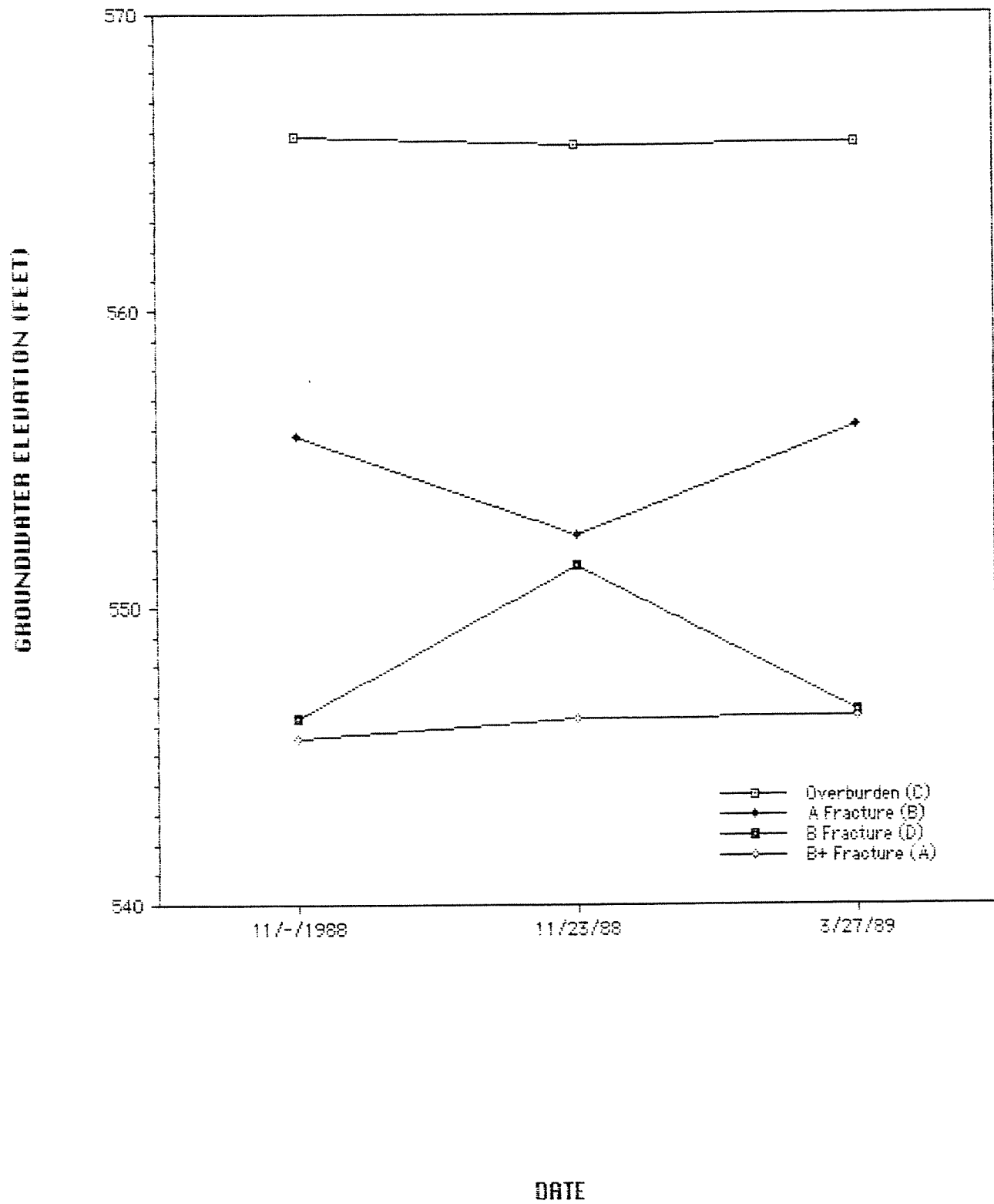
BH-87-1 GROUNDWATER ELEVATION v. DATE



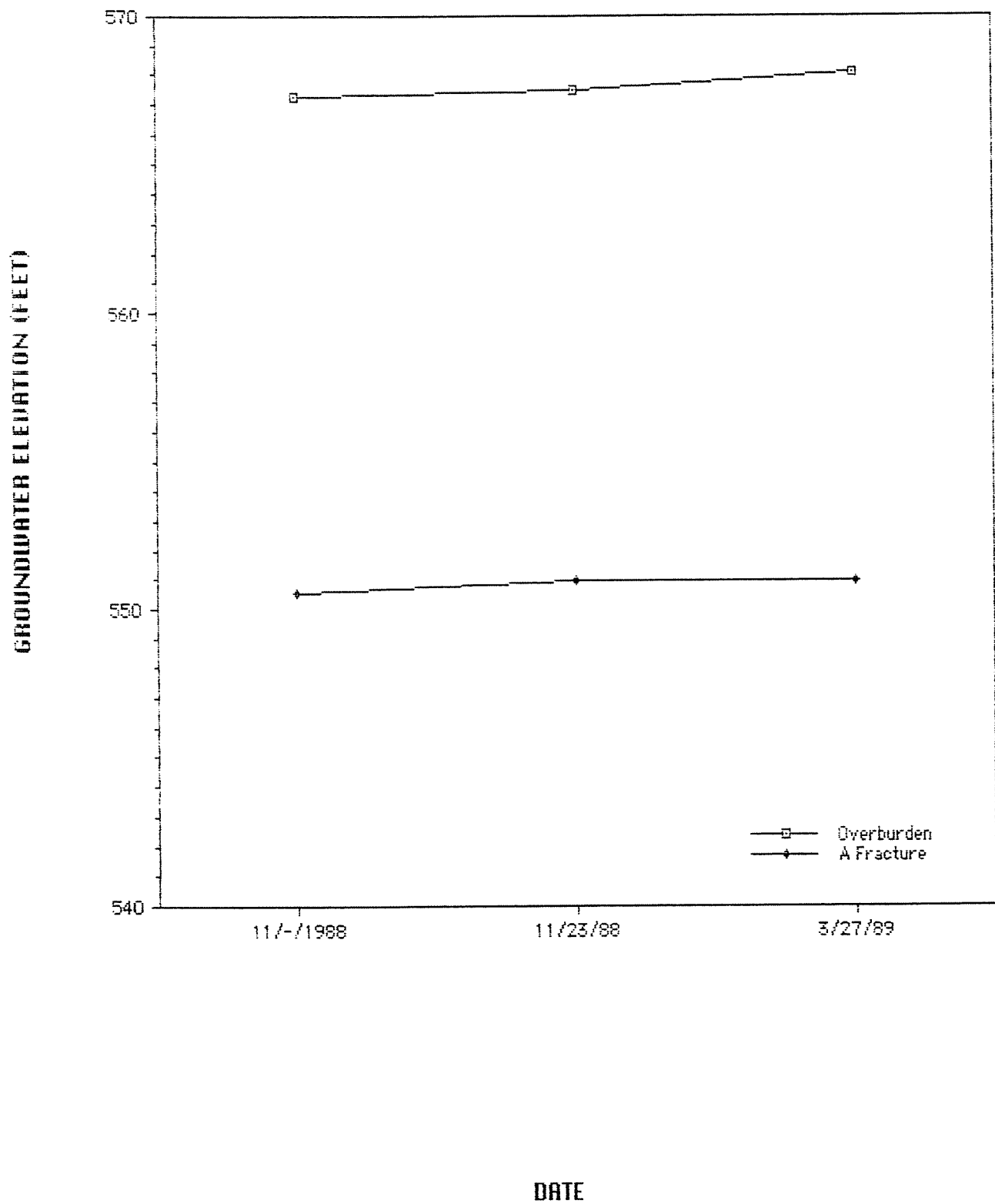
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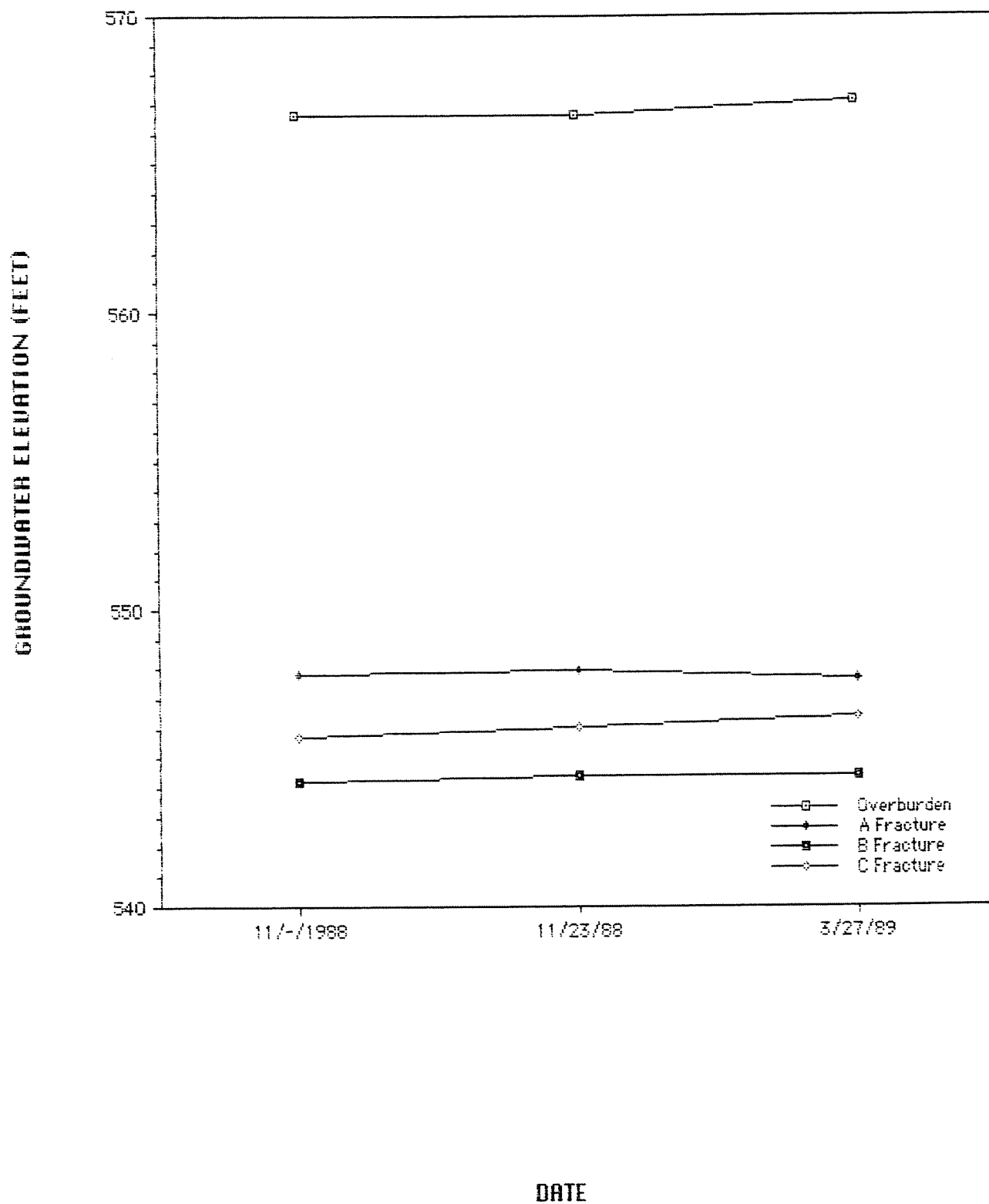
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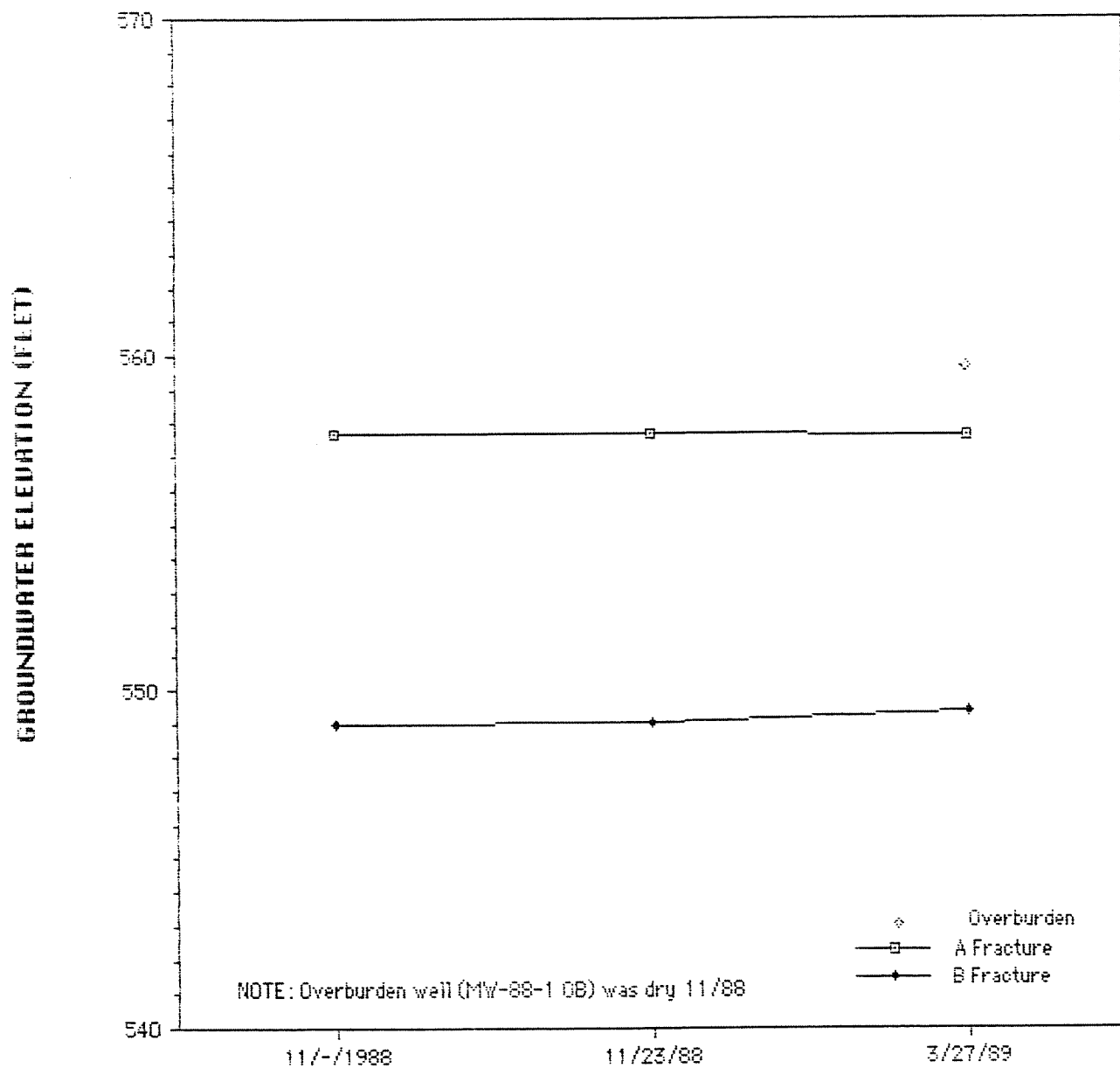
BH-87-4 GROUNDWATER ELEVATION v. DATE



BH-87-5 GROUNDWATER ELEVATION v. DATE

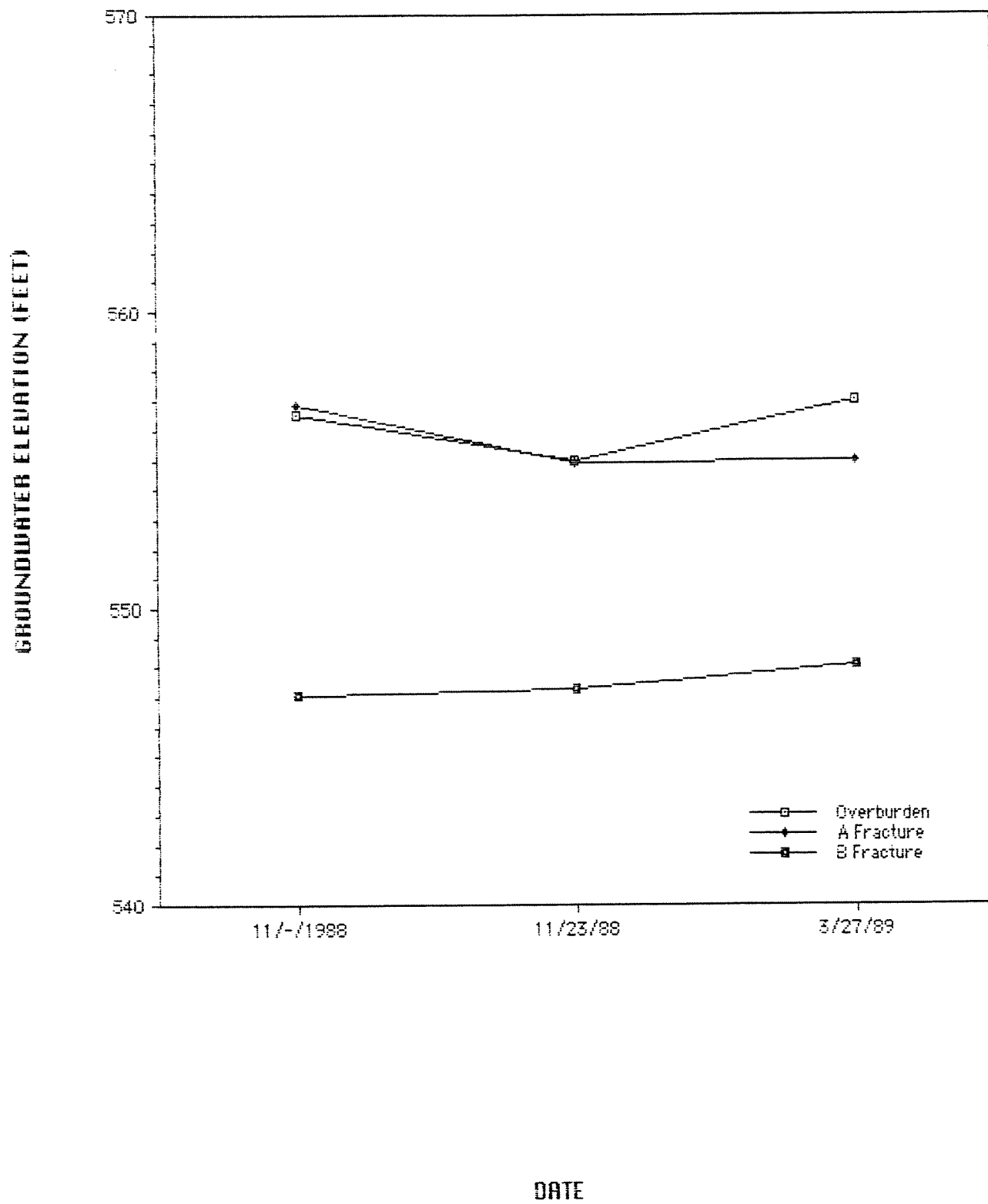


MW-88-1 GROUNDWATER ELEVATION v. DATE

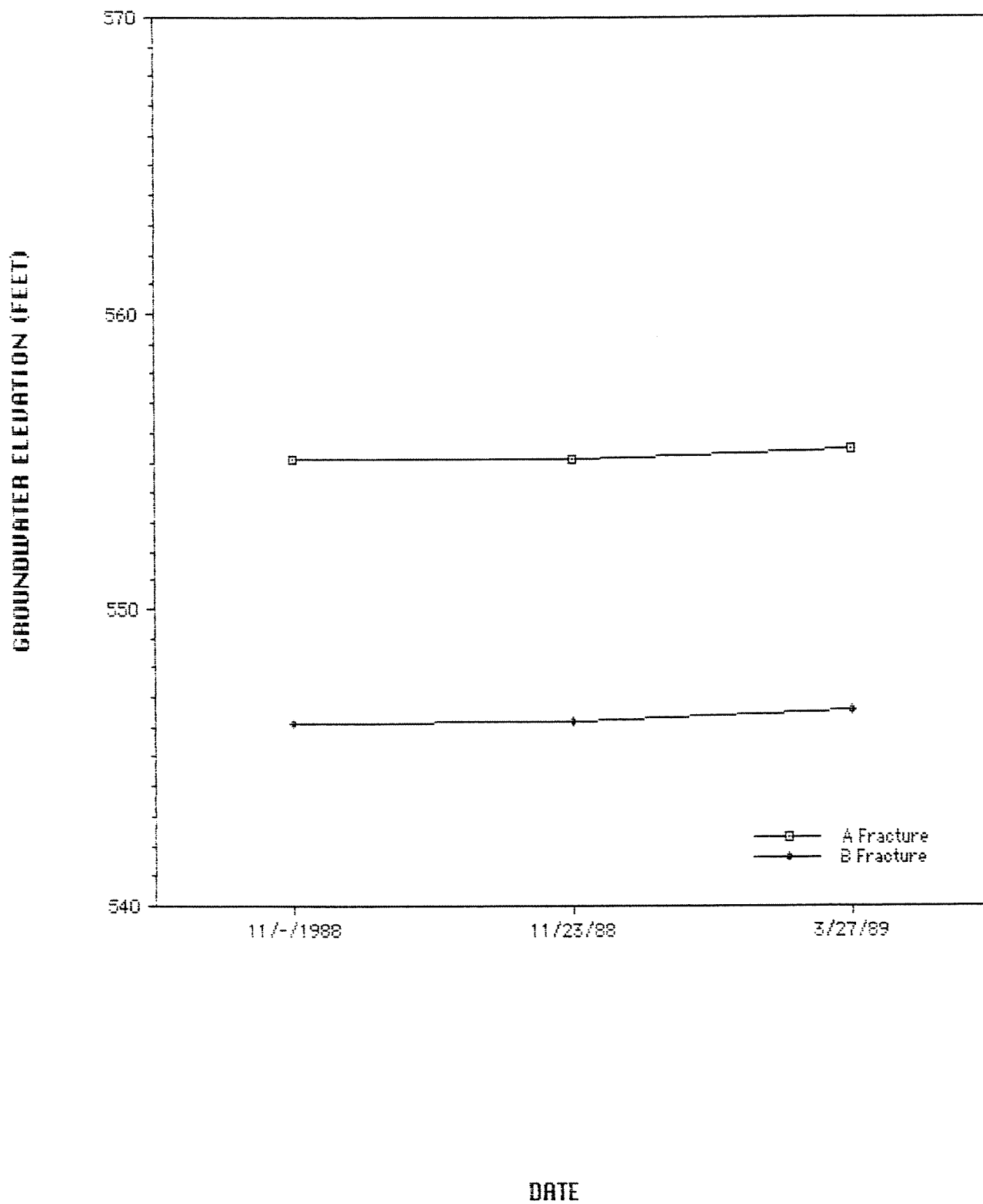


DATE

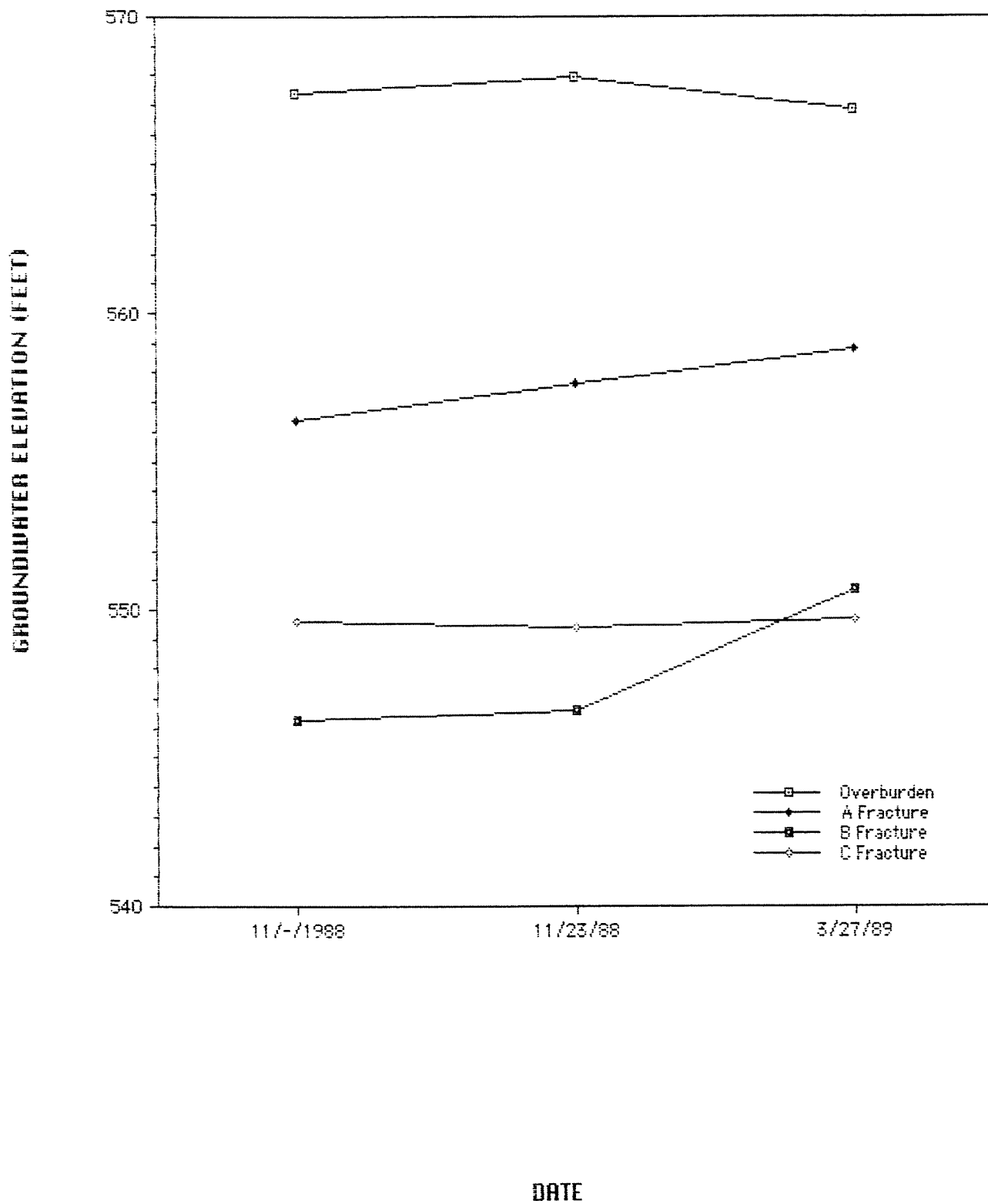
MW-88-2 GROUNDWATER ELEVATION v. DATE



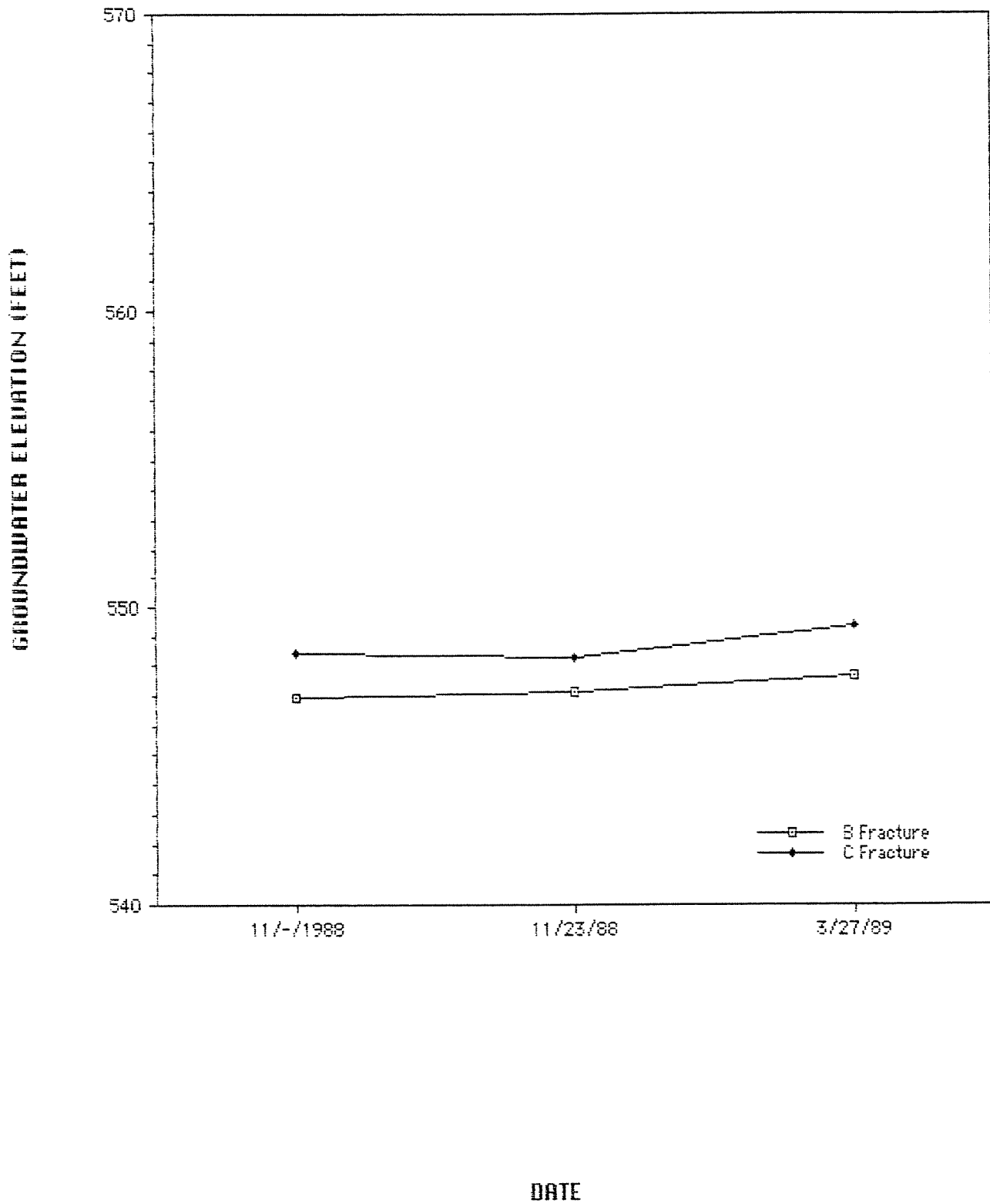
MD-88-3 GROUNDWATER ELEVATION v. DATE



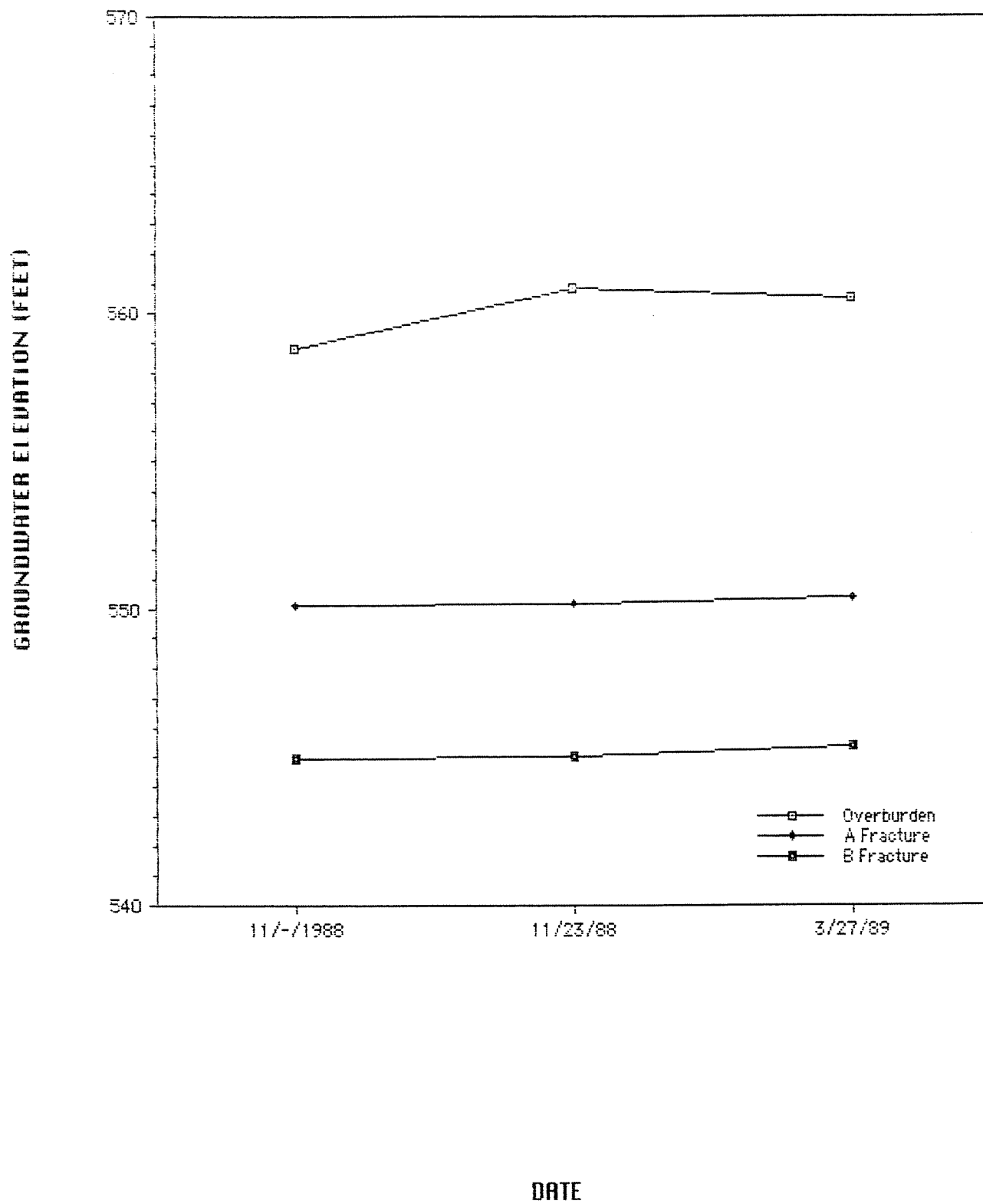
MW-88-4 GROUNDWATER ELEVATION v. DATE



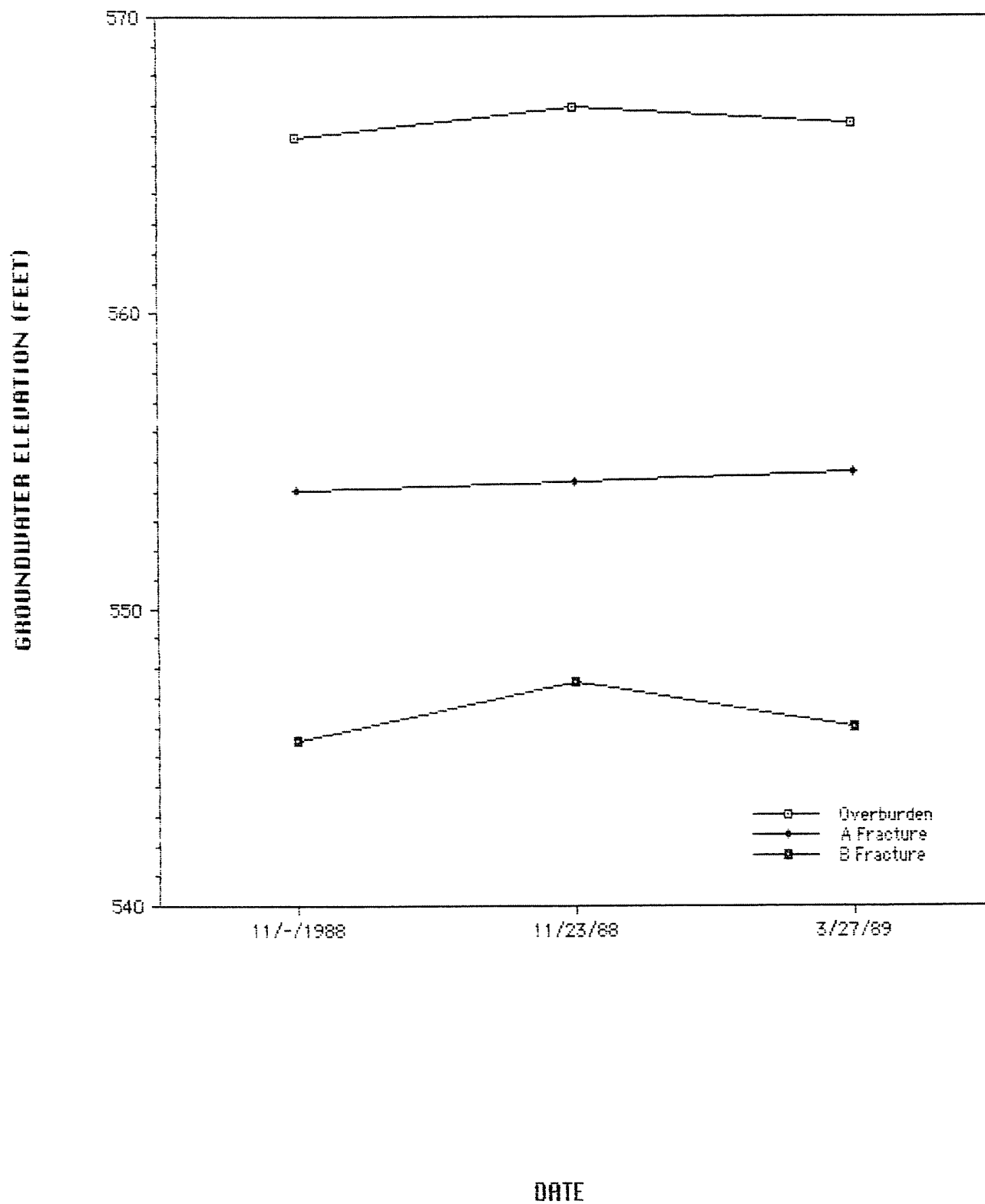
MW-88-5 GROUNDWATER ELEVATION v. DATE



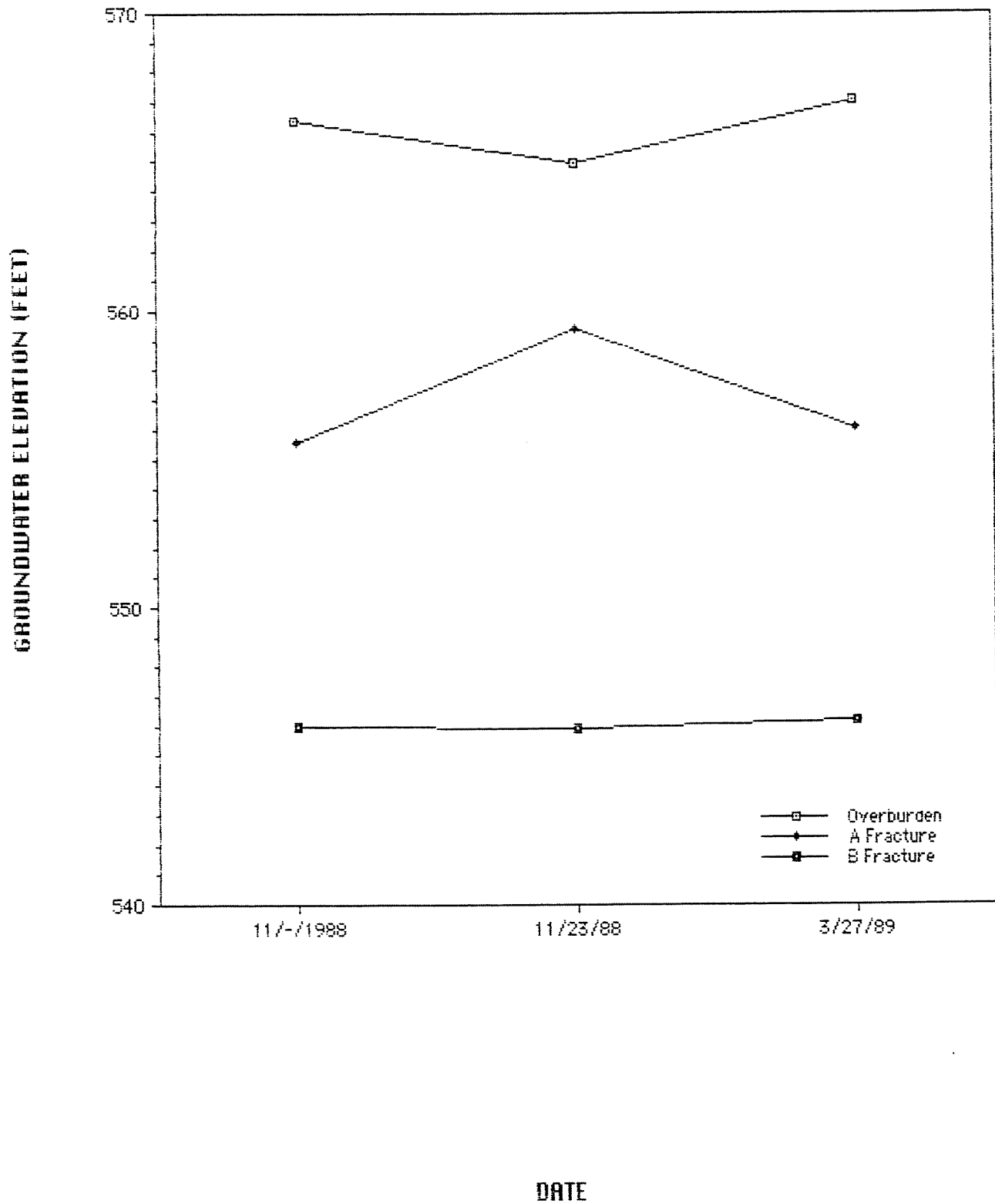
MW-88-6 GROUNDWATER ELEVATION v. DATE



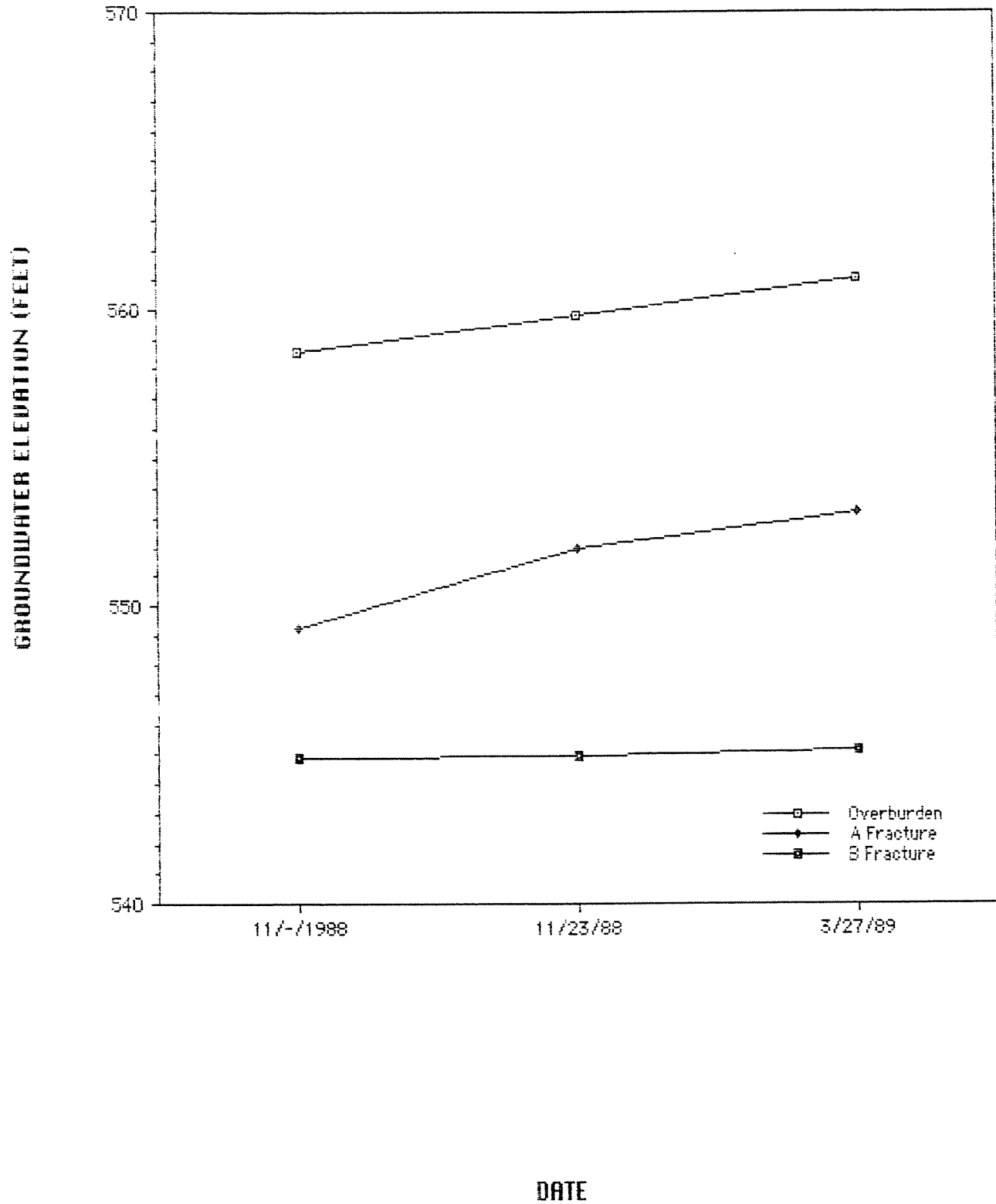
MW-88-7 GROUNDWATER ELEVATION v. DATE



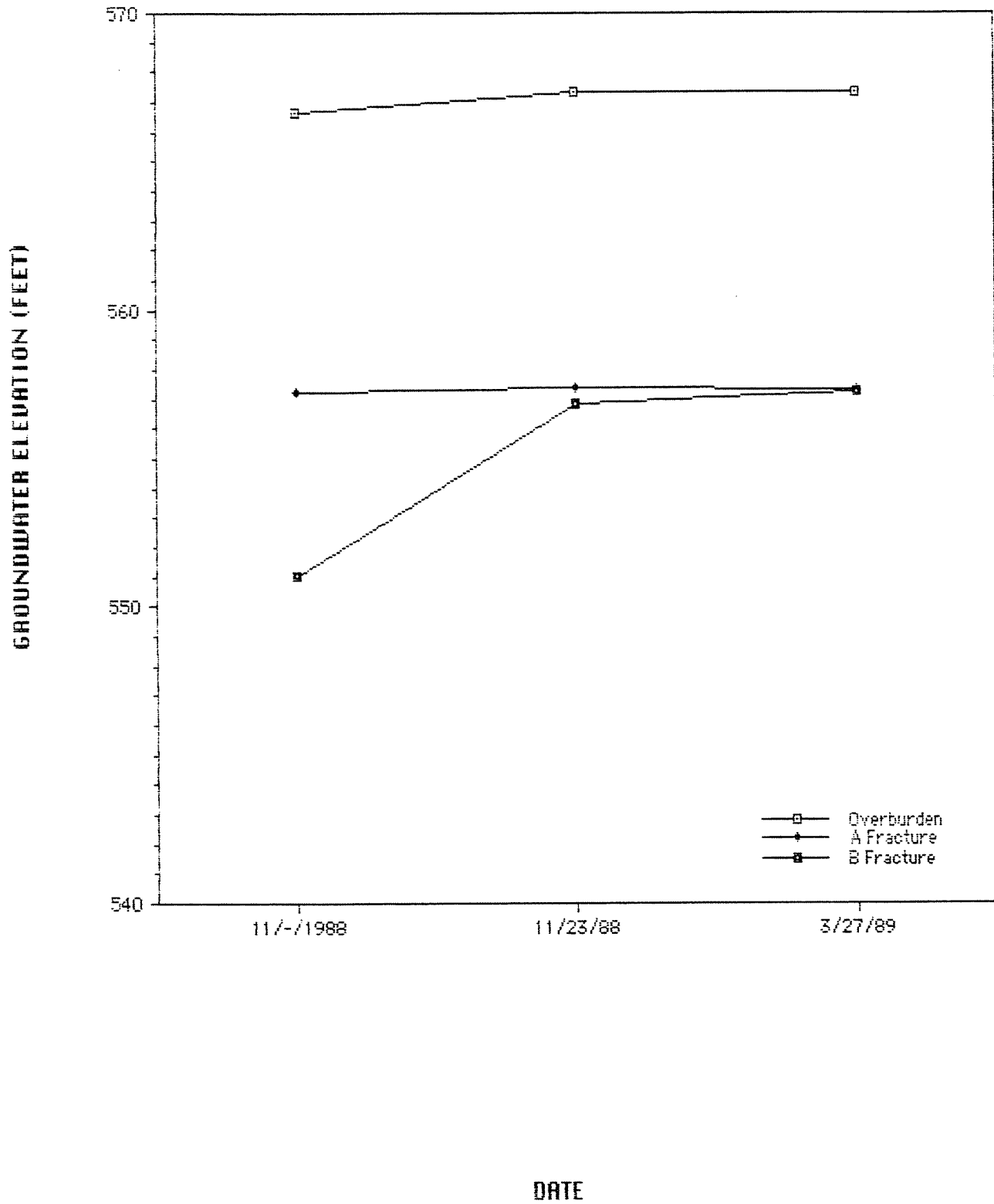
MW-88-8 GROUNDWATER ELEVATION v. DATE



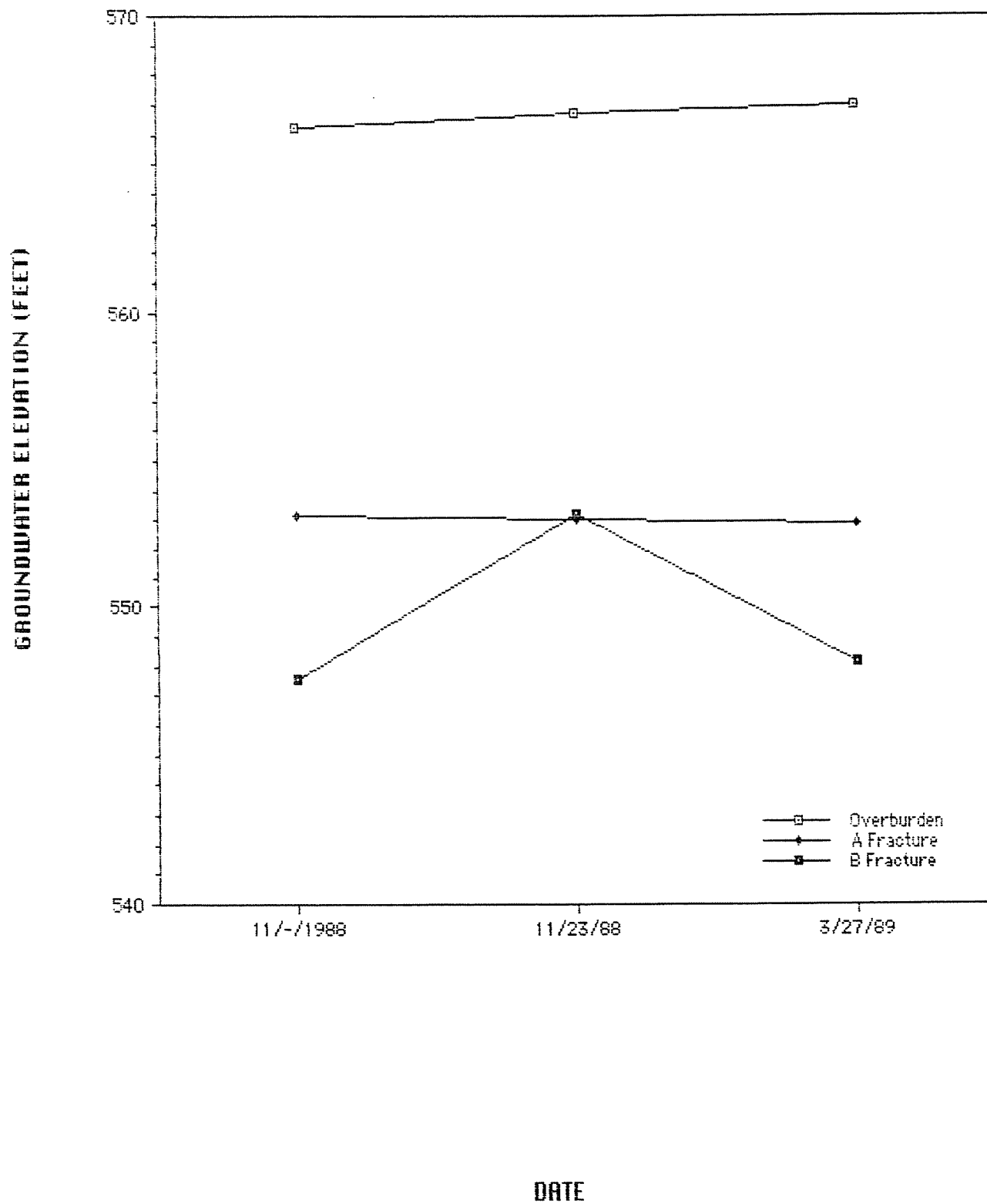
MW-88-9 GROUNDWATER ELEVATION v. DATE



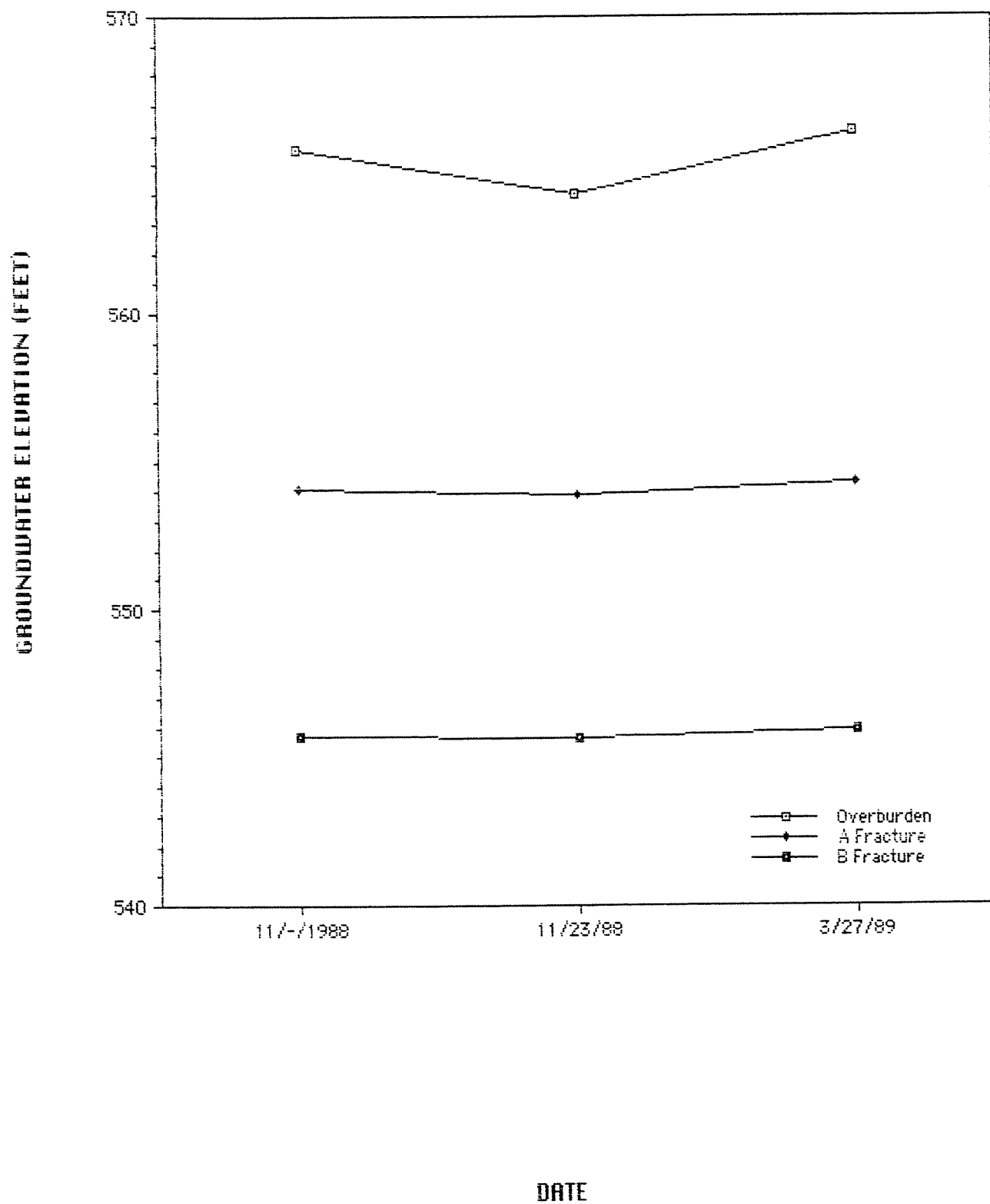
MW-88-10 GROUNDWATER ELEVATION v. DATE



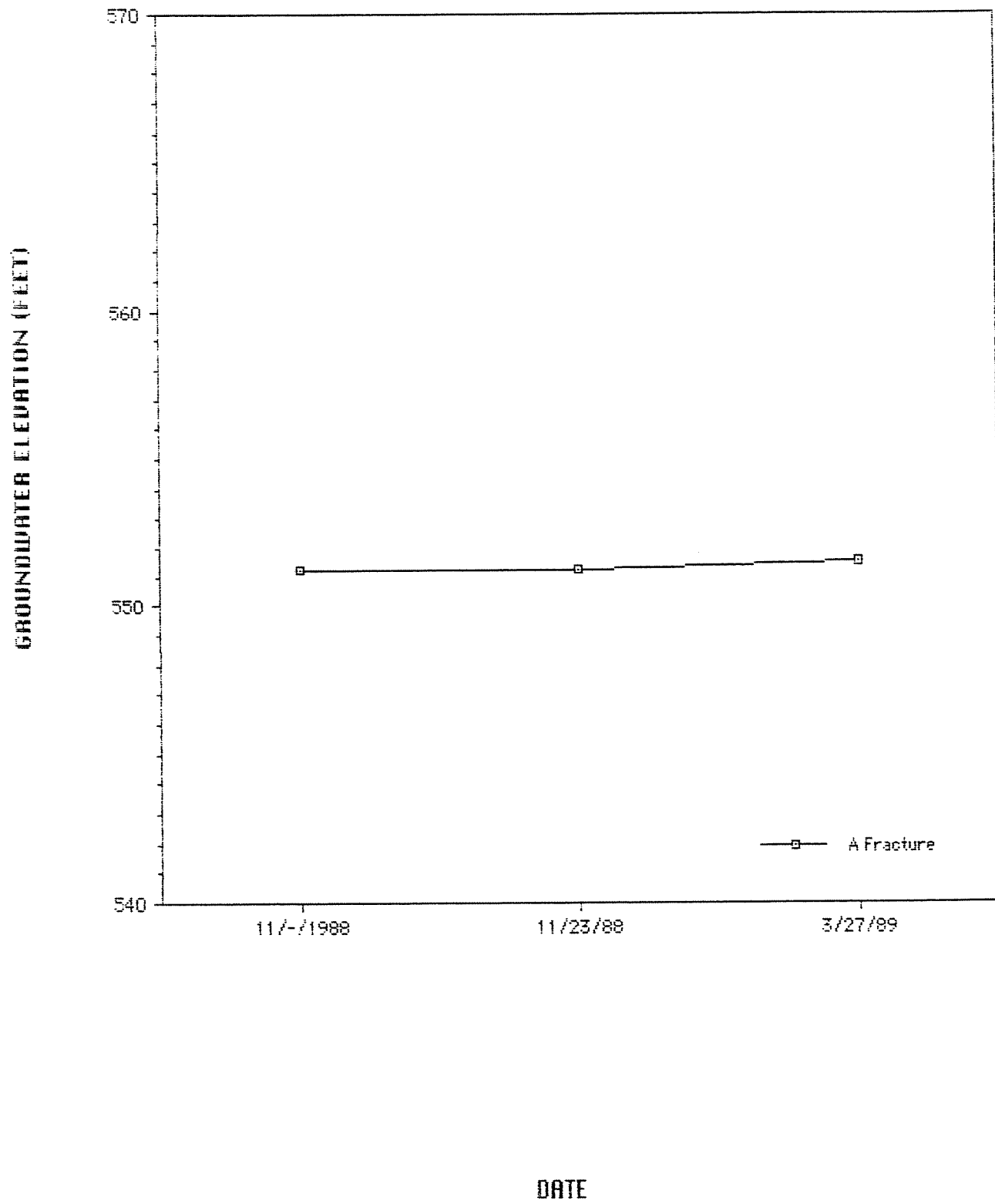
MW-88-11 GROUNDWATER ELEVATION v. DATE



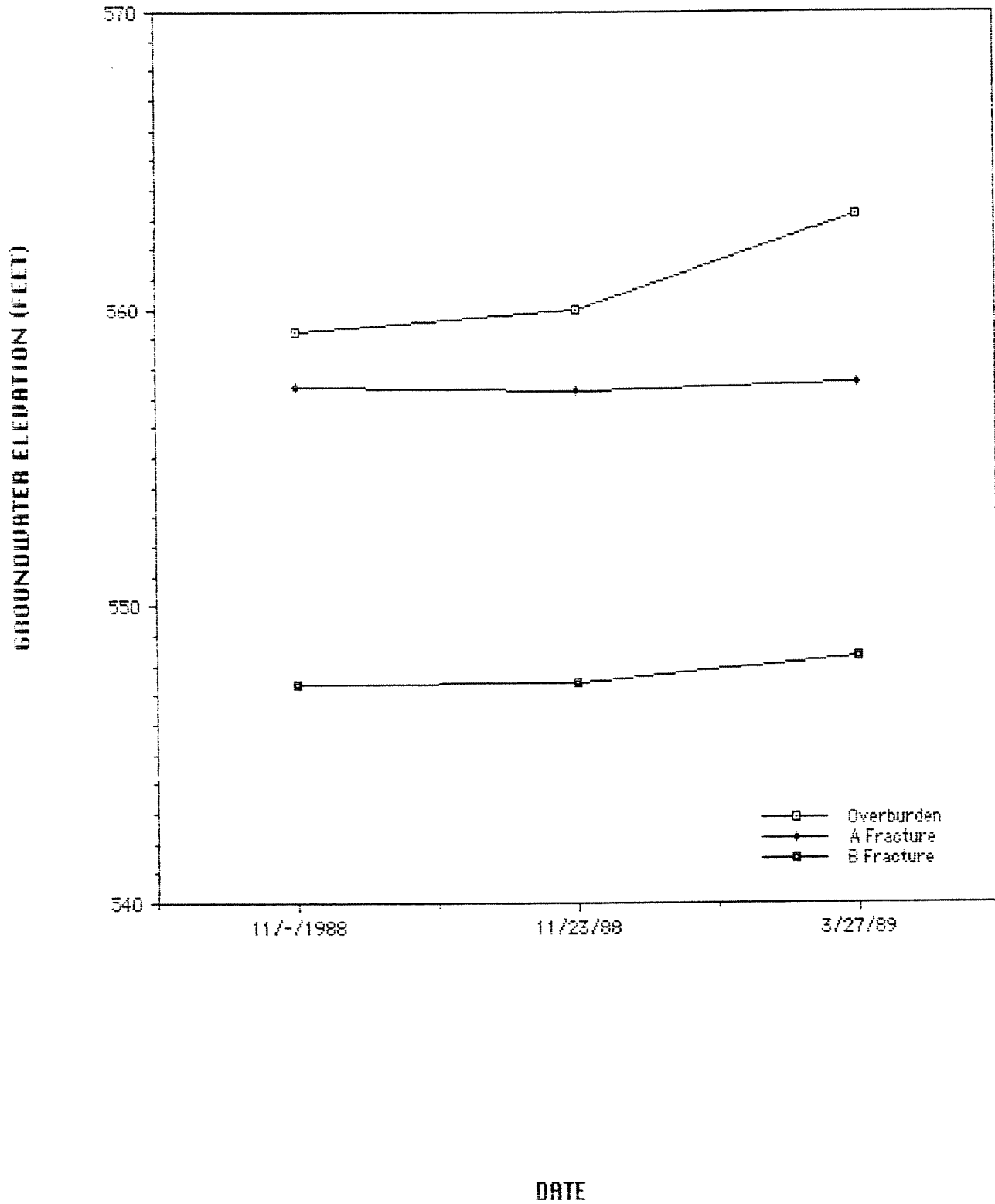
MW-88-12 GROUNDWATER ELEVATION v. DATE



MW-88-13 GROUNDWATER ELEVATION v. DATE



MW-88-14 GROUNDWATER ELEVATION v. DATE



APPENDIX F: ANALYTICAL AND QUALITY CONTROL DATA



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ANALYTICAL RESULTS FOR

Frontier Chemical Waste Process, Inc.

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM (ELAP)
CERTIFICATION #10797

FIELD INFORMATION

Name of Collector: Paul Smith

<u>ASSIGNED</u> <u>BLT# I.D.</u>	<u>SAMPLE I.D.#</u>	<u>SAMPLE TYPE</u>	<u>Site, Date and</u> <u>Time of Collection</u>
2485-01	81-2	Aqueous	Site: Frontier
2485-02	81-7	"	Date: November 9, 1988-
2485-03	84-9	"	November 22, 1988
2485-04	84-90B	"	Time: Refer to Chain-of-
2485-05	84-11	" NAPL	Custody
2485-06	84-12	"	
2485-07	84-13	"	
2485-08	84-14	"	
2485-09	84-15	"	
2485-10	84-16	"	
2485-11	84-17	"	
2485-12	87-1A	"	
2485-13	87-1B	"	
2485-14	87-10B	"	
2485-15	87-1C	"	
2485-16	87-2A	"	
2485-17	87-2B	"	
2485-18	87-2C	"	
2485-19	87-3A	"	
2485-20	87-3B	"	
2485-21	87-3C	"	
2485-22	87-30B	"	
2485-23	87-3D	"	
2485-24	87-4A	"	
2485-25	87-4B	" NAPL	
2485-26	87-40B	"	
2485-27	87-5A	"	
2485-28	87-5B	"	
2485-29	87-5C	"	
2485-30	87-50B	"	



TECHNICAL SERVICES, INC.

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Date: December 28, 1988

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ANALYTICAL RESULTS FOR

Frontier Chemical Waste Process, Inc.

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM (ELAP)
CERTIFICATION #10797

<u>ASSIGNED</u> <u>BLT# I.D.</u>	<u>SAMPLE I.D.#</u>	<u>SAMPLE TYPE</u>
2485-31	87-5D	Aqueous
2485-32	87-28	"
2485-33	88-1A	"
2485-34	88-1B	"
2485-35	88-2OB	" NAPL
2485-36	88-2A	"
2485-37	88-2C	" NAPL
2485-38	88-2B	"
2485-39	88-3A	"
2485-40	88-3B	"
2485-41	88-4OB	"
2485-42	88-4A	"
2485-43	88-4B	"
2485-44	88-4C	"
2485-45	88-5B	"
2485-46	88-5OB	"
2485-47	88-5C	"
2485-48	88-6OB	"
2485-49	88-6A	"
2485-50	88-6B	"
2485-51	88-7OB	"
2485-52	88-7A	"
2485-53	88-7C	"
2485-54	88-7B	"
2485-55	88-8OB	"
2485-56	88-8A	"
2485-57	88-8B	"
2485-58	88-9OB	"
2485-59	88-9A	"
2485-60	88-9B	"



TECHNICAL SERVICES, INC.

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Date: December 28, 1988

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ANALYTICAL RESULTS FOR

Frontier Chemical Waste Process, Inc.

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM (ELAP)
CERTIFICATION #10797

<u>ASSIGNED</u> <u>BLT# I.D.</u>	<u>SAMPLE I.D.#</u>	<u>SAMPLE TYPE</u>
2485-61	88-100B	Aqueous
2485-62	88-10C	"
2485-63	88-10A	"
2485-64	88-10B	"
2485-65	88-110B	"
2485-66	88-11A	"
2485-67	88-11B	"
2485-68	88-120B	"
2485-69	88-12A	"
2485-70	88-12B	"
2485-71	88-13A	"
2485-72	88-140B	"
2485-73	88-14A	"
2485-74	88-14B	"
2485-75	Field Blank	"
2485-76	Well 90-FB	"
2485-77	Well 89-FB	"
2485-78	Well 88-3FB	"
2485-79	Well 88-2FB	"
2485-80	Well 88-FB	"
2485-81	Well 84-FB	"
2485-82	Well 87-FB	"
2485-83	Well EC FB	"
2485-84	Well 87-00 FB	"
2485-85	Well 87-CO TB	"
2485-86	Well TB	"
2485-87	Well 84-TB	"
2485-88	Well 88-TB	"
2485-89	Well 88-2TB	"
2485-90	Well 89-TB	"
2485-91	Well 88-3TB	"
2485-92	Trip Blank	"



TECHNICAL SERVICES, INC.

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Date: December 28, 1988

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ANALYTICAL RESULTS FOR

Frontier Chemical Waste Process, Inc.

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM (ELAP)
CERTIFICATION #10797

Analytical Methodologies

- Method 9060 refers to Total Organic Carbon. The samples were filtered and subsequently the analysis is identified as Soluble Organic Carbon.
- Volatile Organics were performed using method 8240 for Priority Pollutants list volatiles with additional parameters:
 - Acetone
 - 2-Butanone
 - 4-Methyl-2-Pentanone
 - Total Xylenes
 - Total Monochlorotoluenes
- Organic extractable extracts were prepared using method 3580. The date of extraction on samples which method 8270 was performed is November 21, 1988. Results were reported on the wet weight basis.
- All methods were taken from EPA SW-846 Third Edition.
- BLT Laboratory reviewed the GC/MS output to identify any other peaks present, particularly those semi-volatile halogenated organics, such as the chlorobenzenes and chlorotoluenes in excess of a concentration of 10 ppb to 100 ppb depending on the level of contamination present in the sample.

Laboratory Information

<u>Sample ID</u>	<u>Preservation Status Upon Acceptance</u>	<u>Date/Time Received</u>
BLT #s: 2485-01 thru 2485-92	Properly preserved and collected.	Date: November 9, 1988 November 22, 1988 Time: Various

RELEASED BY:

Ralph Williams



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-35

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
88-20B	Bis-(2-Chloroethyl) ether	4000	<DL
	1,3-Dichlorobenzene	200	110,000
	1,4-Dichlorobenzene	200	100,000
	1,2-Dichlorobenzene	200	87,000
	Bis-(2-Chloroisopropyl) ether	4000	<DL
	N-Nitroso-Di-Propylamine	4000	<DL
	Hexachloroethane	4000	<DL
	Nitrobenzene	4000	<DL
	Isophorone	4000	<DL
	Bis-(2-Chloroethoxy) Methane	4000	<DL
	1,2,4-Trichlorobenzene	200	87,000
	Naphthalene	4000	<DL
	4-Chloroaniline	4000	<DL
	Hexachlorobutadiene	4000	<DL
	2-Methylnaphthalene	4000	<DL
	Hexachlorocyclopentadiene	4000	<DL
	2-Chloronaphthalene	4000	<DL
	2-Nitroaniline	4000	<DL
	Dimethyl Phthalate	4000	<DL
	Acenaphthylene	4000	<DL
	3-Nitroaniline	4000	<DL
	Acenaphthene	4000	<DL
	Dibenzofuran	4000	<DL
	2,4-Dinitrotoluene	4000	<DL
	2,6-Dinitrotoluene	4000	<DL
	Diethylphthalate	4000	<DL
	4-Chlorophenyl-phenylether	4000	<DL
	Fluorene	4000	<DL
	4-Nitroaniline	4000	<DL
	N-Nitrosodiphenylamine	4000	<DL
	4-Bromophenyl-phenylether	4000	<DL
	Hexachlorobenzene	4000	<DL

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #13797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-35

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
88-20B	Phenanthrene	4000	<DL
	Anthracene	4000	<DL
	Di-N-Butylphthalate	4000	<DL
	Fluoranthene	4000	<DL
	Pyrene	4000	<DL
	Butylbenzylphthalate	4000	<DL
	3,3'-Dichlorobezidine	4000	<DL
	Benzo (a) Anthracene	4000	<DL
	Bis (2-ethylhexyl) Phthalate	4000	<DL
	Chrysene	4000	<DL
	di-N-Octyl Phthalate	4000	<DL
	Benzo (b) & Benzo (k) Fluoranthene	4000	<DL
	Benzo (a) Pyrene	4000	<DL
	Indeno (1,2,3-ad) Pyrene	4000	<DL
	Dibenzo (a,h) anthracene	4000	<DL
	Benzo (g,h,i) Perylene	4000	<DL

SURROGATE RECOVERIES

%RECOVERY

Nitrobenzene -d5	30
2-Fluorobiphenyl	36
4-Terphenyl-d14	43

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-35

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
88-20B	Phenol	4000	<DL
	2-Chlorophenol	4000	<DL
	Benzyl Alcohol	4000	<DL
	2-Methylphenol	4000	<DL
	4-Methylphenol	4000	<DL
	2-Nitrophenol	4000	<DL
	2,4-Dimethylphenol	4000	<DL
	Benzoic Acid	4000	<DL
	2,4-Dichlorophenol	4000	<DL
	4-Chloro-3-Methylphenol	4000	<DL
	2,4,6-Trichlorophenol	4000	<DL
	2,4,5-Trichlorophenol	4000	<DL
	2,4-Dinitrophenol	4000	<DL
	4-Nitrophenol	4000	<DL
	4-6-Dinitro-2-Methylphenol	4000	<DL
	Pentachlorophenol	4000	<DL

SURROGATE RECOVERIES

%RECOVERY

Phenol-d6	79
2-Fluorophenol	86
2,4,6-Tribromophenol	84

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-37

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
38-2C	Bis-(2-Chloroethyl) ether	4000	<DL
	1,3-Dichlorobenzene	200	120,000
	1,4-Dichlorobenzene	200	100,000
	1,2-Dichlorobenzene	200	91,000
	Bis-(2-Chloroisopropyl) ether	4000	<DL
	N-Nitroso-Di-Propylamine	4000	<DL
	Hexachloroethane	4000	<DL
	Nitrobenzene	4000	<DL
	Isophorone	4000	<DL
	Bis-(2-Chloroethoxy) Methane	4000	<DL
	1,2,4-Trichlorobenzene	200	89,000
	Naphthalene	4000	<DL
	4-Chloroaniline	4000	<DL
	Hexachlorobutadiene	4000	<DL
	2-Methylnaphthalene	4000	<DL
	Hexachlorocyclopentadiene	4000	<DL
	2-Chloronaphthalene	4000	<DL
	2-Nitroaniline	4000	<DL
	Dimethyl Phthalate	4000	<DL
	Acenaphthylene	4000	<DL
	3-Nitroaniline	4000	<DL
	Acenaphthene	4000	<DL
	Dibenzofuran	4000	<DL
	2,4-Dinitrotoluene	4000	<DL
	2,6-Dinitrotoluene	4000	<DL
	Diethylphthalate	4000	<DL
	4-Chlorophenyl-phenylether	4000	<DL
	Fluorene	4000	<DL
	4-Nitroaniline	4000	<DL
	N-Nitrosodiphenylamine	4000	<DL
	4-Bromophenyl-phenylether	4000	<DL
	Hexachlorobenzene	4000	<DL

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-37

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
88-2C	Phenanthrene	4000	<DL
	Anthracene	4000	<DL
	Di-N-Butylphthalate	4000	<DL
	Fluoranthene	4000	<DL
	Pyrene	4000	<DL
	Butylbenzylphthalate	4000	<DL
	3,3'-Dichlorobezidine	4000	<DL
	Benzo (a) Anthracene	4000	<DL
	Bis (2-ethylhexyl) Phthalate	4000	<DL
	Chrysene	4000	<DL
	di-N-Octyl Phthalate	4000	<DL
	Benzo (b) & Benzo (k) Fluoranthene	4000	<DL
	Benzo (a) Pyrene	4000	<DL
	Indeno (1,2,3-ad) Pyrene	4000	<DL
	Dibenzo (a,h) anthracene	4000	<DL
	Benzo (g,h,i) Perylene	4000	<DL

SURROGATE RECOVERIES

%RECOVERY

Nitrobenzene -d5	32
2-Fluorobiphenyl	40
4-Terphenyl-dl4	40

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

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Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-37

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
88-2C	Phenol	4000	<DL
	2-Chlorophenol	4000	<DL
	Benzyl Alcohol	4000	<DL
	2-Methylphenol	4000	<DL
	4-Methylphenol	4000	<DL
	2-Nitrophenol	4000	<DL
	2,4-Dimethylphenol	4000	<DL
	Benzoic Acid	4000	<DL
	2,4-Dichlorophenol	4000	<DL
	4-Chloro-3-Methylphenol	4000	<DL
	2,4,6-Trichlorophenol	4000	<DL
	2,4,5-Trichlorophenol	4000	<DL
	2,4-Dinitrophenol	4000	<DL
	4-Nitrophenol	4000	<DL
	4-6-Dinitro-2-Methylphenol	4000	<DL
	Pentachlorophenol	4000	<DL

SURROGATE RECOVERIES

%RECOVERY

Phenol-d6	89
2-Fluorophenol	91
2,4,6-Tribromophenol	68

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-05

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
84-11	Bis-(2-Chloroethyl) ether	4000	<DL
	1,3-Dichlorobenzene	200	38,000
	1,4-Dichlorobenzene	200	55,000
	1,2-Dichlorobenzene	200	95,000
	Bis-(2-Chloroisopropyl) ether	4000	<DL
	N-Nitroso-Di-Propylamine	4000	<DL
	Hexachloroethane	4000	<DL
	Nitrobenzene	4000	<DL
	Isophorone	4000	<DL
	Bis-(2-Chloroethoxy) Methane	4000	<DL
	1,2,4-Trichlorobenzene	200	20,000
	Naphthalene	4000	<DL
	4-Chloroaniline	4000	<DL
	Hexachlorobutadiene	4000	<DL
	2-Methylnaphthalene	4000	<DL
	Hexachlorocyclopentadiene	4000	<DL
	2-Chloronaphthalene	4000	<DL
	2-Nitroaniline	4000	<DL
	Dimethyl Phthalate	4000	<DL
	Acenaphthylene	4000	<DL
	3-Nitroaniline	4000	<DL
	Acenaphthene	4000	<DL
	Dibenzofuran	4000	<DL
	2,4-Dinitrotoluene	4000	<DL
	2,6-Dinitrotoluene	4000	<DL
	Diethylphthalate	4000	<DL
	4-Chlorophenyl-phenylether	4000	<DL
	Fluorene	4000	<DL
	4-Nitroaniline	4000	<DL
	N-Nitrosodiphenylamine	4000	<DL
	4-Bromophenyl-phenylether	4000	<DL
	Hexachlorobenzene	4000	<DL

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-05

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
34-11	Phenanthrene	4000	<DL
	Anthracene	4000	<DL
	Di-N-Butylphthalate	4000	<DL
	Fluoranthene	4000	<DL
	Pyrene	4000	<DL
	Butylbenzylphthalate	4000	<DL
	3,3'-Dichlorobezidine	4000	<DL
	Benzo (a) Anthracene	4000	<DL
	Bis (2-ethylhexyl) Phthalate	200	1500
	Chrysene	4000	<DL
	di-N-Octyl Phthalate	4000	<DL
	Benzo (b) & Benzo (k) Fluoranthene	4000	<DL
	Benzo (a) Pyrene	4000	<DL
	Indeno (1,2,3-ad) Pyrene	4000	<DL
	Dibenzo (a,h) anthracene	4000	<DL
	Benzo (g,h,i) Perylene	4000	<DL

SURROGATE RECOVERIES

%RECOVERY

Nitrobenzene -d5	25
2-Fluorobiphenyl	33
4-Terphenyl-d14	33

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-05

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
84-11	Phenol	4000	<DL
	2-Chlorophenol	4000	<DL
	Benzyl Alcohol	4000	<DL
	2-Methylphenol	4000	<DL
	4-Methylphenol	4000	<DL
	2-Nitrophenol	4000	<DL
	2,4-Dimethylphenol	4000	<DL
	Benzoic Acid	4000	<DL
	2,4-Dichlorophenol	4000	<DL
	4-Chloro-3-Methylphenol	4000	<DL
	2,4,6-Trichlorophenol	4000	<DL
	2,4,5-Trichlorophenol	4000	<DL
	2,4-Dinitrophenol	4000	<DL
	4-Nitrophenol	4000	<DL
	4-6-Dinitro-2-Methylphenol	4000	<DL
	Pentachlorophenol	4000	<DL

SURROGATE RECOVERIES

%RECOVERY

Phenol-d6	79
2-Fluorophenol	75
2,4,6-Tribromophenol	73

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



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4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-26

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
87-40B	Bis-(2-Chloroethyl) ether	2000	<DL
	1,3-Dichlorobenzene	2000	<DL
	1,4-Dichlorobenzene	2000	<DL
	1,2-Dichlorobenzene	2000	<DL
	Bis-(2-Chloroisopropyl) ether	2000	<DL
	N-Nitroso-Di-Propylamine	2000	<DL
	Hexachloroethane	2000	<DL
	Nitrobenzene	2000	<DL
	Isophorone	2000	<DL
	Bis-(2-Chloroethoxy) Methane	2000	<DL
	1,2,4-Trichlorobenzene	2000	<DL
	Naphthalene	2000	<DL
	4-Chloroaniline	2000	<DL
	Hexachlorobutadiene	2000	<DL
	2-Methylnaphthalene	2000	<DL
	Hexachlorocyclopentadiene	2000	<DL
	2-Chloronaphthalene	2000	<DL
	2-Nitroaniline	2000	<DL
	Dimethyl Phthalate	2000	<DL
	Acenaphthylene	2000	<DL
	3-Nitroaniline	2000	<DL
	Acenaphthene	2000	<DL
	Dibenzofuran	2000	<DL
	2,4-Dinitrotoluene	2000	<DL
	2,6-Dinitrotoluene	2000	<DL
	Diethylphthalate	2000	<DL
	4-Chlorophenyl-phenylether	2000	<DL
	Fluorene	2000	<DL
	4-Nitroaniline	2000	<DL
	N-Nitrosodiphenylamine	2000	<DL
	4-Bromophenyl-phenylether	2000	<DL
	Hexachlorobenzene	2000	<DL

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 28, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-26

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
87-40B	Phenanthrene	2000	<DL
	Anthracene	2000	<DL
	Di-N-Butylphthalate	2000	<DL
	Fluoranthene	2000	<DL
	Pyrene	2000	<DL
	Butylbenzylphthalate	2000	<DL
	3,3'-Dichlorobezidine	2000	<DL
	Benzo(a)Anthracene	2000	<DL
	Bis(2-ethylhexyl) Phthalate	2000	<DL
	Chrysene	2000	<DL
	di-N-Octyl Phthalate	2000	<DL
	Benzo(b) & Benzo(k) Fluoranthene	2000	<DL
	Benzo(a) Pyrene	2000	<DL
	Indeno(1,2,3-ad) Pyrene	2000	<DL
	Dibenzo(a,h) anthracene	2000	<DL
	Benzo(g,h,i) Perylene	2000	<DL

SURROGATE RECOVERIES

%RECOVERY

Nitrobenzene -d5	36
2-Fluorobiphenyl	39
4-Terphenyl-d14	40

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

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Date: December 28, 1988

ELAP #13797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-26

<u>Sample ID</u>	<u>Parameter</u>	<u>Detection Limit ppm</u>	<u>Quantity Detected ppm</u>
37-40B	Phenol	400	630
	2-Chlorophenol	2000	<DL
	Benzyl Alcohol	2000	<DL
	2-Methylphenol	2000	<DL
	4-Methylphenol	2000	<DL
	2-Nitrophenol	2000	<DL
	2,4-Dimethylphenol	2000	<DL
	Benzoic Acid	2000	<DL
	2,4-Dichlorophenol	2000	<DL
	4-Chloro-3-Methylphenol	2000	<DL
	2,4,6-Trichlorophenol	2000	<DL
	2,4,5-Trichlorophenol	2000	<DL
	2,4-Dinitrophenol	2000	<DL
	4-Nitrophenol	2000	<DL
	4-6-Dinitro-2-Methylphenol	2000	<DL
	Pentachlorophenol	2000	<DL

SURROGATE RECOVERIES

%RECOVERY

Phenol-d6	93
2-Fluorophenol	83
2,4,6-Tribromophenol	109

METHOD REFERENCE: EPA SW-846 (8270)

DL: Detection Limit



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 27, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-01/35

<u>Sample ID</u>	<u>Test</u>	<u>Test Method</u>	<u>Detection limit</u>	<u>Results</u>
81-2	SOC	EPA SW-846 (9060)	5 ppm	700
81-7	"	" "	5 ppm	16
84-9	"	" "	5 ppm	180
84-11	"	" "	5 ppm	200
84-12	"	" "	5 ppm	120
84-13	"	" "	5 ppm	34
84-14	"	" "	5 ppm	39
84-15	"	" "	5 ppm	65
84-16	"	" "	5 ppm	140
84-17	"	" "	5 ppm	42
87-1A	"	" "	5 ppm	30
87-1B	"	" "	5 ppm	20
87-10B	"	" "	5 ppm	32
87-1C	"	" "	5 ppm	30
87-2A	"	" "	5 ppm	44
87-2B	"	" "	5 ppm	39
87-2C	"	" "	5 ppm	26
87-3A	"	" "	5 ppm	35
87-3B	"	" "	5 ppm	59
87-3C	"	" "	5 ppm	64
87-30B	"	" "	5 ppm	38
87-3D	"	" "	5 ppm	33
87-4A	"	" "	5 ppm	300
87-4B	"	" "	5 ppm	210
87-40B	"	" "	5 ppm	160
87-5A	"	" "	5 ppm	21
87-5B	"	" "	5 ppm	18
87-5C	"	" "	5 ppm	40
87-50B	"	" "	5 ppm	22
87-5D	"	" "	5 ppm	13
87-28	"	" "	5 ppm	45
88-1A	"	" "	5 ppm	25
88-1B	"	" "	5 ppm	16
88-20B	"	" "	5 ppm	1400

SOC = Soluble Organic Carbon



TECHNICAL SERVICES, INC.

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Date: December 27, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-36/74

<u>Sample ID</u>	<u>Test</u>	<u>Test Method</u>	<u>Detection limit</u>	<u>Results</u>
88-2A	SOC	EPA SW-846 (9060)	5 ppm	330
88-2C	"	" "	5 ppm	870
88-2B	"	" "	5 ppm	28
88-3A	"	" "	5 ppm	160
88-3B	"	" "	5 ppm	190
88-4OB	"	" "	5 ppm	28
88-4A	"	" "	5 ppm	39
88-4B	"	" "	5 ppm	69
88-4C	"	" "	5 ppm	54
88-5B	"	" "	5 ppm	280
88-5OB	"	" "	5 ppm	290
88-5C	"	" "	5 ppm	50
88-6OB	"	" "	5 ppm	150
88-6A	"	" "	5 ppm	620
88-6B	"	" "	5 ppm	150
88-7OB	"	" "	5 ppm	410
88-7A	"	" "	5 ppm	260
88-7C	"	" "	5 ppm	250
88-7B	"	" "	5 ppm	110
88-8OB	"	" "	5 ppm	110
88-8A	"	" "	5 ppm	88
88-8B	"	" "	5 ppm	<DL
88-9OB	"	" "	5 ppm	27
88-9A	"	" "	5 ppm	70
88-9B	"	" "	5 ppm	42
88-10OB	"	" "	5 ppm	380
88-10C	"	" "	5 ppm	400
88-10A	"	" "	5 ppm	22
88-10B	"	" "	5 ppm	110
88-11OB	"	" "	5 ppm	57
88-11A	"	" "	5 ppm	31
88-11B	"	" "	5 ppm	36
88-12OB	"	" "	5 ppm	78
88-12A	"	" "	5 ppm	230
88-12B	"	" "	5 ppm	38
88-13A	"	" "	5 ppm	180
88-14OB	"	" "	5 ppm	47
88-14A	"	" "	5 ppm	29
88-14B	"	" "	5 ppm	42

SOC = Soluble Organic Carbon



TECHNICAL SERVICES, INC.

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Date: December 27, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-01/35

<u>Sample ID</u>	<u>Test</u>	<u>Test Method</u>	<u>Detection limit ppm</u>	<u>Results ppm</u>
81-2	Total Phenol	EPA SW-846 (9065)	0.07	17
81-7	"	"	0.07	<DL
84-9	"	"	0.07	16
84-11	"	"	0.07	18
84-12	"	"	0.07	3.2
84-13	"	"	0.07	<DL
84-14	"	"	0.07	0.22
84-15	"	"	0.07	0.22
84-16	"	"	0.07	2.2
84-17	"	"	0.07	0.13
87-1A	"	"	0.07	<DL
87-1B	"	"	0.07	0.42
87-10B	"	"	0.07	<DL
87-1C	"	"	0.07	0.07
87-2A	"	"	0.07	<DL
87-2B	"	"	0.07	<DL
87-2C	"	"	0.07	<DL
87-3A	"	"	0.07	<DL
87-3B	"	"	0.07	0.10
87-3C	"	"	0.07	0.21
87-30B	"	"	0.07	0.14
87-3D	"	"	0.07	<DL
87-4A	"	"	0.07	32
87-4B	"	"	0.07	3.7
87-40B	"	"	0.07	3.8
87-5A	"	"	0.07	<DL
87-5B	"	"	0.07	<DL
87-5C	"	"	0.07	<DL
87-50B	"	"	0.07	<DL
87-5D	"	"	0.07	<DL
87-28	"	"	0.07	<DL
88-1A	"	"	0.07	0.07
88-1B	"	"	0.07	0.09
88-20B	"	"	0.07	38



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 27, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-36/74

<u>Sample ID</u>	<u>Test</u>	<u>Test Method</u>	<u>Detection limit ppm</u>	<u>Results ppm</u>
88-2A	Total Phenol	EPA SW-846 (9065)	0.07	16
88-2C	"	"	0.07	16
88-2B	"	"	0.07	<DL
88-3A	"	"	0.07	2.7
88-3B	"	"	0.07	34
88-4OB	"	"	0.07	<DL
88-4A	"	"	0.07	0.36
88-4B	"	"	0.07	0.28
88-4C	"	"	0.07	0.29
88-5B	"	"	0.07	27
88-5OB	"	"	0.07	32
88-5C	"	"	0.07	0.08
88-6OB	"	"	0.07	1.9
88-6A	"	"	0.07	17
88-6B	"	"	0.07	22
88-7OB	"	"	0.07	0.87
88-7A	"	"	0.07	5.1
88-7C	"	"	0.07	4.8
88-7B	"	"	0.07	4.0
88-8OB	"	"	0.07	0.26
88-8A	"	"	0.07	0.84
88-8B	"	"	0.07	<DL
88-9OB	"	"	0.07	0.41
88-9A	"	"	0.07	0.86
88-9B	"	"	0.07	0.39
88-10OB	"	"	0.07	1.1
88-10C	"	"	0.07	0.78
88-10A	"	"	0.07	0.07
88-10B	"	"	0.07	1.7
88-11OB	"	"	0.07	0.38
88-11A	"	"	0.07	2.6
88-11B	"	"	0.07	0.09
88-12OB	"	"	0.07	0.09
88-12A	"	"	0.07	2.2
88-12B	"	"	0.07	0.10
88-13A	"	"	0.07	7.6
88-14OB	"	"	0.07	0.14
88-14A	"	"	0.07	0.21
88-14B	"	"	0.07	0.10



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

QUALITY ASSURANCE/QUALITY CONTROL DATA

CUSTOMER NAME: Frontier Chemical Waste Process, Inc.

BLT # 2485

<u>SAMPLE ID #</u>	<u>PARAMETER</u>	<u>DUPLICATE RPD</u>	<u>SPIKE %,RECOVERY</u>	<u>QUANTITY OF SPIKE ADDED</u>	<u>QC CHECK % TV</u>
88-5B	SOC	1.4	102	30 ppm	101
38-1B	"	31	104	30 "	107
87-5B	"	5.7	99	20 "	101
87-3A	"	2.8	108	30 "	105
84-13	"	2.9	120	20 "	109
84-16	"	2.9	89	30 "	110
88-12B	"	2.6	95	30 "	108
88-9B	"	15.3	104	30 "	105

RPD = Relative Percent Difference

TV = True Value

SOC = Soluble Organic Carbon



TECHNICAL SERVICES, INC.

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QUALITY ASSURANCE/QUALITY CONTROL DATA

CUSTOMER NAME: Frontier Chemical Waste Process, Inc.

BLT # 2485

<u>SAMPLE ID #</u>	<u>PARAMETER</u>	<u>DUPLICATE RPD</u>	<u>SPIKE %, RECOVERY</u>	<u>QUANTITY OF SPIKE ADDED</u>	<u>QC CHECK % TV</u>
84-14	Phenol		83	2.0 ppm	82
87-1C	"	0			100
87-50B	"		89	3.0 "	78
87-1B	"		92	4.0 "	88
87-3A	"		85	4.0 "	90
87-2A	"	0			80
88-11A	"	1.7			
*	"		88	4.0 "	
84-13	"		81	4.0 "	
*	"	26			
87-2B	"	0			

RPD = Relative Percent Difference

TV = True Value

* Quality Control Results were generated from samples of similar matrix analyzed simultaneously with the BLT number referenced above.



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-01

SAMPLE ID: 81-2

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	40	<DL
Bromomethane	40	<DL
Vinyl Chloride	40	<DL
Chloroethane	40	<DL
Methylene Chloride	4	4,200
Acetone	4	28,000
Trichlorofluoromethane	40	<DL
Acrolein	40	<DL
Acrylonitrile	40	<DL
1,1-Dichloroethene	40	<DL
1,1-Dichloroethane	4	460
Trans-1,2-Dichloroethylene	4	18
Chloroform	4	4
2-Butanone	4	600
1,1,1-Trichloroethane	40	<DL
Carbon Tetrachloride	40	<DL
Bromodichloromethane	40	<DL
1,2-Dichloropropane	40	<DL
Trans-1,3-Dichloropropene	40	<DL
Trichloroethene	4	18
Benzene	4	24
Dibromochloromethane	40	<DL
Cis-1,3-Dichloropropene	40	<DL
1,1,2-Trichloroethane	40	<DL
2-Chlorovinyl Ether	40	<DL
Bromoform	40	<DL
Tetrachloroethene	40	<DL
1,1,2,2-Tetrachloroethane	40	<DL
4-Methyl-2-Pentanone	4	340
Toluene	4	26
Chlorobenzene	40	<DL
Ethylbenzene	40	<DL
Total-Xylenes	40	<DL
Total Monochlorotoluenes	4	220
Total Dichlorobenzenes	40	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

100
101
106



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-02

SAMPLE ID: 81-7

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	26
Trans-1,2-Dichloroethylene	4	34
Chloroform	4	140
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	400
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	620
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	74
1,1,2,2-Tetrachloroethane	4	13
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

102
96
99



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-03

SAMPLE ID: 84-9

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	400	<DL
Chloroethane	400	<DL
Methylene Chloride	4	4800
Acetone	4	2600
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	400	<DL
1,1-Dichloroethane	4	880
Trans-1,2-Dichloroethylene	400	<DL
Chloroform	4	460
2-Butanone	4	260
1,1,1-Trichloroethane	4	260
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	1500
Benzene	4	1400
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	720
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	4	340
Toluene	4	900
Chlorobenzene	4	3800
Ethylbenzene	4	60
Total-Xylenes	4	320
Total Monochlorotoluenes	4	7000
Total Dichlorobenzenes	4	11000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	98
Toluene D8	97
4-Bromofluorobenzene	96



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-04

SAMPLE ID: 84-90B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	400	<DL
Chloroethane	400	<DL
Methylene Chloride	4	4200
Acetone	400	3000
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	400	<DL
1,1-Dichloroethane	4	920
Trans-1,2-Dichloroethylene	400	<DL
Chloroform	4	320
2-Butanone	4	400
1,1,1-Trichloroethane	4	260
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	1500
Benzene	4	1400
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	760
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	4	360
Toluene	4	880
Chlorobenzene	4	4000
Ethylbenzene	4	40
Total-Xylenes	4	300
Total Monochlorotoluenes	4	7200
Total Dichlorobenzenes	4	11000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	101
Toluene D8	97
4-Bromofluorobenzene	97



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-05

SAMPLE ID: 84-11

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	2600
Acetone	4	8000
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	4	150
1,1-Dichloroethane	4	3600
Trans-1,2-Dichloroethylene	4	200
Chloroform	4	150
2-Butanone	1000	<DL
1,1,1-Trichloroethane	4	38,000
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	27,000
Benzene	4	6500
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	4	6500
1,1,2,2-Tetrachloroethane	4	6500
4-Methyl-2-Pentanone	4	700
Toluene	4	2700
Chlorobenzene	4	18,000
Ethylbenzene	4	150
Total-Xylenes	4	500
Total Monochlorotoluenes	4	47000
Total Dichlorobenzenes	4	28000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

103
101
108



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #13797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-05

SAMPLE ID: Well 84-11 (Organic)

<u>PARAMETER</u>	<u>DETECTION LIMIT mg/kg</u>	<u>RESULT mg/kg</u>
Chloromethane	2000	<DL
Bromomethane	2000	<DL
Vinyl Chloride	2000	<DL
Chloroethane	2000	<DL
Methylene Chloride	0.2	6700
Acetone	2000	<DL
Trichlorofluoromethane	2000	<DL
Acrolein	2000	<DL
Acrylonitrile	2000	<DL
1,1-Dichloroethene	2000	<DL
1,1-Dichloroethane	2000	<DL
Trans-1,2-Dichloroethylene	2000	<DL
Chloroform	0.2	2700
2-Butanone	2000	<DL
1,1,1-Trichloroethane	0.2	34,000
Carbon Tetrachloride	2000	<DL
Bromodichloromethane	2000	<DL
1,2-Dichloropropane	2000	<DL
Trans-1,3-Dichloropropene	2000	<DL
Trichloroethene	0.2	29,000
Benzene	0.2	1400
Dibromochloromethane	2000	<DL
Cis-1,3-Dichloropropene	2000	<DL
1,1,2-Trichloroethane	2000	<DL
2-Chlorovinyl Ether	2000	<DL
Bromoform	2000	<DL
Tetrachloroethene	0.2	36,000
1,1,2,2-Tetrachloroethane	2000	<DL
4-Methyl-2-Pentanone	2000	<DL
Toluene	2000	<DL
Chlorobenzene	0.2	38,000
Ethylbenzene	2000	<DL
Total-Xylenes	2000	<DL
Total Monochlorotoluenes	0.2	270,000
Total Dichlorobenzenes	0.2	140,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

88
104
104



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-06

SAMPLE ID: 84-12

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	800	<DL
Bromomethane	800	<DL
Vinyl Chloride	4	880
Chloroethane	800	<DL
Methylene Chloride	4	2700
Acetone	4	1800
Trichlorofluoromethane	800	<DL
Acrolein	800	<DL
Acrylonitrile	800	<DL
1,1-Dichloroethene	800	<DL
1,1-Dichloroethane	4	560
Trans-1,2-Dichloroethylene	4	5200
Chloroform	4	680
1,2-Dichloroethane	4	320
2-Butanone	4	320
1,1,1-Trichloroethane	800	<DL
Carbon Tetrachloride	800	<DL
Bromodichloromethane	800	<DL
1,2-Dichloropropane	800	<DL
Trans-1,3-Dichloropropene	800	<DL
Trichloroethene	4	25,000
Benzene	4	4400
Dibromochloromethane	800	<DL
Cis-1,3-Dichloropropene	800	<DL
1,1,2-Trichloroethane	800	<DL
2-Chlorovinyl Ether	800	<DL
Bromoform	800	<DL
Tetrachloroethene	4	1200
1,1,2,2-Tetrachloroethane	800	<DL
4-Methyl-2-Pentanone	800	<DL
Toluene	4	1200
Chlorobenzene	4	2600
Ethylbenzene	800	<DL
Total-Xylenes	800	<DL
Total Monochlorotoluenes	4	5600
Total Dichlorobenzenes	4	18,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	95
Toluene D8	97
4-Bromofluorobenzene	94



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-07

SAMPLE ID: 84-13

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	40
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	340
Chloroform	4	110
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	92
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	44
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	16
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	4
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	880
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

106
105
110



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-08

SAMPLE ID: 84-14

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	1000	<DL
Acetone	1000	<DL
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	1000	<DL
Trans-1,2-Dichloroethylene	1000	<DL
Chloroform	4	1400
2-Butanone	1000	<DL
1,1,1-Trichloroethane	4	250
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	1000	<DL
Benzene	1000	<DL
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	1000	<DL
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	1000	<DL
Toluene	4	1800
Chlorobenzene	1000	<DL
Ethylbenzene	4	100
Total-Xylenes	1000	<DL
Total Monochlorotoluenes	4	85,000
Total Dichlorobenzenes	1000	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

88
85
83



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-09

SAMPLE ID: 84-15

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	80	<DL
Bromomethane	80	<DL
Vinyl Chloride	80	<DL
Chloroethane	80	<DL
Methylene Chloride	4	20
Acetone	4	180
Trichlorofluoromethane	80	<DL
Acrolein	80	<DL
Acrylonitrile	80	<DL
1,1-Dichloroethene	80	<DL
1,1-Dichloroethane	4	20
Trans-1,2-Dichloroethylene	80	<DL
Chloroform	4	100
2-Butanone	80	<DL
1,1,1-Trichloroethane	80	<DL
Carbon Tetrachloride	80	<DL
Bromodichloromethane	80	<DL
1,2-Dichloropropane	80	<DL
Trans-1,3-Dichloropropene	80	<DL
Trichloroethene	4	76
Benzene	4	52
Dibromochloromethane	80	<DL
Cis-1,3-Dichloropropene	80	<DL
1,1,2-Trichloroethane	80	<DL
2-Chlorovinyl Ether	80	<DL
Bromoform	80	<DL
Tetrachloroethene	4	16
1,1,2,2-Tetrachloroethane	80	<DL
4-Methyl-2-Pentanone	80	<DL
Toluene	4	68
Chlorobenzene	4	240
Ethylbenzene	80	<DL
Total-Xylenes	80	<DL
Total Monochlorotoluenes	4	250
Total Dichlorobenzenes	4	840

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

107
105
105



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-10

SAMPLE ID: 84-16

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	800	<DL
Bromomethane	800	<DL
Vinyl Chloride	800	<DL
Chloroethane	800	<DL
Methylene Chloride	4	1400
Acetone	4	5200
Trichlorofluoromethane	800	<DL
Acrolein	800	<DL
Acrylonitrile	800	<DL
1,1-Dichloroethene	800	<DL
1,1-Dichloroethane	4	680
Trans-1,2-Dichloroethylene	800	<DL
Chloroform	4	800
2-Butanone	800	<DL
1,1,1-Trichloroethane	800	<DL
Carbon Tetrachloride	800	<DL
Bromodichloromethane	800	<DL
1,2-Dichloropropane	800	<DL
Trans-1,3-Dichloropropene	800	<DL
Trichloroethene	4	960
Benzene	4	360
Dibromochloromethane	800	<DL
Cis-1,3-Dichloropropene	800	<DL
1,1,2-Trichloroethane	800	<DL
2-Chlorovinyl Ether	800	<DL
Bromoform	800	<DL
Tetrachloroethene	4	280
1,1,2,2-Tetrachloroethane	800	<DL
4-Methyl-2-Pentanone	800	<DL
Toluene	4	800
Chlorobenzene	4	120
Ethylbenzene	800	<DL
Total-Xylenes	800	<DL
Total Monochlorotoluenes	4	8000
Total Dichlorobenzenes	800	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	94
Toluene D8	87
4-Bromofluorobenzene	91



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-11

SAMPLE ID: 84-17

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	50
Acetone	1000	<DL
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	1000	<DL
Trans-1,2-Dichloroethylene	1000	<DL
Chloroform	4	1400
2-Butanone	1000	<DL
1,1,1-Trichloroethane	1000	<DL
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	1000	<DL
Benzene	1000	<DL
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	1000	<DL
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	1000	<DL
Toluene	4	1200
Chlorobenzene	4	450
Ethylbenzene	1000	<DL
Total-Xylenes	4	150
Total Monochlorotoluenes	4	95,000
Total Dichlorobenzenes	1000	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

91
94
90



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-11

SAMPLE ID: 84-17

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	50
Acetone	1000	<DL
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	1000	<DL
Trans-1,2-Dichloroethylene	1000	<DL
Chloroform	4	1400
2-Butanone	1000	<DL
1,1,1-Trichloroethane	1000	<DL
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	1000	<DL
Benzene	1000	<DL
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	1000	<DL
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	1000	<DL
Toluene	4	1300
Chlorobenzene	4	450
Ethylbenzene	1000	<DL
Total-Xylenes	4	150
Total Monochlorotoluenes	4	170,000
Total Dichlorobenzenes	1000	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	91
Toluene D8	94
4-Bromofluorobenzene	90



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-12

SAMPLE ID: 87-1A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	54
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	7
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	6
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	5
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	2300
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

94
99
101



TECHNICAL SERVICES, INC.

4626 Royal Avenue. Niagara Falls. New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-14

SAMPLE ID: 87-10B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	200	<DL
Bromomethane	200	<DL
Vinyl Chloride	200	<DL
Chloroethane	200	<DL
Methylene Chloride	200	<DL
Acetone	200	<DL
Trichlorofluoromethane	200	<DL
Acrolein	200	<DL
Acrylonitrile	200	<DL
1,1-Dichloroethene	200	<DL
1,1-Dichloroethane	200	<DL
Trans-1,2-Dichloroethylene	200	<DL
Chloroform	200	<DL
2-Butanone	200	<DL
1,1,1-Trichloroethane	200	<DL
Carbon Tetrachloride	200	<DL
Bromodichloromethane	200	<DL
1,2-Dichloropropane	200	<DL
Trans-1,3-Dichloropropene	200	<DL
Trichloroethene	200	<DL
Benzene	200	<DL
Dibromochloromethane	200	<DL
Cis-1,3-Dichloropropene	200	<DL
1,1,2-Trichloroethane	200	<DL
2-Chlorovinyl Ether	200	<DL
Bromoform	200	<DL
Tetrachloroethene	200	<DL
1,1,2,2-Tetrachloroethane	200	<DL
4-Methyl-2-Pentanone	200	<DL
Toluene	200	<DL
Chlorobenzene	200	<DL
Ethylbenzene	200	<DL
Total-Xylenes	200	<DL
Total Monochlorotoluenes	4	14,000
Total Dichlorobenzenes	200	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	97
Toluene D8	98
4-Bromofluorobenzene	102



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-13

SAMPLE ID: 87-1B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	40	<DL
Bromomethane	40	<DL
Vinyl Chloride	40	<DL
Chloroethane	40	<DL
Methylene Chloride	40	<DL
Acetone	4	56
Trichlorofluoromethane	40	<DL
Acrolein	40	<DL
Acrylonitrile	40	<DL
1,1-Dichloroethene	40	<DL
1,1-Dichloroethane	4	14
Trans-1,2-Dichloroethylene	4	260
Chloroform	4	46
2-Butanone	4	72
1,1,1-Trichloroethane	4	10
Carbon Tetrachloride	40	<DL
Bromodichloromethane	40	<DL
1,2-Dichloropropane	40	<DL
Trans-1,3-Dichloropropene	40	<DL
Trichloroethene	4	76
Benzene	4	6
Dibromochloromethane	40	<DL
Cis-1,3-Dichloropropene	40	<DL
1,1,2-Trichloroethane	40	<DL
2-Chlorovinyl Ether	40	<DL
Bromoform	40	<DL
Tetrachloroethene	40	<DL
1,1,2,2-Tetrachloroethane	40	<DL
4-Methyl-2-Pentanone	40	<DL
Toluene	4	68
Chlorobenzene	40	<DL
Ethylbenzene	40	<DL
Total-Xylenes	40	<DL
Total Monochlorotoluenes	4	10,000
Total Dichlorobenzenes	40	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

101
96
101



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-15

SAMPLE ID: 87-1C

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	11
1,1-Dichloroethane	4	86
Trans-1,2-Dichloroethylene	4	2800
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	130
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	7
Chlorobenzene	4	26
Ethylbenzene	4	<DL
Total-Xylenes	4	64
Total Monochlorotoluenes	4	36
Total Dichlorobenzenes	4	20

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

103
96
99



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-16

SAMPLE ID: 87-2A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	5
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	5
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	7
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	68
Ethylbenzene	4	<DL
Total-Xylenes	4	4
Total Monochlorotoluenes	4	200
Total Dichlorobenzenes	4	82

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

94
97
105



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-17

SAMPLE ID: 87-2B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	7
Chloroform	4	<DL
2-Butanone	4	4
1,2-Dichloroethane	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	10
Benzene	4	11
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	5
Toluene	4	8
Chlorobenzene	4	120
Ethylbenzene	4	<DL
Total-Xylenes	4	7
Total Monochlorotoluenes	4	74
Total Dichlorobenzenes	4	120

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

99
99
108



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-18

SAMPLE ID: 87-2C

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	98
Toluene D8	98
4-Bromofluorobenzene	109



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #13797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-19

SAMPLE ID: 87-3A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	40	<DL
Bromomethane	40	<DL
Vinyl Chloride	40	<DL
Chloroethane	40	<DL
Methylene Chloride	40	<DL
Acetone	4	90
Trichlorofluoromethane	40	<DL
Acrolein	40	<DL
Acrylonitrile	40	<DL
1,1-Dichloroethene	40	<DL
1,1-Dichloroethane	4	14
Trans-1,2-Dichloroethylene	40	<DL
Chloroform	40	<DL
2-Butanone	40	<DL
1,1,1-Trichloroethane	4	22
Carbon Tetrachloride	40	<DL
Bromodichloromethane	40	<DL
1,2-Dichloropropane	40	<DL
Trans-1,3-Dichloropropene	40	<DL
Trichloroethene	40	<DL
Benzene	4	28
Dibromochloromethane	40	<DL
Cis-1,3-Dichloropropene	40	<DL
1,1,2-Trichloroethane	40	<DL
2-Chlorovinyl Ether	40	<DL
Bromoform	40	<DL
Tetrachloroethene	40	<DL
1,1,2,2-Tetrachloroethane	40	<DL
4-Methyl-2-Pentanone	40	<DL
Toluene	40	<DL
Chlorobenzene	4	320
Ethylbenzene	40	<DL
Total-Xylenes	40	<DL
Total Monochlorotoluenes	4	150
Total Dichlorobenzenes	4	1300

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

102
103
113



TECHNICAL SERVICES, INC.

4626 Royal Avenue. Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-20

SAMPLE ID: 87-3B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	40	<DL
Bromomethane	40	<DL
Vinyl Chloride	40	<DL
Chloroethane	40	<DL
Methylene Chloride	40	<DL
Acetone	4	110
Trichlorofluoromethane	4	4
Acrolein	40	<DL
Acrylonitrile	40	<DL
1,1-Dichloroethene	40	<DL
1,1-Dichloroethane	40	<DL
Trans-1,2-Dichloroethylene	40	<DL
Chloroform	4	6
2-Butanone	40	<DL
1,1,1-Trichloroethane	4	6
Carbon Tetrachloride	40	<DL
Bromodichloromethane	40	<DL
1,2-Dichloropropane	40	<DL
Trans-1,3-Dichloropropene	40	<DL
Trichloroethene	4	180
Benzene	4	120
Dibromochloromethane	40	<DL
Cis-1,3-Dichloropropene	40	<DL
1,1,2-Trichloroethane	40	<DL
2-Chlorovinyl Ether	40	<DL
Bromoform	40	<DL
Tetrachloroethene	4	10
1,1,2,2-Tetrachloroethane	40	<DL
4-Methyl-2-Pentanone	40	<DL
Toluene	4	72
Chlorobenzene	4	680
Ethylbenzene	40	<DL
Total-Xylenes	4	74
Total Monochlorotoluenes	4	3000
Total Dichlorobenzenes	4	39,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

95
94
99



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-21

SAMPLE ID: 87-3C

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	400	<DL
Chloroethane	400	<DL
Methylene Chloride	4	620
Acetone	400	<DL
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	400	<DL
1,1-Dichloroethane	400	<DL
Trans-1,2-Dichloroethylene	400	<DL
Chloroform	4	80
2-Butanone	400	<DL
1,1,1-Trichloroethane	400	<DL
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	400	<DL
Benzene	4	120
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	400	<DL
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	4	200
Toluene	4	380
Chlorobenzene	4	1700
Ethylbenzene	4	40
Total-Xylenes	4	620
Total Monochlorotoluenes	4	3000
Total Dichlorobenzenes	4	18,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

93
97
100



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-22

SAMPLE ID: 87-300

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	800	<DL
Bromomethane	800	<DL
Vinyl Chloride	800	<DL
Chloroethane	800	<DL
Methylene Chloride	800	<DL
Acetone	4	2200
Trichlorofluoromethane	4	120
Acrolein	800	<DL
Acrylonitrile	800	<DL
1,1-Dichloroethene	800	<DL
1,1-Dichloroethane	800	<DL
Trans-1,2-Dichloroethylene	800	<DL
Chloroform	800	<DL
2-Butanone	4	1600
1,1,1-Trichloroethane	800	<DL
Carbon Tetrachloride	800	<DL
Bromodichloromethane	800	<DL
1,2-Dichloropropane	800	<DL
Trans-1,3-Dichloropropene	800	<DL
Trichloroethene	800	<DL
Benzene	4	160
Dibromochloromethane	800	<DL
Cis-1,3-Dichloropropene	800	<DL
1,1,2-Trichloroethane	800	<DL
2-Chlorovinyl Ether	800	<DL
Bromoform	800	<DL
Tetrachloroethene	800	<DL
1,1,2,2-Tetrachloroethane	800	<DL
4-Methyl-2-Pentanone	800	<DL
Toluene	800	<DL
Chlorobenzene	4	2000
Ethylbenzene	800	<DL
Total-Xylenes	4	840
Total Monochlorotoluenes	4	3800
Total Dichlorobenzenes	4	26,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

94
94
99



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-23

SAMPLE ID: 87-3D

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	5
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	7
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	24
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	7
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

90
92
93



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-24

SAMPLE ID: 87-4A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	16,000
Acetone	4	16,000
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	4	3800
Trans-1,2-Dichloroethylene	4	300
Chloroform	4	550
2-Butanone	4	4000
1,1,1-Trichloroethane	4	3000
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	8500
Benzene	4	9000
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	4	7500
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	4	1600
Toluene	4	3500
Chlorobenzene	4	12,000
Ethylbenzene	4	250
Total-Xylenes	4	3400
Total Monochlorotoluenes	4	30,000
Total Dichlorobenzenes	4	22,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

94
101
93



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-25

SAMPLE ID: 87-4B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	1300
Acetone	4	400
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	4	700
Trans-1,2-Dichloroethylene	4	300
Chloroform	4	750
2-Butanone	1000	<DL
1,1,1-Trichloroethane	4	150
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	2000
Benzene	4	150
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	1000	<DL
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	4	500
Toluene	4	3400
Chlorobenzene	1000	<DL
Ethylbenzene	1000	<DL
Total-Xylenes	1000	<DL
Total Monochlorotoluenes	4	95,000
Total Dichlorobenzenes	4	350

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

98
100
106



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-26

SAMPLE ID: 87-40B

<u>PARAMETER</u>	<u>DETECTION LIMIT mg/kg</u>	<u>RESULT mg/kg</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	9000
Acetone	4	2300
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	4	350
1,1-Dichloroethane	1000	<DL
Trans-1,2-Dichloroethylene	1000	<DL
Chloroform	4	700
2-Butanone	1000	<DL
1,1,1-Trichloroethane	4	300
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	6000
Benzene	4	200
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	1000	<DL
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	1000	<DL
Toluene	4	3900
Chlorobenzene	1000	<DL
Ethylbenzene	4	50
Total-Xylenes	4	250
Total Monochlorotoluenes	4	120,000
Total Dichlorobenzenes	4	450

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	102
Toluene D8	105
4-Bromofluorobenzene	113



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Date: December 19, 1988

ELAP #13797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2435-26

SAMPLE ID: 87-40B (Organic)

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	0.2	9900
Acetone	1000	<DL
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	1000	<DL
Trans-1,2-Dichloroethylene	1000	<DL
Chloroform	0.2	2600
2-Butanone	1000	<DL
1,1,1-Trichloroethane	0.2	110
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	0.2	1500
Benzene	1000	<DL
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	1000	<DL
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	1000	<DL
Toluene	0.2	550
Chlorobenzene	1000	<DL
Ethylbenzene	1000	<DL
Total-Xylenes	1000	<DL
Total Monochlorotoluenes	0.2	200,000
Total Dichlorobenzenes	0.2	880

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

83
98
94



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-27

SAMPLE ID: 87-5A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	66
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	5
1,1-Dichloroethane	4	8
Trans-1,2-Dichloroethylene	4	1800
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	1600
Benzene	4	8
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	300
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	4
Chlorobenzene	4	11
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	360
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	100
Toluene D8	100
4-Bromofluorobenzene	100



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Date: December 19, 1988

ELAP #13797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-28

SAMPLE ID: 87-5B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	120
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	28
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	5
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	170
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	9
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

97
99
101



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-29

SAMPLE ID: 87-5C

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	20	<DL
Bromomethane	20	<DL
Vinyl Chloride	4	4900
Chloroethane	20	<DL
Methylene Chloride	20	<DL
Acetone	20	<DL
Trichlorofluoromethane	20	<DL
Acrolein	20	<DL
Acrylonitrile	20	<DL
1,1-Dichloroethene	4	9
1,1-Dichloroethane	20	<DL
Trans-1,2-Dichloroethylene	4	1200
Chloroform	4	16
2-Butanone	20	<DL
1,1,1-Trichloroethane	4	5
Carbon Tetrachloride	20	<DL
Bromodichloromethane	20	<DL
1,2-Dichloropropane	20	<DL
Trans-1,3-Dichloropropene	20	<DL
Trichloroethene	4	70
Benzene	4	5
Dibromochloromethane	20	<DL
Cis-1,3-Dichloropropene	20	<DL
1,1,2-Trichloroethane	20	<DL
2-Chlorovinyl Ether	20	<DL
Bromoform	20	<DL
Tetrachloroethene	20	<DL
1,1,2,2-Tetrachloroethane	20	<DL
4-Methyl-2-Pentanone	20	<DL
Toluene	20	<DL
Chlorobenzene	20	<DL
Ethylbenzene	20	<DL
Total-Xylenes	20	<DL
Total Monochlorotoluenes	20	<DL
Total Dichlorobenzenes	20	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

97
96
99



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-30

SAMPLE ID: 87-502

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	80	<DL
Bromomethane	80	<DL
Vinyl Chloride	4	3000
Chloroethane	80	<DL
Methylene Chloride	4	48
Acetone	4	120
Trichlorofluoromethane	80	<DL
Acrolein	80	<DL
Acrylonitrile	80	<DL
1,1-Dichloroethene	80	<DL
1,1-Dichloroethane	4	16
Trans-1,2-Dichloroethylene	4	800
Chloroform	4	80
2-Butanone	80	<DL
1,1,1-Trichloroethane	4	20
Carbon Tetrachloride	80	<DL
Bromodichloromethane	80	<DL
1,2-Dichloropropane	80	<DL
Trans-1,3-Dichloropropene	80	<DL
Trichloroethene	4	64
Benzene	4	12
Dibromochloromethane	80	<DL
Cis-1,3-Dichloropropene	80	<DL
1,1,2-Trichloroethane	80	<DL
2-Chlorovinyl Ether	80	<DL
Bromoform	80	<DL
Tetrachloroethene	80	<DL
1,1,2,2-Tetrachloroethane	80	<DL
4-Methyl-2-Pentanone	80	<DL
Toluene	4	12
Chlorobenzene	80	<DL
Ethylbenzene	4	8
Total-Xylenes	80	<DL
Total Monochlorotoluenes	80	<DL
Total Dichlorobenzenes	80	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

90
93
92



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-31

SAMPLE ID: 87-5D

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	7
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	6
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

100
103
104



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-32

SAMPLE ID: 87-28

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	5
2-Butanone	4	8
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	15
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	9
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

95
93
96



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-33

SAMPLE ID: 88-1A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	200	<DL
Bromomethane	200	<DL
Vinyl Chloride	200	<DL
Chloroethane	200	<DL
Methylene Chloride	4	200
Acetone	200	<DL
Trichlorofluoromethane	200	<DL
Acrolein	200	<DL
Acrylonitrile	200	<DL
1,1-Dichloroethene	200	<DL
1,1-Dichloroethane	200	<DL
Trans-1,2-Dichloroethylene	4	90
Chloroform	4	670
2-Butanone	200	<DL
1,1,1-Trichloroethane	200	<DL
Carbon Tetrachloride	200	<DL
Bromodichloromethane	200	<DL
1,2-Dichloropropane	200	<DL
Trans-1,3-Dichloropropene	200	<DL
Trichloroethene	200	<DL
Benzene	200	<DL
Dibromochloromethane	200	<DL
Cis-1,3-Dichloropropene	200	<DL
1,1,2-Trichloroethane	200	<DL
2-Chlorovinyl Ether	200	<DL
Bromoform	200	<DL
Tetrachloroethene	200	<DL
1,1,2,2-Tetrachloroethane	200	<DL
4-Methyl-2-Pentanone	200	<DL
Toluene	4	260
Chlorobenzene	200	<DL
Ethylbenzene	200	<DL
Total-Xylenes	4	40
Total Monochlorotoluenes	4	58,000
Total Dichlorobenzenes	200	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	102
Toluene D8	99
4-Bromofluorobenzene	103



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-34

SAMPLE ID: 88-1B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	80	<DL
Bromomethane	80	<DL
Vinyl Chloride	80	<DL
Chloroethane	80	<DL
Methylene Chloride	80	<DL
Acetone	30	<DL
Trichlorofluoromethane	80	<DL
Acrolein	80	<DL
Acrylonitrile	80	<DL
1,1-Dichloroethene	80	<DL
1,1-Dichloroethane	80	<DL
Trans-1,2-Dichloroethylene	80	<DL
Chloroform	80	<DL
2-Butanone	4	240
1,1,1-Trichloroethane	80	<DL
Carbon Tetrachloride	80	<DL
Bromodichloromethane	80	<DL
1,2-Dichloropropane	80	<DL
Trans-1,3-Dichloropropene	80	<DL
Trichloroethene	80	<DL
Benzene	80	<DL
Dibromochloromethane	80	<DL
Cis-1,3-Dichloropropene	80	<DL
1,1,2-Trichloroethane	80	<DL
2-Chlorovinyl Ether	80	<DL
Bromoform	80	<DL
Tetrachloroethene	80	<DL
1,1,2,2-Tetrachloroethane	80	<DL
4-Methyl-2-Pentanone	80	<DL
Toluene	4	52
Chlorobenzene	80	<DL
Ethylbenzene	80	<DL
Total-Xylenes	80	<DL
Total Monochlorotoluenes	4	26,000
Total Dichlorobenzenes	80	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

98
97
101



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-35

SAMPLE ID: 88-203

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4000	<DL
Bromomethane	4000	<DL
Vinyl Chloride	4000	<DL
Chloroethane	4000	<DL
Methylene Chloride	4	30,000
Acetone	4	6000
Trichlorofluoromethane	4000	<DL
Acrolein	4000	<DL
Acrylonitrile	4000	<DL
1,1-Dichloroethene	4000	<DL
1,1-Dichloroethane	4000	<DL
Trans-1,2-Dichloroethylene	4000	<DL
Chloroform	4000	<DL
2-Butanone	4000	<DL
1,1,1-Trichloroethane	4	200
Carbon Tetrachloride	4000	<DL
Bromodichloromethane	4000	<DL
1,2-Dichloropropane	4000	<DL
Trans-1,3-Dichloropropene	4000	<DL
Trichloroethene	4	1200
Benzene	4	180,000
Dibromochloromethane	4000	<DL
Cis-1,3-Dichloropropene	4000	<DL
1,1,2-Trichloroethane	4000	<DL
2-Chlorovinyl Ether	4000	<DL
Bromoform	4000	<DL
Tetrachloroethene	4000	<DL
1,1,2,2-Tetrachloroethane	4000	<DL
4-Methyl-2-Pentanone	4	3600
Toluene	4	12,000
Chlorobenzene	4	140,000
Ethylbenzene	4	600
Total-Xylenes	4	1200
Total Monochlorotoluenes	4	300,000
Total Dichlorobenzenes	4	360,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

101
102
108



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-36

SAMPLE ID: 88-2A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	5000
Acetone	4	6000
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	4	250
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	150
2-Butanone	4	3600
1,1,1-Trichloroethane	1000	<DL
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	1400
Benzene	4	42,000
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	4	500
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	4	1400
Toluene	4	4000
Chlorobenzene	4	33,000
Ethylbenzene	1000	<DL
Total-Xylenes	4	1300
Total Monochlorotoluenes	4	33,000
Total Dichlorobenzenes	4	41,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

96
97
98



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-37

SAMPLE ID: 88-2C

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	6500
Acetone	4	6000
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	4	300
Trans-1,2-Dichloroethylene	1000	<DL
Chloroform	4	200
2-Butanone	4	3700
1,1,1-Trichloroethane	1000	<DL
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	1400
Benzene	4	36,000
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	4	750
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	4	1800
Toluene	4	3100
Chlorobenzene	4	29,000
Ethylbenzene	4	200
Total-Xylenes	4	2000
Total Monochlorotoluenes	4	36,000
Total Dichlorobenzenes	4	47,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

89
93
95



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-38

SAMPLE ID: 88-2B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	7
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	5
Chloroform	4	<DL
2-Butanone	4	12
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	46
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	7
Chlorobenzene	4	340
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	460
Total Dichlorobenzenes	4	740

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

98
95
98



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-35

SAMPLE ID: 88-203 (Organic)

<u>PARAMETER</u>	<u>DETECTION LIMIT mg/kg</u>	<u>RESULT mg/kg</u>
Chloromethane	5000	<DL
Bromomethane	5000	<DL
Vinyl Chloride	5000	<DL
Chloroethane	5000	<DL
Methylene Chloride	0.2	32,000
Acetone	5000	<DL
Trichlorofluoromethane	5000	<DL
Acrolein	5000	<DL
Acrylonitrile	5000	<DL
1,1-Dichloroethene	5000	<DL
1,1-Dichloroethane	5000	<DL
Trans-1,2-Dichloroethylene	5000	<DL
Chloroform	0.2	3200
2-Butanone	5000	<DL
1,1,1-Trichloroethane	5000	<DL
Carbon Tetrachloride	5000	<DL
Bromodichloromethane	5000	<DL
1,2-Dichloropropane	5000	<DL
Trans-1,3-Dichloropropene	5000	<DL
Trichloroethene	5000	<DL
Benzene	0.2	45,000
Dibromochloromethane	5000	<DL
Cis-1,3-Dichloropropene	5000	<DL
1,1,2-Trichloroethane	5000	<DL
2-Chlorovinyl Ether	5000	<DL
Bromoform	5000	<DL
Tetrachloroethene	5000	<DL
1,1,2,2-Tetrachloroethane	5000	<DL
4-Methyl-2-Pentanone	5000	<DL
Toluene	0.2	5300
Chlorobenzene	0.2	95,000
Ethylbenzene	5000	<DL
Total-Xylenes	5000	<DL
Total Monochlorotoluenes	0.2	230,000
Total Dichlorobenzenes	0.2	290,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
74-Bromofluorobenzene

88
97
94



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-37

SAMPLE ID: 88-2C (Organic)

<u>PARAMETER</u>	<u>DETECTION LIMIT mg/kg</u>	<u>RESULT mg/kg</u>
Chloromethane	5000	<DL
Bromomethane	5000	<DL
Vinyl Chloride	5000	<DL
Chloroethane	5000	<DL
Methylene Chloride	0.2	15,000
Acetone	5000	<DL
Trichlorofluoromethane	5000	<DL
Acrolein	5000	<DL
Acrylonitrile	5000	<DL
1,1-Dichloroethene	5000	<DL
1,1-Dichloroethane	5000	<DL
Trans-1,2-Dichloroethylene	5000	<DL
Chloroform	0.2	5000
2-Butanone	5000	<DL
1,1,1-Trichloroethane	5000	<DL
Carbon Tetrachloride	5000	<DL
Bromodichloromethane	5000	<DL
1,2-Dichloropropane	5000	<DL
Trans-1,3-Dichloropropene	5000	<DL
Trichloroethene	5000	<DL
Benzene	0.2	8500
Dibromochloromethane	5000	<DL
Cis-1,3-Dichloropropene	5000	<DL
1,1,2-Trichloroethane	5000	<DL
2-Chlorovinyl Ether	5000	<DL
Bromoform	5000	<DL
Tetrachloroethene	5000	<DL
1,1,2,2-Tetrachloroethane	5000	<DL
4-Methyl-2-Pentanone	5000	<DL
Toluene	5000	<DL
Chlorobenzene	0.2	52,000
Ethylbenzene	5000	<DL
Total-Xylenes	5000	<DL
Total Monochlorotoluenes	0.2	170,000
Total Dichlorobenzenes	0.2	240,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

85
98
93



TECHNICAL SERVICES, INC.

4626 Royal Avenue. Niagara Falls. New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-39

SAMPLE ID: 88-3A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	4	680
Chloroethane	400	<DL
Methylene Chloride	4	120,000
Acetone	4	4900
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	4	820
1,1-Dichloroethane	4	8400
Trans-1,2-Dichloroethylene	400	<DL
Chloroform	4	300
1,2-Dichloroethane	4	740
2-Butanone	4	5800
1,1,1-Trichloroethane	4	150,000
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	64,000
Benzene	4	14,000
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	12,000
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	4	680
Toluene	4	5200
Chlorobenzene	4	22,000
Ethylbenzene	4	140
Total-Xylenes	4	1100
Total Monochlorotoluenes	4	42,000
Total Dichlorobenzenes	4	16,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

90
90
93



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-40

SAMPLE ID: 88-3B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4000	<DL
Bromomethane	4000	<DL
Vinyl Chloride	4000	<DL
Chloroethane	4000	<DL
Methylene Chloride	4	32,000
Acetone	4	1600
Trichlorofluoromethane	4000	<DL
Acrolein	4000	<DL
Acrylonitrile	4000	<DL
1,1-Dichloroethene	4000	<DL
1,1-Dichloroethane	4	2800
Trans-1,2-Dichloroethylene	4000	<DL
Chloroform	4000	<DL
2-Butanone	4000	<DL
1,1,1-Trichloroethane	4	68,000
Carbon Tetrachloride	4000	<DL
Bromodichloromethane	4000	<DL
1,2-Dichloropropane	4000	<DL
Trans-1,3-Dichloropropene	4000	<DL
Trichloroethene	4	22,000
Benzene	4	3200
Dibromochloromethane	4000	<DL
Cis-1,3-Dichloropropene	4000	<DL
1,1,2-Trichloroethane	4000	<DL
2-Chlorovinyl Ether	4000	<DL
Bromoform	4000	<DL
Tetrachloroethene	4	5400
1,1,2,2-Tetrachloroethane	4000	<DL
4-Methyl-2-Pentanone	4000	<DL
Toluene	4	3200
Chlorobenzene	4	13,000
Ethylbenzene	4000	<DL
Total-Xylenes	4000	<DL
Total Monochlorotoluenes	4	44,000
Total Dichlorobenzenes	4	20,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	102
Toluene D8	105
4-Bromofluorobenzene	105



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-41

SAMPLE ID: 88-40B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	40
Trans-1,2-Dichloroethylene	4	56
Chloroform	4	26
2-Butanone	4	15
1,1,1-Trichloroethane	4	120
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	140
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	260
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

95
94
99



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-42

SAMPLE ID: 88-4A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	40	<DL
Bromomethane	40	<DL
Vinyl Chloride	40	<DL
Chloroethane	40	<DL
Methylene Chloride	4	20
Acetone	40	<DL
Trichlorofluoromethane	40	<DL
Acrolein	40	<DL
Acrylonitrile	40	<DL
1,1-Dichloroethene	4	72
1,1-Dichloroethane	4	700
Trans-1,2-Dichloroethylene	4	1800
Chloroform	4	300
2-Butanone	4	120
1,1,1-Trichloroethane	4	15,000
Carbon Tetrachloride	40	<DL
Bromodichloromethane	40	<DL
1,2-Dichloropropane	40	<DL
Trans-1,3-Dichloropropene	40	<DL
Trichloroethene	4	300
Benzene	4	36
Dibromochloromethane	40	<DL
Cis-1,3-Dichloropropene	40	<DL
1,1,2-Trichloroethane	40	<DL
2-Chlorovinyl Ether	40	<DL
Bromoform	40	<DL
Tetrachloroethene	4	240
1,1,2,2-Tetrachloroethane	40	<DL
4-Methyl-2-Pentanone	40	<DL
Toluene	4	18
Chlorobenzene	40	<DL
Ethylbenzene	4	6
Total-Xylenes	40	<DL
Total Monochlorotoluenes	40	<DL
Total Dichlorobenzenes	40	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

95
93
97



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-43

SAMPLE ID: 88-4B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	40
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	16
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	9
1,1-Dichloroethane	4	140
Trans-1,2-Dichloroethylene	4	320
Chloroform	4	24
2-Butanone	4	36
1,1,1-Trichloroethane	4	190
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	34
Benzene	4	5
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	19
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	4
Toluene	4	6
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

102
100
97



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-44

SAMPLE ID: 88-4C

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	980
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	34
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	720
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	22
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

101
103
100



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-45

SAMPLE ID: 88-5B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	12,000
Acetone	4	4100
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	4	2800
Trans-1,2-Dichloroethylene	1000	<DL
Chloroform	1000	<DL
2-Butanone	4	2500
1,1,1-Trichloroethane	4	2600
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	6000
Benzene	4	5000
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	4	4600
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	4	900
Toluene	4	1500
Chlorobenzene	4	9500
Ethylbenzene	1000	<DL
Total-Xylenes	4	850
Total Monochlorotoluenes	4	20,000
Total Dichlorobenzenes	4	20,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

87
88
93



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-46

SAMPLE ID: 88-50B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	16,000
Acetone	4	4600
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	4	4000
Trans-1,2-Dichloroethylene	1000	<DL
Chloroform	1000	<DL
1,2-Dichloroethane	4	850
2-Butanone	4	2300
1,1,1-Trichloroethane	4	3600
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	7500
Benzene	4	6500
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	4	6000
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	4	700
Toluene	4	2000
Chlorobenzene	4	11,000
Ethylbenzene	4	150
Total-Xylenes	4	1000
Total Monochlorotoluenes	4	24,000
Total Dichlorobenzenes	4	19,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

88
92
92



TECHNICAL SERVICES, INC.

4626 Royal Avenue. Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-47

SAMPLE ID: 88-5C

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	110
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	26
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	400
Chloroform	4	14
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	13
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	99
Toluene D8	97
4-Bromofluorobenzene	98



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-48

SAMPLE ID: 88-603

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	100
Acetone	4	5500
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	1000	<DL
Trans-1,2-Dichloroethylene	1000	<DL
Chloroform	1000	<DL
2-Butanone	1000	<DL
1,1,1-Trichloroethane	4	100
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	100
Benzene	4	550
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	1000	<DL
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	1000	<DL
Toluene	4	350
Chlorobenzene	4	4100
Ethylbenzene	4	150
Total-Xylenes	4	250
Total Monochlorotoluenes	1000	<DL
Total Dichlorobenzenes	4	120,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

96
95
100



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-49

SAMPLE ID: 88-6A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	39,000
Acetone	4	5000
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	4	4100
Trans-1,2-Dichloroethylene	4	200
Chloroform	4	50
2-Butanone	4	3000
1,1,1-Trichloroethane	4	700
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	4400
Benzene	4	14,000
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	4	300
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	4	900
Toluene	4	1400
Chlorobenzene	4	13,000
Ethylbenzene	1000	<DL
Total-Xylenes	1000	<DL
Total Monochlorotoluenes	4	9500
Total Dichlorobenzenes	4	4300

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	103
Toluene D8	102
4-Bromofluorobenzene	105



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-50

SAMPLE ID: 88-6B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	400	<DL
Chloroethane	400	<DL
Methylene Chloride	4	18,000
Acetone	4	8400
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	4	160
1,1-Dichloroethane	4	3800
Trans-1,2-Dichloroethylene	4	140
Chloroform	4	120
2-Butanone	4	2000
1,1,1-Trichloroethane	4	22,000
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	16,000
Benzene	4	4400
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	3200
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	4	700
Toluene	4	1700
Chlorobenzene	4	9400
Ethylbenzene	4	60
Total-Xylenes	4	500
Total Monochlorotoluenes	4	19,000
Total Dichlorobenzenes	4	16,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

113
109
114



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-51

SAMPLE ID: 88-70B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4000	<DL
Bromomethane	4000	<DL
Vinyl Chloride	4000	<DL
Chloroethane	4000	<DL
Methylene Chloride	4	3800
Acetone	4	4000
Trichlorofluoromethane	4000	<DL
Acrolein	4000	<DL
Acrylonitrile	4000	<DL
1,1-Dichloroethene	4000	<DL
1,1-Dichloroethane	4000	<DL
Trans-1,2-Dichloroethylene	4000	<DL
Chloroform	4000	<DL
2-Butanone	4000	<DL
1,1,1-Trichloroethane	4000	<DL
Carbon Tetrachloride	4000	<DL
Bromodichloromethane	4000	<DL
1,2-Dichloropropane	4000	<DL
Trans-1,3-Dichloropropene	4000	<DL
Trichloroethene	4000	<DL
Benzene	4	30,000
Dibromochloromethane	4000	<DL
Cis-1,3-Dichloropropene	4000	<DL
1,1,2-Trichloroethane	4000	<DL
2-Chlorovinyl Ether	4000	<DL
Bromoform	4000	<DL
Tetrachloroethene	4000	<DL
1,1,2,2-Tetrachloroethane	4000	<DL
4-Methyl-2-Pentanone	4000	<DL
Toluene	4	4400
Chlorobenzene	4	10,000
Ethylbenzene	4000	<DL
Total-Xylenes	4000	<DL
Total Monochlorotoluenes	4	80,000
Total Dichlorobenzenes	4	11,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

95
95
100



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-52

SAMPLE ID: 88-7A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	2000	<DL
Bromomethane	2000	<DL
Vinyl Chloride	2000	<DL
Chloroethane	2000	<DL
Methylene Chloride	4	3600
Acetone	4	22,000
Trichlorofluoromethane	2000	<DL
Acrolein	2000	<DL
Acrylonitrile	2000	<DL
1,1-Dichloroethene	2000	<DL
1,1-Dichloroethane	4	800
Trans-1,2-Dichloroethylene	4	7800
Chloroform	4	200
2-Butanone	2000	<DL
1,1,1-Trichloroethane	4	700
Carbon Tetrachloride	2000	<DL
Bromodichloromethane	2000	<DL
1,2-Dichloropropane	2000	<DL
Trans-1,3-Dichloropropene	2000	<DL
Trichloroethene	4	140,000
Benzene	4	1300
Dibromochloromethane	2000	<DL
Cis-1,3-Dichloropropene	2000	<DL
1,1,2-Trichloroethane	2000	<DL
2-Chlorovinyl Ether	2000	<DL
Bromoform	2000	<DL
Tetrachloroethene	4	21,000
1,1,2,2-Tetrachloroethane	2000	<DL
4-Methyl-2-Pentanone	4	4100
Toluene	4	800
Chlorobenzene	4	600
Ethylbenzene	2000	<DL
Total-Xylenes	2000	<DL
Total Monochlorotoluenes	2000	<DL
Total Dichlorobenzenes	2000	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

103
102
106



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-53

SAMPLE ID: 88-7C

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	1000	<DL
Chloroethane	1000	<DL
Methylene Chloride	4	800
Acetone	4	4100
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	4	900
Trans-1,2-Dichloroethylene	4	9500
Chloroform	4	350
2-Butanone	4	3100
1,1,1-Trichloroethane	4	300
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	160,000
Benzene	4	1300
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	4	23,000
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	4	4500
Toluene	4	900
Chlorobenzene	4	600
Ethylbenzene	1000	<DL
Total-Xylenes	4	150
Total Monochlorotoluenes	1000	<DL
Total Dichlorobenzenes	4	550

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

101
98
100



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-54

SAMPLE ID: 88-7B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	1000	<DL
Bromomethane	1000	<DL
Vinyl Chloride	4	2600
Chloroethane	1000	<DL
Methylene Chloride	4	2300
Acetone	4	4000
Trichlorofluoromethane	1000	<DL
Acrolein	1000	<DL
Acrylonitrile	1000	<DL
1,1-Dichloroethene	1000	<DL
1,1-Dichloroethane	4	850
Trans-1,2-Dichloroethylene	4	2800
Chloroform	4	150
2-Butanone	1000	<DL
1,1,1-Trichloroethane	4	550
Carbon Tetrachloride	1000	<DL
Bromodichloromethane	1000	<DL
1,2-Dichloropropane	1000	<DL
Trans-1,3-Dichloropropene	1000	<DL
Trichloroethene	4	15,000
Benzene	4	1500
Dibromochloromethane	1000	<DL
Cis-1,3-Dichloropropene	1000	<DL
1,1,2-Trichloroethane	1000	<DL
2-Chlorovinyl Ether	1000	<DL
Bromoform	1000	<DL
Tetrachloroethene	4	5500
1,1,2,2-Tetrachloroethane	1000	<DL
4-Methyl-2-Pentanone	4	850
Toluene	4	750
Chlorobenzene	4	2800
Ethylbenzene	1000	<DL
Total-Xylenes	4	100
Total Monochlorotoluenes	4	2400
Total Dichlorobenzenes	4	2500

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	104
Toluene D8	105
4-Bromofluorobenzene	111



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-56

SAMPLE ID: 88-8A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	4	860
Chloroethane	400	<DL
Methylene Chloride	4	240
Acetone	4	2200
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	400	<DL
1,1-Dichloroethane	4	120
Trans-1,2-Dichloroethylene	4	5000
Chloroform	4	220
2-Butanone	4	1400
1,1,1-Trichloroethane	4	40
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	58,000
Benzene	400	<DL
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	20,000
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	4	680
Toluene	4	200
Chlorobenzene	400	<DL
Ethylbenzene	400	<DL
Total-Xylenes	4	120
Total Monochlorotoluenes	4	12,000
Total Dichlorobenzenes	400	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

85
96
94



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-55

SAMPLE ID: 88-803

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	400	<DL
Chloroethane	400	<DL
Methylene Chloride	400	<DL
Acetone	4	1300
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	4	360
1,1-Dichloroethane	400	<DL
Trans-1,2-Dichloroethylene	4	80,000
Chloroform	4	6000
2-Butanone	4	1100
1,1,1-Trichloroethane	4	60
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	24,000
Benzene	400	<DL
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	1100
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	400	<DL
Toluene	400	<DL
Chlorobenzene	400	<DL
Ethylbenzene	400	<DL
Total-Xylenes	400	<DL
Total Monochlorotoluenes	400	<DL
Total Dichlorobenzenes	400	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	83
Toluene D8	93
4-Bromofluorobenzene	92



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-57

SAMPLE ID: 88-8B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	20	<DL
Bromomethane	20	<DL
Vinyl Chloride	20	<DL
Chloroethane	20	<DL
Methylene Chloride	20	<DL
Acetone	4	40
Trichlorofluoromethane	20	<DL
Acrolein	20	<DL
Acrylonitrile	20	<DL
1,1-Dichloroethene	20	<DL
1,1-Dichloroethane	20	<DL
Trans-1,2-Dichloroethylene	4	24
Chloroform	20	<DL
2-Butanone	20	<DL
1,1,1-Trichloroethane	20	<DL
Carbon Tetrachloride	20	<DL
Bromodichloromethane	20	<DL
1,2-Dichloropropane	20	<DL
Trans-1,3-Dichloropropene	20	<DL
Trichloroethene	4	230
Benzene	20	<DL
Dibromochloromethane	20	<DL
Cis-1,3-Dichloropropene	20	<DL
1,1,2-Trichloroethane	20	<DL
2-Chlorovinyl Ether	20	<DL
Bromoform	20	<DL
Tetrachloroethene	4	49
1,1,2,2-Tetrachloroethane	20	<DL
4-Methyl-2-Pentanone	20	<DL
Toluene	4	11
Chlorobenzene	20	<DL
Ethylbenzene	20	<DL
Total-Xylenes	20	<DL
Total Monochlorotoluenes	4	7900
Total Dichlorobenzenes	20	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

85
102
97



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-58

SAMPLE ID: 88-90B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	400
Acetone	4	9
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	12
Chloroform	4	<DL
2-Butanone	4	12
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	9
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	6
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

90
99
99



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-59

SAMPLE ID: 88-9A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	4	600
Chloroethane	400	<DL
Methylene Chloride	400	<DL
Acetone	4	800
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	400	<DL
1,1-Dichloroethane	4	380
Trans-1,2-Dichloroethylene	4	1600
Chloroform	400	<DL
2-Butanone	400	<DL
1,1,1-Trichloroethane	4	80
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	3400
Benzene	4	1700
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	1400
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	400	<DL
Toluene	4	100
Chlorobenzene	4	1100
Ethylbenzene	4	80
Total-Xylenes	400	<DL
Total Monochlorotoluenes	4	3800
Total Dichlorobenzenes	4	9600

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

86
92
93



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-60

SAMPLE ID: 88-9B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	200	<DL
Bromomethane	200	<DL
Vinyl Chloride	4	13,000
Chloroethane	200	<DL
Methylene Chloride	4	340
Acetone	4	610
Trichlorofluoromethane	200	<DL
Acrolein	200	<DL
Acrylonitrile	200	<DL
1,1-Dichloroethene	4	260
1,1-Dichloroethane	4	360
Trans-1,2-Dichloroethylene	4	26,000
Chloroform	200	<DL
2-Butanone	4	450
1,1,1-Trichloroethane	4	30
Carbon Tetrachloride	200	<DL
Bromodichloromethane	200	<DL
1,2-Dichloropropane	200	<DL
Trans-1,3-Dichloropropene	200	<DL
Trichloroethene	4	5400
Benzene	4	5000
Dibromochloromethane	200	<DL
Cis-1,3-Dichloropropene	200	<DL
1,1,2-Trichloroethane	200	<DL
2-Chlorovinyl Ether	200	<DL
Bromoform	200	<DL
Tetrachloroethene	4	50
1,1,2,2-Tetrachloroethane	200	<DL
4-Methyl-2-Pentanone	4	900
Toluene	4	510
Chlorobenzene	4	2200
Ethylbenzene	4	30
Total-Xylenes	4	40
Total Monochlorotoluenes	4	3400
Total Dichlorobenzenes	200	8900

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

105
103
103



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-61

SAMPLE ID: 88-100B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	200	<DL
Bromomethane	200	<DL
Vinyl Chloride	200	<DL
Chloroethane	200	<DL
Methylene Chloride	4	660
Acetone	4	2600
Trichlorofluoromethane	200	<DL
Acrolein	200	<DL
Acrylonitrile	200	<DL
1,1-Dichloroethene	200	<DL
1,1-Dichloroethane	4	30
Trans-1,2-Dichloroethylene	200	<DL
Chloroform	4	620
2-Butanone	4	820
1,1,1-Trichloroethane	200	<DL
Carbon Tetrachloride	200	<DL
Bromodichloromethane	200	<DL
1,2-Dichloropropane	200	<DL
Trans-1,3-Dichloropropene	200	<DL
Trichloroethene	4	240
Benzene	4	30
Dibromochloromethane	200	<DL
Cis-1,3-Dichloropropene	200	<DL
1,1,2-Trichloroethane	200	<DL
2-Chlorovinyl Ether	200	<DL
Bromoform	200	<DL
Tetrachloroethene	4	100
1,1,2,2-Tetrachloroethane	200	<DL
4-Methyl-2-Pentanone	4	170
Toluene	4	240
Chlorobenzene	4	50
Ethylbenzene	200	<DL
Total-Xylenes	4	100
Total Monochlorotoluenes	200	<DL
Total Dichlorobenzenes	4	120

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

112
103
105



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-62

SAMPLE ID: 88-10C

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	80	<DL
Bromomethane	80	<DL
Vinyl Chloride	4	16
Chloroethane	80	<DL
Methylene Chloride	4	440
Acetone	4	2800
Trichlorofluoromethane	80	<DL
Acrolein	80	<DL
Acrylonitrile	80	<DL
1,1-Dichloroethene	80	<DL
1,1-Dichloroethane	4	24
Trans-1,2-Dichloroethylene	80	<DL
Chloroform	4	300
2-Butanone	4	480
1,1,1-Trichloroethane	80	<DL
Carbon Tetrachloride	80	<DL
Bromodichloromethane	80	<DL
1,2-Dichloropropane	80	<DL
Trans-1,3-Dichloropropene	80	<DL
Trichloroethene	4	200
Benzene	4	12
Dibromochloromethane	80	<DL
Cis-1,3-Dichloropropene	80	<DL
1,1,2-Trichloroethane	80	<DL
2-Chlorovinyl Ether	80	<DL
Bromoform	80	<DL
Tetrachloroethene	4	96
1,1,2,2-Tetrachloroethane	80	<DL
4-Methyl-2-Pentanone	4	160
Toluene	4	100
Chlorobenzene	4	44
Ethylbenzene	80	<DL
Total-Xylenes	4	44
Total Monochlorotoluenes	4	140
Total Dichlorobenzenes	4	110

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

105
102
105



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-63

SAMPLE ID: 88-10A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	200	<DL
Bromomethane	200	<DL
Vinyl Chloride	200	<DL
Chloroethane	200	<DL
Methylene Chloride	4	140
Acetone	4	140
Trichlorofluoromethane	200	<DL
Acrolein	200	<DL
Acrylonitrile	200	<DL
1,1-Dichloroethene	200	<DL
1,1-Dichloroethane	200	<DL
Trans-1,2-Dichloroethylene	200	<DL
Chloroform	4	640
2-Butanone	200	<DL
1,1,1-Trichloroethane	200	<DL
Carbon Tetrachloride	200	<DL
Bromodichloromethane	200	<DL
1,2-Dichloropropane	200	<DL
Trans-1,3-Dichloropropene	200	<DL
Trichloroethene	200	<DL
Benzene	4	50
Dibromochloromethane	200	<DL
Cis-1,3-Dichloropropene	200	<DL
1,1,2-Trichloroethane	200	<DL
2-Chlorovinyl Ether	200	<DL
Bromoform	200	<DL
Tetrachloroethene	200	<DL
1,1,2,2-Tetrachloroethane	200	<DL
4-Methyl-2-Pentanone	200	<DL
Toluene	4	230
Chlorobenzene	4	1100
Ethylbenzene	200	<DL
Total-Xylenes	4	90
Total Monochlorotoluenes	4	16,000
Total Dichlorobenzenes	4	80

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

101
99
104



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-64

SAMPLE ID: 88-10B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	400	<DL
Chloroethane	400	<DL
Methylene Chloride	4	480
Acetone	4	3000
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	400	<DL
1,1-Dichloroethane	400	<DL
Trans-1,2-Dichloroethylene	400	<DL
Chloroform	4	500
2-Butanone	4	1200
1,1,1-Trichloroethane	400	<DL
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	120
Benzene	4	80
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	400	<DL
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	4	380
Toluene	4	40
Chlorobenzene	4	460
Ethylbenzene	400	<DL
Total-Xylenes	400	<DL
Total Monochlorotoluenes	4	5200
Total Dichlorobenzenes	4	600

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

107
97
100



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-65

SAMPLE ID: 88-110B

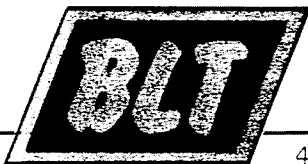
<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	52
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	4
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	10
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

112
103
110



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-66

SAMPLE ID: 88-11A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	200	<DL
Bromomethane	200	<DL
Vinyl Chloride	200	<DL
Chloroethane	200	<DL
Methylene Chloride	4	80
Acetone	4	1100
Trichlorofluoromethane	200	<DL
Acrolein	200	<DL
Acrylonitrile	200	<DL
1,1-Dichloroethene	200	<DL
1,1-Dichloroethane	200	<DL
Trans-1,2-Dichloroethylene	200	<DL
Chloroform	200	<DL
2-Butanone	200	<DL
1,1,1-Trichloroethane	200	<DL
Carbon Tetrachloride	200	<DL
Bromodichloromethane	200	<DL
1,2-Dichloropropane	200	<DL
Trans-1,3-Dichloropropene	200	<DL
Trichloroethene	4	60
Benzene	4	210
Dibromochloromethane	200	<DL
Cis-1,3-Dichloropropene	200	<DL
1,1,2-Trichloroethane	200	<DL
2-Chlorovinyl Ether	200	<DL
Bromoform	200	<DL
Tetrachloroethene	200	<DL
1,1,2,2-Tetrachloroethane	200	<DL
4-Methyl-2-Pentanone	200	<DL
Toluene	4	60
Chlorobenzene	4	2100
Ethylbenzene	200	<DL
Total-Xylenes	4	100
Total Monochlorotoluenes	4	620
Total Dichlorobenzenes	4	2900

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

98
92
100



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-67

SAMPLE ID: 88-11B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	8
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	22
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	17
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	300
Total Dichlorobenzenes	4	20

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

93
88
93



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-68

SAMPLE ID: 88-120B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	8
Trichlorofluoromethane	4	<DL
Acroleim	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	10
1,1-Dichloroethane	4	120
Trans-1,2-Dichloroethylene	4	1200
Chloroform	4	17
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	71
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	220
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	28
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	30

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

91
97
98



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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-69

SAMPLE ID: 88-12A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	2000	<DL
Bromomethane	2000	<DL
Vinyl Chloride	2000	<DL
Chloroethane	2000	<DL
Methylene Chloride	4	400
Acetone	4	15,000
Trichlorofluoromethane	2000	<DL
Acrolein	2000	<DL
Acrylonitrile	2000	<DL
1,1-Dichloroethene	4	500
1,1-Dichloroethane	4	700
Trans-1,2-Dichloroethylene	4	120,000
Chloroform	4	1000
2-Butanone	4	7300
1,1,1-Trichloroethane	4	400
Carbon Tetrachloride	2000	<DL
Bromodichloromethane	2000	<DL
1,2-Dichloropropane	2000	<DL
Trans-1,3-Dichloropropene	2000	<DL
Trichloroethene	4	110,000
Benzene	2000	<DL
Dibromochloromethane	2000	<DL
Cis-1,3-Dichloropropene	2000	<DL
1,1,2-Trichloroethane	2000	<DL
2-Chlorovinyl Ether	2000	<DL
Bromoform	2000	<DL
Tetrachloroethene	4	2300
1,1,2,2-Tetrachloroethane	2000	<DL
4-Methyl-2-Pentanone	4	3500
Toluene	4	200
Chlorobenzene	2000	<DL
Ethylbenzene	2000	<DL
Total-Xylenes	4	800
Total Monochlorotoluenes	2000	<DL
Total Dichlorobenzenes	2000	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

84
90
91



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-70

SAMPLE ID: 88-12B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	200	<DL
Bromomethane	200	<DL
Vinyl Chloride	200	<DL
Chloroethane	200	<DL
Methylene Chloride	200	<DL
Acetone	4	710
Trichlorofluoromethane	200	<DL
Acrolein	200	<DL
Acrylonitrile	200	<DL
1,1-Dichloroethene	200	<DL
1,1-Dichloroethane	200	<DL
Trans-1,2-Dichloroethylene	4	2100
Chloroform	200	<DL
2-Butanone	200	<DL
1,1,1-Trichloroethane	200	<DL
Carbon Tetrachloride	200	<DL
Bromodichloromethane	200	<DL
1,2-Dichloropropane	200	<DL
Trans-1,3-Dichloropropene	200	<DL
Trichloroethene	4	11,000
Benzene	200	<DL
Dibromochloromethane	200	<DL
Cis-1,3-Dichloropropene	200	<DL
1,1,2-Trichloroethane	200	<DL
2-Chlorovinyl Ether	200	<DL
Bromoform	200	<DL
Tetrachloroethene	4	3600
1,1,2,2-Tetrachloroethane	200	<DL
4-Methyl-2-Pentanone	200	<DL
Toluene	4	40
Chlorobenzene	200	<DL
Ethylbenzene	200	<DL
Total-Xylenes	4	100
Total Monochlorotoluenes	4	8700
Total Dichlorobenzenes	200	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

92
100
103



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-71

SAMPLE ID: 88-13A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	4	480
Chloroethane	400	<DL
Methylene Chloride	4	5000
Acetone	4	460
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	400	<DL
1,1-Dichloroethane	4	1200
Trans-1,2-Dichloroethylene	4	5000
Chloroform	4	60
1,2-Dichloroethane	4	480
2-Butanone	4	2000
1,1,1-Trichloroethane	4	240
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	50,000
Benzene	4	13,000
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	3800
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	4	2400
Toluene	4	2200
Chlorobenzene	4	8600
Ethylbenzene	4	60
Total-Xylenes	4	160
Total Monochlorotoluenes	4	13,000
Total Dichlorobenzenes	4	19,000

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

97
97
99



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-72

SAMPLE ID: 88-1408

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	400	<DL
Chloroethane	400	<DL
Methylene Chloride	400	<DL
Acetone	400	<DL
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	4	100
1,1-Dichloroethane	4	940
Trans-1,2-Dichloroethylene	4	8000
Chloroform	400	<DL
2-Butanone	400	<DL
1,1,1-Trichloroethane	4	1300
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	4800
Benzene	400	<DL
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	62,000
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	400	<DL
Toluene	4	80
Chlorobenzene	400	<DL
Ethylbenzene	400	<DL
Total-Xylenes	4	340
Total Monochlorotoluenes	4	3600
Total Dichlorobenzenes	400	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

93
102
104



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-73

SAMPLE ID: 88-14A

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	400	<DL
Bromomethane	400	<DL
Vinyl Chloride	400	<DL
Chloroethane	400	<DL
Methylene Chloride	4	80
Acetone	4	500
Trichlorofluoromethane	400	<DL
Acrolein	400	<DL
Acrylonitrile	400	<DL
1,1-Dichloroethene	400	<DL
1,1-Dichloroethane	4	240
Trans-1,2-Dichloroethylene	4	3000
Chloroform	400	<DL
2-Butanone	400	<DL
1,1,1-Trichloroethane	4	1900
Carbon Tetrachloride	400	<DL
Bromodichloromethane	400	<DL
1,2-Dichloropropane	400	<DL
Trans-1,3-Dichloropropene	400	<DL
Trichloroethene	4	3600
Benzene	4	60
Dibromochloromethane	400	<DL
Cis-1,3-Dichloropropene	400	<DL
1,1,2-Trichloroethane	400	<DL
2-Chlorovinyl Ether	400	<DL
Bromoform	400	<DL
Tetrachloroethene	4	110,000
1,1,2,2-Tetrachloroethane	400	<DL
4-Methyl-2-Pentanone	400	<DL
Toluene	4	40
Chlorobenzene	400	<DL
Ethylbenzene	4	80
Total-Xylenes	4	320
Total Monochlorotoluenes	400	<DL
Total Dichlorobenzenes	400	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

87
93
96



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-74

SAMPLE ID: 88-14B

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	26
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	9
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	50
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	36
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	160
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	5
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	240
Total Dichlorobenzenes	4	4

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

86
90
90



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-85

SAMPLE ID: Well 87-CO TB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	8
Trichlorofluoromethane	4	<DL
Acroleim	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

96
98
98



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-86

SAMPLE ID: Well TB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	36
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	17
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

101
104
108



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-87

SAMPLE ID: Well 84 TB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	6
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

101
102
105



TECHNICAL SERVICES, INC.

4626 Royal Avenue. Niagara Falls. New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-88

SAMPLE ID: Well 88 TB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	14
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	42
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	112
Toluene D8	107
4-Bromofluorobenzene	106



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-89

SAMPLE ID: Well 88-2-TB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	9
Acetone	4	26
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

98
97
108



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-91

SAMPLE ID: Well 88-3TB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	10
Acetone	4	17
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	95
Toluene D8	102
4-Bromofluorobenzene	101



TECHNICAL SERVICES, INC.

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Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-90

SAMPLE ID: Well 89-TB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	220
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

91
98
98



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-92

SAMPLE ID: Trip Blank

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	6
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

94
100
102



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-84

SAMPLE ID: Well 87-00 FB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	46
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	4
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

106
104
112



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-83

SAMPLE ID: Well 87-EC FB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	<DL
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

102
103
111



TECHNICAL SERVICES, INC.

4626 Royal Avenue. Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-82

SAMPLE ID: Well 87-FB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	24
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	15
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

96
101
104



TECHNICAL SERVICES, INC.

4626 Royal Avenue. Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-81

SAMPLE ID: Well 84-FB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	18
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	19
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

104
102
105



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-80

SAMPLE ID: Well 88-FB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	5
Acetone	4	42
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	26
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

106
104
101



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-79

SAMPLE ID: Well 88-2FB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	26
Acetone	4	26
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	12
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

88
98
104



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-78

SAMPLE ID: Well 88-3FB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	34
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	8
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	96
Toluene D8	98
4-Bromofluorobenzene	106



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-77

SAMPLE ID: Well 89-FB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	78
Acetone	4	26
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	24
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds	105
Toluene D8	110
4-Bromofluorobenzene	113



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-76

SAMPLE ID: Well 90-FB

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	5
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	13
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

101
107
107



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-8208

Date: December 19, 1988

ELAP #10797

ANALYSIS FOR: Frontier Chemical Waste Process, Inc.

BLT # 2485-75

SAMPLE ID: Field Blank

<u>PARAMETER</u>	<u>DETECTION LIMIT ug/L</u>	<u>RESULT ug/L</u>
Chloromethane	4	<DL
Bromomethane	4	<DL
Vinyl Chloride	4	<DL
Chloroethane	4	<DL
Methylene Chloride	4	<DL
Acetone	4	17
Trichlorofluoromethane	4	<DL
Acrolein	4	<DL
Acrylonitrile	4	<DL
1,1-Dichloroethene	4	<DL
1,1-Dichloroethane	4	<DL
Trans-1,2-Dichloroethylene	4	<DL
Chloroform	4	<DL
2-Butanone	4	<DL
1,1,1-Trichloroethane	4	<DL
Carbon Tetrachloride	4	<DL
Bromodichloromethane	4	<DL
1,2-Dichloropropane	4	<DL
Trans-1,3-Dichloropropene	4	<DL
Trichloroethene	4	<DL
Benzene	4	<DL
Dibromochloromethane	4	<DL
Cis-1,3-Dichloropropene	4	<DL
1,1,2-Trichloroethane	4	<DL
2-Chlorovinyl Ether	4	<DL
Bromoform	4	<DL
Tetrachloroethene	4	<DL
1,1,2,2-Tetrachloroethane	4	<DL
4-Methyl-2-Pentanone	4	<DL
Toluene	4	<DL
Chlorobenzene	4	<DL
Ethylbenzene	4	<DL
Total-Xylenes	4	<DL
Total Monochlorotoluenes	4	<DL
Total Dichlorobenzenes	4	<DL

SURROGATE RECOVERIES

%RECOVERY

1,2-Dichloroethane Ds
Toluene D8
4-Bromofluorobenzene

97
101
100

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION		CONTAINERS	STORAGE AND TRANSPORTATION
		DATE	TIME		
87-2A	2-40ml VOA's 1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	9:27 AM	2-40ml glass VOA 1-250ml glass 2-40ml glass	ICE CHEST
87-2B	1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	9:40 AM	1-250ml glass 2-40ml glass	" "
87-2C	1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	9:50 AM	1-250ml glass 2-40ml glass	" "
87-3OB	1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	10:54 AM	1-250ml glass 2-40ml glass	" "
87-φφ	Field Blank 2-40ml VOA's	11/9/88	10:58 AM	1-40ml glass 2-40ml glass	" "
87-3A	1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	10:31 AM	1-250ml glass 2-40ml glass	" "
87-3B	1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	10:41 AM	1-250ml glass 2-40ml glass	" "
87-3C	1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	10:51 AM	1-250ml glass 2-40ml glass	" "
87-3D	1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	11:10 AM	1-250ml glass 2-40ml glass	" "
87-EC	Field Blank	11/9/88	12:48 PM	1-40ml glass	" "

SAMPLER Paul E. Smith

AFFILIATION

EFS

WITNESS

Douglas M. Ruzgys

CUSTODY RELINQUISHED BY

Douglas M. Ruzgys

(signature)

DATE/TIME

11/9/88 1:30 PM

RECEIVED BY

Paul E. Smith

(signature)

SAMPLE STATUS

TITLE

AFFILIATION

CUSTODY RELINQUISHED BY

(signature)

DATE/TIME

RECEIVED BY

(signature)

SAMPLE STATUS

TITLE

AFFILIATION

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	DATE	COLLECTION TIME	CONTAINERS	STORAGE AND TRANSPORTATION
87-2A	2-40ml VOA's 1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	9:27 AM	2-40ml glass VOA 1-250ml glass 2-40ml glass	ICE CHEST
87-2B	1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	9:40 AM	1-250ml glass 2-40ml glass	"
87-2C	1-250ml PHENOL/SOC 2-40ml VOA's	11/9/88	9:50 AM	1-250ml glass 2-40ml glass	"
87-30B	1-250ml PHENOL/SOC	11/9/88	10:54 AM	1-250ml glass	"
87-φφ	Field Blank	11/9/88	10:58 AM	1-40ml glass	"
87-3A	2-40ml VOA's 1-250ml PHENOL/SOC	11/9/88	10:31 AM	2-40ml glass 1-250ml glass	"
87-3B	2-40ml VOA's 1-250ml PHENOL/SOC	11/9/88	10:41 AM	2-40ml glass 1-250ml glass	"
87-3C	2-40ml VOA's 1-250ml PHENOL/SOC	11/9/88	10:51 AM	2-40ml glass 1-250ml glass	"
87-3D	2-40ml VOA's 1-250ml PHENOL/SOC	11/9/88	11:10 AM	2-40ml glass 1-250ml glass	"
87-EC	Field Blank	11/9/88	12:48 PM	1-40ml glass	"

SAMPLER Paul E. Smith AFFILIATION EFS WITNESS Douglas M. Ruzgys
 CUSTODY RELINQUISHED BY Douglas M. Ruzgys DATE/TIME 11/9/88 1:30 PM
 RECEIVED BY Robert J. Williams TITLE Affiliation
 SAMPLE STATUS (signature) AFFILIATION (signature)

CUSTODY RELINQUISHED BY (signature) DATE/TIME (signature)
 RECEIVED BY (signature) TITLE Affiliation
 SAMPLE STATUS (signature) AFFILIATION (signature)

2



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2567

ANALYTICAL SERVICES REQUEST FORM

BLT# 2485
FL OR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli BILLING ADDRESS: Frontier Chemical
4626 Royal Ave.
N.Y. N.Y. 14303

TELEPHONE: (716) -285-8208 PO# _____

Laboratory Sample #	Collector's Sample #	Type of Sample*	Field Information**
_____	_____	_____	_____
_____	<u>See</u>	<u>Other</u>	<u>Side</u>
_____	_____	_____	_____
_____	_____	_____	_____

PART II: LABORATORY SECTION

Log in date: 11/9/88 Due Date: _____

Analysis Requested: (Refer to pricing list for Special Quotation)	Quantity	Cost
<u>Phenol</u>	<u>5</u>	_____
<u>SOL</u>	<u>6</u>	_____
<u>VOIA</u>	<u>7</u>	_____
<u>Preserved w/ H₂SO₄</u>	_____	_____
<u>Reieved w/wo Head Space</u>	_____	_____
_____	_____	_____
_____	TOTAL	_____

SPECIAL HANDLING AND/OR STORAGE Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.
**Use back of page for additional information relative to sample location.
COMPLETED BY: Ralph Williams DATE: 11/9/88
please print

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION		CONTAINERS	STORAGE AND TEMPERATURE
		DATE	TIME		
87-4A	2-40ML VOA'S	11/9/88	11:47AM	2-40ML glass	ICE CHEST
87-50B	1-250ML PHENOL / SOC 2-40ML VOA'S	11/9/88	12:53PM	1-250ML glass 2-40ML glass	"
87-5A	1-250ML PHENOL / SOC 2-40ML VOA'S	11/9/88	12:37PM	1-250ML glass 2-40ML glass	"
87-5C	1-250ML PHENOL / SOC 2-40ML VOA'S	11/9/88	12:55PM	1-250ML glass 2-40ML glass	"
87-5D	1-250ML PHENOL / SOC 2-40ML VOA'S	11/9/88	1:01PM	1-250ML glass 2-40ML glass	"
87-28	1-250ML PHENOL / SOC	11/9/88	12:06PM	1-250ML glass	"
87-CO	Trip Blank	11/9/88	9:06AM	1-40ML glass	"

SAMPLER David S. Smith AFFILIATION EFS WITNESS Donald M. Ruyak
 CUSTODY RELINQUISHED BY Donald M. Ruyak DATE/TIME 11/9/88 1:30 PM
 RECEIVED BY David S. Smith (signature) AFFILIATION
 SAMPLE STATUS RELINQUISHED

CUSTODY RELINQUISHED BY _____ DATE/TIME _____
 RECEIVED BY _____ (signature) AFFILIATION _____
 SAMPLE STATUS _____

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION		CONTAINERS	STORAGE AND TRANSPORTATION
		DATE	TIME		
37-4A	2-40ML VOA'S 1-250ML PHENOL/SOC Ground water	11/9/88	11:47AM	2-40ML glass	ICE CHEST
37-50B	2-40ML VOA'S 1-250ML PHENOL/SOC Sample	11/9/88	12:53PM	2-40ML glass	"
37-5A	2-40ML VOA'S 1-250ML PHENOL/SOC	11/9/88	12:37PM	2-40ML glass	"
37-5C	2-40ML VOA'S 1-250ML PHENOL/SOC	11/9/88	12:55PM	2-40ML glass	"
37-5D	2-40ML VOA'S 1-250ML PHENOL/SOC	11/9/88	1:01PM	2-40ML glass	"
37-28	2-40ML VOA'S 1-250ML PHENOL/SOC	11/9/88	12:16PM	2-40ML glass	"
87-CO	Teip Blank	11/9/88	9:06AM	1-40ML glass	"

SAMPLER	<u>Paul S. Smith</u>	AFFILIATION	<u>EFS</u>	WITNESS	<u>Michael M. Ruggieri</u>
JUSTOY RELINQUISHED BY	<u>Michael M. Ruggieri</u>	DATE/TIME	<u>11/9/88</u>		<u>1:30 PM</u>
RECEIVED BY	<u>(Signature)</u>	TITLE		AFFILIATION	
SAMPLE STATUS					

JUSTOY RELINQUISHED BY	(signature)	DATE/TIME
RECEIVED BY	(signature)	TITLE
SAMPLE STATUS	(signature)	AFFILIATION

(3)



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

ANALYTICAL SERVICES REQUEST FORM

BLT# 2485
FL OR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli BILLING ADDRESS: Frontier Chemical
4626 Royal Ave.
N.Y. N.Y. 14303

TELEPHONE: (716) -285-8208 PO# _____

Laboratory Sample #	Collector's Sample #	Type of Sample*	Field Information**
---------------------	----------------------	-----------------	---------------------

_____	<u>See</u>	<u>Other</u>	<u>Side</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PART II: LABORATORY SECTION

Log in date: 11/10/88 Due Date: _____

Analysis Requested:

(Refer to pricing list or Special Quotation)

Quantity Cost

<u>Phenol</u>	<u>Preserved w/ H₂SO₄</u>	<u>3</u>	_____
<u>SOL</u>	_____	<u>3</u>	_____
<u>VOIC</u>	<u>Received w/wo head space</u>	<u>4</u>	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	TOTAL	_____

SPECIAL HANDLING AND/OR STORAGE Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.

**Use back of page for additional information relative to sample location.

COMPLETED BY: Ralph Williams DATE: 11/10/88
please print

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TRANSPORTATION
BT-1B	2-40mL VIALS 1-250mL GLASS	11/6/88	2:48PM	2-40mL VIALS 1-250mL AMBER GLASS	ICE CHEST
BT-1C	2-40mL VIALS 1-250mL GLASS	11/14/88	2:33PM	2-40mL VIALS 1-250mL AMBER GLASS	ICE CHEST
BT-3B	1-250mL GLASS	11/19/88	3:22PM	1-250mL AMBER GLASS	Combined with previous sample ICE CHEST; WELL RAN DRY
BT-7B	1-40mL VIAL DISTILLED WATER	11/16/88	2:10PM	1-40mL VIAL	ICE CHEST
TB	1-40mL VIAL DISTILLED WATER	11/17/88	2:05PM	1-40mL VIAL	ICE CHEST

SAMPLER Paul Smith AFFILIATION EPS WITNESS Donald M. Ruzyczka

CUSTODY RELINQUISHED BY Donald M. Ruzyczka DATE/TIME 11/19/88 4:00 PM

RECEIVED BY (signature) Paul Smith TITLE AFFILIATION

SAMPLE STATUS

CUSTODY RELINQUISHED BY (signature) DATE/TIME

RECEIVED BY (signature) TITLE AFFILIATION

SAMPLE STATUS

4



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

ANALYTICAL SERVICES REQUEST FORM

BLT# 2485
FL CR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli BILLING ADDRESS: Frontier Chemical
4626 Royal Ave.
N.Y. 14303

TELEPHONE: (716) -285-8208 PO# _____

Laboratory Sample #	Collector's Sample #	Type of Sample*	Field Information**
_____	_____	_____	_____
_____	<u>See</u>	<u>Other</u>	<u>Side</u>
_____	_____	_____	_____
_____	_____	_____	_____

PART II: LABORATORY SECTION

Log in date: 11/11/88 Due Date: _____

Analysis Requested: (Refer to pricing list or Special Quotation)		Quantity	Cost
<u>Phenol</u>	<u>Preserved w/ H₂SO₄</u>	<u>8</u>	_____
<u>SOC</u>	_____	<u>2</u>	_____
<u>VOIA</u>	<u>Received w/wc head space</u>	<u>10</u>	_____
_____	_____	_____	_____
_____	_____	_____	_____
		TOTAL	_____

SPECIAL HANDLING AND/OR STORAGE Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.

**Use back of page for additional information relative to sample location.

COMPLETED BY: Ralph Williams DATE: 11/11/88
please print

CHAIN OF CUSTODY REPORT

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	CONTAINERS	STORAGE AND TRANSFORMATION
87-5B	2-40mL GLASS GROUNDWATER	11/11/88	12:44 PM	2-40mL VOA GLASS	ICE CHEST
8A-9	2-40mL GLASS			1-250mL AMBER GLASS	
8A-90B	2-40mL GLASS			2-40mL GLASS	
8A-12	2-40mL GLASS			1-250mL AMBER GLASS	
8A-13	2-40mL GLASS			2-40mL GLASS	
8A-14	2-40mL GLASS			1-250mL AMBER GLASS	
8A-15	2-40mL GLASS			2-40mL GLASS	
8A-17	2-40mL GLASS			1-250mL AMBER GLASS	
8A-TB	1-40mL GLASS DISTILLED WATER			2-40mL GLASS	
8A-FB	1-40mL GLASS DISTILLED WATER			1-250mL AMBER GLASS	

Do not put per R.S. 11/11/88

SAMPLER Kyle Smith AFFILIATION EPS WITNESS Suzanne M. Ruggel

CUSTODY RELINQUISHED BY Dudley M. Ruggel DATE/TIME 11/11/88 3:23 PM

RECEIVED BY Ralph J. Brown TITLE

SAMPLE STATUS (signature) AFFILIATION

CUSTODY RELINQUISHED BY (signature) DATE/TIME

RECEIVED BY (signature) TITLE AFFILIATION

SAMPLE STATUS (signature)

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	COUNTAINERS	STORAGE AND TRANSPORTATION
87-5B	2-40ml GLASS 1-250ml GLASS 2-40ml GLASS 1-250ml GLASS	11/11/88	12:44 PM	2-40ml VOA GLASS 1-250ml L-AMBER GLASS	ICE CHEST
84-9	2-40ml GLASS 1-250ml GLASS		2:41 PM	2-40ml GLASS 1-250ml AMBER GLASS	Do NOT RETURN per R.S. 11/11/88
84-90B	2-40ml GLASS 1-250ml GLASS		2:44 PM	2-40ml GLASS 1-250ml AMBER GLASS	
84-12	2-40ml GLASS 1-250ml GLASS		2:25 PM	2-40ml GLASS 1-250ml AMBER GLASS	
84-13	2-40ml GLASS 1-250ml GLASS		1:03 PM	2-40ml GLASS 1-250ml AMBER GLASS	
84-14	2-40ml GLASS 1-250ml GLASS		1:18 PM	2-40ml GLASS 1-250ml AMBER GLASS	
84-15	2-40ml GLASS 1-250ml GLASS		2:03 PM	2-40ml GLASS 1-250ml AMBER GLASS	
84-17	2-40ml GLASS 1-250ml GLASS		1:45 PM	2-40ml GLASS 1-250ml AMBER GLASS	
84-TB	1-40ml GLASS DISTILLED WATER		12:30 PM	1-40 ml GLASS	✓
84-FB	1-40ml GLASS DISTILLED WATER		12:32 PM	1-40 ml GLASS	

SAMPLER Kyle Smith AFFILIATION EPS WITNESS Angela M. Ruyank

CUSTODY RELINQUISHED BY Angela M. Ruyank DATE/TIME 11/11/88 3:23 PM

RECEIVED BY Angela M. Ruyank AFFILIATION DEPT

SAMPLE STATUS (signature) TITLE

CUSTODY RELINQUISHED BY (signature) DATE/TIME

RECEIVED BY (signature) TITLE

SAMPLE STATUS (signature) AFFILIATION

5



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

ANALYTICAL SERVICES REQUEST FORM

BLT# 2485
FL CR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli BILLING ADDRESS: Frontier Chemical
4626 Royal Ave.
N.Y. 14303

TELEPHONE: (716) -285-8208 PO# _____

Laboratory Sample #	Collector's Sample #	Type of Sample*	Field Information**
_____	_____	_____	_____
_____	<u>See</u>	<u>Other</u>	<u>Side</u>
_____	_____	_____	_____
_____	_____	_____	_____

PART II: LABORATORY SECTION

Log in date: 11/15/88 Due Date: _____

Analysis Requested: (Refer to pricing list or Special Quotation)	Quantity	Cost
<u>Phenol</u>	<u>11</u>	_____
<u>SOL</u>	<u>11</u>	_____
<u>VOIA</u>	<u>11</u>	_____
<u>Preserved w/ H₂SO₄</u>	_____	_____
<u>Received w/wo head space</u>	_____	_____
_____	_____	_____
_____	TOTAL	_____

SPECIAL HANDLING AND/OR STORAGE Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.
**Use back of page for additional information relative to sample location.

COMPLETED BY: Ralph Williams DATE: 11/15/88
please print

CHAIN OF CUSTODY REPORT

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TRANSPORTATION
8A-16	2-40ml VINYL 1-250ml GLASS	11/15/88	8:48AM	2-40 VOA 1-250 AMBER GLASS	ICE CHEST
8B-5C	2-40ml VINYL 1-250ml GLASS	11/15/88	9:06AM	2-40 VOA 1-250 AMBER GLASS	
8B-16A	2-40ml VINYL 1-250ml GLASS	11/15/88	9:42AM	2-40 VOA 1-250 AMBER GLASS	
8B-16B	2-40ml VINYL 1-250ml GLASS	11/15/88	9:51AM	2-40 VOA 1-250 AMBER GLASS	
8B-16C	2-40ml VINYL 1-250ml GLASS	11/15/88	9:27AM	2-40 VOA 1-250 AMBER GLASS	
8B-1A	2-40ml VINYL 1-250ml GLASS	11/15/88	9:28AM	2-40 VOA 1-250 AMBER GLASS	
8B-1B	2-40ml VINYL 1-250ml GLASS	11/15/88	10:36AM	2-40 VOA 1-250 AMBER GLASS	
8B-4A	2-40ml VINYL 1-250ml GLASS	11/15/88	10:26AM	2-40 VOA 1-250 AMBER GLASS	
8B-4B	2-40ml VINYL 1-250ml GLASS	11/15/88	11:09AM	2-40 VOA 1-250 AMBER GLASS	
8B-4OB	2-40ml VINYL 1-250ml GLASS	11/15/88	11:20AM	2-40 VOA 1-250 AMBER GLASS	
8B-4OB	2-40ml VINYL 1-250ml GLASS	11/15/88	10:54AM	2-40 VOA 1-250 AMBER GLASS	

SAMPLER Paul E. Smith AFFILIATION EPS WITNESS Debra M. Ruych

CUSTODY RELINQUISHED BY Debra M. Ruych DATE/TIME 11/15/88 12:13PM

RECEIVED BY Debra M. Ruych (signature) AFFILIATION _____
SAMPLE STATUS _____

CUSTODY RELINQUISHED BY _____ (signature) DATE/TIME _____

RECEIVED BY _____ (signature) TITLE _____ AFFILIATION _____
SAMPLE STATUS _____

CHAIN OF CUSTODY REPORT

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TRANSPORTATION
8A-16	2-40ml VINYL 1-250ml GLASS	11/15/88	8:48AM	2-40 VOA 1-250 AMBER GLASS	ICE CHEST
8B-5C	2-40ml VINYL 1-250ml GLASS	11/15/88	9:06AM	2-40 VOA 1-250 AMBER GLASS	
8B-14A	2-40ml VINYL 1-250ml GLASS	11/15/88	9:12AM	2-40 VOA 1-250 AMBER GLASS	
8B-14B	2-40ml VINYL 1-250ml GLASS	11/15/88	9:51AM	2-40 VOA 1-250 AMBER GLASS	
8B-14C	2-40ml VINYL 1-250ml GLASS	11/15/88	11:27AM	2-40 VOA 1-250 AMBER GLASS	
8B-1A	2-40ml VINYL 1-250ml GLASS	11/15/88	9:28AM	2-40 VOA 1-250 AMBER GLASS	
8B-1B	2-40ml VINYL 1-250ml GLASS	11/15/88	10:36AM	2-40 VOA 1-250 AMBER GLASS	
8B-4A	2-40ml VINYL 1-250ml GLASS	11/15/88	10:26AM	2-40 VOA 1-250 AMBER GLASS	
8B-4B	2-40ml VINYL 1-250ml GLASS	11/15/88	11:09AM	2-40 VOA 1-250 AMBER GLASS	
8B-40B	2-40ml VINYL 1-250ml GLASS	11/15/88	11:20AM	2-40 VOA 1-250 AMBER GLASS	

SAMPLER Paul S. Smith AFFILIATION EPS WITNESS Michael M. Ruych

CUSTODY RELINQUISHED BY Michael M. Ruych DATE/TIME 11/15/88 12:13PM

RECEIVED BY Paul S. Smith (signature) DATE/TIME 11/15/88 12:13PM

SAMPLE STATUS RECEIVED AFFILIATION EPS

CUSTODY RELINQUISHED BY Paul S. Smith (signature) DATE/TIME 11/15/88 12:13PM

RECEIVED BY Paul S. Smith (signature) TITLE OWNER AFFILIATION EPS

SAMPLE STATUS RECEIVED

8



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

ANALYTICAL SERVICES REQUEST FORM

BLT# 2485
FL CR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli BILLING ADDRESS: Frontier Chemical
4626 Royal Ave.
N.Y. 14303

TELEPHONE: (716) -285-8208 PO# _____

Laboratory Sample #	Collector's Sample #	Type of Sample*	Field Information**
_____	_____	_____	_____
_____	<u>See</u>	<u>Other</u>	<u>Side</u>
_____	_____	_____	_____
_____	_____	_____	_____

PART II: LABORATORY SECTION

Log in date: 11/15/88 Due Date: _____

Analysis Requested:

(Refer to pricing list or Special Quotation)

	Quantity	Cost
<u>Phenol</u>	<u>1</u>	_____
<u>SOL</u>	<u>1</u>	_____
<u>VOIA</u>	<u>3</u>	_____
<u>Preserved w/ H₂SO₄</u>	_____	_____
<u>Received w/wo head space</u>	_____	_____
TOTAL	_____	_____

SPECIAL HANDLING AND/OR STORAGE Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.

**Use back of page for additional information relative to sample location.

COMPLETED BY: Ralph Williams
Please print

DATE: 11/15/88

[illegible]

Paul E. Smith

APPENDIX

115

WILLIAMS

CUSTODY RELINQUISHED BY

✓ *Indas M. Ruyak*

DATE/TIME

12:13 AM

RECEIVED BY Karl
(signature)

Signature of _____ (Signature) _____ (Middle)
 _____ (Signature) _____ (Signature)

AFFILIATION

STYLIS ET AL.

CUSTODY RIGHTS BY

(signature)

DATE/TIME:

RECEIVED BY

(signature)

Abstract

AFFILIATION

STYLISH FLIFTS

6



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

ANALYTICAL SERVICES REQUEST FORM

BLT# 2485
FL CR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli BILLING ADDRESS: Frontier Chemical
4626 Royal Ave.
W.F. W.Y. 14303

TELEPHONE: (716) -285-8208

PO# _____

Laboratory Sample #	Collector's Sample #	Type of Sample*	Field Information**
---------------------	----------------------	-----------------	---------------------

_____	<u>See</u>	<u>Other Side</u>	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PART II: LABORATORY SECTION

Log in date: 11/16/88

Due Date: _____

Analysis Requested:

(Refer to pricing list or Special Quotation)

Quantity Cost

<u>Phenol</u>	<u>Preserved w/ H₂SO₄</u>	<u>11</u>	_____
<u>50L</u>	_____	<u>11</u>	_____
<u>VOIA</u>	<u>Received w/ no head space</u>	<u>11</u>	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	TOTAL	_____

SPECIAL HANDLING AND/OR STORAGE Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.

**Use back of page for additional information relative to sample location.

COMPLETED BY: _____

Ralph Williams
Please print

DATE: 11/16/88

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TRANSFORMATION
88-2FB	1- 40mL VIAL DISTILLED WATER	11/16/88	9:25AM	1- 40mL VOA	ICE CHEST
88-2TB	1- 40mL VIAL DISTILLED WATER		8:00 AM	1- 40mL VOA	
88-110B	1- 250mL GLASS GROUND WATER		8:21AM	1- 250mL AMBER GLASS	
88-11A	2- 40 mL VIALS		8:30AM	2- 40mL VOA'S	
88-11B	1- 250 mL GLASS		8:30AM	1- 250mL AMBER GLASS	
88-140B	2- 40 mL VIALS		8:30AM	2- 40mL VOA'S	
88-14A	1- 250 mL GLASS		9:06AM	1- 250mL AMBER GLASS	
88-14B	2- 40 mL VIALS		9:11AM	2- 40mL VOA'S	
88-80B	1- 250 mL GLASS		9:16AM	1- 250mL AMBER GLASS	
88-8A	2- 40 mL VIALS		9:47AM	2- 40mL VOA'S	
88-8B	1- 250 mL GLASS		9:52AM	1- 250mL AMBER GLASS	
88-8C	2- 40 mL VIALS		9:58AM	2- 40mL VOA'S	

SAMPLETEC: Paul S. Smith AFFILIATION: EFS WITNESS: Virginia M. Ruychok
 CUSTODY RELINQUISHED BY: Virginia M. Ruychok DATE/TIME: 11/16/88 11:42am
 RECEIVED BY: Paul S. Smith TITLE: Director AFFILIATION: EFS
 SAMPLE STATUS: (signature)

CUSTODY RELINQUISHED BY: (signature) DATE/TIME: _____
 RECEIVED BY: (signature) TITLE: _____ AFFILIATION: _____
 SAMPLE STATUS: (signature)



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

ANALYTICAL SERVICES REQUEST FORM

BLT#

2485

FL CR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli

BILLING ADDRESS: Frontier Chemical

4626 Royal Ave.

W.F. N.Y. 14303

TELEPHONE: (716) -285-8208

PO# _____

Laboratory
Sample #

Collector's
Sample #

Type of
Sample*

Field Information**

See Other Side

PART II: LABORATORY SECTION

Log in date: 11/16/88

Due Date: _____

Analysis Requested:

(Refer to pricing list or Special Quotation)

Quantity

Cost

<u>Phenol</u>	<u>Preserved w/ H₂SO₄</u>	<u>3</u>	_____
<u>50L</u>		<u>3</u>	_____
<u>VOIA</u>	<u>Received w/ no head space</u>	<u>1</u>	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	TOTAL	_____

SPECIAL HANDLING AND/OR STORAGE

Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.

**Use back of page for additional information relative to sample location.

COMPLETED BY:

Ralph Williams

please print

DATE:

11/16/88

CHAIN OF CUSTODY REPORT

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	CONTAINERS	STORAGE AND TRANSPORTATION
88-120B	2-40 mL VIALS 1-250 mL GLASS GROUNDWATER	11/16/88	10:19 AM	2-40 mL VIALS 1-250 mL AMBER GLASS	ICE CHEST
88-12A	2-40 mL VIALS 1-250 mL GLASS		10:24 AM	2-40 mL VIALS 1-250 mL AMBER GLASS	
88-12B	2-40 mL VIALS 1-250 mL GLASS		10:29 AM	2-40 mL VIALS 1-250 mL AMBER GLASS	
SAMPLER <u>Paul E. Gault</u> AFFILIATION <u>EFS</u> WITNESS <u>Michael J. Ruppel</u> CUSTODY RELINQUISHED BY <u>Michael J. Ruppel</u> DATE/TIME <u>11/16/88 11:42 am</u> RECEIVED BY <u>Joseph M. Gault</u> (signature) TITLE <u>WITNESS</u> AFFILIATION <u></u> SAMPLE STATUS <u></u>					

CUSTODY RELINQUISHED BY _____ (signature) DATE/TIME _____

RECEIVED BY _____ (signature) TITLE _____ AFFILIATION _____

SAMPLE STATUS _____

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TRANSFORMATION
88-12CB	2- 40 mL VIALS 1- 250 mL GLASS	11/16/88	10:19 AM	2- 40mL VIALS 1- 250mL AMBER GLASS	1CE CHEST
88-12A	2- 40 mL VIALS 1- 250 mL GLASS		10:24 AM	2- 40mL VIALS 1- 250mL AMBER GLASS	
88-12B	2- 40 mL VIALS 1- 250 mL GLASS		10:29 AM		

SAMPLE: Pal E. Smith

CUSTODY RELINQUISHED BY: Michael M. Ruyech

RECEIVED BY: (Signature)

SAMPLE STATUS: 11/16/88 11:42am

WITNESS: Michael M. Ruyech

DATE/TIME: 11/16/88 11:42am

AFFILIATION: 11/16/88 11:42am

CUSTODY RELINQUISHED BY		DATE, TIME
(signature)	TITLE	
RECEIVED BY		

SAMPLE STATUS	
(signature)	

CHAIN OF CUSTODY REPORT

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	COMPARISONS	STORAGE AND TRANSPORTATION
88-2FB	1- 40mL VIAL DISTILLED WATER	11/16/88	9:25AM	1- 40mL VOA	ICE CHEST
88-2TB	1- 40mL VIAL DISTILLED WATER		8:00 AM	1- 40mL VOA	
88-110B	1- 250mL GLASS GROUNDWATER		8:24AM	1- 250mL AMPER GLASS	
88-11A	2- 40 mL VIALS		8:30AM	2- 40mL VOA'S	
88-11B	1- 250 mL GLASS		8:36AM	1- 250mL AMPER GLASS	
88-140B	2- 40 mL VIALS		9:06AM	2- 40mL VOA'S	
88-14A	1- 250 mL GLASS		9:11AM	1- 250mL AMPER GLASS	
88-140B	2- 40 mL VIALS		9:16AM	2- 40mL VOA'S	
88-80B	1- 250 mL GLASS		9:47AM	1- 250mL AMPER GLASS	
88-8A	2- 40 mL VIALS		9:52AM	2- 40mL VOA'S	
88-8B	1- 250 mL GLASS		9:58AM	1- 250mL AMPER GLASS	

SAMPLES For S. Smith AFFILIATION EFS WITNESS Dr. Ruych
 CUSTODY RELINQUISHED BY Dr. Ruych DATE/TIME 11/16/88 11:42am
 RECEIVED BY Dr. Ruych TITLE Dr. Ruych AFFILIATION Dr. Ruych
 (signature) (signature)
 SAMPLE STATUS

CUSTODY RELINQUISHED BY _____ DATE/TIME _____
 RECEIVED BY _____ TITLE _____ AFFILIATION _____
 (signature) (signature)
 SAMPLE STATUS



117-103

2485

11. (11)

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

CONTACT NAME: Rudy Scarpelli

MAILING ADDRESS: Frontier Chemical

4626 Royal Ave

W.F. W.Y. 14303

TELEPHONE: (716) - 285-8208

PO#

Laboratory
Sample #

Collector's
Sample #

Type of
Sample*

Field Information**

See Other Side

Log in date: 11/17/83

Due Date:

Analysis Requested:

(Refer to pricing list or Special Quotation)

Quantity

1555

Phenol

 ~~O_2 reserved in $\frac{1}{2}\text{SO}_4$~~

500

Received w/wo head space

VOID

ECOL

SPECIAL HANDLING AND/OR STORAGE

Cool @ 4°/

* indicate whether sample is soil, sludge, etc.

**Use back of page for additional information relative to sample location.

COMPLETED BY:

Ralph Williams

1955 1956

DATE:

11/17/88

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TRANSPORTATION
83-37E	1-40mL GLASS VIAL; DISTILLED WATER	11/17/88	9:15AM	1-40mL VOA	ICE CHEST
83-37E	1-40mL GLASS VIAL; DISTILLED WATER		10:16AM	1-40mL VOA'S	
83-90B	1-250mL GLASS VIALS; GROUNDWATER		9:25AM	1-250mL AMBER GLASS VOA'S	
83-90A	1-250mL GLASS VIALS		9:31AM	1-250mL AMBER GLASS VOA'S	
83-90B	1-40mL VIALS		9:37AM	1-250mL AMBER GLASS VOA'S	
83-13A	1-250mL GLASS VIALS		9:56AM	1-250mL AMBER GLASS VOA'S	
83-60E	1-40mL VIALS		10:51AM	1-250mL AMBER GLASS VOA'S	
83-60A	1-250mL GLASS VIALS		10:58AM	1-250mL AMBER GLASS VOA'S	
83-60E	1-40mL VIALS		11:05AM	1-250mL AMBER GLASS VOA'S	
83-3A	1-250mL GLASS VIALS		10:18AM	1-250mL AMBER GLASS VOA'S	
83-3B	1-250mL GLASS VIALS		10:25AM	1-250mL AMBER GLASS VOA'S	

SAMPLER Paul S. Smith AFFILIATION EFS WITNESS Angela M. Regan
 CUSTODY RELINQUISHED BY Angela M. Regan DATE/TIME 11/17/88 11:41AM
 RECEIVED BY Joseph Williams (signature) AFFILIATION _____
 SAMPLE STATUS _____

CUSTODY RELINQUISHED BY _____ DATE/TIME _____
 RECEIVED BY _____ (signature) TITLE _____ AFFILIATION _____
 SAMPLE STATUS _____

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TRANSFORMATION
88-5B	2-40 mL VIAL 1-250mL GLASS GROUNDWATER 2-40mL VIAL	11/18/88	12:57 PM	2-40mL VIALS 1-250mL AMBER GLASS	ICE CHEST
88-5AB	2-40mL VIAL 1-250mL GLASS		1:02 PM	2-40mL VIALS 1-250mL AMBER GLASS	
87-1A	2-40mL VIAL 1-250mL GLASS		2:22 PM	2-40mL VIALS 1-250mL AMBER GLASS	
87-4B	2-40mL VIAL 1-250mL GLASS		4:01 PM	2-40mL VIALS 1-250mL AMBER GLASS	
87-40B	2-40mL VIAL 1-250mL GLASS		4:10 PM	2-40mL VIALS 1-250mL AMBER GLASS	
84-11	2-40mL VIAL 1-250mL GLASS		2:41 PM	2-40mL VIALS 1-250mL AMBER GLASS	
81-2	2-40mL VIAL 1-250mL GLASS		1:36 PM	2-40mL VIALS 1-250mL AMBER GLASS	
81-7	2-40mL VIAL 1-250mL GLASS		1:27 PM	2-40mL VIALS 1-250mL AMBER GLASS	

SAMPLER Paul E. Smith AFFILIATION EPS WITNESS Michael M. Ryan

CUSTODY RELINQUISHED BY Michael M. Ryan DATE/TIME 11/18/88 4:45 PM

RECEIVED BY Paul E. Smith (signature) DATE/TIME 11/18/88 4:45 PM

SAMPLE STATUS RECEIVED AFFILIATION EPS

CUSTODY RELINQUISHED BY _____ DATE/TIME _____

RECEIVED BY _____ (signature) TITLE _____ AFFILIATION _____

SAMPLE STATUS _____

(8)



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

ANALYTICAL SERVICES REQUEST FORM

BLT# 2485
FL CR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli BILLING ADDRESS: Frontier Chemical
4626 Royal Ave.
W.F. N.Y. 14303

TELEPHONE: (716) -285-8208

PO# _____

Laboratory Sample #	Collector's Sample #	Type of Sample*	Field Information**
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

See Other Side

PART II: LABORATORY SECTION

Log in date: 11/18/88

Due Date: _____

Analysis Requested:

(Refer to pricing list or Special Quotation)

Quantity Cost

Phenol

Preserved w/ H₂SO₄

50L

VOID

Received w/wa head space

8
8
8

TOTAL

SPECIAL HANDLING AND/OR STORAGE

Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.

**Use back of page for additional information relative to sample location.

COMPLETED BY:

Ralph Williams

Please print

DATE:

11/18/88

CHAIN OF CUSTODY REPORT

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TRANSPORTATION
88-5B	2- 40 mL VIAL 1- 250mL GLASS GROUNDWATER	11/18/88	12:57 PM	2- 40mL VIALS 1- 250mL AMBER GLASS	ICE CHEST
88-5AB	2- 40mL VIAL 1- 250mL GLASS		1:02 PM	2- 40mL VIALS 1- 250mL AMBER GLASS	
81-1A	2- 40mL VIAL 1- 250mL GLASS		2:22 PM	2- 40mL VIALS 1- 250mL AMBER GLASS	
81-4B	2- 40mL VIAL 1- 250mL GLASS		4:01 PM	2- 40mL VIALS 1- 250mL AMBER GLASS	
81-40B	2- 40mL VIAL 1- 250mL GLASS		4:10 PM	2- 40mL VIALS 1- 250mL AMBER GLASS	
84-11	2- 40mL VIAL 1- 250mL GLASS		2:41 PM	2- 40mL VIALS 1- 250mL AMBER GLASS	
81-2	2- 40mL VIAL 1- 250mL GLASS		1:36 PM	2- 40mL VIALS 1- 250mL AMBER GLASS	
81-7	2- 40mL VIAL 1- 250mL GLASS		1:27 PM	2- 40mL VIALS 1- 250mL AMBER GLASS	

SAMPLER Paul E. Smith AFFILIATION EPS WITNESS Virginia M. Ruppel

CUSTODY RELINQUISHED BY Virginia M. Ruppel DATE/TIME 11/18/88 4:45 PM

RECEIVED BY Geoffrey M. Brown (signature) AFFILIATION _____

SAMPLE STATUS _____

CUSTODY RELINQUISHED BY _____ DATE/TIME _____

RECEIVED BY _____ (signature) TITLE _____ AFFILIATION _____

SAMPLE STATUS _____

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION		CONTAINERS	STORAGE AND TRANSPORTATION
		DATE	TIME		
88-3TB	1-40mL GLASS VIAL; DISTILLED WATER	11/17/88	9:15AM	1-40mL VOA	ICE CHEST
88-3FB	1-40mL GLASS VIAL; DISTILLED WATER		10:16AM	1-40mL VOA	
88-90B	2-40mL GLASS VIALS		9:25AM	2-40mL VOA'S	
88-9A	1-250mL GLASS; GROUNDWATER		9:31AM	1-250mL AMBER GLASS	
88-9B	2-40mL GLASS		9:37AM	2-40mL VOA'S	
88-13A	2-40mL GLASS		9:56AM	1-250mL AMBER GLASS	
88-60B	1-250mL GLASS		10:51AM	2-40mL VOA'S	
88-6A	2-40mL GLASS		10:58AM	1-250mL AMBER GLASS	
88-6E	1-250mL GLASS		11:05AM	2-40mL VOA'S	
88-3A	2-40mL GLASS		10:18AM	1-250mL AMBER GLASS	
88-3B	1-250mL GLASS		10:25AM	2-40mL VOA'S	

SAMPLER Paul S. Guck AFFILIATION EFS WITNESS Joseph M. Ruzgys
 CUSTODY RELINQUISHED BY Joseph M. Ruzgys DATE/TIME 11/17/88 11:41AM
 RECEIVED BY Joseph M. Ruzgys AFFILIATION
 (signature) (signature)
 SAMPLE STATUS

CUSTODY RELINQUISHED BY
 RECEIVED BY
 SAMPLE STATUS

9

Original



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2587

ANALYTICAL SERVICES REQUEST FORM

BLT# 2485
FL CR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli BILLING ADDRESS: Frontier Chemical
4626 Royal Ave.
N.Y. N.Y. 14303

TELEPHONE: (716) -285-8208 PO# _____

Laboratory Sample #	Collector's Sample #	Type of Sample*	Field Information**
_____	_____	_____	_____
_____	<u>See</u>	<u>Other</u>	<u>Size</u>
_____	_____	_____	_____
_____	_____	_____	_____

PART II: LABORATORY SECTION

Log in date: 11/22/88 Due Date: _____

Analysis Requested: (Refer to pricing list or Special Quotation)	Quantity	Cost
<u>Phenol</u>	_____	_____
<u>50L</u>	_____	_____
<u>VOID</u>	_____	_____
<u>Preserved w/ H₂SO₄</u>	_____	_____
<u>Received w/wo head space</u>	_____	_____
_____	_____	_____
_____	_____	_____
_____	TOTAL	_____

SPECIAL HANDLING AND/OR STORAGE Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.
**Use back of page for additional information relative to sample location.

COMPLETED BY: Ralph Williams DATE: _____
please print

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TEMPERATURE
07-1A	Ground water sample	11/22/88	2:32p	2 40ml vials 1-250ml Ampule Phenol/SOL	cooler ↓
07-10B		11/22/88	2:40p	2-40ml vials 1-250ml AMPULE Phenol/SOL	
07-11		11/22/88	1:25p	3-40ml vials 1-250ml AMPULE Phenol/SOL	

 SAMPLED: Paul G. Smith
 AFFILIATION: E.F.S.
 WITNESS: [Signature]

CUSTODY RELINQUISHED BY Paul J. Sullivan
(signature)
DATE/TIME 11/22/2011 3:00 p.m.
AFFILIATION BCT

RECEIVED BY Sgt. E. J. Sullivan
(signature)
TITLE _____

SAMPLE STATUS (signature)

CUSTODY RELINQUISHED BY _____ DATE/TIME _____

RECEIVED BY _____ TITLE _____ AFFILIATION _____

(signature)

(signature)

SAMPLE STATUS _____

(8)



TECHNICAL SERVICES, INC.

4626 Royal Avenue, Niagara Falls, New York 14303 • Phone (716) 285-2567

ANALYTICAL SERVICES REQUEST FORM

BLT# 2485
FL CR TX

PART I: FIELD SECTION

COLLECTOR: _____ DATE SAMPLED: _____ TIME: _____

AFFILIATION OF SAMPLER: EFS

CONTACT NAME: Rudy Scarpelli BILLING ADDRESS: Frontier Chemical
4626 Royal Ave.
W.F. N.Y. 14303

TELEPHONE: (716) - 285-8208 PO# _____

Laboratory Sample #	Collector's Sample #	Type of Sample*	Field Information**
_____	_____	_____	_____
_____	<u>See</u>	<u>Other Side</u>	_____
_____	_____	_____	_____
_____	_____	_____	_____

PART II: LABORATORY SECTION

Log in date: 11/18/88 Due Date: _____

Analysis Requested: (Refer to pricing list or Special Quotation)	Quantity	Cost
<u>Phenol</u>	<u>8</u>	_____
<u>500</u>	<u>8</u>	_____
<u>VOIA</u>	<u>11</u>	_____
<u>Preserved w/ H₂SO₄</u>	_____	_____
<u>Received w/wa head space</u>	_____	_____
TOTAL	_____	_____

SPECIAL HANDLING AND/OR STORAGE Cool @ 4°C

*Indicate whether sample is soil, sludge, etc.

**Use back of page for additional information relative to sample location.

COMPLETED BY: Ralph Williams
please print

DATE: 11/18/88

CHAIN OF CUSTODY REPORT

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CERTAINERS	STORAGE AND TRANSFORMATION
88-7B	1- 40ml VIAL DISTILLED WATER	10/19/88	11:55AM	1- 40ml VOA	12E CHEST
88-7B	1- 40ml VIAL DISTILLED WATER		12:46 PM	1- 40ml VOA	
88-7B	1- 40ml VIAL DISTILLED WATER		2:52 PM	1- 40ml VOA	
88-7A	2- 40ml VIAL		12:11 PM	2- 40ml VOA	
88-7B	1- 250ml GLASS		12:22 PM	1- 250ml AMBER GLASS	
88-7B	2- 40ml VIAL		12:28 PM	2- 40ml VOA	
88-7C	1- 250ml GLASS		12:15 PM	1- 250ml AMBER GLASS	
88-7C	2- 40ml VIAL		3:37 PM	2- 40ml VOA	
88-7A	1- 250ml GLASS		3:05 PM	1- 250ml AMBER GLASS	
88-7B	2- 40ml VIAL		3:13 PM	2- 40ml VOA	
88-7C	1- 250ml GLASS		3:42 PM	1- 250ml AMBER GLASS	

SAMPLER Paul E Smith AFFILIATION EFS WITNESS Stephen M. Ruzynski

CUSTODY RELINQUISHED BY Stephen M. Ruzynski DATE/TIME 11/18/88 4:45 PM

RECEIVED BY Ralph Williams TITLE _____ AFFILIATION _____

SAMPLE STATUS (signature)

CUSTODY RELINQUISHED BY (signature) DATE/TIME _____

RECEIVED BY (signature) TITLE _____ AFFILIATION _____

SAMPLE STATUS (signature)

CHAIN OF CUSTODY RECORD

SAMPLE I.D.	SAMPLE DESCRIPTION	COLLECTION DATE	TIME	CONTAINERS	STORAGE AND TRANSFORMATION
88-7B	1- 40ml VIAL DISTILLED WATER	10/19/88	11:55AM	1- 40ml VOA	ICE CHEST
88-7B	1- 40ml VIAL DISTILLED WATER		12:46 PM	1- 40ml VOA	
88-7B	1- 40ml VIAL DISTILLED WATER		2:52 PM	1- 40ml VOA	
88-7A	2- 40ml VIAL GLASS		12:11 PM	2- 40ml VOA	
88-7B	1- 250ml GLASS		12:22 PM	1- 250ml AMBER GLASS	
88-70B	2- 40ml VIAL GLASS		12:25 PM	2- 40ml VOA	
88-7C	1- 250ml GLASS		12:15 PM	1- 250ml AMBER GLASS	
88-2A	2- 40ml VIAL GLASS		3:37 PM	2- 40ml VOA	
88-2B	1- 250ml GLASS		3:05 PM	1- 250ml AMBER GLASS	
88-20B	2- 40ml VIAL GLASS		3:13 PM	2- 40ml VOA	
88-2C	1- 250ml GLASS		3:42 PM	1- 250ml AMBER GLASS	

SAMPLER Paul Smith AFFILIATION EFS WITNESS Michael M. Ruyge

CUSTODY RELINQUISHED BY Michael M. Ruyge DATE/TIME 11/18/88 4:45 PM

RECEIVED BY Ralph Williams TITLE Signature AFFILIATION

SAMPLE STATUS

CUSTODY RELINQUISHED BY

(signature)

DATE/TIME

RECEIVED BY

(signature)

TITLE

AFFILIATION

SAMPLE STATUS

[illegible]

 SAMPLED Paul E. Smith AFFILIATION E.F.S. WITNESS John J. Black

 CUSTODY RELINQUISHED BY Paul E. Smith DATE/TIME 11/22/88 3:08 pm

 RECEIVED BY Sed Byrd (signature) TITLE _____ AFFILIATION BCT
 (signature)

 SAMPLE STATUS _____

CUSTODY RELINQUISHED BY	DATE/TIME	AFFILIATION
RECEIVED BY	TITLE	
(signature)		
(signature)		
SAMPLE STATUS		
