

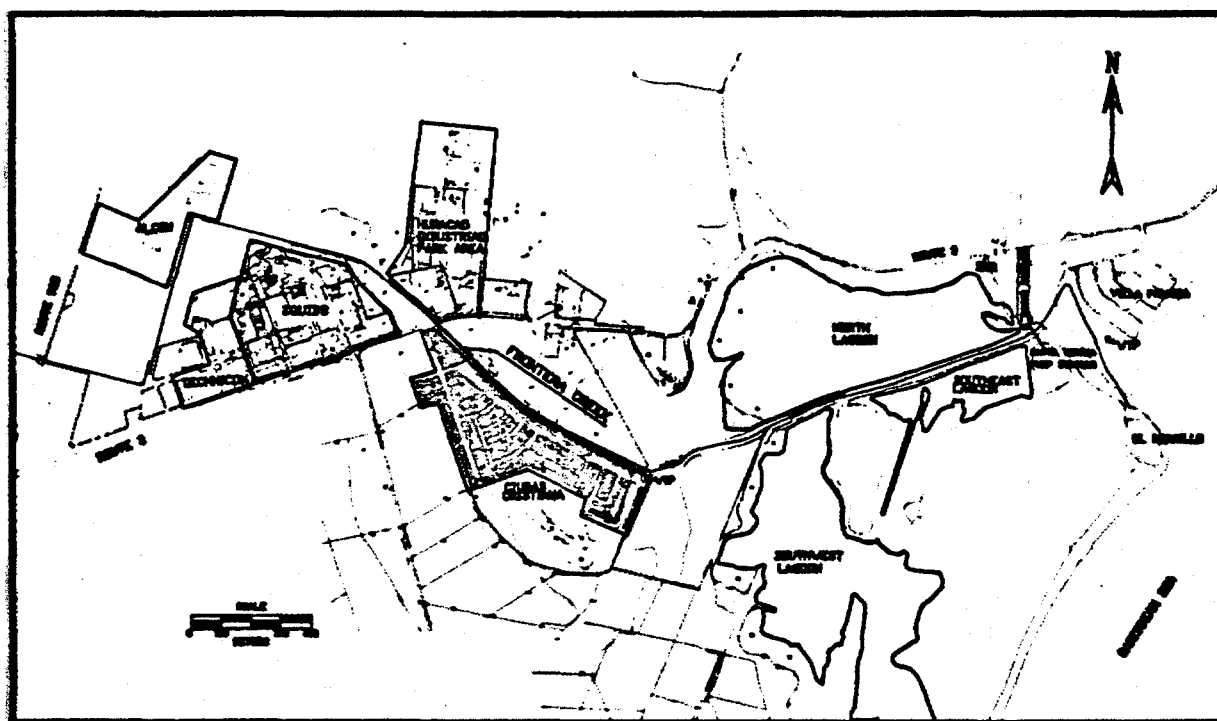
REMEDIAL INVESTIGATION REPORT

For

FRONTERA CREEK SITE HUMACAO, PUERTO RICO

Volume 3 of 7

(Tables, Part 2)



DYNAMAC CORPORATION

Environmental Risk Management Division

REVISED DRAFT

FEBRUARY 1991

FRO 001 1187 F

**THIS VOLUME WAS
SUBMITTED TO EPA MAY 1991**

ERO 001 1188

VOLUME 3

LIST OF TABLES

Table 4-40	Summary of Stored Data for Mercury in Puerto Rico
Table 4-41	Mercury Data for On-site Sediment Samples
Table 4-42	Mercury Data for Background Sediment Samples
Table 4-43	Mercury Data Summary for On-Site and Background Sediment Samples
Table 4-44	Mercury Data Summary for Frontera Lagoons Sediment Samples
Table 4-45	Mercury Data Summary for Sediment Transect Samples
Table 4-46	HSL Data for Frontera Creek Sediment Samples
Table 4-47	HSL Data for Frontera Lagoon Sediment Samples
Table 4-48	HSL Data for Squibb Ditch Sediment Samples
Table 4-49	HSL Data for Mandri Canal Sediment Samples
Table 4-50	HSL Data for Technicon Ditch Sediment Samples
Table 4-51	HSL Data for Background Sediment Samples
Table 4-52	HSL Data Summary for On-Site Sediment Samples
Table 4-53	HSL Data Summary for Background Sediment Samples
Table 4-54	Comparison of Study Area Data with Control Data for Inorganic Chemicals in Sediment Samples
Table 4-55	Literature Values for Mercury Concentrations in Sediment Samples
Table 4-56	Summary of Bird Censuses
Table 4-57	Biological Characteristics of Adult Birds Analyzed for Frontera and Boqueron
Table 4-58	Characteristics of People Fishing and Crabbing at Humacao, Puerto Rico
Table 4-59	Percent of People Eating the Catch
Table 4-60	Percent of People Eating Parts of Catch
Table 4-61	Gill Net Effort for Sampling
Table 4-62	Summary of Gill Net Operations
Table 4-63	Weight and Length of Fish Captured at Study Area and Control Sites
Table 4-64	Coefficient of Variation for Weight and Length of Tarpon and Tilapia Collected
Table 4-65	Shrimp Dip Net Hauls at Frontera
Table 4-66	Trapping Summary
Table 4-67	Summary of Crab and Lizard Collections
Table 4-68	Weight and Size of Crabs Analyzed at On-site and Background Biota Sampling Locations

Table 4-69	Characteristics of Lizards (<i>Ameiva exsul</i>) Collected at On-site and Background Biota Sampling Locations
Table 4-70	Presence or Absence of Organisms in Mud as Determined by Grab Samples of Bottom Sediments
Table 4-71	Physical Characteristics at Frontera Creek Site and Mandri Canal as a Function of Time of Day (March 28, 1988)
Table 4-72	Summary of Physical Characteristics at On-site and Background Biota Sampling Location (March 24-26 1988)
Table 4-73	Mercury Data for the Rutgers Biota Samples
Table 4-74	Biota Data - Total Mercury
Table 4-75	Mercury Data Summary for Biota Samples
Table 4-76	Samples Sent for HSL Analyses
Table 4-77	HSL Data Summary for Biota Samples
Table 4-78	Mercury Data for Cow Samples
Table 4-79	Mercury Data for Coconut Samples
Table 4-80	Species Present from all Methods of Collection
Table 4-81	Literature Summary of Mercury Levels in Fish
Table 4-82	Average Mercury Levels in Marine Organisms in the Caribbean
Table 4-83	Mercury Levels in Adult Birds
Table 4-84	Mercury Dosimeter Monitoring
Table 4-85	Air Sampling Results
Table 4-86	Summary of Average Analyte Concentrations Detected at Air Sampling Locations
Table 4-87	Summary of Available Data on Atmospheric Mercury Concentrations
Table 5-1	List of Replicate Pairs
Table 5-2	Mercury Data for Soil Replicate Samples
Table 5-3	Mercury Data for Cristiana Surface Soil Co-Located Samples
Table 5-4	HSL Data for Soil Samples and Replicates
Table 5-5	Mercury Data for Water Sample Replicates
Table 5-6	HSL Data for Surface Water Samples and Replicates
Table 5-7	Mercury Data for Sediment Sample Replicates
Table 5-8	HSL Data for Sediment Samples and Replicates
Table 5-9	Mercury Data for Biota Replicate Samples
Table 5-10	HSL Data for Biota Samples and Replicates

Table 5-11	Mercury Data for Air Samples and Duplicates
Table 5-12	HSL Data for Air Samples and Replicates
Table 5-13	List of Tripblanks
Table 5-14	Tripblank Data
Table 5-15	Field Blank Data
Table 6-1	Exposure Concentrations
Table 6-2	Comparison of Exposure Factors for Ingestion of Aquatic Biota - Local Residents - Current Land Use Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-3	Comparison of Exposure Factors for Dermal Contact with Sediments - Local Residents - Current Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-4	Comparison of Exposure Factors for Inhalation Workers - Current Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-5	Comparison of Exposure Factors for Incidental Ingestion of Surface Soils - Workers Current Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-6	Comparison of Exposure Factors for Dermal Contact with Surface Soils - Workers Current Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-7	Comparison of Exposure Factors for Incidental Ingestion of Surface Soils - Cristiana Residents - Future Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-8	Comparison of Exposure Factors for Dermal Contact with Soils - Cristiana Residents - Future Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-9	Comparison of Exposure Factors for Inhalation - Cristiana and Local Residents - Future Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-10	Comparison of Exposure Factors for Dermal Contact with Surface Water - Cristiana and Local Residents - Future Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios

Table 6-11	Comparison of Exposure Factors for Dermal Contact with Sediments - Cristiana and Local Residents - Future Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-12	Comparison of Exposure Factors for Hypothetical Future Incidental Ingestion of Technicon Ditch Sediments - Local Residents - Future Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-13	Comparison of Exposure Factors for Hypothetical Future Incidental Ingestion of Technicon Ditch Sediments - Workers Future Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-14	Exposure Factors for Hypothetical Future Dermal Contact with Technicon Ditch Sediments - Local Residents - Future Land Use - Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-15	Exposure Factors for Hypothetical Future Dermal Contact with Technicon Ditch Sediments - Workers Future Land Use Reasonable Case and Reasonable Maximum Exposure Scenarios
Table 6-16	Calculated Daily Intakes (mg/kg/day) of Noncarcinogens Assuming Average(a) and Reasonable Maximum Exposures(b)
Table 6-17	Toxicity Values for Noncarcinogenic Effects
Table 6-18	Toxicity Values for Carcinogenic Effects
Table 6-19	Summary of Non-Carcinogenic Hazard Quotients - Reasonable Case
Table 6-20	Summary of Non-Carcinogenic Hazard Quotients - Reasonable Maximum Exposures
Table 6-21	Hazard Indices for Reasonable Case and Reasonable Maximum Exposures
Table 6-22	Summary of Potential Carcinogenic Risks Associated with Methylene Chloride - Reasonable Case
Table 6-23	Summary of Potential Carcinogenic Risks Reasonable Maximum Exposures
Table 7-1	Recommended Remedial Action Objectives for Mercury
Table 7-2	Recommended Remedial Action Objectives for Volatile Organics in Air
Table 7-3	Recommended Remedial Action Objectives for Volatile Organics in Frontera Creek Surface Water
Table 7-4	Recommended Remedial Action Objectives for Inorganic Chemicals in Frontera Creek Surface Soil

TABLE 4-40

Summary of Storet Data for Mercury in Puerto Rico

Location	Station Number	Date	Depth (ft.)	No. of Analyses	Hg (ug/l) Dissolved	Hg (ug/l) Suspended	Hg (mg/kg) dry wt.) Sediment
<u>LAGOON/BAY</u>							
San Juan Bay	1	02/28/74	1.6	1	2.7	-	-
San Juan, PR	2	02/28/74	1.6	1	0.9	-	0.1
	3	02/28/74	1.6	1	8.0	-	-
	4	02/28/74	1.6	1	2.8	-	-
	5	02/28/74	1.6	1	10.0	-	0.4
Pinones Lagoon	1	02/26/74	1.6	1	0.7	-	0.2
Carolina, PR	2	02/26/74	1.6	1	0.5	-	0.06
	3	02/26/74	1.6	1	1.7	-	0.1
Torrecilla Lagoon	1	02/26/74	1.6	1	1.5	-	-
Carolina, PR	2	02/26/74	1.6	1	2.5	-	0
	3	02/26/74	1.6	1	1.5	-	-
		02/26/74	10.0	1	1.8	-	0.05
	4	02/26/74	1.6	1	0.7	-	0.04
		02/26/74	40.0	1	1.4	-	-
	5	02/26/74	1.6	1	3.0	-	-
		02/26/74	15.0	1	9.8	-	0.3
Condado Lagoon	1	02/28/74	1.6	1	0.9	-	0.5
Santurces, PR		02/28/74	1.6	1	11.0	-	-
	2	02/28/74	-	1	-	-	0.5
		02/28/74	30.0	1	6.3	-	-
San Jose Lagoon	1	02/26/74	30.0	1	0.5	-	0.2
San Juan, PR		02/26/74	1.6	1	1.2	-	-
	2	02/26/74	1.6	1	1.9	-	0.7
	3	02/26/74	1.6	1	1.0	-	0.7
<u>RESERVOIR/LAKE</u>							
Carraizo Reservoir	near dam	11/01/79	45.0	1	-	-	2.1
(Lago Loiza)	none	11/01/79	30.0	1	-	-	2.6
Trujillo Alto, PR	none	11/01/79	10.0	1	-	-	2.6
	lake ctr.	06/19/75	-	1	-	-	0.2
	lake ctr.	06/19/75	-	1	-	-	0.2
Lago Loiza	4	04/04/74	-	1	-	-	0.1
	5	04/04/74	-	1	-	-	0.3
	6	04/04/74	-	1	-	-	0.2
	7	04/04/74	-	1	-	-	0.2

FRO 001 1193

TABLE 4-40 (continued)

Location	Station Number	Date	Depth (ft.)	No. of Analyses	Hg (ug/l) Dissolved	Hg (ug/l) Suspended	Hg (ug/kg dry wt.) Sediment
<u>RESERVOIR/LAKE (continued)</u>							
Rio La Plata	near dam	10/29/79	35.0	1	-	-	2.3
Reservoir	none	10/29/79	25.0	1	-	-	2.2
Tao Alta, PR	none	10/29/79	35.0	1	-	-	1.1
Lago Garzas	1	11/17/77	-	1	-	-	0.1
Arecibo, PR	2	11/17/77	-	1	-	-	0
Lago Guayo	1	11/15/77	-	1	-	-	0
	2	11/15/77	-	1	-	-	0
	3	11/15/77	-	1	-	-	0.2
Lago Dos Bocas	1	11/10/77	-	1	-	-	0
Mayaguez, PR	2	11/11/77	-	1	-	-	0
	3	11/10/77	-	1	-	-	0.1
Lago Carite	1	11/09/77	-	1	-	-	0
Carolina, PR	2	11/09/77	-	1	-	-	0
	3	11/09/77	-	1	-	-	0
Lago Guajataca	1	11/10/77	-	1	-	-	0
	2	11/10/77	-	1	-	-	0
	3	11/10/77	-	1	-	-	0
Lago Patillas	1	11/09/77	-	1	-	-	0
	2	11/09/77	-	1	-	-	0
	3	11/09/77	-	1	-	-	0
Lago Luchetti	1	11/15/77	-	1	-	-	0
	2	11/15/77	-	1	-	-	0.1
	3	11/15/77	-	1	-	-	0
<u>RIVER/STREAM AND BEACHES</u>							
Rio Pellejas	at						
central	04/20/83	-	03/01/00		mean:	0.10	0.500
-							
Arecibo, PR	Pellejas	02/17/83			max:	0.10	
(9/23/82)					min:	0.10	
Rio Grande de	near						
San	10/09/74	-	39/14/00		mean:	0.25	0.030
-							
Anasco	Sebastian, PR	07/02/86			max:	0.50	0.200
					min:	0.10	0.000

FRO 001 1194

TABLE 4-40 (continued)

Location	Station Number	Date	Depth (ft.)	No. of Analyses ¹	Hg (ug/l) Dissolved	Hg (ug/l) Suspended	Hg (mg/kg) Sediment
<u>RIVER/STREAM AND BEACHES (continued)</u>							
Rio Grande de Manati Ponce, PR	Hwy. 2 near Manati	10/09/74	-	35/11/00	mean: 0.46	0.055	-
		06/05/86	-		max: 4.10	0.300	-
			-		min: 0.10	0.000	-
Rio Aibonito	Rt. 14 bridge	06/18/75	-	00/00/01	-	-	0.80
Rio Baranquitas	Rt. 162 bridge	06/18/75	-	00/00/01	-	-	1.30
Rio de la Plata Caguas, PR	at Tor Alto	03/30/73	-	58/28/01	mean: 0.43	0.061	0.00
		08/26/86	-		max: 1.40	0.600 (3/30/73)	-
			-		min: 0.10	0.000	-
Rio Fajardo	near Fajardo	12/05/77	-	10/05/00 08/10/82	mean: 0.46	0.080	-
			-		max: 0.80	0.300	-
			-		min: 0.10	0.000	-
Rio Grande de Loiza	above Lago Loiza	04/04/74	-	00/00/01	-	-	0.00
Rio Gurabo (Aguas, PR)	above Lago Loiza	04/04/74	-	00/00/01	-	-	0.00
	Rt. 181 bridge	02/05/87	2	00/00/01	-	-	0.00
	6 km downstream of Rio Valenciano	02/05/87	8	00/00/03 04/10/87	mean: -	-	0.03
					max: -	-	0.10
					min: -	-	0.00
	2.1 km downstream of Q. Arenas	02/05/87	2	00/00/01	-	-	0.00
	0.5 km downstream of Q. Honda	02/04/87	2	00/00/03	mean: -	-	0.00
		04/07/87			max: -	-	0.00
					min: -	-	0.00
	Rt. 949 bridge	02/04/87	2	00/00/02 03/18/87	mean: -	-	0.00
					max: -	-	0.00
					min: -	-	0.00
Rio de la Plata	under Rt. 179	06/18/75	-	00/00/01	-	-	0.30
	at Rt. 735 bridge	06/18/75	-	00/00/01	-	-	0.10
	at Rt. 729 bridge	06/18/75	-	00/00/01	-	-	0.10
	at Rt. 173 bridge	06/18/75	-	00/00/01	-	-	0.10
	at Rt. 156 bridge	06/18/75	-	00/00/01	-	-	0.60
	at Rt. 2 bridge	06/17/75	-	00/00/01	-	-	0.20
	at Rt. 693 bridge	06/17/75	-	00/00/01	-	-	0.10
Rio Grande de Patillas	near Patillas	10/10/74	-	37/14/00	mean: 0.29	0.014	-
		07/01/86	-		max: 0.50	0.100	-
			-		min: 0.10	0.000	-

FRO 001 1195

TABLE 4-40 (continued)

Location	Station Number	Date	Depth (ft.)	No. of Analyses ¹	Hg (ug/l) Dissolved	Hg (ug/l) Suspended	Hg (mg/kg) Sediment
<u>RIVER/STREAM AND BEACHES (continued)</u>							
Rio Carrillos	near Ponce	12/01/77	-	07/04/00	mean:	0.50	0.000
		08/09/79			max:	0.50	0.000
					min:	0.50	0.000
Rio Vivi	near Central Pellejas	09/23/82	-	02/01/00	mean:	0.10	0.100
		02/17/83			max:	0.10	0.100
					min:	0.10	0.100
Rio Tanama	near Utuado	02/16/83	-	01/01/00		0.20	0.300
Q. de los Muertos of R. Valenciano	2 km upstream	02/04/87	2	00/00/03	mean:	-	0.00
		04/07/87			max:	-	0.00
					min:	-	0.00
Rio Valenciano	Rt. 917	02/04/87	2	00/00/03	mean:	-	0.00
		04/07/87			max:	-	0.00
					min:	-	0.00
Rio de la Guadiana	Rts. 164 & 815	06/18/75	-	00/00/01		-	0.30
San Juan Beaches	-	09/20/85	12	00/00/01		-	0.70
		09/20/85	3	00/00/01		-	1.30
		09/20/85	16	00/00/01		-	0.30
		09/20/85	47	00/00/01		-	0.10
		09/20/85	38	00/00/01		-	0.10
		09/20/85	38	00/00/01		-	0.10
		09/25/85	6	00/00/01		-	8.20
		09/25/85	6	00/00/01		-	0.20

1 - Number of analyses = Hg Dissolved/Hg Suspended/Hg Sediment

PRO 001 1196

TABLE 4-41

Mercury Data for On-site Sediment Samples
(MDL = 80; values in ug/kg)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
Frontera Creek								
Upstream (upgradient)								
FCSEDCL01A	BE0683	880420		82	U			
FCSEDCL02A	BE0772	880420	BMDL	51	U	ND	0	UJ
FCSEDCL02B	BE0682	880420		83	UJ			
FCSEDCL03A	BE0681	880419		84	U			
FCSEDCL04A	BE0771	880419		100	U	ND	0	UJ
FCSEDCL04B	BE0751	880419		114		ND	0	U**
FCSEDCL05A	BE0678	880419		114	J			
FCSEDCL06A	BE1875	880505		86	U	BMDL	73	UJ
FCSEDCL06B	BE1702	880505		89	UJ			
FCSEDCL07A	BE1701	880505		121	UJ			
FCSEDCLA03	BE0679	880419		86	UJ			
FCSEDCLB06	BE1703	880505		89	UJ			
Midstream								
FCSEDCL08A	BE1874	880505		230			160	J
FCSEDCL08B	BE0757	880505		152		BMDL	78	UJ
FCSEDCL09A	BE1777	880504		1000			860	J
FCSEDCL10A	BE1776	880504		630			570	J
FCSEDCL10B	BE0756	880504		959			576	J
FCSEDCL11A	BE1700	880504		365				
FCSEDCL12A	BE1698	880504		145				
FCSEDCL12B	BE1699	880504		195				
FCSEDCL13A	BE1775	880504		1100			880	J
FCSEDCL14A	BE1696	880504		2900				
FCSEDCL14B	BE1697	880504		86	U			
FCSEDCL15A	BE1695	880504		464				
FCSEDCL16A	BE1774	880504		1540			1030	J
FCSEDCL16B	BE0755	880504		738			597	J
FCSEDCL17A	BE0738	880503		2300				
FCSEDCL18A	BE0737	880503		459				
FCSEDCL18B	BE1694	880503	BMDL	69	U			
FCSEDCL19A	BE0735	880503	BMDL	78	U			
FCSEDCL19B	BE0736	880503	BMDL	44	U			
FCSEDCL20A	BE0734	880503		99	U			
FCSEDCL21A	BE1783	880503	BMDL	48	UJ	BMDL	53	UJ
FCSEDCL21B	BE0754	880503	BMDL	65	U	ND	0	UJ
FCSEDCL22A	BE0732	880503		200				
FCSEDCL22B	BE0733	880503	BMDL	71	U			
FCSEDCL23A	BE0730	880503		198				
FCSEDCL24A	BE0728	880503	BMDL	72	U			
FCSEDCL24B	BE0729	880503	BMDL	65	U			
FCSEDCL25A	BE0727	880503	BMDL	61	UJ			

FRO 001 1197

FRO 001 1197

TABLE 4-41 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
Frontera Creek								
Midstream (continued)								
FCSEDCL26A	BE1782	880502		96	J		87	UJ
FCSEDCL27A	BE0726	880502	BMDL	58	U			
FCSEDCL28A	BE1780	880502	ND	0	UJ	ND	0	UJ
FCSEDCL28B	BE0753	880502	ND	0	U	ND	0	UJ
FCSEDCL29A	BE0724	880502	ND	0	U			
FCSEDCL29B	BE0725	880502	ND	0	U			
FCSEDCL30A	BE0721	880502		323				
FCSEDCL30B	BE0722	880502		119				
FCSEDCL31A	BE0720	880502	BMDL	58	U			
FCSEDCL32A	BE1779	880502		190	J		103	J
FCSEDCLA23	BE0731	880503		223				
FCSEDCLA26	BE1781	880502	BMDL	70	UJ		90	UJ
FCSEDCLB30	BE0723	880502	BMDL	65	U			
Downstream								
FCSEDCL33A	BE1787	880428		110			114	J
FCSEDCL33B	BE0752	880428	ND	0	U	ND	0	UJ
FCSEDCL34A	BE1786	880428		140			146	J
FCSEDCL34B	BE0749	880428	ND	0	U	ND	0	UJ
FCSEDCL35A	BE0719	880427	BMDL	50	U			
FCSEDCL36A	BE0717	880427		183				
FCSEDCL36B	BE0716	880427	BMDL	56	U			
FCSEDCL37A	BE1785	880427		110			100	UJ
FCSEDCL38A	BE0711	880427	BMDL	78	U			
FCSEDCL38B	BE0715	880427	BMDL	45	U			
FCSEDCL39A	BE0712	880427		145				
FCSEDCL40A	BE1784	880427	ND	0	U	ND	0	UJ
FCSEDCL40B	BE0748	880427	BMDL	55	U	ND	0	UJ
FCSEDCL41A	BE0710	880426		197				
FCSEDCL42A	BE0707	880426	BMDL	77	U			
FCSEDCL42B	BE0709	880426		135				
FCSEDCL43A	BE1772	880426		1000			553	J
FCSEDCL43B	BE0747	880426		2020			1149	**
FCSEDCL44A	BE0708	880425		99	UJ			
FCSEDCL45A	BE0706	880425		903	J			
FCSEDCL46A	BE0703	880425		292	J			
FCSEDCL46B	BE0705	880425		125	UJ			
FCSEDCL47A	BE1773	880425		410			250	J
FCSEDCL48A	BE0701	880425		185	J			
FCSEDCL49A	BE0702	880425		112	UJ			
FCSEDCL50A	BE0699	880425		148	J			
FCSEDCL50B	BE0700	880425		223	J			
FCSEDCL51A	BE1771	880422		120	UJ		181	UJ
FCSEDCL52A	BE0697	880422		400	J			
FCSEDCL52B	BE0698	880422		95	UJ			
FCSEDCL53A	BE0696	880422		242	J			

FRO 001 11

FRO 001 1198

TABLE 4-41 (continued)

Dynamac Number	ETC Number	Date	Total Mercury				Inorganic Mercury					
			Lab	Qual	Value	QA Qual	Lab	Qual	Value	QA Qual		
Frontera Creek												
Downstream (continued)												
FCSEDCL54A	BE1770	880422	BMDL		59		UJ			117		UJ
FCSEDCL54B	BE0745	880422			425		J			273		**
FCSEDCL55A	BE0695	880422			305		J					
FCSEDCL56A	BE0693	880421			1508		J					
FCSEDCL56B	BE0694	880421			190		J					
FCSEDCL57A	BE1769	880421			370		J			228		J
FCSEDCL58A	BE0692	880421			1460		J					
FCSEDCL59A	BE0690	880421			166		UJ					
FCSEDCL59B	BE0691	880421			153		UJ					
FCSEDCL60A	BE0687	880420			1000		J					
FCSEDCL60B	BE0688	880420			1800		J					
FCSEDCL61A	BE0685	880420			590							
FCSEDCL62A	BE0773	880420	ND		0		U	ND		0		UJ
FCSEDCLA36	BE0718	880427			170							
FCSEDCLA46	BE0704	880425			252							
FCSEDCLA61	BE0686	880420			97		U					
FCSEDCLB54	BE0746	880422			227		J			294		**
FCSEDCLVP	BE0689	880420	BMDL		37		U					
Frontera Lagoons												
North Lagoon												
FLSED01A	BE4755	880523			116		U			116		U
FLSED03A	BE1735	880512			189		J					
FLSED03B	BE1736	880512			166		U					
FLSED04A	BE1742	880512			330		J					
FLSED04B	BE1743	880512			313		J					
FLSED05A	BE1737	880512			180		J					
FLSED06A	BE1740	880512			162		J					
FLSED06B	BE1741	880512	ND		0		UJ					
FLSED07A	BE1739	880512			191		J					
FLSED09A	BE1749	880512			127		J					
FLSED10A	BE1747	880512			113		U					
FLSED10B	BE1748	880512			158		U					
FLSED11A	BE4756	880523	ND		0		U	BMDL		58		U
FLSED12A	BE1744	880512			157							
FLSED12B	BE1745	880512			127		U					
FLSED13A	BE1746	880512			168		J					
FLSEDA05	BE1738	880512			214		J					
FLSEDA11	BE4757	880523	ND		0		UJ	BMDL	FRO	55		UJ
Southeast Lagoon												
FLSED14A	BE1884	880516	ND		0		UJ	ND	001	0		UJ
FLSED15A	BE1806	880516			117		U		1199			
FLSED16A	BE1797	880516			115		U					
FLSED16B	BE1756	880516			97		U					
FLSEDA15	BE1757	880516			106		U					

FRO 001 1199

TABLE 4-41 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury								
			Lab	Qual	Value	QA	Qual	Lab	Qual	Value	QA	Qual		
<u>Frontera Lagoons</u>														
<u>Southwest Lagoon</u>														
FLSED17A	BE0765	880523			176					123		UJ		
FLSED18A	BE1863	880523			85		U			90		U		
FLSED18B	BE4761	880523			96		U		BMDL	74		UJ		
FLSED19A	BE1750	880513			243		U							
FLSED20A	BE1801	880516			144		U							
FLSED21A	BE1751	880513			226		J							
FLSED22A	BE1752	880513			193		J							
FLSED22B	BE1753	880513	BMDL		48		U							
FLSED23A	BE1754	880516			144									
FLSED24A	BE1868	880516			145		UJ			153		J		
FLSED24B	BE1867	880516	BMDL		68		U			111		UJ		
FLSED25A	BE1803	880516			176									
FLSED25B	BE1802	880516			110		U							
<u>Squibb Ditch</u>														
SDSEDCL01A	BE1876	880505			575					210				
SDSEDCL02A	BE0758	880505			89		J		BMDL	54		UJ		
SDSEDCL02B	BE0759	880505			93		J		BMDL	55		UJ		
SDSEDCL03A	BE1704	880505			125		J							
SDSEDCL04A	BE1705	880505			128		J							
SDSEDCL05A	BE1706	880505			538		J							
SDSEDCL05B	BE1708	880505			81		UJ							
SDSEDCL06A	BE1709	880506			260		J							
SDSEDCL06B	BE1710	880506			80		UJ							
SDSEDCL07A	BE1877	880506			230					120				
SDSEDCL08A	BE1758	880506			3540					1990				
SDSEDCL08B	BE1760	880506			87		U		ND	0		U		
SDSEDCLA05	BE1707	880505			518		J							
SDSEDCLA08	BE1759	880506			4500					2010				
<u>Technicon Ditch</u>														
TDSEDCL01A	BE1879	880509			3780		J			2610		J		
TDSEDCL02A	BE1711	880506			15380		J							
TDSEDCL02B	BE1712	880506			132		J							
TDSEDCL03A	BE1713	880506			908		J							
TDSEDCL04A	BE1761	880506			2420		*			18700		*		
TDSEDCL04B	BE1762	880506			141		J			110		J		
TDSEDCL05A	BE1714	880506			33280		J							
TDSEDCL06A	BE1716	880509			43320		J							
TDSEDCL06B	BE1717	880509			384		J							
TDSEDCL07A	BE1718	880509			404		J							
TDSEDCL08A	BE1763	880509			141		*			3530		*		
TDSEDCL08B	BE1765	880509			924		J			187		J		
TDSEDCL09A	BE1719	880509			26760		J							

FRO 001 1200

TABLE 4-41 (continued)

Dynamac Number	ETC Number	Date	Total Mercury				Inorganic Mercury					
			Lab Qual	Value	QA	Qual	Lab Qual	Value	QA	Qual		
<u>Technicon Ditch (continued)</u>												
TDSEDCL10A	BE1720	880509			447		J					
TDSEDCL10B	BE1721	880509			238		J					
TDSEDCL11A	BE1722	880509			483		J					
TDSEDCL12A	BE1766	880509			706					154		J
TDSEDCL12B	BE1767	880509			107		*			188		*
TDSEDCL13A	BE1723	880509			277		J					
TDSEDCL14A	BE1725	880510			109		J					
TDSEDCL15A	BE1726	880510			181		J					
TDSEDCL15B	BE1727	880510	BMDL		60		UJ					
TDSEDCL16A	BE1880	880510			197					158		J
TDSEDCL16B	BE1728	880510	BMDL		55		UJ					
TDSEDCLA05	BE1715	880506			23660		J					
TDSEDCLA08	BE1764	880509			794		*			4480		*
TDSEDCLA13	BE1724	880509			265		J					
TDSEDCLA16	BE1881	880510			176					149		J
<u>Technicon Tributaries</u>												
TDTR1B101A	BE1731	880510			354							
TDTR1B101B	BE1732	880510			127							
TDTR1B102A	BE1733	880510			1330							
TDTR1B102B	BE1734	880510	BMDL		56		U					
TDTR1B201A	BE1729	880510			707		J					
TDTR1B201B	BE1730	880510	ND		0		U					
<u>Sediment Transect A</u>												
SEDTRANA1A	BE3877	880519			240							
SEDTRANA1B	BE3878	880519	BMDL		76		U					
SEDTREPA1B	BE3879	880519			89							
SEDTRANA2A	BE3875	880519			183							
SEDTRANA2B	BE3876	880519	ND		0		U					
SEDTRANA3A	BE1855	880519			383							
SEDTRANA3B	BE1856	880519			133							
SEDTRANA4A	BE1853	880519			267							
SEDTRANA4B	BE1854	880519			122							
SEDTRANA5A	BE1851	880519			166							
SEDTRANA5B	BE1852	880519	ND		0		U					
<u>Sediment Transect B</u>												
SEDTRANB1A	BE1840	880519			932							
SEDTRANB1B	BE1841	880519			178							
SEDTRANB2A	BE1842	880519			328							
SEDTRANB2B	BE1843	880519			146							
SEDTRANB3A	BE1844	880519			11200							
SEDTRANB3B	BE1845	880519			1680							

FRO 001 1201

FRO 001 1201

TABLE 4-41 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury								
			Lab	Qual	Value	QA	Qual	Lab	Qual	Value	QA	Qual		
<u>Sediment Transect B (continued)</u>														
SEDTRANB4A	BE1846	880519			199									
SEDTREPB4A	BE1847	880519			229									
SEDTRANB4B	BE1848	880519	ND		0		U							
SEDTRANB5A	BE1849	880519			1320									
SEDTRANB5B	BE1850	880519	BMDL		74		U							
<u>Sediment Transect C</u>														
SEDTRANC1A	BE1838	880518			293									
SEDTRANC1B	BE1839	880518			91									
SEDTRANC2A	BE1836	880518			52100									
SEDTRANC2B	BE1837	880518			4020									
SEDTRANC3A	BE1834	880518			38700									
SEDTRANC3B	BE1835	880518			64100									
SEDTRANC4A	BE1832	880518			4720									
SEDTRANC4B	BE1833	880518			113									
SEDTRANC5A	BE1830	880518			230									
SEDTRANC5B	BE1831	880518	BMDL		49		U							
<u>Sediment Transect D</u>														
SEDTRAND1A	BE1816	880517			1430		J							
SEDTRAND1B	BE1818	880517			184									
SEDTREPD1B	BE1817	880517			98		J							
SEDTRAND2A	BE1814	880517			7260		J							
SEDTRAND2B	BE1815	880517			20400		J							
SEDTRAND3A	BE1812	880517			88500		J							
SEDTRAND3B	BE1813	880517			100		UJ							
SEDTRAND4A	BE1811	880517			7760		J							
SEDTRAND4B	BE1810	880517			7402									
SEDTRAND5A	BE1808	880517			1730									
SEDTRAND5B	BE1809	880517			128									
<u>Sediment Transect E</u>														
SEDTRANE1A	BE1755	880517			97		U							
SEDTRANE1B	BE1795	880517			147									
SEDTRANE2A	BE1796	880517			114		U							
SEDTRANE2B	BE1798	880517			112		U							
SEDTRANE3A	BE1799	880517			153									
SEDTRANE4A	BE1800	880517			169									
SEDTRANE4B	BE1804	880517	BMDL		57									
SEDTRANE5A	BE1805	880517			269									
SEDTRANE5B	BE1807	880517			836									

FRO 001 1202

FRO 001 1202

TABLE 4-41 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
<u>Sediment Transect F</u>								
SEDTRANF1A	BE1819	880518		1520	J			
SEDTRANF1B	BE1820	880518		120				
SEDTRANF2A	BE1821	880518		1000	J			
SEDTRANF2B	BE1822	880518		100	U			
SEDTRANF3A	BE1823	880518		960				
SEDTRANF3B	BE1824	880518		960				
SEDTRANF4A	BE1827	880518		580				
SEDTRANF4B	BE1826	880518		113				
SEDTREPF4B	BE1825	880518		150				
SEDTRANF5A	BE1828	880518		330				
SEDTRANF5B	BE1829	880518		230				
<u>Mandri Canal</u>								
MCSED01A	BE1864	880517	ND	0	UJ	ND	0	UJ
MCSED01B	BE1865	880517	ND	0	U	ND	0	UJ
MCSED02A	BE1883	880517	ND	0	U	ND	0	UJ
MCSED02B	BE1866	880517	ND	0	UJ	ND	0	UJ
<u>Dredge Samples</u>								
DREDGE1	BE3880	880520	BMDL	53	U	ND	0	U
DREDGE2	BE3881	880520		102	U	ND	0	U
DREDGE3	BE3882	880520	BMDL	56	U	ND	0	U
DREDGE4	BE3883	880520		107			89	
DREDGE5	BE3884	880520	ND	0	U	ND	0	U
DREDGE6	BE3885	880520		119			88	

J - Estimated

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

Note: *, **, R1 and R2 identify data points originally qualified "R" (rejected by the data validation team) but judged usable for data assessment purposes (see Appendix 7 for the explanation of these qualifiers)

FRO 001 1203

TABLE 4-42

Mercury Data for Background Sediment Samples
(MDL = 80; values in ug/kg)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
BGSEDCL01A	BE0673	880418	ND	0	UJ			
BGSEDCL02A	BE0766	880418	BMDL	46	U	ND	0	UJ
BGSEDCL02B	BE0674	880418	BMDL	60	U			
BGSEDCL03A	BE0675	880418		90	U			
BGSEDCL04A	BE0767	880418	ND	0	U	ND	0	UJ
BGSEDCL04B	BE0750	880418	BMDL	55	UJ	ND	0	U
BGSEDCL05A	BE0676	880418	BMDL	50	UJ			
BGSEDCL06A	BE0768	880418	ND	0	U	ND	0	UJ
BGSEDCL06B	BE0684	880418	BMDL	40	UJ			
BGSEDCL07A	BE0677	880419		134	J			
BGSEDCL08A	BE0770	880419	ND	0	U	ND	0	UJ
BGSEDCLA05	BE0680	880418	BMDL	41	UJ			
BGSEDCLA06	BE0769	880418	ND	0	U	ND	0	UJ

J - Estimated

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

FRO 001 1204

TABLE 4-43

Mercury Data Summary for On-site and Background Sediment Samples
(MDL = 80; values in ug/kg)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
<i>Total Mercury - On-site (0-12")</i>						
FCSED, Midstream	25	23	17	0	2,900	505
FCSED, Downstream	31	29	24	0	1,508	330
FLSED	23	21	21	0	330	153
SDSED	8	8	8	89	4,020	744
TDSED	19	19	19	109	43,320	6,668
SEDTRAN	30	30	30	97	88,500	7,436
MCSSED	2	0	0	0	0	0
DREDGE	6	5	3	0	119	73
Total	144	135	132	0	88,500	2,657
<i>Total Mercury - Background (0-12")</i>						
BGSED	8	4	2	0	134	39
FCSED, Upstream	7	7	6	BMDL	121	91
Total	15	11	8	0	134	63
<i>Inorganic Mercury - On-site (0-12")</i>						
FCSED, Midstream	9	8	7	0	1,030	416
FCSED, Downstream	10	8	8	0	553	169
FLSED	6	5	4	0	153	90
SDSED	4	4	3	BMDL	2,000	596
TDSED	5	5	5	154	18,700	5,125
MCSSED	2	0	0	0	0	0
DREDGE	6	2	2	0	89	30
Total	42	32	29	0	18,700	813
<i>Inorganic Mercury - Background (0-12")</i>						
BGSED	4	0	0	0	0	0
FCSED, Upstream	3	1	0	0	BMDL	24
Total	7	1	0	0	BMDL	10

FRO 001 1205

TABLE 4-43 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
Total Mercury - On-site (12-24")						
FCSED, Midstream	13	11	6	0	959	195
FCSED, Downstream	14	12	9	0	2,020	373
FLSED	10	9	7	0	313	118
SDSED	4	4	4	80	93	85
TDSED	11	10	7	0	924	202
SEDTRAN	29	26	23	0	64,100	3,505
MCSED	2	0	0	0	0	0
Total	83	72	56	0	64,100	1,363
Total Mercury - Background (12-24")						
BGSED	3	3	0	BMDL	BMDL	52
FCSED, Upstream	3	3	3	83	114	95
Total	6	6	3	ND	114	74
Inorganic Mercury - On-site (12-24")						
FCSED, Midstream	5	3	2	0	597	250
FCSED, Downstream	5	2	2	0	1,149	287
FLSED	2	2	1	BMDL	111	93
SDSED	2	1	0	0	BMDL	28
TDSED	3	3	3	110	188	162
MCSED	2	0	0	0	0	0
Total	19	11	8	0	1,149	179
Inorganic Mercury - Background (12-24")						
BGSED	1	0	0	0	0	0
FCSED, Upstream	1	0	0	0	0	0
Total	1	0	0	0	0	0

BGSED - Background Locations Sediment
 DREDGE - Dredge Spoils
 FCSED - Frontera Creek Sediment
 FLSED - Frontera lagoons Sediment
 MCSED - Mandri Canal Sediment
 SDSED - Squibb Ditch Sediment
 SEDTRAN - Sediment Transect Study
 TDSED - Technicon Ditch Sediment (includes Technicon Tributaries (TDTRIB) for this table)

* Where values are shown as BMDL (Below Method Detection Limit) or ND (Not Detected), averages are calculated based on estimated concentrations which are below quantitation limits.

TABLE 4-44

Mercury Data Summary for Frontera Lagoons Sediment Samples
(MDL = 80; values in ug/kg)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
Total Mercury (0-12")						
FLSED, North Lagoon	11	10	10	0	330	159
FLSED, Southeast Lagoon	3	2	2	0	115	76
FLSED, Southwest Lagoon	9	9	9	85	243	170
Total	23	21	21	0	330	153
Inorganic Mercury (0-12")						
FLSED, North Lagoon	2	2	1	BMDL	116	86
FLSED, Southeast Lagoon	1	0	0	0	0	0
FLSED, Southwest Lagoon	3	3	3	90	153	122
Total	6	5	4	0	153	90
Total Mercury (12-24")						
FLSED, North Lagoon	5	4	4	0	313	153
FLSED, Southeast Lagoon	1	1	1	97	97	97
FLSED, Southwest Lagoon	4	4	2	BMDL	110	81
Total	10	9	7	0	313	118
Inorganic Mercury (12-24")						
FLSED, North Lagoon	-	-	-	-	-	-
FLSED, Southeast Lagoon	-	-	-	-	-	-
FLSED, Southwest Lagoon	2	2	1	BMDL	111	93
Total	2	2	1	BMDL	111	93

* Where values are shown as BMDL (Below Method Detection Limit) or ND (Not Detected), averages are calculated based on estimated concentrations which are below quantitation limits.

TABLE 4-45

Mercury Data Summary for Sediment Transect Samples
(MDL = 80; values in ug/kg)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
<i>Technicon Ditch Total Mercury (0-12")</i>						
SEDTRAN, Transect A	5	5	5	166	383	248
SEDTRAN, Transect B	5	5	5	214	11,200	2,799
SEDTRAN, Transect C	5	5	5	230	52,100	19,209
SEDTRAN, Transect D	5	5	5	1,430	88,500	21,336
Total	20	20	20	166	88,500	10,898
<i>Frontera Creek Total Mercury (0-12")</i>						
SEDTRAN, Transect E	5	5	5	97	269	160
SEDTRAN, Transect F	5	5	5	330	1,520	878
Total	10	10	10	97	1,520	519
<i>Technicon Ditch Total Mercury (12-24")</i>						
SEDTRAN, Transect A	5	3	3	0	133	68
SEDTRAN, Transect B	5	4	3	0	1,680	416
SEDTRAN, Transect C	5	5	4	BMDL	64,100	13,675
SEDTRAN, Transect D	5	5	5	100	20,400	5,634
Total	20	17	15	0	64,100	4,948
<i>Frontera Creek Inorganic Mercury (12-24")</i>						
SEDTRAN, Transect E	4	3	3	BMDL	836	288
SEDTRAN, Transect F	5	5	5	100	960	308
Total	9	8	8	BMDL	960	299

* Where values are shown as BMDL (Below Method Detection Limit) or ND (Not Detected), averages are calculated based on estimated concentrations which are below quantitation limits.

TABLE 4-46

HSL Data for Frontera Creek Sediment Samples (values in ug/kg)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
VOLATILE ORGANIC COMPOUNDS - FRONTERA CREEK, UPGRADIENT						
Acetone						
FCSEDCL04A	BE0771	880419		144		5.20
FCSEDCL06A	BE1875	880505		196		5.80
Benzene						
FCSEDCL02A	BE0772	880420	BMDL	1.38	U	5.80
Methyl ethyl ketone						
FCSEDCL04A	BE0771	880419		7.40		5.20
FCSEDCL06A	BE1875	880505		41.60		5.80
Methylene chloride						
FCSEDCL02A	BE0772	880420		69.70	U	5.80
FCSEDCL04A	BE0771	880419		5.30	U	5.20
FCSEDCL06A	BE1875	880505		33.90		5.80
Toluene						
FCSEDCL02A	BE0772	880420	BMDL	1.39	U	5.80
FCSEDCL04A	BE0771	880419	BMDL	1.10	U	5.20
VOLATILE ORGANIC COMPOUNDS - FRONTERA CREEK, MIDSTREAM						
1,1,1-Trichloroethane						
FCSEDCL08A	BE1874	880505		8		7.40
Acetone						
FCSEDCL08A	BE1874	880505		278	J	7.40
FCSEDCL09A	BE1777	880504		370	J	6.80
FCSEDCL10A	BE1776	880504		273	J	7.30
FCSEDCL13A	BE1775	880504		1,160	J	5.40
FCSEDCL21A	BE1783	880503		71.30	J	5.30
FCSEDCL26A	BE1782	880502		85.60	J	4.90
FCSEDCL32A	BE1779	880502		56.50	J	5.10
FCSEDCLA26	BE1781	880502		64.60	J	4.90
Methyl ethyl ketone						
FCSEDCL08A	BE1874	880505		232		7.40
FCSEDCL09A	BE1777	880504		193	J	6.80
FCSEDCL10A	BE1776	880504		121	J	7.30
FCSEDCL13A	BE1775	880504		113	J	5.40
Methylene chloride						
FCSEDCL08A	BE1874	880505		11.10	UJ	7.40
FCSEDCLA26	BE1781	880502		5.92	UJ	4.90
Toluene						
FCSEDCL09A	BE1777	880504		11.50	J	6.80

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
VOLATILE ORGANIC COMPOUNDS - FRONTERA CREEK, DOWNSTREAM						
Acetone						
FCSEDCL33A	BE1787	880428		619	J	5.20
FCSEDCL34A	BE1786	880428		113	J	5.30
FCSEDCL37A	BE1785	880427		208	J	5.10
FCSEDCL40A	BE1784	880427		47.40	J	5.30
FCSEDCL43A	BE1772	880426		284		6.80
FCSEDCL51A	BE1771	880422		1,430		9.10
FCSEDCL54A	BE1770	880422		409		7.80
FCSEDCL57A	BE1769	880421		313		9.80
Benzene						
FCSEDCL43A	BE1772	880426	BMDL	3.56	U	6.80
FCSEDCL57A	BE1769	880421	BMDL	3.83	U	9.80
FCSEDCL62A	BE0773	880420	BMDL	1.85	U	4.90
Carbon disulfide						
FCSEDCL43A	BE1772	880426		74.60		6.80
FCSEDCL51A	BE1771	880422		260		9.10
FCSEDCL54A	BE1770	880422		204		7.80
FCSEDCL57A	BE1769	880421		540		9.80
Ethylbenzene						
FCSEDCL62A	BE0773	880420	BMDL	2.15	U	4.90
Methyl chloride						
FCSEDCL43A	BE1772	880426		26.50		6.80
FCSEDCL54A	BE1770	880422		11.50		7.80
FCSEDCL57A	BE1769	880421		24.40		9.80
Methyl ethyl ketone						
FCSEDCL43A	BE1772	880426		120		6.80
FCSEDCL51A	BE1771	880422		242		9.10
FCSEDCL54A	BE1770	880422		104		7.80
FCSEDCL57A	BE1769	880421		68.20		9.80
Methylene chloride						
FCSEDCL33A	BE1787	880428		44.50	U	5.20
FCSEDCL34A	BE1786	880428		33.50	U	5.30
FCSEDCL37A	BE1785	880427		33.70	U	5.10
FCSEDCL40A	BE1784	880427		21.70	U	5.30
FCSEDCL43A	BE1772	880426		58.40	U	6.80
FCSEDCL47A	BE1773	880425		52.50	U	6.60
FCSEDCL51A	BE1771	880422		25.80	U	9.10
FCSEDCL54A	BE1770	880422		93.50	U	7.80
FCSEDCL57A	BE1769	880421		79.70	U	9.80
FCSEDCL62A	BE0773	880420		26.50	U	4.90
m-Xylene						
FCSEDCL43A	BE1772	880426		7.53		6.80
FCSEDCL62A	BE0773	880420	BMDL	3.07		4.90

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
VOLATILE ORGANIC COMPOUNDS - FRONTERA CREEK, DOWNSTREAM (continued)						
o+p-Xylenes						
FCSEDCL43A	BE1772	880426	BMDL	5.97		6.80
FCSEDCL62A	BE0773	880420	BMDL	4.18		4.90
Toluene						
FCSEDCL43A	BE1772	880426	BMDL	3.03	U	6.80
FCSEDCL54A	BE1770	880422	BMDL	2.50	U	7.80
FCSEDCL57A	BE1769	880421	BMDL	2.60	U	9.80
FCSEDCL62A	BE0773	880420	BMDL	2.28	U	4.90
BASE/NEUTRAL EXTRACTABLES - FRONTERA CREEK, UPGRADIENT						
bis(2-ethylhexyl)phthalate						
FCSEDCL04A	BE0771	880419	BMDL	240	UJ	870
BASE/NEUTRAL EXTRACTABLES - FRONTERA CREEK, MIDSTREAM						
Benzo(a)anthracene						
FCSEDCL13A	BE1775	880504	BMDL	430	U	890
Benzo(a)pyrene						
FCSEDCL13A	BE1775	880504	BMDL	391	U	890
FCSEDCL32A	BE1779	880502	BMDL	112	UJ	830
Benzo(b)fluoranthene						
FCSEDCL13A	BE1775	880504		921		890
FCSEDCL32A	BE1779	880502	BMDL	160	UJ	830
bis(2-ethylhexyl)phthalate						
FCSEDCL10A	BE1776	880504	BMDL	283	U	1,200
FCSEDCL13A	BE1775	880504	BMDL	142	U	890
FCSEDCL16A	BE1774	880504	BMDL	255	U	1,200
FCSEDCL21A	BE1783	880503	BMDL	419	U	870
FCSEDCL26A	BE1782	880502	BMDL	160	UJ	820
FCSEDCL26A	BE1781	880502	BMDL	318	UJ	720
FCSEDCL32A	BE1779	880502	BMDL	205	UJ	830
Chrysene						
FCSEDCL13A	BE1775	880504	BMDL	454	U	890
FCSEDCL32A	BE1779	880502	BMDL	118	UJ	830
Fluoranthene						
FCSEDCL13A	BE1775	880504	BMDL	721	U	890
FCSEDCL32A	BE1779	880502	BMDL	67.40	UJ	830
Indeno(1,2,3-c,d)pyrene						
FCSEDCL13A	BE1775	880504	BMDL	160	UJ	890

FRO 001 1211

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
BASE/NEUTRAL EXTRACTABLES - FRONTERA CREEK, MIDSTREAM (continued)						
Pyrene						
FCSEDCL13A	BE1775	880504	BMDL	645	U	890
FCSEDCL32A	BE1779	880502	BMDL	86.80	UJ	830
BASE/NEUTRAL EXTRACTABLES - FRONTERA CREEK, DOWNSTREAM						
bis(2-ethylhexyl)phthalate						
FCSEDCL34A	BE1786	880428		918	J	870
FCSEDCL43A	BE1772	880426	BMDL	466	UJ	1,100
FCSEDCL47A	BE1773	880425	BMDL	406	R	1,100
FCSEDCL51A	BE1771	880422		5,770	J	1,500
FCSEDCL62A	BE0773	880420		2,940	J	790
ACID EXTRACTABLES - FRONTERA CREEK, MIDSTREAM						
Phenol						
FCSEDCL21A	BE1783	880503	BMDL	39	U	1,700
RCRA METALS - FRONTERA CREEK, UPGRADIENT						
Arsenic						
FCSEDCL02A	BE0772	880420		10,000		4,000
FCSEDCL04A	BE0771	880419		6,200		2,000
FCSEDCL06A	BE1875	880505		4,000	J	2,000
Barium						
FCSEDCL02A	BE0772	880420		99,700		930
FCSEDCL04A	BE0771	880419		93,000		930
FCSEDCL06A	BE1875	880505		190,000	J	770
Cadmium						
FCSEDCL02A	BE0772	880420	BMDL	200	U	790
Chromium						
FCSEDCL02A	BE0772	880420		7,300		4,200
FCSEDCL04A	BE0771	880419		6,100		4,200
FCSEDCL06A	BE1875	880505		9,200		6,100
Copper						
FCSEDCL02A	BE0772	880420		23,000	J	2,100
FCSEDCL04A	BE0771	880419		33,000	J	2,100
FCSEDCL06A	BE1875	880505		30,000		2,800
Lead						
FCSEDCL02A	BE0772	880420		4,600		2,000
FCSEDCL04A	BE0771	880419		2,600		2,000
FCSEDCL06A	BE1875	880505		8,700		1,000

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
RCRA METALS - FRONTERA CREEK, UPGRADIENT (continued)						
Selenium						
FCSEDCL02A	BE0772	880420	ND	84	U	1,000
FCSEDCL04A	BE0771	880419	ND	83	U	1,000
FCSEDCL06A	BE1875	880505	ND	48	U	1,000
Silver						
FCSEDCL02A	BE0772	880420	BMDL	490	U	2,000
FCSEDCL04A	BE0771	880419	ND	210	U	2,000
Zinc						
FCSEDCL02A	BE0772	880420		65,000		2,000
FCSEDCL04A	BE0771	880419		80,000		2,000
FCSEDCL06A	BE1875	880505		87,000	J	2,000
RCRA METALS - FRONTERA CREEK, MIDSTREAM						
Arsenic						
FCSEDCL08A	BE1874	880505		5,300	J	2,000
FCSEDCL09A	BE1777	880504		10,000	J	2,000
FCSEDCL10A	BE1776	880504		2,700		2,000
FCSEDCL13A	BE1775	880504		8,100	J	2,000
FCSEDCL16A	BE1774	880504		5,200	J	2,000
FCSEDCL21A	BE1783	880503	BMDL	1,000		4,000
FCSEDCL26A	BE1782	880502	BMDL	1,700		2,000
FCSEDCL28A	BE1780	880502		2,200		2,000
FCSEDCL32A	BE1779	880502	BMDL	400		2,000
FCSEDCLA26	BE1781	880502	ND	320	U	2,000
Barium						
FCSEDCL08A	BE1874	880505		185,000	J	770
FCSEDCL09A	BE1777	880504		123,000	J	770
FCSEDCL10A	BE1776	880504		174,000	J	770
FCSEDCL13A	BE1775	880504		178,000	J	770
FCSEDCL16A	BE1774	880504		161,000	J	770
FCSEDCL21A	BE1783	880503		145,000		930
FCSEDCL26A	BE1782	880502		80,000		930
FCSEDCL28A	BE1780	880502		33,000		930
FCSEDCL32A	BE1779	880502		117,000		930
FCSEDCLA26	BE1781	880502		65,000		930
Cadmium						
FCSEDCL08A	BE1874	880505	ND	44	U	870
FCSEDCL13A	BE1775	880504	ND	38	U	870
FCSEDCL26A	BE1782	880502	BMDL	320	U	790
FCSEDCL28A	BE1780	880502	BMDL	160	U	790
FCSEDCL32A	BE1779	880502	BMDL	180	U	790
FCSEDCLA26	BE1781	880502	BMDL	270	U	790

FRO 001 1213

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
RCRA METALS - FRONTERA CREEK, MIDSTREAM (continued)						
Chromium						
FCSEDCL08A	BE1874	880505		10,000		6,100
FCSEDCL09A	BE1777	880504		8,600		6,100
FCSEDCL10A	BE1776	880504		9,400		6,100
FCSEDCL13A	BE1775	880504		9,600		6,100
FCSEDCL16A	BE1774	880504		7,600		6,100
FCSEDCL21A	BE1783	880503		5,900		4,200
FCSEDCL26A	BE1782	880502		13,000		4,200
FCSEDCL28A	BE1780	880502		5,700		4,200
FCSEDCL32A	BE1779	880502		6,800		4,200
FCSEDCLA26	BE1781	880502		7,800		4,200
Copper						
FCSEDCL08A	BE1874	880505		44,000		2,800
FCSEDCL09A	BE1777	880504		30,000		2,800
FCSEDCL10A	BE1776	880504		37,000		2,800
FCSEDCL13A	BE1775	880504		34,000		2,800
FCSEDCL16A	BE1774	880504		33,000		2,800
FCSEDCL21A	BE1783	880503		28,000		2,100
FCSEDCL26A	BE1782	880502		28,000		2,100
FCSEDCL28A	BE1780	880502		24,000		2,100
FCSEDCL32A	BE1779	880502		24,000		2,100
FCSEDCLA26	BE1781	880502		20,000		2,100
Lead						
FCSEDCL08A	BE1874	880505		15,000	J	2,000
FCSEDCL09A	BE1777	880504		6,700	J	1,000
FCSEDCL10A	BE1776	880504		10,000	J	10,000
FCSEDCL13A	BE1775	880504	BMDL	5,500	J	10,000
FCSEDCL16A	BE1774	880504		11,000	J	1,000
FCSEDCL21A	BE1783	880503		3,300		1,000
FCSEDCL26A	BE1782	880502		4,800		2,000
FCSEDCL28A	BE1780	880502		2,600		2,000
FCSEDCL32A	BE1779	880502		6,500		2,000
FCSEDCLA26	BE1781	880502	BMDL	1,900		2,000
Selenium						
FCSEDCL08A	BE1874	880505	BMDL	600		1,000
FCSEDCL09A	BE1777	880504		2,600		2,000
FCSEDCL10A	BE1776	880504	ND	58	U	1,000
FCSEDCL13A	BE1775	880504	ND	54	U	1,000
FCSEDCL26A	BE1782	880502	ND	71	U	1,000
FCSEDCL28A	BE1780	880502	ND	74	U	1,000

ERO 001 1214

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
RCRA METALS - FRONTERA CREEK, MIDSTREAM (continued)						
Silver						
FCSEDCL21A	BE1783	880503	BMDL	560	U	2,000
FCSEDCL26A	BE1782	880502	ND	300	U	2,000
FCSEDCL28A	BE1780	880502	ND	190	U	2,000
FCSEDCL32A	BE1779	880502	BMDL	500	U	2,000
FCSEDCLA26	BE1781	880502	BMDL	660	U	2,000
Zinc						
FCSEDCL08A	BE1874	880505		120,000	J	2,000
FCSEDCL09A	BE1777	880504		71,000	J	2,000
FCSEDCL10A	BE1776	880504		110,000	J	2,000
FCSEDCL13A	BE1775	880504		93,000	J	2,000
FCSEDCL16A	BE1774	880504		120,000	J	2,000
FCSEDCL21A	BE1783	880503		54,000		2,000
FCSEDCL26A	BE1782	880502		91,000		2,000
FCSEDCL28A	BE1780	880502		44,000		2,000
FCSEDCL32A	BE1779	880502		68,000		2,000
FCSEDCLA26	BE1781	880502		76,000		2,000
RCRA METALS - FRONTERA CREEK, DOWNSTREAM						
Arsenic						
FCSEDCL33A	BE1787	880428	BMDL	3,400		10,000
FCSEDCL34A	BE1786	880428	BMDL	800		2,000
FCSEDCL37A	BE1785	880427	BMDL	2,800		10,000
FCSEDCL40A	BE1784	880427	ND	180	U	2,000
FCSEDCL43A	BE1772	880426	ND	1,900		10,000
FCSEDCL47A	BE1773	880425		2,600		2,000
FCSEDCL51A	BE1771	880422	BMDL	8,300		10,000
FCSEDCL54A	BE1770	880422	BMDL	6,900		10,000
FCSEDCL57A	BE1769	880421		10,000		10,000
FCSEDCL62A	BE0773	880420	BMDL	1,300		2,000
Barium						
FCSEDCL33A	BE1787	880428		86,000		930
FCSEDCL34A	BE1786	880428		62,000		930
FCSEDCL37A	BE1785	880427		101,000		930
FCSEDCL40A	BE1784	880427		131,000		930
FCSEDCL43A	BE1772	880426		162,000		930
FCSEDCL47A	BE1773	880425		47,000		930
FCSEDCL51A	BE1771	880422		104,000		930
FCSEDCL54A	BE1770	880422		50,000		930
FCSEDCL57A	BE1769	880421		73,000		930
FCSEDCL62A	BE0773	880420		5,400		930
Cadmium						
FCSEDCL33A	BE1787	880428	BMDL	330	U	790
FCSEDCL34A	BE1786	880428	BMDL	190	U	790
FCSEDCL37A	BE1785	880427	BMDL	240	U	790
FCSEDCL40A	BE1784	880427	BMDL	260	U	790

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
RCRA METALS - FRONTERA CREEK, DOWNSTREAM (continued)						
Cadmium (continued)						
FCSEDCL43A	BE1772	880426	BMDL	510		790
FCSEDCL47A	BE1773	880425	BMDL	270	U	790
FCSEDCL51A	BE1771	880422		880		790
FCSEDCL54A	BE1770	880422		860		790
FCSEDCL57A	BE1769	880421	BMDL	170	U	790
FCSEDCL62A	BE0773	880420	BMDL	310	U	790
Chromium						
FCSEDCL33A	BE1787	880428		56,000		4,200
FCSEDCL34A	BE1786	880428		6,700		4,200
FCSEDCL37A	BE1785	880427		7,700		4,200
FCSEDCL40A	BE1784	880427		7,500		4,200
FCSEDCL43A	BE1772	880426		15,000		4,200
FCSEDCL47A	BE1773	880425		5,400		4,200
FCSEDCL51A	BE1771	880422		11,000		4,200
FCSEDCL54A	BE1770	880422		9,100		4,200
FCSEDCL57A	BE1769	880421		12,000		4,200
FCSEDCL62A	BE0773	880420	BMDL	1,400		4,200
Copper						
FCSEDCL33A	BE1787	880428		26,000		2,100
FCSEDCL34A	BE1786	880428		17,000		2,100
FCSEDCL37A	BE1785	880427		24,000		2,100
FCSEDCL40A	BE1784	880427		21,000		2,100
FCSEDCL43A	BE1772	880426		51,000	J	2,100
FCSEDCL47A	BE1773	880425		18,000	J	2,100
FCSEDCL51A	BE1771	880422		110,000	J	2,100
FCSEDCL54A	BE1770	880422		49,000	J	2,100
FCSEDCL57A	BE1769	880421		51,000	J	2,100
FCSEDCL62A	BE0773	880420		4,400	J	2,100
Lead						
FCSEDCL33A	BE1787	880428		2,900		2,000
FCSEDCL34A	BE1786	880428		5,800		2,000
FCSEDCL37A	BE1785	880427		10,000		2,000
FCSEDCL40A	BE1784	880427		2,200		2,000
FCSEDCL43A	BE1772	880426		16,000		2,000
FCSEDCL47A	BE1773	880425		6,200		2,000
FCSEDCL51A	BE1771	880422		36,000		5,000
FCSEDCL54A	BE1770	880422		13,000		2,000
FCSEDCL57A	BE1769	880421		13,000		2,000
FCSEDCL62A	BE0773	880420	BMDL	1,100	U	2,000
Selenium						
FCSEDCL33A	BE1787	880428	ND	77	U	1,000
FCSEDCL37A	BE1785	880427	ND	180	U	1,000
FCSEDCL51A	BE1771	880422	BMDL	530		1,000
FCSEDCL54A	BE1770	880422	BMDL	280		1,000
FCSEDCL57A	BE1769	880421	ND	150	U	1,000

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
RCRA METALS - FRONTERA CREEK, DOWNSTREAM (continued)						
Silver						
FCSEDCL37A	BE1785	880427	ND	330	U	2,000
FCSEDCL40A	BE1784	880427	BMDL	450	U	2,000
FCSEDCL43A	BE1772	880426	BMDL	960	U	2,000
FCSEDCL47A	BE1773	880425	ND	80	U	2,000
FCSEDCL51A	BE1771	880422	ND	120	U	2,000
FCSEDCL54A	BE1770	880422	BMDL	520	U	2,000
FCSEDCL57A	BE1769	880421	ND	130	U	2,000
Zinc						
FCSEDCL33A	BE1787	880428		47,000		2,000
FCSEDCL34A	BE1786	880428		37,000		2,000
FCSEDCL37A	BE1785	880427		42,000		2,000
FCSEDCL40A	BE1784	880427		35,000		2,000
FCSEDCL43A	BE1772	880426		200,000		2,000
FCSEDCL47A	BE1773	880425		57,000		2,000
FCSEDCL51A	BE1771	880422		170,000		2,000
FCSEDCL54A	BE1770	880422		110,000		2,000
FCSEDCL57A	BE1769	880421		140,000		2,000
FCSEDCL62A	BE0773	880420		8,700		2,000
OTHER/MISCELLANEOUS - FRONTERA CREEK, UPGRADIENT						
Aluminum						
FCSEDCL02A	BE0772	880420		15,400,000	J	15,000
FCSEDCL04A	BE0771	880419		16,200,000	J	15,000
FCSEDCL06A	BE1875	880505		15,000,000		20,000
Beryllium						
FCSEDCL02A	BE0772	880420		300		200
FCSEDCL04A	BE0771	880419		270		200
Calcium						
FCSEDCL02A	BE0772	880420		1,900,000		25,000
FCSEDCL04A	BE0771	880419		1,600,000		25,000
FCSEDCL06A	BE1875	880505		3,490,000	J	19,000
Cobalt						
FCSEDCL02A	BE0772	880420		12,000		3,800
FCSEDCL04A	BE0771	880419		14,000		3,800
FCSEDCL06A	BE1875	880505		20,000		6,900
Cyanide, Total						
FCSEDCL02A	BE0772	880420		< 500	NA	500
FCSEDCL04A	BE0771	880419		< 500	NA	500
FCSEDCL06A	BE1875	880505		< 500	NA	500

FRO 001 1217

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS - FRONTERA CREEK, UPGRADIENT (continued)						
Iron						
FCSEDCL02A	BE0772	880420		26,000,000		34,000
FCSEDCL04A	BE0771	880419		37,800,000		34,000
FCSEDCL06A	BE1875	880505		40,600,000		33,000
Magnesium						
FCSEDCL02A	BE0772	880420		3,200,000		8,200
FCSEDCL04A	BE0771	880419		6,500,000		8,200
FCSEDCL06A	BE1875	880505		4,860,000	J	4,700
Manganese						
FCSEDCL02A	BE0772	880420		854,000	J	1,300
FCSEDCL04A	BE0771	880419		889,000	J	1,100
FCSEDCL06A	BE1875	880505		1,760,000	J	1,400
Nickel						
FCSEDCL02A	BE0772	880420		3,600		2,700
FCSEDCL04A	BE0771	880419		4,100		2,700
FCSEDCL06A	BE1875	880505		2,300		2,100
Potassium						
FCSEDCL02A	BE0772	880420		280,000		20,000
FCSEDCL04A	BE0771	880419		270,000		20,000
FCSEDCL06A	BE1875	880505		340,000		20,000
Sodium						
FCSEDCL02A	BE0772	880420		170,000		30,000
FCSEDCL04A	BE0771	880419		130,000		30,000
FCSEDCL06A	BE1875	880505		160,000		23,000
Sulfate as SO₄ (values in mg/kg)						
FCSEDCL02A	BE0772	880420		360	NA	250
FCSEDCL04A	BE0771	880419		500	NA	250
FCSEDCL04B	BE0751	880419		< 250	NA	250
FCSEDCL06A	BE1875	880505		320	NA	250
Sulfide as S (values in mg/kg)						
FCSEDCL02A	BE0772	880420		< 10	NA	10
FCSEDCL04A	BE0771	880419		< 10	NA	10
FCSEDCL04B	BE0751	880419		< 10	NA	10
FCSEDCL06A	BE1875	880505		26	NA	10
Thallium						
FCSEDCL02A	BE0772	880420	ND	55	U	2,000
FCSEDCL04A	BE0771	880419	ND	54	U	2,000
Total Organic Carbon						
FCSEDCL02A	BE0772	880420		8,830	NA	100
FCSEDCL02A	BE0772	880420		8,830	NA	100

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS - FRONTERA CREEK, UPGRADIENT (continued)</i>						
Total Organic Carbon (values in mg/kg) (continued)						
FCSEDCL04A	BE0771	880419		13,900	NA	100
FCSEDCL04A	BE0771	880419		13,800	NA	100
FCSEDCL04B	BE0751	880419		8,300	NA	100
FCSEDCL04B	BE0751	880419		9,300	NA	100
FCSEDCL06A	BE1875	880505		22,100	NA	100
FCSEDCL06A	BE1875	880505		21,900	NA	100
Vanadium						
FCSEDCL02A	BE0772	880420		68,000		4,300
FCSEDCL04A	BE0771	880419		83,000		4,300
FCSEDCL06A	BE1875	880505		100,000	J	2,500
% Solid						
FCSEDCL01A	BE0683	880420		78	NA	0
FCSEDCL02A	BE0772	880420		70.30	NA	0
FCSEDCL02B	BE0682	880420		77.60	NA	0
FCSEDCL03A	BE0681	880419		75.90	NA	0
FCSEDCL04A	BE0771	880419		71.70	NA	0
FCSEDCL04B	BE0751	880419		77.10	NA	0
FCSEDCL05A	BE0678	880419		73.50	NA	0
FCSEDCL06A	BE1875	880505		65.50	NA	0
FCSEDCL06B	BE1702	880505		75.70	NA	0
FCSEDCL07A	BE1701	880505		55.40	NA	0
FCSEDCLA03	BE0679	880419		74.10	NA	0
FCSEDCLB06	BE1703	880505		75.20	NA	0
<i>OTHER/MISCELLANEOUS - FRONTERA CREEK, MIDSTREAM</i>						
Aluminum						
FCSEDCL08A	BE1874	880505		19,700,000		20,000
FCSEDCL09A	BE1777	880504		15,000,000		20,000
FCSEDCL10A	BE1776	880504		20,600,000		20,000
FCSEDCL13A	BE1775	880504		14,400,000		20,000
FCSEDCL16A	BE1774	880504		21,900,000		20,000
FCSEDCL21A	BE1783	880503		13,800,000		15,000
FCSEDCL26A	BE1782	880502		15,500,000		15,000
FCSEDCL28A	BE1780	880502		6,760,000		15,000
FCSEDCL32A	BE1779	880502		14,600,000		15,000
FCSEDCLA26	BE1781	880502		12,700,000		15,000
Antimony						
FCSEDCL08A	BE1874	880505	BMDL	3,800		19,000
FCSEDCL13A	BE1775	880504	ND	450	U	19,000
FCSEDCL16A	BE1774	880504	ND	290	U	19,000
FCSEDCL21A	BE1783	880503	ND	17	U	2,000
Beryllium						
FCSEDCL21A	BE1783	880503		460		200
FCSEDCL26A	BE1782	880502		470		200

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS - FRONTERA CREEK, MIDSTREAM (continued)</i>						
<i>Beryllium (continued)</i>						
FCSEDCL28A	BE1780	880502		300		200
FCSEDCL32A	BE1779	880502		420		200
FCSEDCLA26	BE1781	880502		470		200
<i>Calcium</i>						
FCSEDCL08A	BE1874	880505		3,450,000	J	19,000
FCSEDCL09A	BE1777	880504		2,910,000	J	19,000
FCSEDCL10A	BE1776	880504		3,020,000	J	19,000
FCSEDCL13A	BE1775	880504		3,100,000	J	19,000
FCSEDCL16A	BE1774	880504		2,930,000	J	19,000
FCSEDCL21A	BE1783	880503		2,300,000		25,000
FCSEDCL26A	BE1782	880502		2,560,000		25,000
FCSEDCL28A	BE1780	880502		1,300,000		25,000
FCSEDCL32A	BE1779	880502		3,890,000		25,000
FCSEDCLA26	BE1781	880502		1,800,000		25,000
<i>Cobalt</i>						
FCSEDCL08A	BE1874	880505		19,000		6,900
FCSEDCL09A	BE1777	880504		14,000		6,900
FCSEDCL10A	BE1776	880504		20,000		6,900
FCSEDCL13A	BE1775	880504		20,000		6,900
FCSEDCL16A	BE1774	880504		15,000		6,900
FCSEDCL21A	BE1783	880503		13,000		3,800
FCSEDCL26A	BE1782	880502		21,000		3,800
FCSEDCL28A	BE1780	880502		12,000		3,800
FCSEDCL32A	BE1779	880502		15,000		3,800
FCSEDCLA26	BE1781	880502		19,000		3,800
<i>Cyanide, Total</i>						
FCSEDCL08A	BE1874	880505		< 500	NA	500
FCSEDCL09A	BE1777	880504		< 500	NA	500
FCSEDCL10A	BE1776	880504		< 500	NA	500
FCSEDCL13A	BE1775	880504		< 500	NA	500
FCSEDCL16A	BE1774	880504		< 500	NA	500
FCSEDCL21A	BE1783	880503		< 500	NA	500
FCSEDCL26A	BE1782	880502		< 500	NA	500
FCSEDCL28A	BE1780	880502		< 500	NA	500
FCSEDCL32A	BE1779	880502		< 500	NA	500
FCSEDCLA26	BE1781	880502		< 500	NA	500
<i>Iron</i>						
FCSEDCL08A	BE1874	880505		35,800,000		33,000
FCSEDCL09A	BE1777	880504		27,700,000		33,000
FCSEDCL10A	BE1776	880504		41,500,000		33,000
FCSEDCL13A	BE1775	880504		36,200,000		33,000
FCSEDCL16A	BE1774	880504		37,200,000		33,000
FCSEDCL21A	BE1783	880503		29,500,000		34,000
FCSEDCL26A	BE1782	880502		41,300,000		34,000
FCSEDCL28A	BE1780	880502		28,200,000		34,000

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS - FRONTERA CREEK, MIDSTREAM (continued)						
Iron (continued)						
FCSEDCL32A	BE1779	880502		29,200,000		34,000
FCSEDCLA26	BE1781	880502		35,500,000		34,000
Magnesium						
FCSEDCL08A	BE1874	880505		5,790,000	J	4,700
FCSEDCL09A	BE1777	880504		3,970,000	J	4,700
FCSEDCL10A	BE1776	880504		5,650,000	J	4,700
FCSEDCL13A	BE1775	880504		5,370,000	J	4,700
FCSEDCL16A	BE1774	880504		6,570,000	J	4,700
FCSEDCL21A	BE1783	880503		2,640,000		8,200
FCSEDCL26A	BE1782	880502		9,020,000		8,200
FCSEDCL28A	BE1780	880502		3,260,000		8,200
FCSEDCL32A	BE1779	880502		7,230,000		8,200
FCSEDCLA26	BE1781	880502		7,110,000		8,200
Manganese						
FCSEDCL08A	BE1874	880505		1,780,000	J	1,400
FCSEDCL09A	BE1777	880504		811,000	J	1,400
FCSEDCL10A	BE1776	880504		1,070,000	J	1,400
FCSEDCL13A	BE1775	880504		1,620,000	J	1,400
FCSEDCL16A	BE1774	880504		885,000	J	1,400
FCSEDCL21A	BE1783	880503		1,020,000		1,100
FCSEDCL26A	BE1782	880502		874,000		1,100
FCSEDCL28A	BE1780	880502		197,000		1,300
FCSEDCL32A	BE1779	880502		675,000		1,300
FCSEDCLA26	BE1781	880502		743,000		1,300
Nickel						
FCSEDCL08A	BE1874	880505		4,400		2,100
FCSEDCL09A	BE1777	880504		2,500		2,100
FCSEDCL10A	BE1776	880504		3,700		2,100
FCSEDCL13A	BE1775	880504		3,400		2,100
FCSEDCL16A	BE1774	880504	BMDL	1,900		2,100
FCSEDCL21A	BE1783	880503		3,100		2,700
FCSEDCL26A	BE1782	880502		6,600		2,700
FCSEDCL28A	BE1780	880502		3,600		2,700
FCSEDCL32A	BE1779	880502		5,000		2,700
FCSEDCLA26	BE1781	880502		3,800		2,700
Potassium						
FCSEDCL08A	BE1874	880505		390,000		20,000
FCSEDCL09A	BE1777	880504		260,000		20,000
FCSEDCL10A	BE1776	880504		410,000		20,000
FCSEDCL13A	BE1775	880504		290,000		20,000
FCSEDCL16A	BE1774	880504		390,000		20,000
FCSEDCL21A	BE1783	880503		190,000		20,000
FCSEDCL26A	BE1782	880502		280,000		20,000
FCSEDCL28A	BE1780	880502		290,000		20,000

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS - FRONTERA CREEK, MIDSTREAM (continued)						
Potassium (continued)						
FCSEDCL32A	BE1779	880502		280,000		20,000
FCSEDCLA26	BE1781	880502		190,000		20,000
Sodium						
FCSEDCL08A	BE1874	880505		330,000	J	23,000
FCSEDCL09A	BE1777	880504		330,000	J	23,000
FCSEDCL10A	BE1776	880504		370,000	J	23,000
FCSEDCL13A	BE1775	880504		320,000	J	23,000
FCSEDCL16A	BE1774	880504		430,000	J	23,000
FCSEDCL21A	BE1783	880503		270,000		32,000
FCSEDCL26A	BE1782	880502		200,000		32,000
FCSEDCL28A	BE1780	880502		240,000		32,000
FCSEDCL32A	BE1779	880502		440,000		32,000
FCSEDCLA26	BE1781	880502		160,000		32,000
Sulfate as SO₄ (values in mg/kg)						
FCSEDCL08A	BE1874	880505		1,400	NA	250
FCSEDCL08B	BE0757	880505		< 250	NA	250
FCSEDCL09A	BE1777	880504		2,900	NA	250
FCSEDCL10A	BE1776	880504		290	NA	250
FCSEDCL10B	BE0756	880504		730	NA	250
FCSEDCL13A	BE1775	880504		800	NA	250
FCSEDCL16A	BE1774	880504		1,400	NA	250
FCSEDCL16B	BE0755	880504		< 250	NA	250
FCSEDCL21A	BE1783	880503		1,050	NA	250
FCSEDCL21B	BE0754	880503		1,800	NA	250
FCSEDCL26A	BE1782	880502		1,300	NA	250
FCSEDCL28A	BE1780	880502		3,300	NA	250
FCSEDCL28B	BE0753	880502		2,100	NA	250
FCSEDCL32A	BE1779	880502		1,050	NA	250
FCSEDCLA26	BE1781	880502		< 250	NA	250
Sulfide as S (values in mg/kg)						
FCSEDCL08A	BE1874	880505		< 10	NA	10
FCSEDCL08B	BE0757	880505		290	NA	10
FCSEDCL09A	BE1777	880504		59	NA	10
FCSEDCL10A	BE1776	880504		28	NA	10
FCSEDCL10B	BE0756	880504		440	NA	10
FCSEDCL13A	BE1775	880504		26	NA	10
FCSEDCL16A	BE1774	880504		180	NA	10
FCSEDCL16B	BE0755	880504		150	NA	10
FCSEDCL21A	BE1783	880503		< 10	NA	10
FCSEDCL21B	BE0754	880503		< 10	NA	10
FCSEDCL26A	BE1782	880502		660	NA	10
FCSEDCL28A	BE1780	880502		< 10	NA	10
FCSEDCL28B	BE0753	880502		< 10	NA	10
FCSEDCL32A	BE1779	880502		< 10	NA	10
FCSEDCLA26	BE1781	880502		700	NA	10

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
Thallium						
FCSEDCL08A	BE1874	880505	ND	150	U	2,000
FCSEDCL09A	BE1777	880504	ND	27	U	2,000
FCSEDCL10A	BE1776	880504	ND	110	U	2,000
FCSEDCL13A	BE1775	880504	ND	220	U	2,000
FCSEDCL16A	BE1774	880504	ND	260	U	2,000
FCSEDCL21A	BE1783	880503	ND	36	U	2,000
FCSEDCL26A	BE1782	880502	ND	130	U	2,000
FCSEDCL28A	BE1780	880502	ND	49	U	2,000
FCSEDCL32A	BE1779	880502	ND	130	U	2,000
FCSEDCLA26	BE1781	880502	ND	140	U	2,000
Total Organic Carbon						
FCSEDCL08A	BE1874	880505		56,600	NA	100
FCSEDCL08A	BE1874	880505		57,700	NA	100
FCSEDCL08B	BE0757	880505		29,900	NA	100
FCSEDCL08B	BE0757	880505		30,000	NA	100
FCSEDCL09A	BE1777	880504		33,600	NA	100
FCSEDCL09A	BE1777	880504		32,700	NA	100
FCSEDCL10A	BE1776	880504		29,700	NA	100
FCSEDCL10A	BE1776	880504		30,700	NA	100
FCSEDCL10B	BE0756	880504		15,800	NA	100
FCSEDCL10B	BE0756	880504		15,500	NA	100
FCSEDCL13A	BE1775	880504		17,900	NA	100
FCSEDCL13A	BE1775	880504		18,500	NA	100
FCSEDCL16A	BE1774	880504		28,000	NA	100
FCSEDCL16A	BE1774	880504		27,000	NA	100
FCSEDCL16B	BE0755	880504		17,400	NA	100
FCSEDCL16B	BE0755	880504		17,400	NA	100
FCSEDCL21A	BE1783	880503		8,060	NA	100
FCSEDCL21A	BE1783	880503		7,990	NA	100
FCSEDCL21B	BE0754	880503		8,390	NA	100
FCSEDCL21B	BE0754	880503		8,210	NA	100
FCSEDCL26A	BE1782	880502		3,810	NA	100
FCSEDCL26A	BE1782	880502		3,570	NA	100
FCSEDCL28A	BE1780	880502		3,450	NA	100
FCSEDCL28A	BE1780	880502		3,680	NA	100
FCSEDCL28B	BE0753	880502		3,630	NA	100
FCSEDCL28B	BE0753	880502		4,010	NA	100
FCSEDCL32A	BE1779	880502		22,800	NA	100
FCSEDCL32A	BE1779	880502		23,800	NA	100
FCSEDCLA26	BE1781	880502		9,140	NA	100
FCSEDCLA26	BE1781	880502		9,370	NA	100
Vanadium						
FCSEDCL08A	BE1874	880505		98,000	J	2,500
FCSEDCL09A	BE1777	880504		93,000	J	2,500
FCSEDCL10A	BE1776	880504		110,000	J	2,500
FCSEDCL13A	BE1775	880504		100,000	J	2,500
FCSEDCL16A	BE1774	880504		100,000	J	2,500
FCSEDCL21A	BE1783	880503		94,000		4,300

FRO 001 1223

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS - FRONTERA CREEK, MIDSTREAM (continued)						
Vanadium (continued)						
FCSEDCL26A	BE1782	880502		120,000		4,300
FCSEDCL28A	BE1780	880502		100,000		4,300
FCSEDCL32A	BE1779	880502		92,000		4,300
FCSEDCLA26	BE1781	880502		110,000		4,300
% Solid						
FCSEDCL08A	BE1874	880505		53.10	NA	0
FCSEDCL08B	BE0757	880505		61.20	NA	0
FCSEDCL09A	BE1777	880504		63.80	NA	0
FCSEDCL10A	BE1776	880504		57.60	NA	0
FCSEDCL10B	BE0756	880504		69.50	NA	0
FCSEDCL11A	BE1700	880504		63.60	NA	0
FCSEDCL12A	BE1698	880504		79.50	NA	0
FCSEDCL12B	BE1699	880504		71.90	NA	0
FCSEDCL13A	BE1775	880504		62.30	NA	0
FCSEDCL14A	BE1696	880504		58.70	NA	0
FCSEDCL14B	BE1697	880504		74	NA	0
FCSEDCL15A	BE1695	880504		67.20	NA	0
FCSEDCL16A	BE1774	880504		56.20	NA	0
FCSEDCL16B	BE0755	880504		71.80	NA	0
FCSEDCL17A	BE0738	880503		68	NA	0
FCSEDCL18A	BE0737	880503		68	NA	0
FCSEDCL18B	BE1694	880503		69.60	NA	0
FCSEDCL19A	BE0735	880503		71.30	NA	0
FCSEDCL19B	BE0736	880503		81.80	NA	0
FCSEDCL20A	BE0734	880503		72.60	NA	0
FCSEDCL21A	BE1783	880503		75.70	NA	0
FCSEDCL21B	BE0754	880503		74.40	NA	0
FCSEDCL22A	BE0732	880503		73.90	NA	0
FCSEDCL22B	BE0733	880503		78.50	NA	0
FCSEDCL23A	BE0730	880503		78.70	NA	0
FCSEDCL24A	BE0728	880503		77.70	NA	0
FCSEDCL24B	BE0729	880503		73.90	NA	0
FCSEDCL25A	BE0727	880503		78.90	NA	0
FCSEDCL26A	BE1782	880502		83	NA	0
FCSEDCL27A	BE0726	880502		82.10	NA	0
FCSEDCL28A	BE1780	880502		79.60	NA	0
FCSEDCL28B	BE0753	880502		82.40	NA	0
FCSEDCL29A	BE0724	880502		79.40	NA	0
FCSEDCL29B	BE0725	880502		78.20	NA	0
FCSEDCL30A	BE0721	880502		60.70	NA	0
FCSEDCL30B	BE0722	880502		74.20	NA	0
FCSEDCL31A	BE0720	880502		76.20	NA	0
FCSEDCL32A	BE1779	880502		85.20	NA	0
FCSEDCLA23	BE0731	880503		77.10	NA	0
FCSEDCLA26	BE1781	880502		80.10	NA	0
FCSEDCLB30	BE0723	880502		74.40	NA	0

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS - FRONTERA CREEK, DOWNSTREAM						
Aluminum						
FCSEDCL33A	BE1787	880428		14,100,000		15,000
FCSEDCL34A	BE1786	880428		8,130,000		15,000
FCSEDCL37A	BE1785	880427		15,200,000		15,000
FCSEDCL40A	BE1784	880427		11,000,000		15,000
FCSEDCL43A	BE1772	880426		21,800,000	J	15,000
FCSEDCL47A	BE1773	880425		6,230,000	J	22,000
FCSEDCL51A	BE1771	880422		22,000,000	J	1,500
FCSEDCL54A	BE1770	880422		18,000,000	J	1,500
FCSEDCL57A	BE1769	880421		30,000,000	J	1,500
FCSEDCL62A	BE0773	880420		1,200,000	J	22,000
Beryllium						
FCSEDCL33A	BE1787	880428		340		200
FCSEDCL34A	BE1786	880428		270		200
FCSEDCL37A	BE1785	880427		380		200
FCSEDCL40A	BE1784	880427		390		200
FCSEDCL43A	BE1772	880426		450		200
FCSEDCL47A	BE1773	880425		200		200
FCSEDCL51A	BE1771	880422		910		200
FCSEDCL54A	BE1770	880422		760		200
FCSEDCL57A	BE1769	880421		630		200
FCSEDCL62A	BE0773	880420	ND	7.80	U	200
Calcium						
FCSEDCL33A	BE1787	880428		2,400,000		25,000
FCSEDCL34A	BE1786	880428		1,600,000		25,000
FCSEDCL37A	BE1785	880427		1,800,000		25,000
FCSEDCL40A	BE1784	880427		2,000,000		25,000
FCSEDCL43A	BE1772	880426		3,080,000		25,000
FCSEDCL47A	BE1773	880425		920,000		25,000
FCSEDCL51A	BE1771	880422		2,870,000		25,000
FCSEDCL54A	BE1770	880422		3,400,000		25,000
FCSEDCL57A	BE1769	880421		3,510,000		25,000
FCSEDCL62A	BE0773	880420		5,630,000		25,000
Cobalt						
FCSEDCL33A	BE1787	880428		9,900		3,800
FCSEDCL34A	BE1786	880428		7,300		3,800
FCSEDCL37A	BE1785	880427		8,300		3,800
FCSEDCL40A	BE1784	880427		6,300		3,800
FCSEDCL43A	BE1772	880426		14,000		3,800
FCSEDCL47A	BE1773	880425		7,200		3,800
FCSEDCL51A	BE1771	880422		30,000		3,800
FCSEDCL54A	BE1770	880422		24,000		3,800
FCSEDCL57A	BE1769	880421		21,000		3,800
FCSEDCL62A	BE0773	880420	BMDL	1,800		3,800

FRO 001 1225

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS - FRONTERA CREEK, DOWNSTREAM (continued)						
Cyanide, Total						
FCSEDCL33A	BE1787	880428		< 600	NA	600
FCSEDCL34A	BE1786	880428		< 700	NA	700
FCSEDCL37A	BE1785	880427		< 600	NA	600
FCSEDCL40A	BE1784	880427		< 600	NA	600
FCSEDCL43A	BE1772	880426		< 500	NA	500
FCSEDCL47A	BE1773	880425		< 500	NA	500
FCSEDCL51A	BE1771	880422		< 500	NA	500
FCSEDCL54A	BE1770	880422		< 500	NA	500
FCSEDCL57A	BE1769	880421		< 500	NA	500
FCSEDCL62A	BE0773	880420		< 500	NA	500
Iron						
FCSEDCL33A	BE1787	880428		29,600,000		34,000
FCSEDCL34A	BE1786	880428		20,100,000		34,000
FCSEDCL37A	BE1785	880427		23,200,000		34,000
FCSEDCL40A	BE1784	880427		21,400,000		34,000
FCSEDCL43A	BE1772	880426		32,400,000		34,000
FCSEDCL47A	BE1773	880425		13,000,000		34,000
FCSEDCL51A	BE1771	880422		44,000,000		34,000
FCSEDCL54A	BE1770	880422		36,300,000		34,000
FCSEDCL57A	BE1769	880421		49,000,000		34,000
FCSEDCL62A	BE0773	880420		3,000,000		34,000
Magnesium						
FCSEDCL33A	BE1787	880428		2,360,000		8,200
FCSEDCL34A	BE1786	880428		2,190,000		8,200
FCSEDCL37A	BE1785	880427		1,990,000		8,200
FCSEDCL40A	BE1784	880427		1,940,000		8,200
FCSEDCL43A	BE1772	880426		5,120,000		8,200
FCSEDCL47A	BE1773	880425		1,970,000		8,200
FCSEDCL51A	BE1771	880422		5,260,000		8,200
FCSEDCL54A	BE1770	880422		4,970,000		8,200
FCSEDCL57A	BE1769	880421		6,330,000		8,200
FCSEDCL62A	BE0773	880420		901,000		8,200
Manganese						
FCSEDCL33A	BE1787	880428		264,000		1,300
FCSEDCL34A	BE1786	880428		240,000		1,300
FCSEDCL37A	BE1785	880427		288,000		1,300
FCSEDCL40A	BE1784	880427		254,000		1,300
FCSEDCL43A	BE1772	880426		669,000	J	1,300
FCSEDCL47A	BE1773	880425		161,000	J	1,300
FCSEDCL51A	BE1771	880422		732,000	J	1,300
FCSEDCL54A	BE1770	880422		374,000	J	1,300
FCSEDCL57A	BE1769	880421		408,000	J	1,300
FCSEDCL62A	BE0773	880420		57,000	J	1,300

FRO 001 1226

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS - FRONTERA CREEK, DOWNSTREAM (continued)</i>						
Nickel						
FCSEDCL33A	BE1787	880428		6,800		2,700
FCSEDCL34A	BE1786	880428		3,000		2,700
FCSEDCL37A	BE1785	880427		2,700		2,700
FCSEDCL40A	BE1784	880427	BMDL	2,600		2,700
FCSEDCL43A	BE1772	880426		7,600		2,700
FCSEDCL47A	BE1773	880425		3,700		2,700
FCSEDCL51A	BE1771	880422		12,000		2,700
FCSEDCL54A	BE1770	880422		9,200		2,700
FCSEDCL57A	BE1769	880421		12,000		2,700
FCSEDCL62A	BE0773	880420	BMDL	930	U	2,700
Potassium						
FCSEDCL33A	BE1787	880428		360,000		20,000
FCSEDCL34A	BE1786	880428		250,000		20,000
FCSEDCL37A	BE1785	880427		330,000		20,000
FCSEDCL40A	BE1784	880427		170,000		20,000
FCSEDCL43A	BE1772	880426		500,000		20,000
FCSEDCL47A	BE1773	880425		240,000		20,000
FCSEDCL51A	BE1771	880422		1,400,000		20,000
FCSEDCL54A	BE1770	880422		1,200,000		20,000
FCSEDCL57A	BE1769	880421		1,600,000		20,000
FCSEDCL62A	BE0773	880420		190,000		20,000
Sodium						
FCSEDCL33A	BE1787	880428		250,000		32,000
FCSEDCL34A	BE1786	880428		180,000		32,000
FCSEDCL37A	BE1785	880427		960,000		32,000
FCSEDCL40A	BE1784	880427		500,000		32,000
FCSEDCL43A	BE1772	880426		690,000		32,000
FCSEDCL47A	BE1773	880425		340,000		32,000
FCSEDCL51A	BE1771	880422		2,800,000		32,000
FCSEDCL54A	BE1770	880422		2,200,000		32,000
FCSEDCL57A	BE1769	880421		3,260,000		32,000
FCSEDCL62A	BE0773	880420		420,000		32,000
Sulfate as SO₄ (values in mg/kg)						
FCSEDCL33A	BE1787	880428		710	NA	250
FCSEDCL33B	BE0752	880428		730	NA	250
FCSEDCL34A	BE1786	880428		640	NA	250
FCSEDCL34B	BE0749	880428		< 250	NA	250
FCSEDCL37A	BE1785	880427		550	NA	250
FCSEDCL40A	BE1784	880427		1,900	NA	250
FCSEDCL40B	BE0748	880427		2,300	NA	250
FCSEDCL43A	BE1772	880426		1,550	NA	250
FCSEDCL43B	BE0747	880426		480	NA	250
FCSEDCL47A	BE1773	880425		910	NA	250
FCSEDCL51A	BE1771	880422		2,040	NA	250
FCSEDCL54A	BE1770	880422		2,100	NA	250

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS - FRONTERA CREEK, DOWNSTREAM (continued)						
Sulfate as SO₄ (values in mg/kg) (continued)						
FCSEDCL54B	BE0745	880422		1,000	NA	250
FCSEDCL57A	BE1769	880421		1,800	NA	250
FCSEDCL62A	BE0773	880420		580	NA	250
FCSEDCLB54	BE0746	880422		2,900	NA	250
Sulfide as S (values in mg/kg)						
FCSEDCL33A	BE1787	880428		< 10	NA	10
FCSEDCL33B	BE0752	880428		< 10	NA	10
FCSEDCL34A	BE1786	880428		< 10	NA	10
FCSEDCL34B	BE0749	880428		< 10	NA	10
FCSEDCL37A	BE1785	880427		< 10	NA	10
FCSEDCL40A	BE1784	880427		< 10	NA	10
FCSEDCL40B	BE0748	880427		< 10	NA	10
FCSEDCL43A	BE1772	880426		< 10	NA	10
FCSEDCL43B	BE0747	880426		630	NA	10
FCSEDCL47A	BE1773	880425		520	NA	10
FCSEDCL51A	BE1771	880422		40	NA	10
FCSEDCL54A	BE1770	880422		21	NA	10
FCSEDCL54B	BE0745	880422		730	NA	10
FCSEDCL57A	BE1769	880421		570	NA	10
FCSEDCL62A	BE0773	880420		< 10	NA	10
FCSEDCLB54	BE0746	880422		1,010	NA	10
Thallium						
FCSEDCL33A	BE1787	880428	ND	140	U	2,000
FCSEDCL34A	BE1786	880428	ND	150	U	2,000
FCSEDCL37A	BE1785	880427	ND	140	U	2,000
FCSEDCL40A	BE1784	880427	ND	50	U	2,000
FCSEDCL43A	BE1772	880426	ND	200	U	2,000
FCSEDCL47A	BE1773	880425	ND	64	U	2,000
FCSEDCL51A	BE1771	880422	ND	270	U	2,000
FCSEDCL57A	BE1769	880421	ND	280	U	2,000
FCSEDCL62A	BE0773	880420	ND	50	U	2,000
Total Organic Carbon						
FCSEDCL33A	BE1787	880428		9,100	NA	100
FCSEDCL33A	BE1787	880428		10,300	NA	100
FCSEDCL33B	BE0752	880428		7,770	NA	100
FCSEDCL33B	BE0752	880428		7,690	NA	100
FCSEDCL34A	BE1786	880428		17,800	NA	100
FCSEDCL34A	BE1786	880428		17,100	NA	100
FCSEDCL34B	BE0749	880428		10,500	NA	100
FCSEDCL34B	BE0749	880428		11,400	NA	100
FCSEDCL37A	BE1785	880427		6,320	NA	100
FCSEDCL37A	BE1785	880427		6,730	NA	100
FCSEDCL40A	BE1784	880427		6,320	NA	100
FCSEDCL40A	BE1784	880427		6,380	NA	100
FCSEDCL40B	BE0748	880427		2,710	NA	100

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS - FRONTERA CREEK, DOWNSTREAM (continued)						
Total Organic Carbon (continued)						
FCSEDCL40B	BE0748	880427		2,990	NA	100
FCSEDCL43A	BE1772	880426		30,300	NA	100
FCSEDCL43A	BE1772	880426		29,800	NA	100
FCSEDCL43B	BE0747	880426		52,000	NA	100
FCSEDCL43B	BE0747	880426		53,500	NA	100
FCSEDCL47A	BE1773	880425		9,150	NA	100
FCSEDCL47A	BE1773	880425		8,550	NA	100
FCSEDCL51A	BE1771	880422		82,500	NA	100
FCSEDCL51A	BE1771	880422		88,800	NA	100
FCSEDCL54A	BE1770	880422		55,600	NA	100
FCSEDCL54A	BE1770	880422		65,200	NA	100
FCSEDCL54B	BE0745	880422		180,000	NA	100
FCSEDCL54B	BE0745	880422		174,000	NA	100
FCSEDCL57A	BE1769	880421		38,000	NA	100
FCSEDCL57A	BE1769	880421		38,000	NA	100
FCSEDCL62A	BE0773	880420		1,600	NA	100
FCSEDCL62A	BE0773	880420		1,730	NA	100
FCSEDCLB54	BE0746	880422		266,000	NA	100
FCSEDCLB54	BE0746	880422		286,000	NA	100
Vanadium						
FCSEDCL33A	BE1787	880428		93,000		4,300
FCSEDCL34A	BE1786	880428		69,000		4,300
FCSEDCL37A	BE1785	880427		75,000		4,300
FCSEDCL40A	BE1784	880427		66,000		4,300
FCSEDCL43A	BE1772	880426		87,000		4,300
FCSEDCL47A	BE1773	880425		41,000		4,300
FCSEDCL51A	BE1771	880422		110,000		4,300
FCSEDCL54A	BE1770	880422		88,000		4,300
FCSEDCL57A	BE1769	880421		99,000		4,300
FCSEDCL62A	BE0773	880420		9,800		4,300
% Solid						
FCSEDCL33A	BE1787	880428		77	NA	0
FCSEDCL33B	BE0752	880428		86.40	NA	0
FCSEDCL34A	BE1786	880428		71.40	NA	0
FCSEDCL34B	BE0749	880428		79.80	NA	0
FCSEDCL35A	BE0719	880427		90	NA	0
FCSEDCL36A	BE0717	880427		68.10	NA	0
FCSEDCL36B	BE0716	880427		78.90	NA	0
FCSEDCL37A	BE1785	880427		75.40	NA	0
FCSEDCL38A	BE0711	880427		75.20	NA	0
FCSEDCL38B	BE0715	880427		80.90	NA	0
FCSEDCL39A	BE0712	880427		75.60	NA	0
FCSEDCL40A	BE1784	880427		78.10	NA	0
FCSEDCL40B	BE0748	880427		79.80	NA	0
FCSEDCL41A	BE0710	880426		74.60	NA	0
FCSEDCL42A	BE0707	880426		75.80	NA	0

FRO 001 1229

TABLE 4-46 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS - FRONTERA CREEK, DOWNSTREAM (continued)</i>						
<i>% Solid (continued)</i>						
FCSEDCL42B	BE0709	880426		70.30	NA	0
FCSEDCL43A	BE1772	880426		55	NA	0
FCSEDCL43B	BE0747	880426		59.90	NA	0
FCSEDCL44A	BE0708	880425		66	NA	0
FCSEDCL45A	BE0706	880425		44.80	NA	0
FCSEDCL46A	BE0703	880425		55.40	NA	0
FCSEDCL46B	BE0705	880425		58.10	NA	0
FCSEDCL47A	BE1773	880425		60.90	NA	0
FCSEDCL48A	BE0701	880425		43.40	NA	0
FCSEDCL49A	BE0702	880425		52.30	NA	0
FCSEDCL50A	BE0699	880425		54.10	NA	0
FCSEDCL50B	BE0700	880425		42.60	NA	0
FCSEDCL51A	BE1771	880422		39.90	NA	0
FCSEDCL52A	BE0697	880422		38.60	NA	0
FCSEDCL52B	BE0698	880422		61.10	NA	0
FCSEDCL53A	BE0696	880422		39.10	NA	0
FCSEDCL54A	BE1770	880422		47.70	NA	0
FCSEDCL54B	BE0745	880422		38.10	NA	0
FCSEDCL55A	BE0695	880422		46	NA	0
FCSEDCL56A	BE0693	880421		38.40	NA	0
FCSEDCL56B	BE0694	880421		49.90	NA	0
FCSEDCL57A	BE1769	880421		38.60	NA	0
FCSEDCL58A	BE0692	880421		26.60	NA	0
FCSEDCL59A	BE0690	880421		38.60	NA	0
FCSEDCL59B	BE0691	880421		36.70	NA	0
FCSEDCL60A	BE0687	880420		25.20	NA	0
FCSEDCL60B	BE0688	880420		24.70	NA	0
FCSEDCL61A	BE0685	880420		57.20	NA	0
FCSEDCL62A	BE0773	880420		77.50	NA	0
FCSEDCLA36	BE0718	880427		77.80	NA	0
FCSEDCLA46	BE0704	880425		67.20	NA	0
FCSEDCLA61	BE0686	880420		57.50	NA	0
FCSEDCLB54	BE0746	880422		41.80	NA	0
FCSEDCLVP	BE0689	880420		86.70	NA	0

J - Estimated
 NA - Not applicable
 R - Data rejected by data validation team
 U - Not detected, associated value below the Sample Quantitation Limit
 UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit
 UR - Value is below Sample Quantitation Limit; data rejected by data validation team

TABLE 4-47

HSL Data for Frontera Lagoon Sediment Samples
(values in ug/kg)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
VOLATILE ORGANIC COMPOUNDS						
Acetone						
FLSED01A	BE4755	880523		293	J	7.10
FLSED11A	BE4756	880523		185	J	8.50
FLSED14A	BE0764	880523		1,180	J	7.70
FLSED17A	BE0765	880523		2,980	J	80
FLSEDA11	BE4757	880523		2,290	J	7.10
Carbon disulfide						
FLSED01A	BE4755	880523		14.90	J	7.10
FLSED11A	BE4756	880523		17.30	J	8.50
FLSED14A	BE0764	880523	BMDL	6.35	J	7.70
FLSED17A	BE0765	880523		230	J	80
FLSEDA11	BE4757	880523		209	J	7.10
Methyl chloride						
FLSED01A	BE4755	880523		25	UJ	7.10
FLSED11A	BE4756	880523		13.80	UJ	8.50
FLSED14A	BE0764	880523		147		7.70
FLSED17A	BE0765	880523		1,730	J	80
FLSEDA11	BE4757	880523		239		7.10
Methyl ethyl ketone						
FLSED01A	BE4755	880523		62.30	J	7.10
FLSED11A	BE4756	880523		18.60	J	8.50
FLSED14A	BE0764	880523		145	J	7.70
FLSED17A	BE0765	880523		624	J	80
FLSEDA11	BE4757	880523		95.20	J	7.10
Methylene chloride						
FLSED01A	BE4755	880523		7.79	UJ	7.10
FLSED11A	BE4756	880523	BMDL	2.91	UJ	8.50
FLSED14A	BE0764	880523		24.80		7.70
FLSED17A	BE0765	880523		338	J	80
FLSEDA11	BE4757	880523		33.20	J	7.10
Vinyl acetate						
FLSED01A	BE4755	880523		22.30	J	7.10
FLSED11A	BE4756	880523	BMDL	6.72	UJ	8.50
FLSED14A	BE0764	880523		13	UJ	7.70
FLSED17A	BE0765	880523	BMDL	44.40	J	80

TABLE 4-47 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
BASE/NEUTRAL EXTRACTABLES						
Benzyl alcohol						
FLSED01A	BE4755	880523	BMDL	162	UJ	1,200
FLSED11A	BE4756	880523	BMDL	205	UJ	1,400
FLSEDA11	BE4757	880523	BMDL	453	UJ	1,100
FLSED17A	BE0765	880523	BMDL	304	U	1,300
Di-n-butyl phthalate						
FLSED14A	BE1884	880516	BMDL	152	U	1,300
RCRA METALS						
Arsenic						
FLSED01A	BE4755	880523		14,000	J	2,000
FLSED11A	BE4756	880523		2,400		2,000
FLSED14A	BE1884	880516		6,300	J	4,000
FLSED17A	BE0765	880523		10,000	J	4,000
FLSEDA11	BE4757	880523		2,800	J	2,000
Barium						
FLSED01A	BE4755	880523		55,000	J	770
FLSED11A	BE4756	880523		78,100	J	770
FLSED14A	BE1884	880516		40,000	J	770
FLSED17A	BE0765	880523		195,000	J	770
FLSEDA11	BE4757	880523		143,000	J	770
Cadmium						
FLSED01A	BE4755	880523	ND	84	U	870
Chromium						
FLSED01A	BE4755	880523	BMDL	4,900		6,100
FLSED11A	BE4756	880523	BMDL	2,200		6,100
FLSED14A	BE1884	880516	BMDL	5,600	J	6,100
FLSED17A	BE0765	880523		7,400		6,100
FLSEDA11	BE4757	880523	BMDL	4,100	J	6,100
Copper						
FLSED01A	BE4755	880523		44,000		2,800
FLSED11A	BE4756	880523		22,000		2,800
FLSED14A	BE1884	880516		25,000	J	2,800
FLSED17A	BE0765	880523		57,000		2,800
FLSEDA11	BE4757	880523		39,000	J	2,800
Lead						
FLSED01A	BE4755	880523		12,000		2,000
FLSED11A	BE4756	880523		8,100	J	1,000
FLSED14A	BE1884	880516		3,700	J	1,000
FLSED17A	BE0765	880523		7,600	J	1,000
FLSEDA11	BE4757	880523		5,500	J	1,000

PRO 001 1232

TABLE 4-47 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
RCRA METALS (continued)						
Selenium						
FLSED01A	BE4755	880523	ND	190	U	1,000
FLSED11A	BE4756	880523	ND	56	U	1,000
FLSED17A	BE0765	880523	BMDL	750		1,000
FLSEDA11	BE4757	880523	ND	86	U	1,000
Zinc						
FLSED01A	BE4755	880523		31,000	J	2,000
FLSED11A	BE4756	880523		41,000	J	2,000
FLSED14A	BE1884	880516		57,000	J	2,000
FLSED17A	BE0765	880523		72,000	J	2,000
FLSEDA11	BE4757	880523		63,000	J	2,000
OTHER/MISCELLANEOUS						
Aluminum						
FLSED01A	BE4755	880523		8,280,000		20,000
FLSED11A	BE4756	880523		7,680,000		20,000
FLSED14A	BE1884	880516		22,800,000	J	20,000
FLSED17A	BE0765	880523		22,200,000		20,000
FLSEDA11	BE4757	880523		11,200,000	J	20,000
Antimony						
FLSED14A	BE1884	880516	ND	1,300		19,000
Beryllium						
FLSED17A	BE0765	880523	ND	11	U	130
Calcium						
FLSED01A	BE4755	880523		940,000	J	19,000
FLSED11A	BE4756	880523		1,000,000	J	19,000
FLSED14A	BE1884	880516		1,930,000	J	19,000
FLSED17A	BE0765	880523		1,400,000	J	19,000
FLSEDA11	BE4757	880523		1,700,000	J	19,000
Cobalt						
FLSED01A	BE4755	880523	BMDL	3,700		6,900
FLSED11A	BE4756	880523	BMDL	4,500		6,900
FLSED14A	BE1884	880516	BMDL	2,400		6,900
FLSED17A	BE0765	880523		8,800		6,900
FLSEDA11	BE4757	880523		7,000	J	6,900
Cyanide, Total						
FLSED01A	BE4755	880523		< 500	NA	500
FLSED11A	BE4756	880523		< 500	NA	500
FLSED14A	BE1884	880516		< 500	NA	500
FLSED17A	BE0765	880523		< 500	NA	500
FLSEDA11	BE4757	880523		< 500	NA	500

TABLE 4-47 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS (continued)</i>						
Iron						
FLSED01A	BE4755	880523		24,700,000		33,000
FLSED11A	BE4756	880523		19,800,000		33,000
FLSED14A	BE1884	880516		45,700,000	J	33,000
FLSED17A	BE0765	880523		24,900,000		33,000
FLSEDA11	BE4757	880523		30,900,000	J	33,000
Magnesium						
FLSED01A	BE4755	880523		2,500,000	J	4,700
FLSED11A	BE4756	880523		2,070,000	J	4,700
FLSED14A	BE1884	880516		2,410,000	J	4,700
FLSED17A	BE0765	880523		3,340,000	J	4,700
FLSEDA11	BE4757	880523		3,590,000	J	4,700
Manganese						
FLSED01A	BE4755	880523		79,000	J	1,400
FLSED11A	BE4756	880523		120,000	J	1,400
FLSED14A	BE1884	880516		79,000	J	1,400
FLSED17A	BE0765	880523		191,000	J	1,400
FLSEDA11	BE4757	880523		222,000	J	1,400
Nickel						
FLSED01A	BE4755	880523	ND	32	U	2,100
FLSED11A	BE4756	880523	ND	230	U	2,100
FLSED14A	BE1884	880516	ND	45	U	2,100
FLSED17A	BE0765	880523		2,100	U	2,100
Potassium						
FLSED01A	BE4755	880523		790,000		20,000
FLSED11A	BE4756	880523		550,000		20,000
FLSED14A	BE1884	880516		850,000	J	20,000
FLSED17A	BE0765	880523		610,000		20,000
FLSEDA11	BE4757	880523		950,000	J	20,000
Sodium						
FLSED01A	BE4755	880523		3,960,000	J	23,000
FLSED11A	BE4756	880523		1,600,000	J	23,000
FLSED14A	BE1884	880516		4,760,000	J	23,000
FLSED17A	BE0765	880523		1,900,000	J	23,000
FLSEDA11	BE4757	880523		2,690,000	J	23,000
Sulfate as SO₄ (values in mg/kg)						
FLSED01A	BE4755	880523		1,500	NA	250
FLSED11A	BE4756	880523		1,900	NA	250
FLSED14A	BE1884	880516		1,700	NA	250
FLSED17A	BE0765	880523		1,300	NA	250
FLSED18A	BE1863	880523		1,500	NA	250
FLSED18B	BE4761	880523		1,100	NA	250

TABLE 4-47 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS (continued)						
Sulfate as SO₄ (values in mg/kg) (continued)						
FLSED24A	BE1868	880516		1,600	NA	250
FLSED24B	BE1867	880516		6,700	NA	250
FLSEDA11	BE4757	880523		1,400	NA	250
Sulfide as S (values in mg/kg)						
FLSED01A	BE4755	880523		120	NA	10
FLSED11A	BE4756	880523		1,500	NA	10
FLSED14A	BE1884	880516		3,700	NA	10
FLSED17A	BE0765	880523		130	NA	10
FLSED18A	BE1863	880523		320	NA	10
FLSED18B	BE4761	880523		< 10	NA	10
FLSED24A	BE1868	880516		53	NA	10
FLSED24B	BE1867	880516		< 10	NA	10
FLSEDA11	BE4757	880523		600	NA	10
Thallium						
FLSED01A	BE4755	880523	ND	30	U	2,000
FLSED17A	BE0765	880523	ND	32	U	2,000
FLSEDA11	BE4757	880523	ND	46	U	2,000
Total Organic Carbon (values in mg/kg)						
FLSED01A	BE4755	880523		79,200	NA	100
FLSED01A	BE4755	880523		74,800	NA	100
FLSED11A	BE4756	880523		34,600	NA	100
FLSED11A	BE4756	880523		34,800	NA	100
FLSED14A	BE1884	880516		162,000	NA	100
FLSED14A	BE1884	880516		161,000	NA	100
FLSED17A	BE0765	880523		75,900	NA	100
FLSED17A	BE0765	880523		76,200	NA	100
FLSED18A	BE1863	880523		52,300	NA	100
FLSED18A	BE1863	880523		50,100	NA	100
FLSED18B	BE4761	880523		61,200	NA	100
FLSED18B	BE4761	880523		59,600	NA	100
FLSED24A	BE1868	880516		179,000	NA	100
FLSED24A	BE1868	880516		177,000	NA	100
FLSED24B	BE1867	880516		96,200	NA	100
FLSED24B	BE1867	880516		97,800	NA	100
FLSEDA11	BE4757	880523		49,400	NA	100
FLSEDA11	BE4757	880523		48,300	NA	100
Vanadium						
FLSED01A	BE4755	880523		67,000	J	2,500
FLSED11A	BE4756	880523		48,000	J	2,500
FLSED14A	BE1884	880516		230,000	J	2,500
FLSED17A	BE0765	880523		89,000	J	2,500
FLSEDA11	BE4757	880523		82,000	J	2,500

TABLE 4-47 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS (continued)						
% Solid						
FLSED01A	BE4755	880523		55.30	NA	0
FLSED03A	BE1735	880512		50.90	NA	0
FLSED03B	BE1736	880512		36.20	NA	0
FLSED04A	BE1742	880512		26.70	NA	0
FLSED04B	BE1743	880512		28.10	NA	0
FLSED05A	BE1737	880512		53.30	NA	0
FLSED06A	BE1740	880512		61.70	NA	0
FLSED06B	BE1741	880512		64.50	NA	0
FLSED07A	BE1739	880512		50.40	NA	0
FLSED09A	BE1749	880512		69.10	NA	0
FLSED10A	BE1747	880512		63.90	NA	0
FLSED10B	BE1748	880512		45.70	NA	0
FLSED11A	BE4756	880523		55.50	NA	0
FLSED12B	BE1745	880512		50.40	NA	0
FLSED13A	BE1746	880512		57.20	NA	0
FLSED14A	BE1884	880516		47.90	NA	0
FLSED15A	BE1806	880516		54.50	NA	0
FLSED16A	BE1797	880516		55.60	NA	0
FLSED16B	BE1756	880516		65.70	NA	0
FLSED17A	BE0765	880523		52.10	NA	0
FLSED18A	BE1863	880523		70.80	NA	0
FLSED18B	BE4761	880523		70.50	NA	0
FLSED19A	BE1750	880513		29.60	NA	0
FLSED20A	BE1801	880516		44.50	NA	0
FLSED21A	BE1751	880513		51.20	NA	0
FLSED22A	BE1752	880513		64.10	NA	0
FLSED22B	BE1753	880513		75.10	NA	0
FLSED23A	BE1754	880516		58.20	NA	0
FLSED24A	BE1868	880516		52.40	NA	0
FLSED24B	BE1867	880516		47	NA	0
FLSED25A	BE1803	880516		59.10	NA	0
FLSED25B	BE1802	880516		62	NA	0
FLSEDA05	BE1738	880512		54.20	NA	0
FLSEDA11	BE4757	880523		36.30	NA	0
FLSEDA15	BE1757	880516		48.90	NA	0

J - Estimated

NA - Not applicable

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

TABLE 4-48

HSL Data for Squibb Ditch Sediment Samples
(values in ug/kg)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
VOLATILE ORGANIC COMPOUNDS						
Acetone						
SDSEDCL01A	BE1876	880505		254		5.7
SDSEDCL07A	BE1877	880506		107		5.2
Carbon disulfide						
SDSEDCL07A	BE1877	880506		8.73		5.2
Methyl ethyl ketone						
SDSEDCL01A	BE1876	880505		79		5.7
Methylene chloride						
SDSEDCL01A	BE1876	880505		24.40	U	5.7
SDSEDCL07A	BE1877	880506		21.20	U	5.2
RCRA METALS						
Arsenic						
SDSEDCL01A	BE1876	880505	BMDL	1,700		2,000
SDSEDCL07A	BE1877	880506	BMDL	800		2,000
Barium						
SDSEDCL01A	BE1876	880505		129,000	J	770
SDSEDCL07A	BE1877	880506		186,000	J	680
Cadmium						
SDSEDCL07A	BE1877	880506		610		610
Chromium						
SDSEDCL01A	BE1876	880505	BMDL	4,600		6,100
SDSEDCL07A	BE1877	880506		11,000		4,200
Copper						
SDSEDCL01A	BE1876	880505		16,000		2,800
SDSEDCL07A	BE1877	880506		27,000		2,900
Lead						
SDSEDCL01A	BE1876	880505		2,700	J	1,000
SDSEDCL07A	BE1877	880506		2,600	J	2,000
Silver						
SDSEDCL07A	BE1877	880506	ND	370	U	3,100
Zinc						
SDSEDCL01A	BE1876	880505		40,000	J	2,000
SDSEDCL07A	BE1877	880506		33,000	J	2,000

TABLE 4-48 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS						
Aluminum						
SDSEDCL01A	BE1876	880505		14,800,000		20,000
SDSEDCL07A	BE1877	880506		9,750,000		20,000
Antimony						
SDSEDCL01A	BE1876	880505	ND	340	U	19,000
SDSEDCL07A	BE1877	880506	ND	140	U	2,000
Beryllium						
SDSEDCL07A	BE1877	880506		380		230
Calcium						
SDSEDCL01A	BE1876	880505		5,210,000	J	19,000
SDSEDCL07A	BE1877	880506		1,600,000	J	34,000
Cobalt						
SDSEDCL01A	BE1876	880505	BMDL	6,100		6,900
SDSEDCL07A	BE1877	880506		15,000		2,800
Cyanide, Total						
SDSEDCL01A	BE1876	880505		< 500	NA	500
SDSEDCL07A	BE1877	880506		< 500	NA	500
Iron						
SDSEDCL01A	BE1876	880505		30,400,000		33,000
SDSEDCL07A	BE1877	880506		27,700,000		33,000
Magnesium						
SDSEDCL01A	BE1876	880505		2,670,000	J	4,700
SDSEDCL07A	BE1877	880506		1,650,000	J	6,700
Manganese						
SDSEDCL01A	BE1876	880505		270,000	J	1,400
SDSEDCL07A	BE1877	880506		1,050,000	J	1,400
Nickel						
SDSEDCL01A	BE1876	880505	BMDL	1,300		2,100
SDSEDCL07A	BE1877	880506		6,200		3,000
Potassium						
SDSEDCL01A	BE1876	880505		250,000		20,000
SDSEDCL07A	BE1877	880506		160,000		20,000
Sodium						
SDSEDCL01A	BE1876	880505		520,000	J	23,000
SDSEDCL07A	BE1877	880506		68,000		22,000

FRO 001 1238

TABLE 4-48 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS (continued)</i>						
Sulfate as SO ₄ (values in mg/kg)						
SDSEDCL01A	BE1876	880505		1,200	NA	250
SDSEDCL02A	BE0758	880505		5,500	NA	250
SDSEDCL02B	BE0759	880505		< 250	NA	250
SDSEDCL07A	BE1877	880506		< 250	NA	250
SDSEDCL08A	BE1758	880506		< 250	NA	250
SDSEDCL08B	BE1760	880506		< 250	NA	250
SDSEDCLA08	BE1759	880506		< 250	NA	250
Sulfide as S (values in mg/kg)						
SDSEDCL01A	BE1876	880505		< 10	NA	10
SDSEDCL02A	BE0758	880505		< 10	NA	10
SDSEDCL02B	BE0759	880505		< 10	NA	10
SDSEDCL07A	BE1877	880506		< 10	NA	10
SDSEDCL08A	BE1758	880506		< 10	NA	10
SDSEDCL08B	BE1760	880506		< 10	NA	10
SDSEDCLA08	BE1759	880506		< 10	NA	10
Thallium						
SDSEDCL01A	BE1876	880505	ND	220	U	2,000
SDSEDCL07A	BE1877	880506	ND	22	U	2,000
Total Organic Carbon (values in mg/kg)						
SDSEDCL01A	BE1876	880505		8,050	NA	100
SDSEDCL01A	BE1876	880505		8,020	NA	100
SDSEDCL02A	BE0758	880505		4,220	NA	100
SDSEDCL02A	BE0758	880505		3,740	NA	100
SDSEDCL02B	BE0759	880505		6,700	NA	100
SDSEDCL02B	BE0759	880505		6,180	NA	100
SDSEDCL07A	BE1877	880506		4,870	NA	100
SDSEDCL07A	BE1877	880506		4,970	NA	100
SDSEDCL08A	BE1758	880506		32,700	NA	100
SDSEDCL08A	BE1758	880506		34,900	NA	100
SDSEDCL08B	BE1760	880506		3,740	NA	100
SDSEDCL08B	BE1760	880506		3,930	NA	100
SDSEDCLA08	BE1759	880506		41,600	NA	100
SDSEDCLA08	BE1759	880506		39,200	NA	100
Vanadium						
SDSEDCL01A	BE1876	880505		60,000	J	2,500
SDSEDCL07A	BE1877	880506		95,000		2,500

FRO 001 1239

TABLE 4-48 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS (continued)</i>						
% Solid						
SDSEDCL01A	BE1876	880505		69.60	NA	0
SDSEDCL02A	BE0758	880505		89.50	NA	0
SDSEDCL02B	BE0759	880505		86.70	NA	0
SDSEDCL03A	BE1704	880505		91.20	NA	0
SDSEDCL04A	BE1705	880505		88.70	NA	0
SDSEDCL05A	BE1706	880505		83.20	NA	0
SDSEDCL05B	BE1708	880505		82.80	NA	0
SDSEDCL06A	BE1709	880506		78.20	NA	0
SDSEDCL06B	BE1710	880506		83.80	NA	0
SDSEDCL07A	BE1877	880506		76.50	NA	0
SDSEDCL08A	BE1758	880506		63.50	NA	0
SDSEDCL08B	BE1760	880506		77.40	NA	0
SDSEDCLA05	BE1707	880505		83	NA	0
SDSEDCLA08	BE1759	880506		64.20	NA	0

J - Estimated

NA - Not applicable

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

FRO 001 1240

TABLE 4-49

HSL Data for Mandri Canal Sediment Samples
(values in ug/kg)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
VOLATILE ORGANIC COMPOUNDS						
Acetone MCSED02A	BE1883	880517		6.75	U	4.70
Chlorobenzene MCSED02A	BE1883	880517	BMDL	1.26	UJ	4.70
Methylene chloride MCSED02A	BE1883	880517		5.28	U	4.70
Toluene MCSED02A	BE1883	880517	BMDL	3.32	UJ	4.70
BASE/NEUTRAL EXTRACTABLES						
Di-n-butyl phthalate MCSED02A	BE1883	880517	BMDL	109	U	780
RCRA METALS						
Arsenic MCSED02A	BE1883	880517	BMDL	1,900		2,000
Barium MCSED02A	BE1883	880517		8,300	J	770
Chromium MCSED02A	BE1883	880517	ND	1,000	U	6,100
Copper MCSED02A	BE1883	880517	BMDL	1,300		2,800
Lead MCSED02A	BE1883	880517	BMDL	700		1,000
Zinc MCSED02A	BE1883	880517		4,600		2,000
OTHER/MISCELLANEOUS						
Aluminum MCSED02A	BE1883	880517		1,400,000		20,000
Calcium MCSED02A	BE1883	880517		10,800,000	J	19,000

TABLE 4-49 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS (continued)</i>						
Cobalt						
MCSED02A	BE1883	880517	BMDL	1,900		6,900
Cyanide, Total						
MCSED02A	BE1883	880517		< 500	NA	500
Iron						
MCSED02A	BE1883	880517		3,200,000		33,000
Magnesium						
MCSED02A	BE1883	880517		440,000	J	4,700
Manganese						
MCSED02A	BE1883	880517		17,000	J	1,400
Potassium						
MCSED02A	BE1883	880517		140,000		20,000
Sodium						
MCSED02A	BE1883	880517		570,000	J	23,000
Sulfate as SO ₄ (values in mg/kg)						
MCSED01A	BE1864	880517		< 250	NA	250
MCSED01B	BE1865	880517		< 250	NA	250
MCSED02A	BE1883	880517		720	NA	250
MCSED02B	BE1866	880517		< 250	NA	250
Sulfide as S (values in mg/kg)						
MCSED01A	BE1864	880517		< 10	NA	10
MCSED01B	BE1865	880517		< 10	NA	10
MCSED02A	BE1883	880517		< 10	NA	10
MCSED02B	BE1866	880517		< 10	NA	10
Thallium						
MCSED02A	BE1883	880517	ND	91	U	2,000
Total Organic Carbon						
MCSED01A	BE1864	880517		32,000	NA	100
MCSED01A	BE1864	880517		34,400	NA	100
MCSED01B	BE1865	880517		13,800	NA	100
MCSED01B	BE1865	880517		14,700	NA	100
MCSED02A	BE1883	880517		3,560	NA	100
MCSED02A	BE1883	880517		3,460	NA	100
MCSED02B	BE1866	880517		14,300	NA	100
MCSED02B	BE1866	880517		15,500	NA	100
Vanadium						
MCSED02A	BE1883	880517		9,000	J	2,500

TABLE 4-49 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
----------------	------------	------	----------	-------	---------	-----

OTHER/MISCELLANEOUS (continued)

% Solid						
MCSED01A	BE1864	880517		83.60	NA	0
MCSED01B	BE1865	880517		81.20	NA	0
MCSED02A	BE1883	880517		85.10	NA	0
MCSED02B	BE1866	880517		81.80	NA	0

J - Estimated
 NA - Not applicable
 U - Not detected, associated value below the Sample Quantitation Limit
 UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

PRO 001 1243

TABLE 4-50

HSL Data for Technicon Ditch Sediment Samples
(values in ug/kg)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
VOLATILE ORGANIC COMPOUNDS						
Acetone						
TDSEDCL01A	BE1879	880509		288		8.7
TDSEDCL16A	BE1880	880510		185		5.5
TDSEDCLA16	BE1881	880510		222		11.0
Chlorobenzene						
TDSEDCL16A	BE1880	880510	BMDL	0.75	U	5.5
Methyl ethyl ketone						
TDSEDCL01A	BE1879	880509		48		8.7
TDSEDCL16A	BE1880	880510		39.6		5.5
TDSEDCLA16	BE1881	880510		38.8		11.0
Methylene chloride						
TDSEDCL01A	BE1879	880509		157	U	8.7
TDSEDCLA16	BE1881	880510		109	UJ	11.0
Toluene						
TDSEDCL16A	BE1880	880510		115		5.5
TDSEDCLA16	BE1881	880510		14.6		11.0
Vinyl acetate						
TDSEDCLA16	BE1881	880510	BMDL	2.95	UJ	11.0
RCRA METALS						
Arsenic						
TDSEDCL01A	BE1879	880509		9,000	J	2,000.0
TDSEDCL16A	BE1880	880510	BMDL	1,300		2,000.0
TDSEDCLA16	BE1881	880510	BMDL	1,200		2,000.0
Barium						
TDSEDCL01A	BE1879	880509		278,000	J	770.0
TDSEDCL16A	BE1880	880510		78,600	J	770.0
TDSEDCLA16	BE1881	880510		78,800	J	770.0
Chromium						
TDSEDCL01A	BE1879	880509		14,000	J	6,100.0
TDSEDCLA16	BE1881	880510	BMDL	2,800		6,100.0
TDSEDCL16A	BE1880	880510	BMDL	5,300		6,100.0
Copper						
TDSEDCL01A	BE1879	880509		58,000	J	2,800.0
TDSEDCL16A	BE1880	880510		24,000		2,800.0
TDSEDCLA16	BE1881	880510		21,000		2,800.0

TABLE 4-50 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>RCRA METALS (continued)</i>						
Lead						
TDSEDCL01A	BE1879	880509		11,000		2,000.0
TDSEDCL16A	BE1880	880510		5,300	J	1,000.0
TDSEDCLA16	BE1881	880510		5,500	J	1,000.0
Selenium						
TDSEDCL01A	BE1879	880509		1,400	J	1,000.0
TDSEDCLA16	BE1881	880510	ND	43	U	1,000.0
Zinc						
TDSEDCL01A	BE1879	880509		160,000	J	2,000.0
TDSEDCL16A	BE1880	880510		69,000	J	2,000.0
TDSEDCLA16	BE1881	880510		61,000	J	2,000.0
<i>OTHER/MISCELLANEOUS</i>						
Aluminum						
TDSEDCL01A	BE1879	880509		43,500,000	J	20,000.0
TDSEDCL16A	BE1880	880510		18,000,000		20,000.0
TDSEDCLA16	BE1881	880510		12,800,000		20,000.0
Antimony						
TDSEDCL01A	BE1879	880509	BMDL	5,400		19,000.0
Calcium						
TDSEDCL01A	BE1879	880509		5,720,000	J	19,000.0
TDSEDCL16A	BE1880	880510		1,980,000	J	19,000.0
TDSEDCLA16	BE1881	880510		1,200,000	J	19,000.0
Cobalt						
TDSEDCL01A	BE1879	880509		22,000	J	6,900.0
TDSEDCL16A	BE1880	880510		12,000		6,900.0
TDSEDCLA16	BE1881	880510		9,500		6,900.0
Cyanide, Total						
TDSEDCL01A	BE1879	880509		< 500	NA	500.0
TDSEDCL16A	BE1880	880510		< 500	NA	500.0
TDSEDCLA16	BE1881	880510		< 500	NA	500.0
Iron						
TDSEDCL01A	BE1879	880509		57,200,000	J	33,000.0
TDSEDCL16A	BE1880	880510		28,100,000		33,000.0
TDSEDCLA16	BE1881	880510		24,400,000		33,000.0
Magnesium						
TDSEDCL01A	BE1879	880509		7,510,000	J	4,700.0
TDSEDCL16A	BE1880	880510		4,320,000	J	4,700.0
TDSEDCLA16	BE1881	880510		4,220,000	J	4,700.0

TABLE 4-50 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS (continued)						
Manganese						
TDSEDCL01A	BE1879	880509		1,550,000.00	J	1,400.0
TDSEDCL16A	BE1880	880510		491,000.00	J	1,400.0
TDSEDCLA16	BE1881	880510		502,000.00	J	1,400.0
Nickel						
TDSEDCL01A	BE1879	880509		4,700.00	J	2,100.0
TDSEDCL16A	BE1880	880510	BMDL	920.00	U	2,100.0
TDSEDCLA16	BE1881	880510	BMDL	580.00	U	2,100.0
Potassium						
TDSEDCL01A	BE1879	880509		650,000.00	J	20,000.0
TDSEDCL16A	BE1880	880510		290,000.00		20,000.0
TDSEDCLA16	BE1881	880510		190,000.00		20,000.0
Sodium						
TDSEDCL01A	BE1879	880509		530,000.00	J	23,000.0
TDSEDCL16A	BE1880	880510		180,000.00	J	23,000.0
TDSEDCLA16	BE1881	880510		150,000.00		23,000.0
Sulfate as SO₄ (values in mg/kg)						
TDSEDCL01A	BE1879	880509		< 250.00	NA	250.0
TDSEDCL04A	BE1761	880506		1,100.00	NA	250.0
TDSEDCL04B	BE1762	880506		340.00	NA	250.0
TDSEDCL08A	BE1763	880509		800.00	NA	250.0
TDSEDCL08B	BE1765	880509		890.00	NA	250.0
TDSEDCL12A	BE1766	880509		2,900.00	NA	250.0
TDSEDCL12B	BE1767	880509		4,100.00	NA	250.0
TDSEDCL16A	BE1880	880510		2,400.00	NA	250.0
TDSEDCLA08	BE1764	880509		< 250.00	NA	250.0
TDSEDCLA16	BE1881	880510		290.00	NA	250.0
Sulfide as S (values in mg/kg)						
TDSEDCL01A	BE1879	880509		100.00	NA	10.0
TDSEDCL04A	BE1761	880506		24.00	NA	10.0
TDSEDCL04B	BE1762	880506		< 10.00	NA	10.0
TDSEDCL08A	BE1763	880509		< 10.00	NA	10.0
TDSEDCL08B	BE1765	880509		< 10.00	NA	10.0
TDSEDCL12A	BE1766	880509		< 10.00	NA	10.0
TDSEDCL12B	BE1767	880509		< 10.00	NA	10.0
TDSEDCL16A	BE1880	880510		< 10.00	NA	10.0
TDSEDCLA08	BE1764	880509		11.00	NA	10.0
TDSEDCLA16	BE1881	880510		< 10.00	NA	10.0
Total Organic Carbon						
TDSEDCL01A	BE1879	880509		32,900.00	NA	100.0
TDSEDCL01A	BE1879	880509		35,200.00	NA	100.0
TDSEDCL04A	BE1761	880506		22,600.00	NA	100.0
TDSEDCL04A	BE1761	880506		22,100.00	NA	100.0

TABLE 4-50 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS (continued)</i>						
Total Organic Carbon (continued)						
TDSEDCL04B	BE1762	880506		3,410.00	NA	100.0
TDSEDCL04B	BE1762	880506		3,600.00	NA	100.0
TDSEDCL08A	BE1763	880509		14,000.00	NA	100.0
TDSEDCL08A	BE1763	880509		15,000.00	NA	100.0
TDSEDCL08B	BE1765	880509		4,610.00	NA	100.0
TDSEDCL08B	BE1765	880509		4,880.00	NA	100.0
TDSEDCL12A	BE1766	880509		18,000.00	NA	100.0
TDSEDCL12A	BE1766	880509		21,600.00	NA	100.0
TDSEDCL12B	BE1767	880509		2,750.00	NA	100.0
TDSEDCL12B	BE1767	880509		2,920.00	NA	100.0
TDSEDCL16A	BE1880	880510		19,300.00	NA	100.0
TDSEDCL16A	BE1880	880510		20,200.00	NA	100.0
TDSEDCLA08	BE1764	880509		13,900.00	NA	100.0
TDSEDCLA08	BE1764	880509		14,500.00	NA	100.0
TDSEDCLA16	BE1881	880510		35,600.00	NA	100.0
TDSEDCLA16	BE1881	880510		36,200.00	NA	100.0
Vanadium						
TDSEDCL01A	BE1879	880509		160,000.00	J	2,500.0
TDSEDCL16A	BE1880	880510		80,000.00	J	2,500.0
TDSEDCLA16	BE1881	880510		71,000.00	J	2,500.0
% Solid						
TDSEDCL01A	BE1879	880509		44.00	NA	0.0
TDSEDCL02A	BE1711	880506		68.10	NA	0.0
TDSEDCL02B	BE1712	880506		81.10	NA	0.0
TDSEDCL03A	BE1713	880506		73.50	NA	0.0
TDSEDCL04A	BE1761	880506		62.60	NA	0.0
TDSEDCL04B	BE1762	880506		79.70	NA	0.0
TDSEDCL05A	BE1714	880506		56.40	NA	0.0
TDSEDCL06A	BE1716	880509		67.80	NA	0.0
TDSEDCL06B	BE1717	880509		79.80	NA	0.0
TDSEDCL07A	BE1718	880509		79.40	NA	0.0
TDSEDCL08A	BE1763	880509		71.10	NA	0.0
TDSEDCL08B	BE1765	880509		79.20	NA	0.0
TDSEDCL09A	BE1719	880509		63.30	NA	0.0
TDSEDCL10A	BE1720	880509		75.30	NA	0.0
TDSEDCL10B	BE1721	880509		76.40	NA	0.0
TDSEDCL11A	BE1722	880509		75.50	NA	0.0
TDSEDCL12A	BE1766	880509		75.30	NA	0.0
TDSEDCL12B	BE1767	880509		78.80	NA	0.0
TDSEDCL13A	BE1723	880509		73.60	NA	0.0
TDSEDCL14A	BE1725	880510		77.20	NA	0.0
TDSEDCL15A	BE1726	880510		69.20	NA	0.0
TDSEDCL15B	BE1727	880510		72.90	NA	0.0
TDSEDCL16A	BE1880	880510		73.20	NA	0.0
TDSEDCL16B	BE1728	880510		80.50	NA	0.0
TDSEDCLA05	BE1715	880506		66.90	NA	0.0

TABLE 4-50 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS (continued)</i>						
* Solid (continued)						
TDSEDCLA08	BE1764	880509		72.00	NA	0.0
TDSEDCLA13	BE1724	880509		74.40	NA	0.0
TDSEDCLA16	BE1881	880510		72.70	NA	0.0
TDTR1B101A	BE1733	880510		71.10	NA	0.0
TDTR1B101A	BE1731	880510		75.90	NA	0.0
TDTR1B101B	BE1732	880510		78.90	NA	0.0
TDTR1B102B	BE1734	880510		79.20	NA	0.0
TDTR1B201A	BE1729	880510		73.00	NA	0.0
TDTR1B201B	BE1730	880510		81.20	NA	0.0

J - Estimated
 NA - Not applicable
 U - Not detected, associated value below the Sample Quantitation Limit
 UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

FRO 001 1248

TABLE 4-51

HSL Data for Background Sediment Samples
(values in ug/kg)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
VOLATILE ORGANIC COMPOUNDS						
Acetone						
BGSEDCL02A	BE0766	880418		97.80	J	5.10
BGSEDCL04A	BE0767	880418		118	J	4.60
BGSEDCL06A	BE0768	880418		108	J	4.80
BGSEDCL08A	BE0770	880419		24.30		4.70
BGSEDCLA06	BE0769	880418		69.90	J	5
Carbon disulfide						
BGSEDCL08A	BE0770	880419	BMDL	4.15	U	4.70
Methyl ethyl ketone						
BGSEDCL06A	BE0768	880418		15.50	J	4.80
BGSEDCL08A	BE0770	880419	BMDL	4.21		4.70
Methylene chloride						
BGSEDCL08A	BE0770	880419		41.30	U	4.70
Toluene						
BGSEDCL06A	BE0768	880418	BMDL	2.50	UJ	4.80
BASE/NEUTRAL EXTRACTABLES						
Di-n-butyl phthalate						
BGSEDCL02A	BE0766	880418	BMDL	46.10	UJ	850
RCRA METALS						
Arsenic						
BGSEDCL02A	BE0766	880418	ND	1,600		10,000
BGSEDCL04A	BE0767	880418	BMDL	820		2,000
BGSEDCL06A	BE0768	880418	ND	250		2,000
BGSEDCL08A	BE0770	880419	ND	200		2,000
BGSEDCLA06	BE0769	880418	BMDL	410		2,000
Barium						
BGSEDCL02A	BE0766	880418		272,000		930
BGSEDCL04A	BE0767	880418		95,700		930
BGSEDCL06A	BE0768	880418		30,000		930
BGSEDCL08A	BE0770	880419		20,000		930
BGSEDCLA06	BE0769	880418		31,000		930
Cadmium						
BGSEDCL02A	BE0766	880418	BMDL	270	U	790
BGSEDCL04A	BE0767	880418	BMDL	220	U	790
BGSEDCL06A	BE0768	880418	ND	7	U	790
BGSEDCL08A	BE0770	880419	ND	96	U	790

FRO 001 1249

TABLE 4-51 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
RCRA METALS (continued)						
Cadmium (continued)						
BGSEDCLA06	BEO769	880418	ND	91	U	790
Chromium						
BGSEDCL02A	BEO766	880418		12,000	J	4,200
BGSEDCL04A	BEO767	880418		82,000	J	4,200
BGSEDCL06A	BEO768	880418		7,700	J	4,200
BGSEDCL08A	BEO770	880419	BMDL	2,500		4,200
BGSEDCLA06	BEO769	880418		4,500	J	4,200
Copper						
BGSEDCL02A	BEO766	880418		34,000	J	2,100
BGSEDCL04A	BEO767	880418		85,000	J	2,100
BGSEDCL06A	BEO768	880418		21,000	J	2,100
BGSEDCL08A	BEO770	880419		13,000	J	2,100
BGSEDCLA06	BEO769	880418		18,000	J	2,100
Lead						
BGSEDCL02A	BEO766	880418		3,900		1,000
BGSEDCL04A	BEO767	880418		5,800		1,000
BGSEDCL06A	BEO768	880418	BMDL	1,700		5,000
BGSEDCL08A	BEO770	880419		2,500		2,000
BGSEDCLA06	BEO769	880418	BMDL	1,600		2,000
Selenium						
BGSEDCL06A	BEO768	880418	ND	67	U	1,000
BGSEDCLA06	BEO769	880418	ND	72	U	1,000
Silver						
BGSEDCL02A	BEO766	880418	BMDL	800	U	2,000
BGSEDCL04A	BEO767	880418	BMDL	720	U	2,000
BGSEDCL06A	BEO768	880418	ND	280	U	2,000
BGSEDCL08A	BEO770	880419	ND	150	U	2,000
BGSEDCLA06	BEO769	880418	ND	350	U	2,000
Zinc						
BGSEDCL02A	BEO766	880418		84,000		2,000
BGSEDCL04A	BEO767	880418		110,000		2,000
BGSEDCL06A	BEO768	880418		22,000		2,000
BGSEDCL08A	BEO770	880419		14,000		2,000
BGSEDCLA06	BEO769	880418		20,000		2,000
OTHER/MISCELLANEOUS						
Aluminum						
BGSEDCL02A	BEO766	880418		23,800,000		15,000
BGSEDCL04A	BEO767	880418		15,600,000		15,000

TABLE 4-51 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS (continued)</i>						
<i>Aluminum (continued)</i>						
BGSEDCL06A	BE0768	880418		3,850,000		22,000
BGSEDCL08A	BE0770	880419		2,890,000	J	22,000
BGSEDCLA06	BE0769	880418		4,620,000		22,000
<i>Antimony</i>						
BGSEDCL02A	BE0766	880418	BMDL	620		2,000
BGSEDCL04A	BE0767	880418	BMDL	560		2,000
BGSEDCL08A	BE0770	880419	ND	14	U	2,000
BGSEDCLA06	BE0769	880418	ND	110	U	2,000
<i>Beryllium</i>						
BGSEDCL02A	BE0766	880418		560		200
BGSEDCL04A	BE0767	880418		740		200
BGSEDCL06A	BE0768	880418		280		200
BGSEDCL08A	BE0770	880419	BMDL	190		200
BGSEDCLA06	BE0769	880418		260		200
<i>Calcium</i>						
BGSEDCL02A	BE0766	880418		2,610,000		25,000
BGSEDCL04A	BE0767	880418		3,220,000		25,000
BGSEDCL06A	BE0768	880418		1,200,000		25,000
BGSEDCL08A	BE0770	880419		1,900,000		25,000
BGSEDCLA06	BE0769	880418		1,200,000		25,000
<i>Cobalt</i>						
BGSEDCL02A	BE0766	880418		27,000		3,800
BGSEDCL04A	BE0767	880418		64,000		3,800
BGSEDCL06A	BE0768	880418		5,300		3,800
BGSEDCL08A	BE0770	880419		4,300		3,800
BGSEDCLA06	BE0769	880418		5,100		3,800
<i>Cyanide, Total</i>						
BGSEDCL02A	BE0766	880418		< 600	NA	600
BGSEDCL04A	BE0767	880418		< 600	NA	600
BGSEDCL06A	BE0768	880418		< 600	NA	600
BGSEDCL08A	BE0770	880419		< 500	NA	500
BGSEDCLA06	BE0769	880418		< 600	NA	600
<i>Iron</i>						
BGSEDCL02A	BE0766	880418		52,900,000		34,000
BGSEDCL04A	BE0767	880418		58,800,000		34,000
BGSEDCL06A	BE0768	880418		25,500,000		34,000
BGSEDCL08A	BE0770	880419		20,000,000		34,000
BGSEDCLA06	BE0769	880418		22,700,000		34,000

FRO 001 1251

TABLE 4-51 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS (continued)</i>						
Magnesium						
BGSEDCL02A	BE0766	880418		5,100,000		8,200
BGSEDCL04A	BE0767	880418		6,540,000		8,200
BGSEDCL06A	BE0768	880418		1,420,000		8,200
BGSEDCL08A	BE0770	880419		1,010,000		8,200
BGSEDCLA06	BE0769	880418		1,090,000		8,200
Manganese						
BGSEDCL02A	BE0766	880418		1,470,000		1,100
BGSEDCL04A	BE0767	880418		1,050,000		1,100
BGSEDCL06A	BE0768	880418		266,000		1,300
BGSEDCL08A	BE0770	880419		148,000	J	1,300
BGSEDCLA06	BE0769	880418		156,000		1,300
Nickel						
BGSEDCL02A	BE0766	880418		5,100		2,700
BGSEDCL04A	BE0767	880418		64,000		2,700
BGSEDCL06A	BE0768	880418		5,900		2,700
BGSEDCL08A	BE0770	880419	BMDL	2,400		2,700
BGSEDCLA06	BE0769	880418	BMDL	2,600		2,700
Potassium						
BGSEDCL02A	BE0766	880418		400,000		20,000
BGSEDCL04A	BE0767	880418		410,000		20,000
BGSEDCL06A	BE0768	880418		290,000		20,000
BGSEDCL08A	BE0770	880419		270,000		20,000
BGSEDCLA06	BE0769	880418		440,000		20,000
Sodium						
BGSEDCL02A	BE0766	880418		300,000		32,000
BGSEDCL04A	BE0767	880418		160,000		32,000
BGSEDCL06A	BE0768	880418		98,000		32,000
BGSEDCL08A	BE0770	880419		160,000		32,000
BGSEDCLA06	BE0769	880418		100,000		32,000
Sulfate as SO₄ (values in mg/kg)						
BGSEDCL02A	BE0766	880418		890	NA	250
BGSEDCL04A	BE0767	880418		< 250	NA	250
BGSEDCL04B	BE0750	880418		420	NA	250
BGSEDCL06A	BE0768	880418		< 250	NA	250
BGSEDCL08A	BE0770	880419		< 250	NA	250
BGSEDCLA06	BE0769	880418		< 250	NA	250
Sulfide as S (values in mg/kg)						
BGSEDCL02A	BE0766	880418		< 10	NA	10
BGSEDCL04A	BE0767	880418		< 10	NA	10
BGSEDCL04B	BE0750	880418		< 10	NA	10
BGSEDCL06A	BE0768	880418		< 10	NA	10

TABLE 4-51 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
OTHER/MISCELLANEOUS (continued)						
Sulfide as S (values in mg/kg) (continued)						
BGSEDCLO8A	BE0770	880419		< 10	NA	10
BGSEDCLOA06	BE0769	880418		< 10	NA	10
Thallium						
BGSEDCLO6A	BE0768	880418	ND	120	U	2,000
BGSEDCLO8A	BE0770	880419	ND	200	U	2,000
BGSEDCLOA06	BE0769	880418	ND	47	U	2,000
Total Organic Carbon						
BGSEDCLO2A	BE0766	880418		20,600	NA	100
BGSEDCLO2A	BE0766	880418		23,400	NA	100
BGSEDCLO4A	BE0767	880418		13,300	NA	100
BGSEDCLO4A	BE0767	880418		15,300	NA	100
BGSEDCLO4B	BE0750	880418		4,350	NA	100
BGSEDCLO4B	BE0750	880418		4,500	NA	100
BGSEDCLO6A	BE0768	880418		8,500	NA	100
BGSEDCLO6A	BE0768	880418		9,040	NA	100
BGSEDCLO8A	BE0770	880419		8,040	NA	100
BGSEDCLO8A	BE0770	880419		8,090	NA	100
BGSEDCLOA06	BE0769	880418		7,740	NA	100
BGSEDCLOA06	BE0769	880418		7,590	NA	100
Vanadium						
BGSEDCLO2A	BE0766	880418		130,000		4,300
BGSEDCLO4A	BE0767	880418		140,000		4,300
BGSEDCLO6A	BE0768	880418		99,000		4,300
BGSEDCLO8A	BE0770	880419		79,000		4,300
BGSEDCLOA06	BE0769	880418		79,000		4,300
% Solid						
BGSEDCLO1A	BE0673	880418		85.90	NA	0
BGSEDCLO2A	BE0766	880418		78.40	NA	0
BGSEDCLO2B	BE0674	880418		80.80	NA	0
BGSEDCLO3A	BE0675	880418		80.10	NA	0
BGSEDCLO4A	BE0767	880418		86.80	NA	0
BGSEDCLO4B	BE0750	880418		87.20	NA	0
BGSEDCLO5A	BE0676	880418		79.90	NA	0
BGSEDCLO6A	BE0768	880418		88.40	NA	0
BGSEDCLO6B	BE0684	880418		77.90	NA	0
BGSEDCLO7A	BE0677	880419		59.80	NA	0
BGSEDCLO8A	BE0770	880419		90.70	NA	0
BGSEDCLOA05	BE0680	880418		77.40	NA	0
BGSEDCLOA06	BE0769	880418		82.80	NA	0

J - Estimated

NA - Not applicable

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

TABLE 4-52

HSL Data Summary for On-Site Sediment Samples
(values in ug/kg)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
Volatile Organic Compounds (0-12")						
<u>1,1,1-TRICHLOROETHANE</u>						
FCSED, Midstream	9	1	1	0	8	8
<u>ACETONE</u>						
FCSED, Midstream	9	7	7	0	1,160	326
FCSED, Downstream	10	8	8	47.4	1,430	427.9
FLSED	4	4	4	293	2,980	1,385.6
SDSED	2	2	2	107	254	180.5
TDSED	2	2	2	204	288	246
MCSED	1	1	1	6.75	6.75	6.75
Total	28	24	24	0	2,980	511
<u>BENZENE</u>						
FCSED, Downstream	10	3	0	0	BMDL	3.08
<u>CARBON DISULFIDE</u>						
FCSED, Downstream	10	4	4	0	540	269.95
FLSED	4	4	3	BMDL	230	91
SDSED	2	1	1	8.73	8.73	8.73
Total	16	9	8	6.35	540	161
<u>CHLOROBENZENE</u>						
TDSED	2	1	0	0	BMDL	0.748
MCSED	1	1	0	0	BMDL	1.26
Total	3	2	0	0	BMDL	1.004
<u>ETHYLBENZENE</u>						
FCSED, Midstream	9	1	0	0	BMDL	2.15
<u>METHYL CHLORIDE</u>						
FCSED, Downstream	10	3	3	0	26.5	20.8
FLSED	4	4	4	25	1,730	507
Total	14	7	7	0	1,730	299
<u>METHYL ETHYL KETONE</u>						
FCSED, Midstream	9	4	4	0	232	164.8
FCSED, Downstream	10	4	4	0	242	133.6
FLSED	4	4	4	56.9	624	222
SDSED	2	1	1	79	79	79
TDSED	2	2	2	0	48	43.6
Total	27	15	15	0	624	149.8

FRO 001 1254

TABLE 4-52 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
Volatile Organic Compounds (0-12") (continued)						
<u>METHYLENE CHLORIDE</u>						
FCSED, Midstream	9	2	2	0	11.1	8.51
FCSED, Downstream	10	10	10	21.7	93.5	46.98
FLSED	4	4	3	BMDL	338	97.16
SDSED	2	2	2	21.2	24.4	22.8
TDSED	2	2	2	0	157	133
MCSED	1	1	1	5.28	5.28	5.28
Total	28	21	20	0	338	56.8
<u>M-XYLENES</u>						
FCSED, Downstream	10	2	1	0	7.53	5.3
<u>O+P-XYLENE</u>						
FCSED, Downstream	10	2	0	0	BMDL	5.08
<u>TOLUENE</u>						
FCSED, Midstream	9	1	1	0	11.5	11.5
FCSED, Downstream	10	4	0	0	BMDL	2.6
TDSED	2	1	1	0	64.8	64.8
MCSED	1	1	0	BMDL	BMDL	3.32
Total	22	7	2	0	64.8	12.9
<u>VINYL ACETATE</u>						
FLSED	4	4	2	0	BMDL	21.61
TDSED	2	1	0	0	BMDL	2.95
Total	6	5	2	0	BMDL	17.87
Base/Neutral Extractable Compounds (0-12")						
<u>BENZO(A)ANTHRACENE</u>						
FCSED, Midstream	9	1	0	0	BMDL	430
<u>BENZO(A)PYRENE</u>						
FCSED, Midstream	9	2	0	0	BMDL	252
<u>BENZO(B)FLUORANTHENE</u>						
FCSED, Midstream	9	2	1	0	921	541
<u>BENZYL ALCOHOL</u>						
FLSED	4	3	0	0	BMDL	265
<u>BIS(2-ETHYLHEXYL) PHTHALATE</u>						
FCSED, Midstream	9	6	0	0	BMDL	257
FCSED, Downstream	10	4	3	0	5,770	2,524
Total	19	10	3	0	5,770	1,164
<u>CHRYSENE</u>						
FCSED, Midstream	9	2	0	0	BMDL	286

TABLE 4-52 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
<i>Base/Neutral Extractable Compounds (0-12") (continued)</i>						
<u>DI-N-BUTYL PHTHALATE</u>						
FLSED	4	1	0	0	BMDL	152
MCSED	1	1	0	109	BMDL	109
Total	5	2	0	0	152	131
<u>FLUORANTHENE</u>						
FCSED, Midstream	9	2	0	0	BMDL	394
<u>INDENO(1,2,3-C,D)PYRENE</u>						
FCSED, Midstream	9	1	0	0	BMDL	160
<u>PYRENE</u>						
FCSED, Midstream	9	2	0	0	BMDL	366
<i>Acid Extractable Compounds</i>						
<u>PHENOL</u>						
FCSED, Midstream	9	1	0	0	BMDL	39
<i>RCRA Metals (0-12")</i>						
<u>ARSENIC</u>						
FCSED, Midstream	9	9	6	ND	10,000	3,990
FCSED, Downstream	10	10	2	ND	10,000	3,818
FLSED	4	4	4	2,600	14,000	8,225
SDSED	2	2	0	BMDL	BMDL	1,250
TDSED	2	2	1	BMDL	9,000	5,125
MCSED	1	1	0	BMDL	BMDL	1,900
Total	28	28	13	ND	14,000	4,344
<u>BARIUM</u>						
FCSED, Midstream	9	9	9	33,000	185,000	132,056
FCSED, Downstream	10	10	10	5,400	162,000	82,140
FLSED	4	4	4	40,000	195,000	100,138
SDSED	2	2	2	129,000	186,000	157,500
TDSED	2	2	2	78,700	278,000	178,350
MCSED	1	1	1	8,300	8,300	8,300
Total	28	28	28	5,400	278,000	110,373
<u>CADMIUM</u>						
FCSED, Midstream	9	5	0	0	BMDL	143
FCSED, Downstream	10	10	2	BMDL	880	402
FLSED	4	1	0	0	ND	84
SDSED	2	1	1	0	610	610
Total	25	17	3	0	880	318

TABLE 4-52 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
RCRA Metals (0-12") (continued)						
CHROMIUM						
FCSED, Midstream	9	9	9	5,700	10,400	8,222
FCSED, Downstream	10	10	9	BMDL	56,000	13,180
FLSED	4	4	1	BMDL	7,400	5,262
SDSED	2	2	1	4,600	11,000	7,800
TDSED	2	2	1	BMDL	14,000	9,025
MCSED	1	1	0	ND	ND	1,000
Total	28	28	21	ND	56,000	9,339
COPPER						
FCSED, Midstream	9	9	9	20,000	44,000	30,889
FCSED, Downstream	10	10	10	4,400	110,000	37,140
FLSED	4	4	4	30,500	57,000	39,125
SDSED	2	2	2	16,000	27,000	21,500
TDSED	2	2	2	22,500	58,000	40,250
MCSED	1	1	0	BMDL	BMDL	1,300
Total	28	28	27	BMDL	110,000	33,239
LEAD						
FCSED, Midstream	9	9	7	BMDL	15,000	7,106
FCSED, Downstream	10	10	9	BMDL	36,000	10,620
FLSED	4	4	4	3,700	12,000	7,525
SDSED	2	2	2	2,600	2,700	2,650
TDSED	2	2	2	5,400	11,000	8,200
MCSED	1	1	0	BMDL	BMDL	700
Total	28	28	24	BMDL	36,000	7,952
SELENIUM						
FCSED, Midstream	9	6	1	0	2,600	576
FCSED, Downstream	10	5	0	0	BMDL	243
FLSED	4	3	0	0	BMDL	337
TDSED	2	2	1	0	1,400	722
Total	25	16	2	0	2,600	445
SILVER						
FCSED, Midstream	9	4	0	0	BMDL	433
FCSED, Downstream	10	7	0	0	BMDL	370
SDSED	2	1	0	0	BMDL	370
Total	21	12	0	0	BMDL	391
ZINC						
FCSED, Midstream	9	9	9	44,000	120,000	84,833
FCSED, Downstream	10	10	10	8,700	200,000	84,670
FLSED	4	4	4	31,000	72,000	53,000
SDSED	2	2	2	33,000	40,000	36,500
TDSED	2	2	2	65,000	160,000	112,500
MCSED	1	1	1	4,600	4,600	4,600
Total	28	28	28	4,600	200,000	75,886

PRO 001 1257

TABLE 4-52 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
<i>Other/Miscellaneous Compounds (0-12*)</i>						
<u>ALUMINUM</u>						
FCSED, Midstream	9	9	9	6,760,000	21,900,000	15,651,111
FCSED, Downstream	10	10	10	1,200,000	30,000,000	14,766,000
FLSED	4	4	4	8,280,000	22,800,000	15,680,000
SDSED	2	2	2	9,750,000	14,800,000	12,275,000
TDSED	2	2	2	15,400,000	43,500,000	29,450,000
MCSED	1	1	1	1,400,000	1,400,000	1,400,000
Total	28	28	28	1,200,000	43,500,000	15,574,642
<u>ANTIMONY</u>						
FCSED, Midstream	9	4	0	0	BMDL	1,139
FLSED	4	1	0	0	ND	1,300
SDSED	2	2	0	ND	ND	240
TDSED	2	1	0	0	BMDL	5,400
Total	17	8	0	0	BMDL	1,467
<u>BERYLLIUM</u>						
FCSED, Midstream	9	4	4	0	470	413
FCSED, Downstream	10	10	9	ND	910	434
FLSED	4	1	0	0	ND	11
SDSED	2	1	1	0	380	380
Total	25	16	14	0	910	399
<u>CALCIUM</u>						
FCSED, Midstream	9	9	9	1,300,000	3,890,000	2,786,666
FCSED, Downstream	10	10	10	920,000	5,630,000	2,721,000
FLSED	4	4	4	940,000	1,930,000	1,405,000
SDSED	2	2	2	1,600,000	5,210,000	3,405,000
TDSED	2	2	2	1,590,000	5,720,000	3,655,000
MCSED	1	1	1	10,800,000	10,800,000	10,800,000
Total	28	28	28	920,000	10,800,000	2,958,214
<u>COBALT</u>						
FCSED, Midstream	9	9	10	12,000	20,000	16,444
FCSED, Downstream	10	10	9	BMDL	30,000	12,980
FLSED	4	4	1	BMDL	8,800	5,163
SDSED	2	2	1	BMDL	15,000	10,550
TDSED	2	2	2	10,750	22,000	16,375
MCSED	1	1	0	BMDL	BMDL	1,900
Total	28	28	23	BMDL	30,000	12,650
<u>CYANIDE</u>						
FCSED, Midstream	9	9	0	< 500	< 500	500
FCSED, Downstream	10	10	0	< 500	< 700	550
FLSED	4	4	0	< 500	< 500	500
SDSED	2	2	0	< 500	< 500	500
TDSED	2	2	0	< 500	< 500	500
MCSED	1	1	0	< 500	< 500	500
Total	28	28	0	< 500	< 700	518

TABLE 4-52 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
Other/Miscellaneous Compounds (0-12") (continued)						
IRON						
FCSED, Midstream	9	9	9	27,700,000	41,500,000	33,744,444
FCSED, Downstream	10	10	10	3,000,000	49,000,000	27,200,000
FLSED	4	4	4	24,700,000	45,700,000	30,162,500
SDSED	2	2	2	27,700,000	30,400,000	29,050,000
TDSED	2	2	2	26,250,000	57,200,000	41,725,000
MCSED	1	1	1	3,200,000	3,200,000	3,200,000
Total	28	28	28	3,000,000	57,200,000	30,039,285
MAGNESIUM						
FCSED, Midstream	9	9	9	2,640,000	9,020,000	5,393,888
FCSED, Downstream	10	10	10	901,000	6,330,000	3,303,100
FLSED	4	4	4	2,410,000	3,340,000	2,770,000
SDSED	2	2	2	1,650,000	2,670,000	2,160,000
TDSED	2	2	2	4,270,000	7,510,000	5,890,000
MCSED	1	1	1	440,000	440,000	440,000
Total	28	28	28	440,000	8,065,000	3,899,857
MANGANESE						
FCSED, Midstream	9	9	9	197,000	1,780,000	985,167
FCSED, Downstream	10	10	10	57,000	732,000	344,700
FLSED	4	4	4	79,000	191,000	130,000
SDSED	2	2	2	270,000	1,050,000	660,000
TDSED	2	2	2	496,500	1,550,000	1,023,250
MCSED	1	1	1	17,000	17,000	17,000
Total	28	28	28	17,000	1,780,000	579,179
NICKEL						
FCSED, Midstream	9	9	8	BMDL	5,200	3,644
FCSED, Downstream	10	10	8	BMDL	12,000	6,053
FLSED	4	4	1	0	2,100	602
SDSED	2	2	1	BMDL	6,200	3,750
TDSED	2	2	1	BMDL	4,700	2,725
Total	27	27	19	0	12,000	4,025
POTASSIUM						
FCSED, Midstream	9	9	9	190,000	410,000	303,889
FCSED, Downstream	10	10	10	170,000	1,600,000	624,000
FLSED	4	4	4	610,000	850,000	750,000
SDSED	2	2	2	160,000	250,000	205,000
TDSED	2	2	2	240,000	650,000	445,000
MCSED	1	1	1	140,000	140,000	140,000
Total	28	28	28	140,000	1,600,000	479,107

FRO 001 1259

TABLE 4-52 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
<i>Other/Miscellaneous Compounds (0-12") (continued)</i>						
SODIUM						
FCSED, Midstream	9	9	9	180,000	440,000	323,333
FCSED, Downstream	10	10	10	180,000	3,260,000	1,160,000
FLSED	4	4	4	1,900,000	4,760,000	3,191,250
SDSED	2	2	2	68,000	520,000	294,000
TDSED	2	2	2	165,000	530,000	347,500
MCSED	1	1	1	570,000	570,000	570,000
Total	28	28	28	68,000	4,760,000	1,040,285
SULFATE (AS SO₄) (mg/kg)						
FCSED, Midstream	9	9	8	290	3,300	1,441
FCSED, Downstream	10	10	10	550	2,100	1,278
FLSED	6	6	6	1,300	1,700	1,533
SDSED	4	4	2	< 250	5,500	1,800
TDSED	5	5	5	< 250	2,900	1,224
MCSED	2	2	1	< 250	720	485
Total	36	36	32	< 250	5,500	1,368
SULFIDE (AS S) (mg/kg)						
FCSED, Midstream	9	9	5	< 10	680	113
FCSED, Downstream	10	10	5	< 10	570	121
FLSED	6	6	6	53	3,700	896
SDSED	4	4	0	< 10	< 10	10
TDSED	5	5	3	< 10	100	31
MCSED	2	2	0	< 10	< 10	10
Total	36	36	19	< 10	3,700	217
THALLIUM						
FCSED, Midstream	9	9	0	ND	ND	124
FCSED, Downstream	10	9	0	0	ND	149
FLSED	4	3	0	0	ND	36
SDSED	2	2	0	ND	ND	121
MCSED	1	1	0	ND	ND	91
Total	26	24	0	0	ND	121
TOTAL ORGANIC CARBON (mg/kg)						
FCSED, Midstream	9	9	9	3,565	57,150	23,063
FCSED, Downstream	10	10	10	1,665	85,650	26,464
FLSED	6	6	6	41,755	178,000	97,588
SDSED	4	4	4	3,980	37,100	13,509
TDSED	5	5	5	14,350	34,050	22,936
MCSED	2	2	2	3,510	33,200	18,355
Total	36	36	36	1,665	178,000	35,190

FRO 001 1260

TABLE 4-52 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
Other/Miscellaneous Compounds (0-12") (continued)						
<u>VANADIUM</u>						
FCSED, Midstream	9	9	9	92,000	115,000	100,222
FCSED, Downstream	10	10	10	9,800	110,000	73,780
FLSED	4	4	4	65,000	230,000	112,750
SDSED	2	2	2	60,000	95,000	77,500
TDSED	2	2	2	75,500	160,000	117,750
MCSED	1	1	1	9,000	9,000	9,000
Total	28	28	28	9,000	230,000	88,939
<u>% SOLID</u>						
FCSED, Midstream	25	25	-	53.1	85.2	70.8
FCSED, Downstream	31	31	-	25.2	90	58.2
FLSED	23	22	-	26.7	70.8	53.3
SDSED	8	8	-	63.8	91.2	80.1
TDSED	19	19	-	44	79.4	70.1
SEDTRAN	30	30	-	57.8	90.1	74.8
MCSED	2	2	-	83.6	85.1	84.4
Total	137	137	-	25.2	91.2	66.7
Other/Miscellaneous Compounds (12-24")						
<u>SULFATE (AS SO₄) (mg/kg)</u>						
FCSED, Midstream	5	5	3	< 250	2,100	1,026
FCSED, Downstream	5	5	5	< 250	2,300	1,142
FLSED	2	2	2	1,100	6,700	3,900
SDSED	2	2	0	< 250	< 250	< 250
TDSED	3	3	3	340	4,100	1,777
MCSED	2	2	0	< 250	< 250	< 250
Total	19	19	13	< 250	6,700	1,314
<u>SULFIDE (AS S) (mg/kg)</u>						
FCSED, Midstream	5	5	3	< 10	440	180
FCSED, Downstream	5	5	2	< 10	870	306
FLSED	2	2	0	< 10	< 10	< 10
SDSED	2	2	0	< 10	< 10	< 10
TDSED	3	3	0	< 10	< 10	< 10
MCSED	2	2	0	< 10	< 10	< 10
Total	19	19	5	< 10	870	121
<u>TOTAL ORGANIC CARBON (mg/kg)</u>						
FCSED, Midstream	5	5	5	3,820	29,950	15,024
FCSED, Downstream	5	5	5	2,850	187,350	52,325
FLSED	2	2	2	60,400	97,000	78,700
SDSED	2	2	2	3,835	6,440	5,138
TDSED	3	3	3	2,835	4,745	3,695
MCSED	2	2	2	14,250	14,900	14,575
Total	19	19	19	2,835	187,350	28,663

TABLE 4-52 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
<i>Other/Miscellaneous Compounds (12-24") (continued)</i>						
% SOLID						
FCSED, Midstream	13	13	-	61.2	82.4	74
FCSED, Downstream	14	14	-	24.7	86.4	60.6
FLSED	10	10	-	28.1	75.1	54.5
SDSED	4	4	-	77.4	86.7	82.7
TDSED	11	11	-	72.9	81.2	78.9
SEDTRAN	29	29	-	62.6	90.1	79.6
MCSSED	2	2	-	81.2	81.8	81.5
Total	83	83	-	24.7	90.1	72.6

FCSED - Frontera Creek Sediment
 FLSED - Frontera Lagoons Sediment
 SDSED - Squibb Ditch Sediment
 TDSED - Technicon Ditch Sediment; includes Technicon Ditch Tributaries (TDTRIB) for this table)
 SEDTRAN - Sediment Transect
 MCSSED - Mandri Canal Sediment

* Based on all samples with a concentration or estimated concentration greater than zero. Includes samples which are listed as BMDL (below method detection limit) or ND (not detected).

TABLE 4-53

HSL Data Summary for Background Sediment Samples
(values in ug/kg)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
Volatile Organic Compounds (0-12")						
<u>ACETONE</u>						
BGSED	4	4	4	24.3	118	82.3
FCSED, Upstream	3	2	2	0	196	170
Total	7	6	6	0	196	111.5
<u>BENZENE</u>						
FCSED, Upstream	3	1	0	0	BMDL	1.38
<u>CARBON DISULFIDE</u>						
BGSED	4	1	1	0	BMDL	4.15
<u>METHYL ETHYL KETONE</u>						
BGSED	4	2	1	0	15.5	9.9
FCSED, Upstream	3	2	2	0	41.6	24.5
Total	7	4	3	0	41.6	17.2
<u>METHYLENE CHLORIDE</u>						
BGSED	4	1	1	0	41.3	41.3
FCSED, Upstream	3	3	3	5.3	69.7	36.3
Total	7	4	4	0	69.7	37.6
<u>TOLUENE</u>						
BSGED	4	1	0	0	BMDL	2.5
FCSED, Upstream	3	2	0	0	BMDL	1.25
Total	7	3	0	0	BMDL	1.66
Base/Neutral Extractables						
<u>BIS(2-ETHYLHEXYL) PHTHALATE</u>						
FCSED, Upstream	3	1	0	0	BMDL	240
<u>DI-N-BUTYL PHTHALATE</u>						
BGSED	4	1	0	0	BMDL	46.1
RCRA Metals (0-12")						
<u>ARSENIC</u>						
BGSED	4	4	0	ND	BMDL	738
FCSED, Upstream	3	3	3	4,000	10,000	6,733
Total	7	7	3	ND	10,000	3,307
<u>BARIUM</u>						
BGSED	4	4	4	20,000	272,000	104,550
FCSED, Upstream	3	3	3	93,000	190,000	127,567
Total	7	7	7	20,000	272,000	114,414

TABLE 4-53 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
RCRA Metals (0-12") (continued)						
CADMIUM						
BGSED	4	4	0	ND	BMDL	159
FCSED, Upstream	3	1	0	0	BMDL	200
Total	7	5	0	0	BMDL	167
CHROMIUM						
BGSED	4	4	3	2,500	82,000	26,650
FCSED, Upstream	3	3	3	6,100	9,200	7,533
Total	7	7	6	2,500	82,000	17,886
COPPER						
BGSED	4	4	4	13,000	85,000	37,875
FCSED, Upstream	3	3	3	23,000	33,000	28,667
Total	7	7	7	13,000	85,000	33,929
LEAD						
BGSED	4	4	3	BMDL	5,800	3,463
FCSED, Upstream	3	3	3	2,600	8,700	5,300
Total	7	7	6	BMDL	8,700	4,250
SELENIUM						
BGSED	4	1	0	0	ND	70
FCSED, Upstream	3	3	0	ND	ND	72
Total	7	4	0	0	ND	71
SILVER						
BGSED	4	4	0	ND	BMDL	496
FCSED, Upstream	3	2	0	0	BMDL	350
Total	7	6	0	0	BMDL	448
ZINC						
BGSED	4	4	4	14,000	110,000	57,250
FCSED, Upstream	3	3	3	65,000	87,000	77,333
Total	7	7	7	14,000	110,000	65,857
Other/Miscellaneous Compounds (0-12")						
ALUMINUM						
BGSED	4	4	4	2,890,000	23,800,000	11,631,250
FCSED, Upstream	3	3	3	15,000,000	16,200,000	15,533,333
Total	7	7	7	2,890,000	23,800,000	13,303,571
ANTIMONY						
BGSED	4	4	0	0	BMDL	326

FRO 001 1264

TABLE 4-53 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
<i>Other/Miscellaneous Compounds (0-12") (continued)</i>						
<u>BERYLLIUM</u>						
BGSED	4	4	3	BMDL	740	440
FCSED, Upstream	3	2	2	0	300	285
Total	7	6	5	0	740	388
<u>CALCIUM</u>						
BGSED	4	4	4	1,200,000	3,220,000	2,232,500
FCSED, Upstream	3	3	3	1,600,000	3,490,000	2,330,000
Total	7	7	7	1,200,000	3,490,000	2,274,286
<u>COBALT</u>						
BGSED	4	4	4	4,300	64,000	25,125
FCSED, Upstream	3	3	3	12,000	20,000	15,333
Total	7	7	7	4,300	64,000	20,929
<u>CYANIDE</u>						
BGSED	4	4	0	< 500	< 600	575
FCSED, Upstream	3	3	0	< 500	< 500	500
Total	7	7	0	< 500	< 600	543
<u>IRON</u>						
BGSED	4	4	4	20,000,000	58,800,000	38,950,000
FCSED, Upstream	3	3	3	26,000,000	40,600,000	34,800,000
Total	7	7	7	20,000,000	58,800,000	37,171,428
<u>MAGNESIUM</u>						
BGSED	4	4	4	1,010,000	6,540,000	3,476,250
FCSED, Upstream	3	3	3	3,200,000	6,500,000	4,853,333
Total	7	7	7	1,010,000	6,540,000	4,066,429
<u>MANGANESE</u>						
BGSED	4	4	4	148,000	1,470,000	719,750
FCSED, Upstream	3	3	3	854,000	1,760,000	1,167,667
Total	7	7	7	148,000	1,760,000	911,714
<u>NICKEL</u>						
BGSED	4	4	3	BMDL	64,000	18,938
FCSED, Upstream	3	3	3	2,300	4,100	3,333
Total	7	7	6	2,300	64,000	12,250
<u>POTASSIUM</u>						
BGSED	4	4	4	270,000	410,000	361,250
FCSED, Upstream	3	3	3	270,000	340,000	296,667
Total	7	7	7	270,000	410,000	333,571
<u>SODIUM</u>						
BGSED	4	4	4	99,000	300,000	179,750
FCSED, Upstream	3	3	3	130,000	170,000	153,333
Total	7	7	7	99,000	300,000	168,429

TABLE 4-53 (continued)

Parameter/Sample Program	N	N>0	N>MDL	Min	Max	Avg*
Other/Miscellaneous Compounds (0-12") (continued)						
<u>SULFATE (AS SO₄) (mg/kg)</u>						
BGSED	4	4	1	< 250	890	410
FCSED, Upstream	3	3	3	320	500	393
Total	7	7	4	< 250	890	403
<u>SULFIDE (AS S) (mg/kg)</u>						
BGSED	4	4	0	< 10	< 10	< 10
FCSED, Upstream	3	3	1	< 10	26	15
Total	7	7	1	< 10	26	12
<u>THALLIUM</u>						
BGSED	4	2	0	0	ND	142
FCSED, Upstream	3	2	0	0	ND	55
Total	7	4	0	0	ND	98
<u>TOTAL ORGANIC CARBON (mg/kg)</u>						
BGSED	4	4	4	7,665	22,000	12,897
FCSED, Upstream	3	3	3	8,830	22,000	14,893
Total	7	7	7	7,665	22,000	13,752
<u>VANADIUM</u>						
BGSED	4	4	4	79,000	140,000	109,500
FCSED, Upstream	3	3	3	68,000	100,000	83,667
Total	7	7	7	68,000	140,000	98,429
<u>% SOLID</u>						
BGSED	8	8	-	59.8	90.7	80.7
FCSED, Upstream	7	7	-	55.4	78	69.9
Total	15	15	-	55.4	90.7	75.7
Other/Miscellaneous Compounds (12-24")						
<u>SULFATE (AS SO₄) (mg/kg)</u>						
BGSED	1	1	1	420	420	420
FCSED, Upstream	1	1	0	< 250	< 250	< 250
Total	2	2	1	< 250	420	335
<u>SULFIDE (AS S) (mg/kg)</u>						
BGSED	1	1	0	< 10	< 10	< 10
FCSED, Upstream	1	1	0	< 10	< 10	< 10
Total	2	2	0	< 10	< 10	< 10
<u>TOTAL ORGANIC CARBON (mg/kg)</u>						
BGSED	1	1	1	4,350	4,500	4,425
FCSED, Upstream	1	1	1	8,300	9,300	8,800
Total	2	2	2	4,350	9,300	6,613

FRO 001 1266

TABLE 4-53 (continued)

Parameter/Sample Program	N	N>0	N $\geq$ MDL	Min	Max	Avg*
<i>Other/Miscellaneous Compounds (12-24") (continued)</i>						
<u>% SOLID</u>						
BGSED	3	3	-	77.9	87.2	82
FCSED, Upstream	3	3	-	75.5	77.6	76.7
Total	6	6	-	75.2	87.2	79.3

BGSED - Background Sediment
 FCSED - Frontera Creek Sediment

- * Based on all samples with a concentration or estimated concentration greater than zero. Includes samples which are listed as BMDL (below method detection limit) or ND (not detected).

FRO 001 1267

TABLE 4-54

**Comparison of Study Area Data with Control Data
for Inorganic Chemicals in Sediment Samples**

Parameter	Peak Concentration (ug/kg)			Ratio 1*	Ratio 2*
	Background	Upstream	Study Area		
Arsenic	1,600	10,000	14,000	8.8	1.4
Barium	272,000	190,000	278,000	1.0	1.5
Chromium	82,000	9,200	56,000	0.7	6.1
Copper	85,000	33,000	110,000	1.3	3.3
Lead	5,800	8,700	36,000	6.2	4.1
Zinc	110,000	87,000	200,000	1.8	2.3
Aluminum	23,800,000	16,200,000	43,500,000	1.8	2.7
Beryllium	740	300	910	1.2	3.0
Cobalt	64,000	20,000	30,000	0.5	1.5
Iron	58,880,000	40,600,000	57,200,000	1.0	1.4
Magnesium	6,540,000	6,500,000	8,065,000	1.2	1.2
Manganese	1,470,000	1,760,000	1,780,000	1.2	1.0
Nickel	64,000	4,100	12,000	0.2	2.9
Vanadium	140,000	100,000	230,000	1.6	2.3

Parameter	Average Concentration (ug/kg)			Ratio 1*	Ratio 2*
	Background	Upstream	Study Area		
Arsenic	738	6,733	8,225	11.1	1.2
Barium	104,550	127,567	157,400	1.5	1.2
Chromium	26,650	7,533	13,180	0.5	1.7
Copper	37,875	28,667	40,250	1.1	1.4
Lead	3,463	5,300	10,620	3.1	2.0
Zinc	57,250	77,333	112,500	2.0	1.5
Aluminum	11,631,250	15,533,333	29,450,000	2.5	1.9
Beryllium	440	285	434	1.0	1.5
Cobalt	25,125	15,333	16,444	0.7	1.1
Iron	38,950,000	34,800,000	41,729,000	1.1	1.2
Magnesium	3,476,000	4,853,333	5,890,000	1.7	1.2
Manganese	719,750	1,167,667	1,023,250	1.4	0.9
Nickel	18,938	3,333	6,053	0.3	1.8
Vanadium	109,500	83,667	117,750	1.1	1.4

* Ratio 1 = Study Area Concentration/Background Concentration
 Ratio 2 = Study Area Concentration/Upstream Concentration

TABLE 4-55

Literature Values for Mercury Concentrations in Sediment Samples

Sediment	Value (ug/kg)	Source
Remote	150 - 1,500	Forstner
Fossil lake	500	Forstner
Fossil river	200	Forstner
Wisconsin Lakes (pre-industrial)	10 - 240	ACOE/WES
Mobile Bay	210 - 600	ACOE/WES
Mississippi River Delta	80 - 570	ACOE/WES
Florida Everglades	120 - 490	ACOE/WES
Ottawa River (upstream of source)	280	ACOE
Marine	410	NAS
Freshwater	300	NAS

FRO 001 1269

TABLE 4-56

Summary of Bird Censuses

Species Found	STUDY AREA 35 segments			BOQUERON 9 segments			ROOSEVELT ROAD 4 segments		
	No.	Pct. Count	Max Count	No.	Pct. Count	Max Count	No.	Pct. Count	Max Count
Pied-billed Grebe	10	29	5	2	22	3	0	0	-
Brown Pelican	11	31	13	1	11	1	3	75	3
Magnificent Frigatebird	1	3	3	2	22	2	0	0	-
Green-backed Heron	18	51	4	8	89	7	4	100	6
Little Blue Heron	7	20	2	5	56	9	4	100	7
Great Blue Heron	9	26	12	4	44	3	2	50	1
Tricolored Heron	6	17	7	2	22	2	2	50	3
Cattle Egret	26	74	525	7	78	129	4	100	34
Great Egret	22	63	9	7	78	3	4	100	4
Snowy Egret	5	14	2	1	11	1	1	25	1
Yellow-crown Night Heron	1	3	1	0	0	-	1	25	1
Black-crown Night Heron	5	14	1	0	0	-	0	0	-
Least Bittern	3	9	1	2	22	1	0	0	-
Blue-winged Teal	8	23	28	0	0	-	3	75	22
White-cheeked Pintail	9	26	19	0	0	-	4	100	8
Ruddy Duck	5	14	9	0	0	-	0	0	-
Red-tailed Hawk	3	9	2	0	0	-	0	0	-
Turkey Vulture	0	0	-	2	22	1	0	0	-
Osprey	17	49	10	1	11	1	4	100	2
Kestrel	0	0	-	0	0	-	1	25	1
Merlin	2	6	1	1	11	1	0	0	-
Peregrine	1	3	1	0	0	-	0	0	-
Coot	3	9	5	0	0	-	0	0	-
Common Gallinule	24	69	20	8	89	21	4	100	6
Purple Gallinule	2	6	1	0	0	-	0	0	-
Clapper Rail	0	0	-	1	11	5	0	0	-
Killdeer	0	0	-	0	0	-	2	50	4

TABLE 4-56 (continued)

Species Found	STUDY AREA 35 segments			BOQUERON 9 segments			ROOSEVELT ROAD 4 segments		
	No.	Pct. Count	Max Count	No.	Pct. Count	Max Count	No.	Pct. Count	Max Count
Greater Yellowlegs	0	0	-	2	22	4		100	6
Lesser Yellowlegs	0	0	-	1	11	4	1	25	2
Spotted Sandpiper	7	20	1	0	0	-	4	100	4
Common Snipe	1	3	1	0	0	-	1	25	3
Laughing Gull	0	0	-	0	0	-	4	100	75
Royal Tern	0	0	-	0	0	-	4	100	4
Zenaida Dove	2	6	1	4	44	3	4	100	22
Common Ground Dove	3	9	2	2	22	19	4	100	5
Mangrove Cuckoo	0	0	-	2	22	1	2	50	1
Smooth-billed Ani	19	54	13	5	56	11	3	75	15
Crested Hummingbird	1	3	0	0	-	1	25	1	
Puerto Rican Woodpecker	0	0	-	2	22	3	1	25	1
Belted Kingfisher	0	0	-	3	33	1	4	100	3
Gray Kingbird	13	37	4	3	33	52	4	100	9
Puerto Rican Flycatcher	0	0	-	2	22	3	1	25	1
Lesser Antillean Pewee	0	0	-	1	11	2	1	25	1
Caribbean Martin	0	0	-	0	0	-	4	100	12
Barn Swallow	0	0	-	5	56	6	4	100	8
Cave Swallow	1	3	8	1	11	8	3	75	2
Pearly-eyed Thrasher	1	3	1	2	22	2	3	75	2
Northern Mockingbird	2	6	2	0	0	-	1	25	1
Bananaquit	8	23	7	8	89	90	4	100	18
Black & White Warbler	0	0	-	2	22	2	2	50	1
Prothonotary Warbler	0	0	-	2	22	1	3	75	2
Yellow Warbler	4	11	3	8	89	68	4	100	8
Adelaide's Warbler	0	0	-	2	22	3	0	0	-
Northern Parula	0	0	-	3	33	6	1	25	1
Cape May Warbler	0	0	-	2	22	2	0	0	-

TABLE 4-56 (continued)

Species Found	STUDY AREA 35 segments			BOQUERON 9 segments			ROOSEVELT ROAD 4 segments		
	No.	Pct. Count	Max Count	No.	Pct. Count	Max Count	No.	Pct. Count	Max Count
Northern Waterthrush	4	11	5	8	89	31	2	50	1
Ovenbird	1	3	1	1	11	1	0	0	-
Common Yellowthroat	2	6	1	1	11	1	4	100	6
American Redstart	0	0	-	3	33	2	0	0	-
Stripe-headed Tanager	1	3	1	0	0	-	0	0	-
Greater Antillean Grackle	6	17	40	6	67	8	2	50	12
Shiny Cowbird	1	3	1	3	33	1	3	75	2
Black-faced Grassquit	7	20	42	5	56	33	4	100	16
Yellow-faced Grassquit	4	11	2	1	11	2	1	25	2
Orange-cheeked Waxbill	2	6	7	0	0	-	0	0	-
Black-headed Mannikin	5	14	35	0	0	-	0	0	-
Total = 66 species			45			45			47

Species found other than Censuses

West Indian Whistling Duck
 Yellow-breasted Crane
 Pintailed Widgeon
 Red Bishop

TABLE 4-57

Biological Characteristics of Adult Birds Analyzed
from Frontera and Boqueron

	Frontera	Boqueron
CATTLE EGRETS		
Sex Ratio (M:F)	3:3	4:2
Mean Weight (gm)	308 $\pm$ 25	346 $\pm$ 67
Range in Weight	269.4 - 346.7	263.0 - 458.9
GALLINULES		
Sex Ratio (M:F)	1:1	3:2
Mean Weight (gm)	385 $\pm$ 46	386 $\pm$ 53
Range in Weight	326.0 - 449.2	269.9 - 427.9

FRO 001 1273

TABLE 4-58

Characteristics of People Fishing and Crabbing at Humacao, Puerto Rico
(given are means $\pm$ SD)

	Crabbing	Fishing	$\chi^2(P)$
Number of Interviews	20	25	NS
Sample Hour	1455 $\pm$ 0.8	1635 $\pm$ 0.6	NS
Arrival Hour ¹	1350 $\pm$ 0.8	1501 $\pm$ 0.6	NS
Percent Cloud Cover	27 $\pm$ 6	36 $\pm$ 6	NS
Number of People in Group	3.5 $\pm$ 0.4	2.9 $\pm$ 0.3	NS
Number of Adults	2.3 $\pm$ 0.3	2.3 $\pm$ 0.2	NS
Number Fish Caught per Session	21.4 $\pm$ 4.7	16.9 $\pm$ 3.5	NS
Number Fish Caught per Hour	21.6 $\pm$ 4.9	11.3 $\pm$ 2.6	NS
Number of Times at Humacao per Month ²	3.8 $\pm$ 0.7	2.8 $\pm$ 0.4	NS
Range in Number of Times at Humacao	0-10	0-6	-
Number Fish Eaten per Week	13.3 $\pm$ 2.3	6.8 $\pm$ 0.7	7.05 (.007)
Range in Number Eaten per Week	0-25	3-30	-

1 - for fisherman or crabbers

2 - either crabbing or fishing

FR0 001 1274

TABLE 4-59

Percent of People Eating the Catch

	Crabs	Fish
Number of People Responding	20	24
	<u>Pct.</u>	<u>Pct.</u>
Immediate Family	60	67
Friends	20	21
Other Relatives	20	12

PRO 001 1275

TABLE 4-60

Percent of People Eating Parts of Catch

	Crabs		Fish	
Number of People Responding	20		25	
	<u>Pct.</u>	<u>Sample Size</u>	<u>Pct.</u>	<u>Sample Size</u>
Everything	80	16	52	13
Claws and Abdomen	15	3		
Abdomen Only	5	1		
Fillet			4	1
All but Head			44	11

χ^2 Not significant for "all" versus "other parts"

PRO 001 1276

TABLE 4-61

Gill Net Collection Data

(each line represents 1 net - 125 feet long; does not include gill net operations where fish were driven into the net or where nets were stolen)

	Net Number*	Start Date	Night or Day	Time (hrs)	Land Crab	Blue Crab	Tilapia	Tarpon	Robalo	Anchovy	Darter
FRONTERA											
Mandri Canal	1A	24 Feb	N	16	-	13	35	4	3	13	-
	2A	25 Feb	D	5.5	-	12	14	3	-	12	-
	2B	28 Mar	D	4.5	-	-	37	-	-	-	-
Subtotal				26	-	25	86	7	3	25	-
North Lagoon	3A	24 Feb	N	15	-	11	5	-	14	-	-
	4A	25 Feb	D	5	-	4	2	1	1	-	-
	5A	25 Feb	N	17	-	-	6	-	8	-	-
	7A	26 Feb	N	24	-	39	20	1	1	16	-
	11A	26 Feb	N	26	-	10	32	6	2	-	-
Subtotal				87	-	64	65	8	26	16	-
Southwest Lagoon											
	6A	25 Feb	N	14	-	3	26	20	-	-	-
	6B	26 Mar	N	25	-	3	47	10	-	-	-
	6C	28 Mar	D	7.5	-	5	45	2	-	-	-
	6D	28 Mar	N	16.5	-	3	34	7	1	-	-
Subtotal				63	-	14	152	39	1	-	-
Frontera Creek											
	8A	26 Feb	N	24	-	-	-	-	-	-	-
	9A	26 Feb	N	24	-	-	-	-	-	-	-
	10A	26 Feb	N	24	-	-	-	-	-	-	-
	12A	26 Feb	N	24	-	-	-	-	-	-	-
	10B	26 Mar	N	25	-	-	-	-	-	-	-
	12B	26 Mar	N	25	-	-	-	-	-	-	-
	10C	27 Mar	N	25	-	-	-	-	-	-	-
	12C	27 Mar	N	23	-	-	6	-	-	-	-
Subtotal				194	-	-	6	-	-	-	-

TABLE 4-61 (continued)

	Net Number*	Start Date	Night or Day	Time (hrs)	Land Crab	Blue Crab	Tilapia	Tarpon	Robalo	Anchovy	Darter
BOQUERON											
Outside (Bay)	1A	22 Feb	D	6	-	6	13	-	3	-	4
	1B	22/Feb	N	17	-	-	21	-	-	-	-
	1C	23 Feb	D	4	3	15	5	2	1	22	3
	1D	23/Feb	N	18	1	-	1	-	5	-	-
	1E	24 Feb	D	4	1	6	-	-	-	-	-
	1F	22 Mar	N	13.5	-	6	9	4	4	-	-
	1G	23 Mar	D	8.5	-	3	10	-	-	-	-
	5A	23 Mar	D	6	-	-	-	-	-	-	-
	6A	23 Mar	D	6	-	18	-	-	1	-	-
	1H	23 Mar	N	16	-	1	1	-	-	-	-
	6B	23 Mar	N	19	-	7	-	-	-	-	-
	5B	23 Mar	N	19	-	1	-	-	-	-	-
	7A	24 Mar	D	2	-	-	-	-	-	-	-
	1I	24 Mar	N	8.8	-	2	3	-	-	-	-
	7B	24 Mar	N	24	-	6	-	-	-	-	-
	8A	24 Mar	N	24	-	15	-	-	-	-	-
	Subtotal			195.8	5	86	63	6	14	22	7
Inside (Lagoon)	2A	23 Feb	D	4	-	2	4	-	-	-	-
	3A	23 Feb	D	4	-	-	-	1	-	-	-
	4A	23 Feb	D	4	-	-	-	-	-	-	-
	2B	23 Feb	N	18	-	3	11	2	-	-	-
	3B	23 Feb	N	18	-	-	-	-	-	-	-
	4B	23 Feb	N	18	-	-	-	-	-	-	-
	2B	23 Feb	D	4	-	4	-	-	-	-	-
	9A	22 Mar	N	25.5	-	-	-	-	-	-	-
	10A	23 Mar	D	8	-	1	31	3	2	-	-
	10B	23 Mar	N	15.5	-	1	41	3	-	-	-
	11A	23 Mar	N	15.5	-	1	29	4	-	-	-
	Subtotal			134.5	-	12	116	13	2	-	-

TABLE 4-61 (continued)

	Net Number*	Start Date	Night or Day	Time (hrs)	Land Crab	Blue Crab	Tilapia	Tarpon	Robalo	Anchovy	Darter
ROOSEVELT ROADS											
Lagoon	1A	25 Mar	N	15.3	-	27	85	7	4	-	-
	1B	26 Mar	D	4.0	-	-	8	-	-	-	-
	1C	26 Mar	N	17.5	-	9	20	5	1	-	-
	2A	27 Mar	D	3.5	-	-	1	4	-	-	-
	1D	27 Mar	N	25.0	-	-	1	-	-	-	-
	2B	27 Mar	N	23.0	-	-	15	-	-	-	-
Subtotal				88.3	-	36	130	16	9	-	-
Creek	3A	25 Mar	N	15.5	-	6	18	4	1	-	-
	3B	26 Mar	D	3	-	2	1	-	-	-	-
	4A	26 Mar	D	4	-	-	3	1	-	-	-
	5A	26 Mar	N	19	-	4	6	-	-	-	3
	3C	26 Mar	N	19.5	-	-	-	2	-	-	-
	4B	27 Mar	D	2.5	-	-	-	13	-	-	-
Subtotal	5B	27 Mar	D	20	-	2	3	-	-	-	-
				83.5	-	14	31	20	1	-	3

* Corresponds to number on figures. Letter refers to the order nets were checked.

TABLE 4-62
Summary of Gill Net Operations
(total numbers caught in the nets)

Location	Total Net Time (Hr.)	Land Crabs	Blue Crabs	Tilapia	Tarpon	Robalo	Anchovy	Darter	Total fish/ Net Hr.	Tilapia/ Net Hr.
BOQUERON										
Outside (Bay)	195.8	5	83	63	6	14	22	7	0.64	0.32
Inside (Lagoon)	116.5	-	8	106	13	2	-	-	1.04	0.91
FRONTERA										
Mandri Canal	26	-	25	86	7	3	25	-	4.65	3.31
North Lagoon	87	-	64	65	8	26	16	-	1.80	0.75
Southwest Lagoon	63	-	14	152	39	1	-	-	3.05	2.41
Frontera Creek	192	-	-	6	-	-	-	-	0.03	0.03
ROOSEVELT ROADS										
Lagoon	88.8	-	36	130	16	5	-	-	1.70	1.46
Creek	83.5	-	13	32	20	1	-	-	0.62	0.37

TABLE 4-63

Weight and Length of Fish Captured at Study Area and Control Sites*

	-----Tilapia-----		-----Tarpon-----	
	Weight (gm)	Length (cm)	Weight (gm)	Length (cm)
STUDY AREA				
Mandri Canal	351.9 + 131	22.0 + 2.7	669.3 + 300	35.6 + 5
Frontera Creek	113.3 + 10	14.8 + 0.3	--	--
Frontera Lagoon	340.2 + 107	21.4 + 2.5	764.7 + 387	36.2 + 7
North	423.3 + 89	21.8 + 2.3	--	--
Southwest	328.1 + 179	21.1 + 2.5	--	--
ROOSEVELT ROADS				
Creek	330.2 + 179	21.2 + 4.5	808.4 + 431	37.1 + 8
Lagoon	190.7 + 95	17.6 + 3.1	214.1 + 217	23.2 + 7
BOQUERON				
Inside (Lagoon)	319.8 +118	21.2 + 3.4	1211.5 + 420	42.3 + 6
Outside (Bay)	232.5 +108	19.8 + 3.5	732.5 + 33	36.5 + 2

* Sample sizes can be found in Table 4-60

PRO 001 1281

TABLE 4-64

Coefficient of Variation for Weight and
Length of Tarpon and Tilapia Collected

	-----Tilapia-----		-----Tarpon-----	
	Weight (gm)	Length (cm)	Weight (gm)	Length (cm)
FRONTERA				
Mandri Canal	.37	.12	.45	.15
Frontera Creek	.10	.02	--	--
Frontera Lagoons	.31	.12	.51	.18
ROOSEVELT ROADS				
Creek	.54	.21	.54	.22
Lagoon	.50	.17	1.01	.28
BOQUERON				
Inside (lagoon)	.37	.16	.35	.13
Outside (bay)	.47	.17	.18	.04

FRO 001 1282

TABLE 4-65

Shrimp Dip Net Hauls at Frontera

Location	Dip Net Number	Number of Shrimp	Number of Insect Larvae
Frontera Creek	1	0	0
	2	0	0
	3	0	0
North Lagoon	1	30	0
	2	58	0
	3	0	0
	4	34	0
	5	86	0
	6	98	0
	7	79	0
	8	120	0
	9	25	172
	10	58	129
	11	54	75
Southwest Lagoon	1	168	0
	2	80	0
	3	24	0
	4	83	0
	5	61	0
Mandri Canal	1	82	0
	2	45	0
	3	48	0
	4	48	0
	5	53	0

Note: each dip was over a 3 m area at the surface in grass beds

FRO 001 1283

TABLE 4-66

Trapping Summary

Species/Location	Date	Method	Number of Hooks or Traps	Number of People	Total Time (hrs)	Number Captured
BLUE CRAB						
Mandri Canal	24 Feb	Hook and chicken	8	2	8	92
Frontera Creek	24 Feb	Hook and chicken	5	2	8	0
Frontera Lagoon	24 Feb	Hook and chicken	3	2	8	10
Frontera Creek	24 Feb	Star trap and chicken	1	1	22	0
Mandri Canal	24 Feb	Hook and chicken	6	2	4	22
Frontera Creek	25 Feb	Hook and chicken	3	2	4	0
Frontera Lagoon	25 Feb	Hook and chicken	3	1	10	5
Frontera Creek	25 Feb	Star trap and chicken	1	1	12	0
Roosevelt Roads	28 Mar	Star trap and chicken	2	2	3	25
Roosevelt Roads	28 Mar	Hook and chicken	3	3	4	4
Boqueron	24 Mar	Hook and chicken	6	2	3	8
Roosevelt Roads ¹	28 Mar	Star trap and chicken	4	3	5	5
LIZARD						
Boqueron Dump	23 Mar	Drift fence	1	2	4	0
Beach	23 Mar	Drift fence	2	4	3.5	0
Beach	23 Mar	By hand	-	4	3.5	2
Beach	24 Mar	Drift fence	4	8	6.5	9
Refuge	24 Mar	Rat trap	5	1	7	4
Roosevelt Road Creek	27 Mar	Rat trap	10	2	4	0
McDonalds	27 Mar	Rat trap	5	2	3	4
Frontera Headquarters	26 Mar	Rat trap	10	4	4.5	16
Pumphouse	26 Mar	Rat trap	8	2	2	2
Cristiana	29 Mar	Rat trap	20	2	3	3
Cristiana	29 Mar	Rat trap	20	4	4	4

1 - local experts

FRO 001 1284

TABLE 4-67
Summary of Crab and Lizard Collections

	Mean No. of Devices	Mean No. of People	Time (hrs)	Number Captured	Specimens/hr. x people x traps
CRAB (Hooks and star traps only)					
FRONTERA					
Mandri Canal	7	2	12	114	0.68
Frontera Creek	5	2	8	0	0
Frontera Lagoons	3	2	18	15	0.14
ROOSEVELT ROADS	3	3	4	4	0.11
BOQUERON	6	2	3	8	0.22
LIZARD (Rat traps only)					
FRONTERA	9	3	6.5	18	0.10
CRISTIANA	20	3	7	7	0.02
ROOSEVELT ROADS	8	2	7	4	0.04
BOQUERON	5	1	7	17	0.49

TABLE 4-68

Weight and Size of Crabs Analysed at On-site and
Background Biota Sampling Locations
(given are means $\pm$ standard deviations;
sample sizes can be found in Table 4-62)

Location	Whole Body Weight (gm) ¹	Carapace Width (point to point, cm)	Carapace Length (cm)	Tail Length (cm)
FRONTERA				
Mandri Canal	73.3 $\pm$ 16	11.0 $\pm$ 0.9	6.0 $\pm$ 0.4	4.0 $\pm$ 0.3
Lagoons	90.3 $\pm$ 15	11.9 $\pm$ 0.8	6.3 $\pm$ 0.4	4.3 $\pm$ 0.3
ROOSEVELT ROADS				
Lagoons	68.1 $\pm$ 9	10.6 $\pm$ 0.6	5.9 $\pm$ 0.3	4.0 $\pm$ 0.2
BOQUERON				
Outside	57.4 $\pm$ 18	9.9 $\pm$ 1	5.3 $\pm$ 0.5	3.3 $\pm$ 0.3
Inside	118.5 $\pm$ 20	13.1 $\pm$ 1	7.0 $\pm$ 0.4	4.5 $\pm$ 0.4

1 - without claws

PRO 001 1286

TABLE 4-69

Characteristics of Lizards (*Ameiva exsul*)
Collected at On-site and Background Biota Sampling Locations

	Frontera	Boqueron	Roosevelt Roads
Sex Ratio (M:F)	14:4	14:3	4:0
Weight (gm)	39.1 $\pm$ 21.3	30.5 $\pm$ 15.5	14.5 $\pm$ 3.7
Range in Weight	18.0 - 80.8	9.5 - 62.4	13.0 - 20

FRO 001 1287

TABLE 4-70

Presence or Absence of Organisms in Mud as Determined by
Grab Samples of Bottom Sediments

	Gastropods ¹	Annelid Worms	Insect Larva ²	Bivalve Molluscs ³
FRONTERA				
Frontera Creek Bridge near Santa Teresa Pump Station	No	No	No	No
Frontera Creek Bridge at West End of Lagoons	No	No	No	No
Route 3 Bridge	Yes	Yes	No	No
Mandri Canal	No	No	No	No
Lagoons	Yes	Yes	No	No
BOQUERON				
	Yes	No	Yes	Yes
ROOSEVELT ROADS				
	No	No	No	No

1 - Potamididae, Vitrinella

2 - Diptera

3 - Astartes, Tagelus

PRO 001 1288

TABLE 4-71

**Physical Characteristics at Frontera Creek Site and Mandri Canal
as a Function of Time of Day (March 28, 1988)**

Location/Characteristic	-----Time of Day-----		
	1000-1100	1300-1500	1655-1900
Frontera Creek Bridge near Santa Teresa Pump Station			
pH	7.93	8.10	8.3
O ₂ (mg/L)	2.20	1.0	0.8
temperature (°C)	25.8	26.3	26.0
salinity (ppt)	2.0	2.0	3.0
Frontera Creek Bridge at West End of Lagoons			
pH	-	7.68	-
O ₂ (mg/L)	-	0.4	-
temperature (°C)	-	26.8	-
salinity (ppt)	-	2.0	-
Frontera Creek Route 3 Bridge			
pH	-	-	7.45
O ₂ (mg/L)	-	-	5.2
temperature (°C)	-	-	26.8
salinity (ppt)	-	-	0
Mandri Canal			
pH	7.70	8.00	8.00
O ₂ (mg/L)	5.20	8.2	8.1
temperature (°C)	26.0	26.5	27.0
salinity (ppt)	6.0	5.0	6.0

TABLE 4-72

Summary of Physical Characteristics at On-site and Background
Biota Sampling Locations (March 24-26, 1988)

(given are mean $\pm$ standard deviation; if none given it was 0)

Location	pH (avg. of 4 readings)	O ₂ (mg/L) (avg. of 2 readings)	Temperature (°C) (avg. of 2 readings)	Salinity (ppt) (avg. of 10 readings)
FRONTERA				
Mandri Canal	8.03 $\pm$ 0.04	7.4	28.0	4.0
North Lagoon	8.0 $\pm$ 0	8.1	28.8	6.0
Southwest Lagoon	7.35 $\pm$ 0.09	6.2	29.0	3.0
Transect Along Net in Southwest Lagoon (avg. of 10 readings)	-	-	-	2.9 $\pm$ 19.0
Frontera Creek (March 28, 1988 - from Table 4-60)	7.89 $\pm$ 0.30	1.92 $\pm$ 1.74	26.3 $\pm$ 0.40	2.2 $\pm$ 0.4
BOQUERON				
Gate North of No. 6	7.97 $\pm$ 0.04	0.9	25.0	2.0
Gate No. 6 - inside	8.28 $\pm$ 0.08	1.25 $\pm$ 0.05	25.0	6.0
Gate No. 6 - outside	8.00 $\pm$ 0.10	3.2	26.0	36.0
Boat Launch	8.42 $\pm$ 0.11	3.6	25.0	6.0
Shrimp Site	8.3 $\pm$ 0	4.8	25.0	4.0
ROOSEVELT ROADS				
Lagoon	8.05 $\pm$ 0.05	3.4	27.0	14.0
Creek (bridge)	7.63 $\pm$ 0.04	2.6	26.5	0.0
Creek (2nd bridge)	7.63 $\pm$ 0.04	3.2	26.0	0.0

FRO 001 1290

TABLE 4-73

Mercury Data for the Rutgers Biota Samples
(MDL = 80; values in ug/kg)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
CRABS - FRONTERA NORTH LAGOON								
WHOLE - 5 CRABS								
CF203	BH1323	880225	BMDL	49	UJ	ND	0	UJ
CF204	BH1314	880227	ND	0	UJ	ND	0	UJ
CF220	BH1322	880224	BMDL	52	UJ	ND	0	UJ
EDIBLE - 5 CRABS								
CF202	BF1043	880225	BMDL	36	UJ	ND	0	UJ
CF206	BF1190	880227	ND	0	UJ	ND	0	UJ
CF207	BF1186	880227	BMDL	48	UJ	ND	0	UJ
CF250 REP	BF1172	880227	BMDL	36	UJ	ND	0	UJ
CF208	BF1166	880227	ND	0	UJ	ND	0	UJ
CF209	BF1141	880227	ND	0	U	ND	0	UJ
CF210	BF1182	880227	ND	0	UJ	ND	0	UJ
CRABS - MANDRI CANAL								
WHOLE - 5 CRABS								
CM207	BH1311	880224	ND	0	UJ	ND	0	UJ
CM208	BH1327	880224	ND	0	UJ	ND	0	UJ
CM220	BH1336	880225	BMDL	40	UJ	ND	0	UJ
EDIBLE - 5 CRABS								
CM201	BF1191	880224	ND	0	UJ	ND	0	UJ
CM203	BF1163	880224	ND	0	UJ	ND	0	UJ
CM250 REP	BF1193	880224	ND	0	UJ	ND	0	UJ
CM206	BF1194	880224	ND	0	UJ	ND	0	UJ
CM213	BF1171	880225	ND	0	UJ	ND	0	UJ
CM221	BF1169	880224	ND	0	UJ	ND	0	UJ
CM222	BF1170	880224	ND	0	UJ	ND	0	UJ
CRABS - BOQUERON								
WHOLE - 5 CRABS								
C001	BH1312	880222	ND	0	UJ	ND	0	UJ
C008	BH1313	880323	ND	0	UJ	ND	0	UJ
C026	BH1335	880325	BMDL	56	UJ	ND	0	UJ
EDIBLE - 5 CRABS								
C003	BF1189	880223	BMDL	40	UJ	ND	0	UJ
C005	BF1164	880224	ND	0	UJ	ND	0	UJ
C007	BF1185	880323	BMDL	48	UJ	ND	0	UJ
C040	BF1165	880223	ND	0	UJ	ND	0	UJ
C041	BF1167	880223	ND	0	UJ	ND	0	UJ
C042	BF1168	880223	BMDL	36	UJ	ND	0	UJ

FRO
001
1291

FRO 001 1291

TABLE 4-73 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
CRABS - ROOSEVELT ROADS								
WHOLE - 5 CRABS								
C411	BH1334	880327	ND	0	UJ	ND	0	UJ
C415	BH1331	880328	ND	0	UJ	ND	0	UJ
C418	BH1333	880328	ND	0	UJ	ND	0	UJ
EDIBLE - 5 CRABS								
C401	BF1184	880325	ND	0	UJ	ND	0	UJ
C402	BF1183	880325	ND	0	UJ	ND	0	UJ
C403	BF1192	880325	ND	0	UJ	ND	0	UJ
C404	BF1195	880326	ND	0	UJ	ND	0	UJ
C405	BF1187	880326	ND	0	UJ	ND	0	UJ
C450	BF1188	880326	ND	0	UJ	ND	0	UJ
C406	BF1173	880326	ND	0	UJ	ND	0	UJ
WHOLE SHRIMP - FRONTERA NORTH LAGOON								
SF201	BF1010	880225	ND	0	UJ	BMDL	36	UJ
SF202	BF1007	880225	ND	0	UJ	ND	0	UJ
SF203	BF1011	880225	BMDL	36	UJ	ND	0	UJ
SF204	BF1026	880225	BMDL	36	UJ	ND	0	UJ
SF205	BF1020	880225	BMDL	40	UJ	ND	0	UJ
SF206	BF1008	880225	BMDL	36	UJ	ND	0	UJ
WHOLE SHRIMP - MANDRI CANAL								
SM201	BF1025	880224	ND	0	UJ	BMDL	36	UJ
SM202	BF1024	880225	BMDL	36	UJ	ND	0	UJ
SM203	BF1009	880227	BMDL	48	UJ	ND	0	UJ
WHOLE SHRIMP - BOQUERON								
S001	BF1030	880222	ND	0	UJ	ND	0	UJ
S002	BF1023	880222	ND	0	UJ	ND	0	UJ
S003	BF1015	880222	ND	0	UJ	ND	0	UJ
WHOLE SHRIMP - ROOSEVELT ROADS								
S401	BF1016	880326	ND	0	UJ	ND	0	UJ
S402	BF1022	880326	ND	0	UJ	ND	0	UJ
S403	BF1029	880326	ND	0	UJ	ND	0	UJ

FRO 001 1292

TABLE 4-73 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
TARPON - FRONTERA LAGOONS								
WHOLE - 5 FISH								
X208	BF0989	880226	BMDL	48	UJ	ND	0	UJ
X209	BH1318	880226	ND	0	UJ	ND	0	UJ
X251 REP	BH1325	880226	ND	0	UJ	ND	0	UJ
X216	BF0994	880226	BMDL	40	UJ	ND	0	UJ
X227	BH1320	880226	BMDL	40	UJ	ND	0	UJ
X217	BF0992	880227	BMDL	56	UJ	ND	0	UJ
X250 REP	BF0993	880227	BMDL	60	UJ	ND	0	UJ
X220	BH1321	880227	BMDL	52	UJ	ND	0	UJ
FILLET - 5 FISH								
X201	BF1077	880225		104	J	ND	0	UJ
X202	BF1104	880226		112	J	ND	0	UJ
X252 REP	BF1107	880226		128	J	ND	0	UJ
X203	BF1038	880226		144	J	ND	0	UJ
X205	BF1035	880226		92	J	ND	0	UJ
X215	BF1108	880226		92	J	ND	0	UJ
X224	BF1102	880327		132	J	ND	0	UJ
LIVER - 5 FISH								
X200	BF1135	880226	ND	0	U	ND	0	UJ
LIVER - 15 FISH								
X240	BF1110	880226	BMDL	48	UJ	ND	0	UJ
LIVER - 10 FISH								
X241	BF1139	880225	ND	0	U	ND	0	UJ
TARPON - MANDRI CANAL								
FILLET - 2 FISH								
X260	BF1105	880225		156	J	ND	0	UJ
X261	BF1096	880225		128	J	ND	0	UJ
X262	BF1090	880225		128	R1	ND	0	UJ
X265 REP	BF1106	880225		120	J	ND	0	UJ
FILLET - 1 FISH								
X263	BF1080	880225	BMDL	56	UJ	ND	0	UJ
FILLET - 5 FISH, COMPOSITE OF 3 SAMPLES								
X264	BF1100	880225		112	J	ND	0	UJ
LIVER - 7 FISH								
X266	BF1111	880225	BMDL	58	UJ	ND	0	UJ

TABLE 4-73 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
TARPON - BOQUERON								
WHOLE - 2 FISH								
X005	BF0995	880324	ND	0	UJ	ND	0	UJ
X014	BH1324	880324	ND	0	UJ	ND	0	UJ
X002	BF0999	880226	ND	0	UJ	ND	0	UJ
X003	BH1329	880324	ND	0	UJ	ND	0	UJ
WHOLE - 1 FISH								
X008	BF0991	880324	ND	0	UJ	ND	0	UJ
X040	BH1328	880324	ND	0	UJ	ND	0	UJ
WHOLE - 5 FISH, COMPOSITE OF ABOVE SAMPLES								
X001	BF0998	880324	ND	0	UJ	ND	0	UJ
X041	BH1326	880324	ND	0	UJ	ND	0	UJ
FILLET - 2 FISH								
X007	BF1099	880323	BMDL	48	UJ	ND	0	UJ
X004	BF1093	880224	BMDL	56	UR1	ND	0	UJ
X050 REP	BF1094	880224	BMDL	44	UR1	ND	0	UJ
X009	BF1079	880324	ND	0	UJ	ND	0	UJ
FILLET - 5 FISH, COMPOSITE OF ABOVE SAMPLES								
X012	BF1143	880323	ND	0	U	ND	0	UJ
FILLET - 2 FISH								
X006	BF1081	880323	ND	0	UJ	ND	0	UJ
X042	BF1076	880223	BMDL	40	UJ	ND	0	UJ
FILLET - 5 FISH, COMPOSITE OF ABOVE SAMPLES								
X013	BF1065	880326	ND	0	UJ	ND	0	UJ
FILLET - 1 FISH								
X043	BF1095	880323	ND	0	UR1	ND	0	UJ
LIVER - 2 FISH								
X045	BF1137	880323	ND	0	U	ND	0	UJ
LIVER - 8 FISH								
X046	BF1140	880223	ND	0	U	ND	0	UJ

TABLE 4-73 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
TARPON - ROOSEVELT ROADS								
WHOLE - 5 FISH								
X402	BF0987	880326	ND	0	UJ	ND	0	UJ
X410	BH1310	880326	ND	0	UJ	ND	0	UJ
X404	BF0996	880326	ND	0	UJ	ND	0	UJ
X417	BH1332	880326	ND	0	UJ	ND	0	UJ
X418	BF0990	880328	ND	0	UJ	ND	0	UJ
X430	BH1315	880328	ND	0	UJ	ND	0	UJ
FILLET - 5 FISH								
X405	BF1064	880326		152	J	ND	0	UJ
X406	BF1092	880327	BMDL	52	UR1	ND	0	UJ
X407	BF1066	880326	BMDL	68	UJ	ND	0	UJ
X412	BF1098	880327		204	J	ND	0	UJ
X416	BF1091	880326	BMDL	72	UR1	ND	0	UJ
X501	BF1086	880326		244	R1	ND	0	UJ
X550 REP	BF1103	880326		232	J	ND	0	UJ
LIVER - 15 FISH								
X440	BF1114	880326	BMDL	52	UJ	ND	0	UJ
X540 REP	BF1136	880326	BMDL	44	U	ND	0	UJ
LIVER - 10 FISH								
X441	BF1138	880326	ND	0	U	ND	0	UJ
TILAPIA - FRONTERA CREEK								
FILLET - 1 FISH								
T202	BF1084	880227		96	J	ND	0	UJ
T203	BF1078	880227		84	J	ND	0	UJ
T204	BF1088	880227	BMDL	64	UR1	ND	0	UJ
T205	BF1063	880227		92	J	ND	0	UJ
T206	BF1085	880227		460	J		84	J
T207	BF1089	880227		148	R1	ND	0	UJ
FILLET - 6 FISH, COMPOSITE OF ABOVE SAMPLES								
T201	BF1083	880227		108	J	BMDL	52	UJ
LIVER - 6 FISH								
T210	BF1134	880227		-	**		480	J

TABLE 4-73 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
TILAPIA - NORTH LAGOON								
WHOLE - 5 FISH								
TF202	BF1034	880227	BMDL	40	UJ	ND	0	UJ
FILLET - 5 FISH								
TF204	BF1145	880225	BMDL	78	UJ	ND	0	UJ
TF250 REP	BF1082	880225	BMDL	64	UJ	ND	0	UJ
TF207	BF1147	880227	BMDL	56	UJ	ND	0	UJ
TILAPIA - SOUTHWEST LAGOON								
WHOLE - 5 FISH								
TS204	BF1039	880327	BMDL	40	UJ	ND	0	UJ
TS211	BF1000	880327	ND	0	UJ	ND	0	UJ
FILLET - 5 FISH								
TS202	BF1144	880226	BMDL	49	UJ	ND	0	UJ
TS207	BF1153	880226	BMDL	42	UJ	ND	0	UJ
TS208	BF1151	880226	BMDL	56	UJ	ND	0	UJ
TS209	BF1161	880226	ND	0	UJ	ND	0	UJ
LIVER - 20 FISH								
TS200	BF1109	880226		133	J	ND	0	UJ
TILAPIA - MANDRI CANAL								
WHOLE - 5 FISH								
TM202	BF1012	880225	BMDL	48	UJ	ND	0	UJ
TM251 REP	BF1005	880225	ND	0	UJ	ND	0	UJ
TM204	BF1003	880328	ND	0	UJ	ND	0	UJ
TM211	BF1014	880225	ND	0	UJ	ND	0	UJ
FILLET - 5 FISH								
TM201	BF1148	880225	BMDL	64	UJ	ND	0	UJ
TM203	BF1157	880225	ND	0	UJ	ND	0	UJ
TM206	BF1150	880225	ND	0	UJ	ND	0	UJ
TM250 REP	BF1097	880225	ND	0	UJ	ND	0	UJ
TM207	BF1159	880225	ND	0	UJ	ND	0	UJ
TM208	BF1154	880225	ND	0	UJ	ND	0	UJ
TM209	BF1155	880225	ND	0	UJ	ND	0	UJ
LIVER - 20 FISH								
TM200	BF1115	880225		80	UJ	ND	0	UJ

TABLE 4-73 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury						
			Lab	Qual	Value	QA	Qual	Lab	Qual	Value	QA	Qual
TILAPIA - BOQUERON												
WHOLE - 5 FISH												
T005	BF1013	880223	ND		0	UJ	ND		0	UJ		
T030	BF1006	880324	ND		0	UJ	ND		0	UJ		
T050 REP	BF1004	880324	ND		0	UJ	ND		0	UJ		
T040	BF1001	880228	ND		0	UJ	ND		0	UJ		
FILLET - 5 FISH												
T003	BF1158	880222	ND		0	UJ	ND		0	UJ		
T006	BF1160	880223	ND		0	UJ	ND		0	UJ		
T015	BF1146	880224	ND		0	UJ	ND		0	UJ		
T027	BF1149	880324	ND		0	UJ	ND		0	UJ		
T031	BF1156	880324	ND		0	UJ	ND		0	UJ		
T032	BF1162	880324	ND		0	UJ	ND		0	UJ		
LIVER - 20 FISH												
T070	BF1113	880324	ND		0	UJ	ND		0	UJ		
TILAPIA - ROOSEVELT ROADS												
WHOLE - 5 FISH												
T407	BF1002	880326	ND		0	UJ	ND		0	UJ		
T413	BF0997	880326	ND		0	UJ	ND		0	UJ		
T450 REP	BF1031	880326	ND		0	UJ	ND		0	UJ		
T420	BF1044	880326	ND		0	UJ	ND		0	UJ		
FILLET - 5 FISH												
T408	BF1152	880326	ND		0	UJ	ND		0	UJ		
T408 REP	BF1142	880326	ND		0	UJ	ND		0	UJ		
T411	BF1101	880326	ND		0	UJ	ND		0	UJ		
T414	BF1087	880326	ND		0	UR1	ND		0	UJ		
T419	BF1049	880326	ND		0	UJ	ND		0	UJ		
T423	BF1037	880326	ND		0	UJ	ND		0	UJ		
T503	BF1040	880326	BMDL		64	UJ	ND		0	UJ		
LIVER - 17 FISH												
T400	BF1112	880326	ND		0	UJ	ND		0	UJ		
LIZARDS - MANDRI CANAL												
WHOLE - 5 LIZARDS												
L201	BF1021	880326	ND		0	UJ	ND		0	UJ		
L202	BF1019	880326	ND		0	UJ	ND		0	UJ		
L203	BF1017	880326	BMDL		60	UJ	ND		0	UJ		

TABLE 4-73 (continued)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
LIZARDS - BOQUERON								
WHOLE - 5 LIZARDS								
L001	BF1027	880323	BMDL	40	UJ	ND	0	UJ
L002	BF1028	880324	BMDL	36	UJ	ND	0	UJ
L003	BF1018	880324	BMDL	36	UJ	ND	0	UJ
GALLINULES - FRONTERA LAGOONS								
MUSCLE - 1 GALLINULE								
M029	BF1054	880225	ND	0	UJ	ND	0	UJ
M030	BF1059	880225		120	J	ND	0	UJ
M031	BF1051	880225	BMDL	68	UJ	ND	0	UJ
M032	BF1062	880226	ND	0	UJ	ND	0	UJ
M033	BF1032	880226		84	J	ND	0	UJ
LIVER - 5 GALLINULES								
M053	BH1317	880225		160	J		92	J
GALLINULES - BOQUERON								
MUSCLE - 1 GALLINULE								
M008	BF1057	880222	ND	0	UJ	ND	0	UJ
M009	BF1055	880222	ND	0	UJ	ND	0	UJ
M010	BF1056	880222	ND	0	UJ	ND	0	UJ
M012	BF1061	880222	ND	0	UJ	ND	0	UJ
M013	BF1053	880222	ND	0	UJ	ND	0	UJ
LIVER - 5 GALLINULES								
M052	BH1330	880222	ND	0	UJ	ND	0	UJ
CATTLE EGRETS - FRONTERA LAGOONS								
MUSCLE - 1 CATTLE EGRET								
M020	BF1041	880225	ND	0	UJ	ND	0	UJ
M021	BF1045	880225	ND	0	UJ	ND	0	UJ
M022	BF1060	880225	ND	0	UJ	ND	0	UJ
M023	BF1033	880225	ND	0	UJ	ND	0	UJ
M024	BF1042	880225	ND	0	UJ	ND	0	UJ
M025	BF1050	880225	BMDL	36	UJ	ND	0	UJ
LIVER - 6 CATTLE EGRETS								
M051	BH1316	880225	BMDL	44	UJ	ND	0	UJ

TABLE 4-73 (continued)

Dynamac	ETC		Total Mercury			Inorganic Mercury		
Number	Number	Date	Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
CATTLE EGRETS - BOQUERON								
MUSCLE - 1 CATTLE EGRET								
MO11	BF1048	880222	ND	0	UJ	ND	0	UJ
MO14	BF1052	880223	ND	0	UJ	ND	0	UJ
MO15	BF1036	880223	BMDL	40	UJ	ND	0	UJ
MO16	BF1047	880223	BMDL	68	UJ	ND	0	UJ
MO17	BF1046	880223		132	J	ND	0	UJ
MO18	BF1058	880223	BMDL	48	UJ	ND	0	UJ
LIVER - 6 CATTLE EGRETS								
MO50	BH1319	880222		98	J	BMDL	36	UJ
EGGS - FRONTERA LAGOONS								
E201	BF0988	880227	ND	0	UJ	ND	0	UJ

J - Estimated

R - Data rejected by data validation team

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

UR - Value is below Sample Quantitation Limit; data rejected by data validation team

Note: *, **, R1 and R2 identify data points originally qualified "R" (rejected by the data validation team) but judged usable for data assessment purposes (see Appendix 7 for the explanation of these qualifiers)

FRO 001 1299

TABLE 4-74

Biota Data - Total Mercury
(Samples Consist of a Composite of Five Individuals Except as Noted)
(values in ug/kg)

	Hg	Hg (Rep)	Hg (HSL)	Hg (HSL Rep)	Average
<u>FRONTERA NORTH LAGOON</u>					
CRABS - WHOLE	-	-	49	-	49
	-	-	0	-	0
	-	-	52	-	52
				Mean	34 ± 29
CRABS - EDIBLE	36	-	-	-	36
	0	-	-	-	0
	48	36	-	-	42
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
				Mean	13 ± 20
<u>MANDRI CANAL</u>					
CRABS - WHOLE	-	-	0	-	0
	-	-	0	-	0
	-	-	40	-	40
				Mean	13 ± 23
CRABS - EDIBLE	0	-	-	-	0
	0	0	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
<u>BOQUERON</u>					
CRABS - WHOLE	-	-	0	-	0
	-	-	0	-	0
	-	-	56	-	56
				Mean	19 ± 32
CRABS - EDIBLE	40	-	-	-	40
	0	-	-	-	0
	48	-	-	-	48
	0	-	-	-	0
	0	-	-	-	0
	36	-	-	-	36
				Mean	21 ± 23

TABLE 4-74 (continued)

	Hg	Hg (Rep)	Hg (HSL)	Hg (HSL Rep)	Average
<u>ROOSEVELT ROADS</u>					
CRABS - WHOLE	-	-	0	-	0
	-	-	0	-	0
	-	-	0	-	0
 CRABS - EDIBLE					
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
 <u>FRONTERA NORTH LAGOON</u>					
SHRIMP - WHOLE (a)	0	-	-	-	0
	0	-	-	-	0
	36	-	-	-	36
	36	-	-	-	36
	40	-	-	-	40
	36	-	-	-	36
				Mean	25 ± 19
 <u>MANDRI CANAL</u>					
SHRIMP - WHOLE (a)	0	-	-	-	0
	36	-	-	-	36
	48	-	-	-	48
				Mean	28 ± 25
 <u>BOQUERON</u>					
SHRIMP - WHOLE (a)	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
 <u>ROOSEVELT ROADS</u>					
SHRIMP - WHOLE (a)	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0

TABLE 4-74 (continued)

	Hg	Hg (Rep)	Hg (HSL)	Hg (HSL Rep)	Average
<u>FRONTERA LAGOONS</u>					
<u>TARPON - WHOLE</u>					
	48	-	0	0	16
	40	-	40	-	40
	56	60	52	-	56
				Mean	37 ± 20
<u>TARPON - FILLET</u>					
	104	-	-	-	104
	112	128	-	-	120
	144	-	-	-	144
	92	-	-	-	92
	92	-	-	-	92
	132	-	-	-	132
				Mean	110 ± 22
<u>TARPON - LIVER</u>					
	0	-	-	-	0
(b)	48	-	-	-	48
(c)	0	-	-	-	0
				Mean	16 ± 28
<u>MANDRI CANAL</u>					
<u>TARPON - FILLET</u>					
(d)	156	-	-	-	156
(d)	128	-	-	-	128
(d)	128	120	-	-	124
(e)	56	-	-	-	56
(f)	112	-	-	-	112
				Mean	115 ± 37
<u>TARPON - LIVER (g)</u>					
	58	-	-	-	58
<u>BOQUERON</u>					
<u>TARPON - WHOLE</u>					
(d)	0	-	0	-	0
(d)	0	-	0	-	0
(e)	0	-	0	-	0
(f)	0	-	0	-	0

TABLE 4-74 (continued)

	Hg	Hg (Rep)	Hg (HSL)	Hg (HSL Rep)	Average
<u>BOQUERON (continued)</u>					
<u>TARPON - FILLET</u>					
(d)	48	-	-	-	48
(d)	56	44	-	-	50
(d)	0	-	-	-	0
(e)	0	-	-	-	0
(d)	0	-	-	-	0
(d)	40	-	-	-	40
(f)	0	-	-	-	0
(e)	0	-	-	-	0
				Mean	17 ± 24
<u>TARPON - LIVER</u>					
(d)	0	-	-	-	0
(h)	0	-	-	-	0
<u>ROOSEVELT ROADS</u>					
<u>TARPON - WHOLE</u>					
	0	-	0	-	0
	0	-	0	-	0
	0	-	0	-	0
<u>TARPON - FILLET</u>					
	152	-	-	-	152
	52	-	-	-	52
	68	-	-	-	68
	204	-	-	-	204
	72	-	-	-	72
	244	232	-	-	238
				Mean	131 ± 79
<u>TARPON - LIVER</u>					
(b)	52	44	-	-	48
(c)	0	-	-	-	0
				Mean	24 ± 34
<u>FRONTERA CREEK</u>					
<u>TILAPIA - FILLET</u>					
(e)	96	-	-	-	96
(e)	84	-	-	-	84
(e)	64	-	-	-	64
(e)	92	-	-	-	92
(e)	460	-	-	-	460
(e)	148	-	-	-	148
(i)	108	-	-	-	108
				Mean	161 ± 149

TABLE 4-74 (continued)

	Hg	Hg (Rep)	Hg (HSL)	Hg (HSL Rep)	Average
<u>FRONTERA CREEK (continued)</u>					
TILAPIA - LIVER (j) *	-	-	-	-	-
<u>FRONTERA LAGOONS</u>					
TILAPIA - WHOLE	40	-	-	-	40
	40	-	-	-	40
	0	-	-	-	0
				Mean	27 ± 23
TILAPIA - FILLET	78	64	-	-	71
	56	-	-	-	56
	49	-	-	-	49
	42	-	-	-	42
	56	-	-	-	56
	0	-	-	-	0
				Mean	46 ± 24
TILAPIA - LIVER (k)	133	-	-	-	133
<u>MANDRI CANAL</u>					
TILAPIA - WHOLE	48	0	-	-	24
	0	-	-	-	0
	0	-	-	-	0
				Mean	8 ± 14
TILAPIA - FILLET	64	-	-	-	64
	0	-	-	-	0
	0	0	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
				Mean	11 ± 26
TILAPIA - LIVER (k)	80	-	-	-	80
<u>BOQUERON</u>					
TILAPIA - WHOLE	0	-	-	-	0
	0	0	-	-	0
	0	-	-	-	0
TILAPIA - FILLET	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0

TABLE 4-74 (continued)

	Hg	Hg (Rep)	Hg (HSL)	Hg (HSL Rep)	Average
<u>BOQUERON (continued)</u>					
TILAPIA - LIVER (k)	0	-	-	-	0
<u>ROOSEVELT ROADS</u>					
TILAPIA - WHOLE	0	-	-	-	0
	0	0	-	-	0
	0	-	-	-	0
<u>TILAPIA - FILLET</u>					
	0	0	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	64	-	-	-	64
				Mean	11 ± 26
<u>TILAPIA - LIVER</u>					
(1)	0	-	-	-	0
<u>MANDRI CANAL</u>					
LIZARDS - WHOLE	0	-	-	-	0
	0	-	-	-	0
	60	-	-	-	60
				Mean	20 ± 35
<u>BOQUERON</u>					
LIZARDS - WHOLE	40	-	-	-	40
	36	-	-	-	36
	36	-	-	-	36
				Mean	37 ± 2
<u>FRONTERA LAGOONS</u>					
GALLINULES - MUSCLE					
(a)	0	-	-	-	0
	120	-	-	-	120
	68	-	-	-	68
	0	-	-	-	0
	84	-	-	-	84
				Mean	54 ± 53
GALLINULES - LIVER	160	-	-	-	160

TABLE 4-74 (continued)

	Hg	Hg (Rep)	Hg (HSL)	Hg (HSL Rep)	Average
<u>BOQUERON</u>					
<u>GALLINULES - MUSCLE</u>					
(e)	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
GALLINULES - LIVER	0	-	-	-	0
<u>FRONTERA LAGOONS</u>					
<u>CATTLE EGRETS - MUSCLE</u>					
(e)	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	0	-	-	-	0
	36	-	-	-	36
				Mean	6 ± 15
CATTLE EGRETS - LIVER					
(j)	44	-	-	-	44
<u>BOQUERON</u>					
<u>CATTLE EGRETS - MUSCLE</u>					
(e)	0	-	-	-	0
	0	-	-	-	0
	40	-	-	-	40
	68	-	-	-	68
	132	-	-	-	132
	48	-	-	-	48
				Mean	48 ± 49
CATTLE EGRETS - LIVER					
(j)	98	-	-	-	98
<u>FRONTERA LAGOONS</u>					
<u>BIRD EGGS</u>					
	0	-	-	-	0

a = sample of 75 or 100g

b = 15 fish

c = 10 fish

d = 2 fish

e = 1 individual

f = 5 fish, composite of 3 samples

g = 7 fish

h = 8 fish

i = 6 fish, composite of 6 samples

j = 6 individuals

k = 20 fish

l = 17 fish

* Analyzed for Inorganic Mercury only

TABLE 4-75

Mercury Data Summary for Biota Samples
(values in ug/kg; MDL = 80)

Parameter/Sample Program	N	0<N<MDL	N>MDL	Mean	Range
Total Mercury					
<u>CRABS (WHOLE)</u>					
Frontera North Lagoon	3	2	0	34	0-52
Mandri Canal	3	1	0	13	0-40
Boqueron	3	1	0	19	0-56
Roosevelt Roads	3	0	0	0	0
<u>CRABS (EDIBLE)</u>					
Frontera North Lagoon	6	2	0	13	0-42
Mandri Canal	6	0	0	0	0
Boqueron	6	3	0	21	0-48
Roosevelt Roads	7	0	0	0	0
<u>SHRIMP (WHOLE)</u>					
Frontera North Lagoon	6	4	0	25	0-40
Mandri Canal	3	2	0	28	0-48
Boqueron	3	0	0	0	0
Roosevelt Roads	3	0	0	0	0
<u>TARPON (WHOLE)</u>					
Frontera Lagoons	3	3	0	37	0-56
Boqueron*	4	0	0	0	0
Roosevelt Roads	3	0	0	0	0
<u>TARPON (FILLET)</u>					
Frontera Lagoons	6	0	6	110	92-144
Mandri Canal	5	0	5	115	56-156
Boqueron	8	3	0	17	0-50
Roosevelt Roads	6	6	3	131	52-238
<u>TARPON (LIVER)</u>					
Frontera Lagoons	3	1	0	16	0-48
Mandri Canal	1	1	0	58	58
Boqueron	2	0	0	0	0
Roosevelt Roads	2	1	0	32	0-48
<u>TILAPIA (WHOLE)</u>					
Frontera Lagoons	3	2	0	27	0-40
Mandri Canal	3	1	0	14	0-24
Boqueron	3	0	0	0	0
Roosevelt Roads	3	0	0	0	0

TABLE 4-75 (continued)

Parameter/Sample Program	N	0<N<MDL	N>MDL	Mean	Range
Total Mercury (continued)					
<u>TILAPIA (FILLET)</u>					
Frontera Creek*	7	7	6	161	64-460
Frontera Lagoons	6	5	0	46	0-71
Mandri Canal	6	1	0	11	0-64
Boqueron	6	0	0	0	0
Roosevelt Roads	6	1	0	9	0-64
<u>TILAPIA (LIVER)</u>					
Frontera Lagoons	1	0	1	133	133
Mandri Canal	1	0	1	80	80
Boqueron	1	0	0	0	0
Roosevelt Roads	1	0	0	0	0
<u>LIZARDS (WHOLE)</u>					
Mandri Canal	3	1	0	20	0-60
Boqueron	3	3	0	37	36-40
<u>GALLINULES (MUSCLE)</u>					
Frontera Lagoons	5	3	2	54	0-120
Boqueron	5	0	0	0	0
<u>GALLINULES (LIVER)</u>					
Frontera Lagoons	1	0	1	160	160
Boqueron	1	0	0	0	0
<u>CATTLE EGRETS (MUSCLE)</u>					
Frontera Lagoons	6	1	0	6	0-36
Boqueron	6	4	1	48	0-132
<u>CATTLE EGRETS (LIVER)</u>					
Frontera Lagoons	1	1	0	44	44
Boqueron	1	0	1	98	98
<u>BIRD EGGS</u>					
Mandri Canal	1	0	0	0	0

TABLE 4-75 (continued)

Parameter/Sample Program	N	0<N<MDL	N>MDL	Mean	Range
<i>Inorganic Mercury</i>					
<u>CRABS (WHOLE)</u>					
Frontera North Lagoon	3	0	0	0	0
Mandri Canal	3	0	0	0	0
Boqueron	3	0	0	0	0
Roosevelt Roads	3	0	0	0	0
<u>CRABS (EDIBLE)</u>					
Frontera North Lagoon	6	0	0	0	0
Mandri Canal	6	0	0	0	0
Boqueron	6	0	0	0	0
Roosevelt Roads	7	0	0	0	0
<u>SHRIMP (WHOLE)</u>					
Frontera North Lagoon	6	1	0	6	0-36
Mandri Canal	3	1	0	12	0-36
Boqueron	3	0	0	0	0
Roosevelt Roads	3	0	0	0	0
<u>TARPON (WHOLE)</u>					
Frontera Lagoons	3	0	0	0	0
Boqueron*	4	0	0	0	0
Roosevelt Roads	3	0	0	0	0
<u>TARPON (FILLET)</u>					
Frontera Lagoons*	6	0	0	0	0
Mandri Canal*	5	0	0	0	0
Boqueron	8	0	0	0	0
Roosevelt Roads	6	0	0	0	0
<u>TARPON (LIVER)</u>					
Frontera Lagoons	3	0	0	0	0
Mandri Canal	1	0	0	0	0
Boqueron	2	0	0	0	0
Roosevelt Roads	2	0	0	0	0
<u>TILAPIA (WHOLE)</u>					
Frontera Lagoons*	3	0	0	0	0
Mandri Canal	3	0	0	0	0
Boqueron	3	0	0	0	0
Roosevelt Roads	3	0	0	0	0
<u>TILAPIA (FILLET)</u>					
Frontera Creek	7	2	1	19	0-84
Frontera Lagoons	6	0	0	0	0
Mandri Canal	6	0	0	0	0
Boqueron	6	0	0	0	0
Roosevelt Roads	6	0	0	0	0

TABLE 4-75 (continued)

Parameter/Sample Program	N	0<N<MDL	N>MDL	Mean	Range
<i>Inorganic Mercury (continued)</i>					
<u>TILAPIA (LIVER)</u>					
Frontera Creek	1	0	1	480	480
Frontera Lagoons	1	0	0	0	0
Mandri Canal	1	0	0	0	0
Boqueron	1	0	0	0	0
Roosevelt Roads	1	0	0	0	0
<u>LIZARDS (WHOLE)</u>					
Mandri Canal	3	0	0	0	0
Boqueron	3	0	0	0	0
<u>GALLINULES (MUSCLE)</u>					
Frontera Lagoons	5	0	0	0	0
Boqueron	5	0	0	0	0
<u>GALLINULES (LIVER)</u>					
Frontera Lagoons	1	0	1	92	92
Boqueron	1	0	0	0	0
<u>CATTLE EGRETS (MUSCLE)</u>					
Frontera Lagoons	6	0	0	0	0
Boqueron	6	0	0	0	0
<u>CATTLE EGRETS (LIVER)</u>					
Frontera Lagoons	1	0	0	0	0
Boqueron	1	1	0	36	36
<u>BIRD EGGS</u>					
Mandri Canal	1	0	0	0	0

* Due to the limited number of specimens collected, the number of samples analyzed and numbers of individuals in a composite sample varies by location (see Table 4-74).

TABLE 4-76
Samples Sent for HSL Analysis

Dynamac Number	Species	Tissue	Location
C001	crab	whole	Boqueron
C008	crab	whole	Boqueron
C026	crab	whole	Boqueron
C411	crab	whole	Roosevelt Roads
C415	crab	whole	Roosevelt Roads
C418	crab	whole	Roosevelt Roads
CF203	crab	whole	Frontera Lagoons
CF204	crab	whole	Frontera Lagoons
CF220	crab	whole	Frontera Lagoons
CM207	crab	whole	Mandri Canal
CM208	crab	whole	Mandri Canal
CM220	crab	whole	Mandri Canal
M050	egret	liver	Boqueron
M051	egret	liver	Frontera Creek
M052	gallinule	liver	Boqueron
M053	gallinule	liver	Frontera Creek
X003	tarpon	whole	Boqueron
X014	tarpon	whole	Boqueron
X040	tarpon	whole	Boqueron
X041	tarpon	whole	Boqueron
X209	tarpon	whole	Frontera Lagoons
X251 REP	tarpon	whole	Frontera Lagoons
X220	tarpon	whole	Frontera Lagoons
X227	tarpon	whole	Frontera Lagoons
X410	tarpon	whole	Roosevelt Roads
X417	tarpon	whole	Roosevelt Roads
X430	tarpon	whole	Roosevelt Roads

REP - replicate of sample on line above

TABLE 4-77

BSL Data Summary for Biota Samples
(values in ug/kg)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>BASE/NEUTRALS - bis(2-Ethylhexyl)phthalate</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF204	BH1314	880227	BMDL	203	990
CF220	BH1322	880224	BMDL	118	960
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM208	BH1327	880224	BMDL	120	980
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222	BMDL	197	1,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	BMDL	305	990
C415	BH1331	880328	BMDL	79	990
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	BMDL	335	990
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	BMDL	189	990
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X430	BH1315	880328	BMDL	227	1,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222	BMDL	177	1,900
<u>BASE/NEUTRALS - Di-n-octyl phthalate</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF204	BH1314	880227	BMDL	136	990
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224	BMDL	152	1,000
CM208	BH1327	880224	BMDL	175	980
CM220	BH1336	880225	BMDL	667	990
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222	BMDL	425	1,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C415	BH1331	880328	BMDL	130	990
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X251	BH1325	880226	BMDL	368	980

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>BASE/NEUTRALS - Di-n-octyl phthalate (continued)</u>					
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324		1,280	990
X014	BH1324	880324	BMDL	490	980
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324		1,140	990
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	BMDL	723	990
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222	BMDL	110	1,900
<u>ACID EXTRACTABLES - Benzoic acid</u>					
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224	BMDL	1,810	5,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	BMDL	854	50,000
X220	BH1321	880227	BMDL	980	50,000
X227	BH1320	880226	BMDL	658	50,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	BMDL	111	5,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	BMDL	165	4,900
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X417	BH1332	880326	BMDL	102	5,000
X430	BH1315	880328	BMDL	575	5,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	BMDL	1,890	100,000
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222	BMDL	882	100,000
<u>ACID EXTRACTABLES - 2,4,6-Trichlorophenol</u>					
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X430	BH1315	880328	BMDL	127	1,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>ORGANOCHLORINE PESTICIDES/PCBs - 4,4'-DDD</u>					
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C415	BH1331	880328		23	20
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X417	BH1332	880326		27	20
<u>ORGANOCHLORINE PESTICIDES/PCBs - 4,4'-DDE</u>					
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		110	20
C415	BH1331	880328		120	20
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X251 REP	BH1325	880226		28	20
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326		110	20
X417	BH1332	880326		160	20
X430	BH1315	880328		74	20
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225		47	40
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222		83	40
<u>ORGANOCHLORINE PESTICIDES/PCBs - Delta-BHC</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - CRABS)					
CF203	BH1323	880225		62	10
CF220	BH1322	880224		48	9.6
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M053	BH1317	880225		67	20
<u>RCRA METALS - Arsenic</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225	BMDL	460	2,000
CF204	BH1314	880227	ND	380	2,000
CF220	BH1322	880224	BMDL	460	2,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224	BMDL	430	2,000
CM208	BH1327	880224	ND	350	2,000
CM220	BH1336	880225	ND	120	4,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>RCRA METALS - Arsenic (continued)</u>					
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		3,800	2,000
C008	BH1313	880323		2,500	2,000
C026	BH1335	880325	BMDL	4,100	10,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	ND	390	2,000
C415	BH1331	880328	ND	310	2,000
C418	BH1333	880328	ND	310	2,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	ND	160	2,000
X251 REP	BH1325	880226	ND	190	2,000
X220	BH1321	880227	ND	270	2,000
X227	BH1320	880226	ND	190	2,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	BMDL	700	2,000
X014	BH1324	880324	ND	39	2,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324	ND	39	2,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	ND	230	2,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	BMDL	990	4,000
X417	BH1332	880326	BMDL	580	2,000
X430	BH1315	880328	BMDL	620	2,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	ND	78	2,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222	ND	39	2,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225	ND	50	2,000
CATTLE EGRETS - BOQUERON LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222	ND	39	2,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>RCRA METALS - Barium</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		170,000	4,000
CF204	BH1314	880227		250,000	4,000
CF220	BH1322	880224		72,000	4,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		140,000	4,000
CM208	BH1327	880224		210,000	4,000
CM220	BH1336	880225		250,000	4,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		83,000	4,000
C008	BH1313	880323		62,000	4,000
C026	BH1335	880325		8,700	4,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		7,900	4,000
C415	BH1331	880328		9,500	4,000
C418	BH1333	880328		8,400	4,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226		4,800	4,000
X251 REP	BH1325	880226	BMDL	3,800	4,000
X220	BH1321	880227	BMDL	1,500	4,000
X227	BH1320	880226		9,400	4,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	ND	180	4,000
<u>RCRA METALS - Cadmium</u>					
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C026	BH1335	880325	BMDL	140	400
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	BMDL	100	400
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	ND	54	400
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225	ND	45	400
<u>RCRA METALS - Chromium</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225	ND	39	2,000
CF204	BH1314	880227	BMDL	1,000	2,000
CF220	BH1322	880224	BMDL	1,500	2,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>RCRA METALS - Chromium (continued)</u>					
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224	BMDL	740	2,000
CM208	BH1327	880224	BMDL	1,800	2,000
CM220	BH1336	880225	BMDL	1,400	2,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222	BMDL	1,100	2,000
C008	BH1313	880323	BMDL	1,200	2,000
C026	BH1335	880325	BMDL	1,600	2,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	BMDL	1,600	2,000
C415	BH1331	880328	BMDL	700	2,000
C418	BH1333	880328	BMDL	520	2,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	BMDL	920	2,000
X251 REP	BH1325	880226	BMDL	870	2,000
X220	BH1321	880227	ND	350	2,000
X227	BH1320	880226	BMDL	1,200	2,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	BMDL	680	2,000
X014	BH1324	880324	ND	280	2,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324	BMDL	480	2,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	BMDL	480	2,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	BMDL	1,400	2,000
X417	BH1332	880326	BMDL	700	2,000
X430	BH1315	880328	BMDL	1,600	2,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	BMDL	1,200	2,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225	BMDL	940	2,000
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222	BMDL	480	2,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>RCRA METALS - Copper</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		15,000	2,000
CF204	BH1314	880227		26,000	2,000
CF220	BH1322	880224		22,000	2,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		12,000	2,000
CM208	BH1327	880224		24,000	2,000
CM220	BH1336	880225		10,000	2,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		14,000	2,000
C008	BH1313	880323		18,000	2,000
C026	BH1335	880325		11,000	2,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		10,000	2,000
C415	BH1331	880328		8,600	2,000
C418	BH1333	880328		7,000	2,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	BMDL	1,100	2,000
X251 REP	BH1325	880226	BMDL	680	2,000
X220	BH1321	880227	BMDL	970	2,000
X227	BH1320	880226	BMDL	960	2,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	BMDL	820	2,000
X014	BH1324	880324	BMDL	1,300	2,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324	BMDL	1,300	2,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	BMDL	750	2,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	BMDL	600	2,000
X417	BH1332	880326	BMDL	460	2,000
X430	BH1315	880328	BMDL	890	2,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225		10,000	2,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222		3,100	2,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225		8,100	2,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>RCRA METALS - Copper (continued)</u>					
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222		6,400	2,000
<u>RCRA METALS - Lead</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225	ND	130	15,000
CF204	BH1314	880227	BMDL	470	1,000
CF220	BH1322	880224	ND	130	15,000
CRABS - MANDRI LAGOONS (WHOLE - 5 CRABS)					
CM207	BH1311	880224	ND	170	1,000
CM208	BH1327	880224	ND	35	15,000
CM220	BH1336	880225	BMDL	400	1,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222	BMDL	240	1,000
C008	BH1313	880323	BMDL	200	1,000
C026	BH1335	880325	ND	130	15,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	ND	380	15,000
C415	BH1331	880328	ND	180	15,000
C418	BH1333	880328	ND	730	15,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	ND	130	15,000
X251 REP	BH1325	880226	ND	780	15,000
X220	BH1321	880227	ND	85	15,000
X227	BH1320	880226	ND	85	15,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	ND	35	15,000
X014	BH1324	880324	ND	35	15,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324	ND	85	15,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	ND	85	15,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	ND	170	1,000
X417	BH1332	880326	ND	85	15,000
X430	BH1315	880328	ND	140	1,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	ND	230	15,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>RCRA METALS - Lead (continued)</u>					
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222	ND	180	15,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225	BMDL	270	1,000
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222	ND	480	15,000
<u>RCRA METALS - Selenium</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225	ND	1	1,000
CF204	BH1314	880227	ND	80	1,000
CF220	BH1322	880224	ND	130	1,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224	ND	6.8	1,000
CM208	BH1327	880224	ND	130	1,000
CM220	BH1336	880225	ND	370	2,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222	ND	80	1,000
C026	BH1335	880325	ND	130	1,000
TARPON - FRONTREA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	ND	1	1,000
X251 REP	BH1325	880226	ND	63	1,000
X220	BH1321	880227	ND	87	5,000
X227	BH1320	880226	ND	510	5,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X014	BH1324	880324	ND	510	5,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324	ND	87	5,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	ND	6.8	1,000
X417	BH1332	880326	ND	87	5,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	ND	510	5,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222	ND	930	5,000
CATTLE EGRETS - FRONTERA CREEK (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225		1,200	1,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>RCRA METALS - Selenium (continued)</u>					
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222	ND	510	5,000
<u>RCRA METALS - Silver</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF220	BH1322	880224	BMDL	460	2,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM208	BH1327	880224	BMDL	590	2,000
CM220	BH1336	880225	BMDL	590	2,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222	ND	390	2,000
C026	BH1335	880325	BMDL	850	2,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	BMDL	920	2,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	ND	260	2,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	ND	260	2,000
X014	BH1324	880324	ND	330	2,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324	BMDL	530	2,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	ND	3.6	2,000
X430	BH1315	880328	ND	200	2,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	ND	200	2,000
<u>RCRA METALS - Zinc</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		28,000	4,000
CF204	BH1314	880227		28,000	4,000
CF220	BH1322	880224		41,000	4,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		25,000	4,000
CM208	BH1327	880224		29,000	4,000
CM220	BH1336	880225		37,000	4,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>RCRA METALS - Zinc (continued)</u>					
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		24,000	4,000
C008	BH1313	880323		22,000	4,000
C026	BH1335	880325		30,000	4,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		28,000	4,000
C415	BH1331	880328		30,000	4,000
C418	BH1333	880328		21,000	4,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226		17,000	4,000
X251 REP	BH1325	880226		15,000	4,000
X220	BH1321	880227		20,000	4,000
X227	BH1320	880226		22,000	4,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324		21,000	4,000
X014	BH1324	880324		13,000	4,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324		21,000	4,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324		12,000	4,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326		36,000	4,000
X417	BH1332	880326		27,000	4,000
X430	BH1315	880328		24,000	4,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225		35,000	4,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222		36,000	4,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225		39,000	4,000
CATTLE EGRETS - BOQUERON (WHOLE - 6 CATTLE EGRETS)					
M050	BH1319	880222		26,000	4,000
<u>OTHER/MISCELLANEOUS - Aluminum</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		34,000	20,000
CF204	BH1314	880227		26,000	20,000
CF220	BH1322	880224		33,000	20,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Aluminum (continued)</u>					
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		26,000	20,000
CM208	BH1327	880224	BMDL	15,000	20,000
CM220	BH1336	880225	BMDL	9,000	20,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		51,000	20,000
C008	BH1313	880323		49,000	20,000
C026	BH1335	880325		91,000	20,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		27,000	20,000
C415	BH1331	880328	BMDL	4,200	20,000
C418	BH1333	880328	BMDL	4,600	20,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	ND	1,400	20,000
X251 REP	BH1325	880226	ND	2,000	20,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	BMDL	5,700	20,000
X014	BH1324	880324	ND	640	20,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	ND	1,200	20,000
X417	BH1332	880326	BMDL	7,500	20,000
X430	BH1315	880328	ND	41	20,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	BMDL	6,900	20,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222	ND	1,100	20,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225	BMDL	8,200	20,000
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222	BMDL	6,800	20,000
<u>OTHER/MISCELLANEOUS - Antimony</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF204	BH1314	880227	BMDL	7,400	12,000
CF220	BH1322	880224	BMDL	6,100	12,000

PRO 001 1323

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Antimony (continued)</u>					
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224	BMDL	3,900	12,000
CM208	BH1327	880224	ND	1,000	12,000
CM220	BH1336	880225	BMDL	4,200	12,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222	BMDL	3,200	12,000
C008	BH1313	880323	BMDL	2,700	12,000
C026	BH1335	880325	BMDL	3,700	12,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	BMDL	3,400	12,000
C418	BH1333	880328	ND	720	12,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	ND	1,900	12,000
X251 REP	BH1325	880226	ND	1,600	12,000
X220	BH1321	880227	BMDL	2,500	12,000
X227	BH1320	880226	ND	2,100	12,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	BMDL	3,300	12,000
X014	BH1324	880324	BMDL	2,800	12,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324	BMDL	3,600	12,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	BMDL	3,500	12,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	ND	1,500	12,000
X417	BH1332	880326	ND	700	12,000
X430	BH1315	880328	BMDL	3,000	12,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	BMDL	2,400	12,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222	BMDL	4,300	12,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225	BMDL	5,300	12,000
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222	BMDL	2,700	12,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Calcium</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		42,300,000	40,000
CF204	BH1314	880227		39,500,000	40,000
CF220	BH1322	880224		18,700,000	40,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		60,100,000	40,000
CM208	BH1327	880224		68,600,000	40,000
CM220	BH1336	880225		97,800,000	40,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		78,300,000	40,000
C008	BH1313	880323		66,300,000	40,000
C026	BH1335	880325		32,700,000	40,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		45,300,000	40,000
C415	BH1331	880328		43,400,000	40,000
C418	BH1333	880328		57,900,000	40,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226		16,600,000	40,000
X251 REP	BH1325	880226		10,500,000	40,000
X220	BH1321	880227		18,800,000	40,000
X227	BH1320	880226		22,300,000	40,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324		10,200,000	40,000
X014	BH1324	880324		7,100,000	40,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324		15,500,000	40,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324		3,100,000	40,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326		52,100,000	40,000
X417	BH1332	880326		29,700,000	40,000
X430	BH1315	880328		21,400,000	40,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225		300,000	40,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222		280,000	40,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225		130,000	40,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Calcium (continued)</u>					
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222		140,000	40,000
<u>OTHER/MISCELLANEOUS - Cobalt</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF204	BH1314	880227	ND	520	4,000
CF220	BH1322	880224	ND	440	4,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224	ND	630	4,000
CM220	BH1336	880225	BMDL	870	4,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C008	BH1313	880323	ND	630	4,000
C026	BH1335	880325	ND	250	4,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	ND	260	4,000
C415	BH1331	880328	ND	350	4,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X220	BH1321	880227	ND	300	4,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	ND	160	4,000
X014	BH1324	880324	ND	630	4,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324	ND	570	4,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	ND	240	4,000
X430	BH1315	880328	BMDL	1,000	4,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	ND	300	4,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222	ND	470	4,000
CATTLE EGRETS - BOQUERON (WHOLE - 6 CATTLE EGRETS)					
M050	BH1319	880222	ND	88	4,000

FRO 001 1326

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Cyanide, Total</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		< 430	430
CF204	BH1314	880227		< 550	550
CF220	BH1322	880224		< 380	380
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		< 630	630
CM208	BH1327	880224		< 520	520
CM220	BH1336	880225		< 590	590
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		< 470	470
C008	BH1313	880323		< 410	410
C026	BH1335	880325		< 570	570
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		< 370	370
C415	BH1331	880328		< 440	440
C418	BH1333	880328		< 500	500
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226		< 500	500
X251 REP	BH1325	880226		< 500	500
X220	BH1321	880227		< 500	500
X227	BH1320	880226		< 500	500
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324		< 620	620
X014	BH1324	880324		< 610	610
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324		< 580	580
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324		< 620	620
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326		< 530	530
X417	BH1332	880326		< 430	430
X430	BH1315	880328		< 420	420
<u>OTHER/MISCELLANEOUS - Iron</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		530,000	30,000
CF204	BH1314	880227		570,000	30,000
CF220	BH1322	880224		300,000	30,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Iron (continued)</u>					
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		350,000	30,000
CM208	BH1327	880224		170,000	30,000
CM220	BH1336	880225		220,000	30,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		140,000	30,000
C008	BH1313	880323		92,000	30,000
C026	BH1335	880325		470,000	30,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		95,000	30,000
C415	BH1331	880328		42,000	30,000
C418	BH1333	880328		54,000	30,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226		29,000	30,000
X251 REP	BH1325	880226		26,000	30,000
X220	BH1321	880227		23,000	30,000
X227	BH1320	880226		30,000	30,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324		33,000	30,000
X014	BH1324	880324		30,000	30,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324		20,000	30,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	BMDL	16,000	30,000
TARPON - ROOSEVLET ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326		33,000	30,000
X417	BH1332	880326	BMDL	18,000	30,000
X430	BH1315	880328		36,000	30,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225		1,600,000	30,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222		1,000,000	30,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225		610,000	30,000
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222		350,000	30,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Magnesium</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		2,300,000	20,000
CF204	BH1314	880227		2,490,000	20,000
CF220	BH1322	880224		1,600,000	20,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		2,620,000	20,000
CM208	BH1327	880224		3,430,000	20,000
CM220	BH1336	880225		4,980,000	20,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		4,120,000	20,000
C008	BH1313	880323		3,730,000	20,000
C026	BH1335	880325		2,760,000	20,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		2,620,000	20,000
C415	BH1331	880328		2,580,000	20,000
C418	BH1333	880328		3,010,000	20,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226		510,000	20,000
X251 REP	BH1325	880226		430,000	20,000
X220	BH1321	880227		600,000	20,000
X227	BH1320	880226		650,000	20,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324		600,000	20,000
X014	BH1324	880324		350,000	20,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324		500,000	20,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324		290,000	20,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326		1,100,000	20,000
X417	BH1332	880326		800,000	20,000
X430	BH1315	880328		610,000	20,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225		210,000	20,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222		210,000	20,000

FRO 001 1329

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Magnesium (continued)</u>					
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225		230,000	20,000
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222		190,000	20,000
<u>OTHER/MISCELLANEOUS - Manganese</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		480,000	1,000
CF204	BH1314	880227		493,000	1,000
CF220	BH1322	880224		460,000	1,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		385,000	1,000
CM208	BH1327	880224		567,000	1,000
CM220	BH1336	880225		527,000	1,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		127,000	1,000
C008	BH1313	880323		86,000	1,000
C026	BH1335	880325		99,000	1,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		79,000	1,000
C415	BH1331	880328		60,000	1,000
C418	BH1333	880328		83,000	1,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226		11,000	1,000
X251 REP	BH1325	880226		8,700	1,000
X220	BH1321	880227		11,000	1,000
X227	BH1320	880226		20,000	1,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324		2,500	1,000
X014	BH1324	880324		1,700	1,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324		2,800	1,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324	BMDL	670	1,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326		10,000	1,000
X417	BH1332	880326		6,300	1,000
X430	BH1315	880328		3,900	1,000

FRO 001 1330

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Manganese (continued)</u>					
GALLINULES - FRONTERA LAGOONS (LIVER - 5 FISH)					
M053	BH1317	880225		11,000	1,000
GALLINULES - BOQUERON (LIVER - 5 FISH)					
M052	BH1330	880222		2,900	1,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225		4,200	1,000
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222		2,700	1,000
<u>OTHER/MISCELLANEOUS - Nickel</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF220	BH1322	880224	BMDL	830	4,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224	ND	220	4,000
CM208	BH1327	880224	ND	170	4,000
CM220	BH1336	880225	ND	110	4,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222	ND	740	4,000
C008	BH1313	880323	BMDL	1,100	4,000
C026	BH1335	880325	ND	770	4,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	ND	460	4,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	ND	460	4,000
X227	BH1320	880226	ND	55	4,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324	ND	280	4,000
X014	BH1324	880324	ND	290	4,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	ND	93	4,000
X417	BH1332	880326	ND	93	4,000
X430	BH1315	880328	BMDL	950	4,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	ND	240	4,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Potassium</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		2,300,000	100,000
CF204	BH1314	880227		2,500,000	100,000
CF220	BH1322	880224		2,300,000	100,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		1,800,000	100,000
CM208	BH1327	880224		3,000,000	100,000
CM220	BH1336	880225		2,400,000	100,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		2,200,000	100,000
C008	BH1313	880323		2,100,000	100,000
C026	BH1335	880325		1,900,000	100,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		2,200,000	100,000
C415	BH1331	880328		2,000,000	100,000
C418	BH1333	880328		1,800,000	100,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226		2,900,000	100,000
X251 REP	BH1325	880226		2,200,000	100,000
X220	BH1321	880227		2,700,000	100,000
X227	BH1320	880226		2,500,000	100,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324		3,200,000	100,000
X014	BH1324	880324		2,400,000	100,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324		3,100,000	100,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324		3,400,000	100,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326		3,200,000	100,000
X417	BH1332	880326		2,900,000	100,000
X430	BH1315	880328		2,300,000	100,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225		2,600,000	100,000
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222		3,000,000	100,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225		2,600,000	100,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Potassium (continued)</u>					
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222		2,800,000	100,000
<u>OTHER/MISCELLANEOUS - Sodium</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225		3,600,000	100,000
CF204	BH1314	880227		3,500,000	100,000
CF220	BH1322	880224		3,200,000	100,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224		3,400,000	100,000
CM208	BH1327	880224		3,700,000	100,000
CM220	BH1336	880225		3,700,000	100,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222		5,000,000	100,000
C008	BH1313	880323		6,600,000	100,000
C026	BH1335	880325		5,400,000	100,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327		3,300,000	100,000
C415	BH1331	880328		4,100,000	100,000
C418	BH1333	880328		4,500,000	100,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226		1,200,000	100,000
X251 REP	BH1325	880226		1,100,000	100,000
X220	BH1321	880227		1,300,000	100,000
X227	BH1320	880226		1,200,000	100,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X003	BH1329	880324		2,200,000	100,000
X014	BH1324	880324		1,100,000	100,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324		1,100,000	100,000
TARPON - BOQUERON (WHOLE - 5 FISH, COMPOSITE)					
X041	BH1326	880324		1,300,000	100,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326		2,100,000	100,000
X417	BH1332	880326		1,700,000	100,000
X430	BH1315	880328		1,700,000	100,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225		1,200,000	100,000

TABLE 4-77 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	MDL
<u>OTHER/MISCELLANEOUS - Sodium (continued)</u>					
GALLINULES - BOQUERON (LIVER - 5 GALLINULES)					
M052	BH1330	880222		1,300,000	100,000
CATTLE EGRETS - FRONTERA LAGOONS (LIVER - 6 CATTLE EGRETS)					
M051	BH1316	880225		1,100,000	100,000
CATTLE EGRETS - BOQUERON (LIVER - 6 CATTLE EGRETS)					
M050	BH1319	880222		1,100,000	100,000
<u>OTHER/MISCELLANEOUS - Vanadium</u>					
CRABS - FRONTERA NORTH LAGOON (WHOLE - 5 CRABS)					
CF203	BH1323	880225	ND	740	4,000
CF204	BH1314	880227	ND	320	4,000
CF220	BH1322	880224	ND	550	4,000
CRABS - MANDRI CANAL (WHOLE - 5 CRABS)					
CM207	BH1311	880224	ND	460	4,000
CM208	BH1327	880224	ND	220	4,000
CRABS - BOQUERON (WHOLE - 5 CRABS)					
C001	BH1312	880222	BMDL	840	4,000
C008	BH1313	880323	ND	650	4,000
C026	BH1335	880325	BMDL	2,300	4,000
CRABS - ROOSEVELT ROADS (WHOLE - 5 CRABS)					
C411	BH1334	880327	ND	650	4,000
C418	BH1333	880328	ND	220	4,000
TARPON - FRONTERA LAGOONS (WHOLE - 5 FISH)					
X209	BH1318	880226	ND	410	4,000
TARPON - BOQUERON (WHOLE - 2 FISH)					
X014	BH1324	880324	ND	460	4,000
TARPON - BOQUERON (WHOLE - 1 FISH)					
X040	BH1328	880324	ND	410	4,000
TARPON - ROOSEVELT ROADS (WHOLE - 5 FISH)					
X410	BH1310	880326	ND	270	4,000
X430	BH1315	880328	BMDL	840	4,000
GALLINULES - FRONTERA LAGOONS (LIVER - 5 GALLINULES)					
M053	BH1317	880225	BMDL	930	4,000

REP - replicate of sample on line above

TABLE 4-78

Mercury Data for Cow Samples
(MDL = 80; values in ug/kg)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury								
			Lab	Qual	Value	QA	Qual	Lab	Qual	Value	QA	Qual		
<u>Cow Blood</u>														
<u>On-site</u>														
BCOWFCS01	BE4736	880616	ND		0	UJ	ND		0	UR2				
BCOWFCS02	BE4737	880616	ND		0	UJ	ND		0	UR2				
BCOWFCS03	BE4738	880616	ND		0	UJ	ND		0	UR2				
BCOWFCR01	BE4745	880616	ND		0	UJ	ND		0	UR2				
<u>Background</u>														
BCOWBG101	BE4739	880616	ND		0	UJ	ND		0	UR2				
BCOWBG102	BE4740	880616	ND		0	UJ	ND		0	UR2				
BCOWBG103	BE4741	880616	ND		0	UJ	ND		0	UR2				
BCOWBG201	BE4742	880616	ND		0	UJ	ND		0	UR2				
BCOWBG202	BE4743	880616	ND		0	UJ	ND		0	UR2				
BCOWBG203	BE4744	880616	ND		0	UJ	ND		0	UR2				
<u>Cow Hair</u>														
<u>On-site</u>														
HCOWFCS01	BE4747	880616	ND		0	UJ	ND		0	UR2				
<u>Background</u>														
HCOWBG101	BE4748	880616	ND		0	UJ	ND		0	UR2				
HCOWBG201	BE4749	880616	ND		0	UJ	ND		0	UR2				
<u>Cow Milk</u>														
<u>On-site</u>														
MCOWFCS01	BE7280	880616	ND		0	UJ	ND		0	UJ				
MCOWFCS02	BE7282	880616	ND		0	UJ	BMDL		44	UJ				
MCOWFCS03	BE7283	880616	ND		0	UJ	ND		0	UJ				
MCOWFCR01	BE7290	880616	ND		0	UJ	ND		0	UJ				
<u>Background</u>														
MCOWBG101	BE7284	880616	ND		0	UJ	ND		0	UJ				
MCOWBG102	BE7285	880616	ND		0	UJ	ND		0	UJ				
MCOWBG103	BE7286	880616	ND		0	UJ	ND		0	UJ				
MCOWBG201	BE7287	880616	ND		0	UJ	ND		0	UJ				
MCOWBG202	BE7288	880616	ND		0	UJ	ND		0	UJ				
MCOWBG203	BE7289	880616	ND		0	UJ	ND		0	UJ				

J - Estimated

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

Note: *, **, R1 and R2 identify data points originally qualified "R" (rejected by the data validation team) but judged usable for data assessment purposes (see Appendix 7 for the explanation of these qualifiers)

TABLE 4-79

Mercury Data for Coconut Samples
(MDL = 80; values in ug/kg)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury		
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual
<u>Coconut Pulp</u>								
<i>On-site</i>								
COCOPFC01	BE7309	880827	ND	0	UJ	ND	0	UJ
COCOPFC02	BE7310	880827	ND	0	UJ	ND	0	UJ
COCOPFC03	BE7311	880827	ND	0	UJ	ND	0	UJ
<i>Background</i>								
COCOPBG101	BE7306	880827	ND	0	UJ	ND	0	UJ
COCOPBG102	BE7307	880827	ND	0	UJ	ND	0	UJ
COCOPBG103	BE7308	880827	ND	0	UJ	ND	0	UJ
COCOPBG201	BE7303	880827	ND	0	UJ	ND	0	UJ
COCOPBG202	BE7304	880827	ND	0	UJ	ND	0	UJ
COCOPBG203	BE7305	880827	ND	0	UJ	ND	0	UJ
<u>Coconut Water</u>								
<i>On-site</i>								
COCOWFC01	BE7263	880827	ND	0	UJ	ND	0	U
COCOWFC02	BE7264	880827	BMDL	44	UJ	ND	0	U
COCOWFC03	BE7265	880827	ND	0	UJ	ND	0	U
<i>Background</i>								
COCOWBG101	BE7266	880827	ND	0	UJ	ND	0	U
COCOWBG102	BE7267	880827	BMDL	36	UJ	ND	0	U
COCOWBG103	BE7268	880827	ND	0	UJ	ND	0	U
COCOWBG201	BE7269	880827	BMDL	36	UJ	ND	0	U
COCOWBG202	BE7270	880827	ND	0	UJ	ND	0	U
COCOWBG203	BE7271	880827	ND	0	UJ	ND	0	U

J - Estimated

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

TABLE 4-80

Species Present from all Methods of Collection

	Frontera Creek ¹	Frontera Lagoons	Mandri Canal	Boqueron	Roosevelt Roads
SHRIMP					
<i>Palaemonetes</i> sp.	No	Yes	Yes	Yes	Yes
GASTROPODS (family)					
<i>Potamididae</i>	Yes	Yes	No	Yes	No
<i>Vitrinella</i>	Yes	Yes	No	Yes	No
<i>Rissoidea</i>	No	No	No	Yes	No
FISH					
Tilapia	Yes	Yes	Yes	Yes	Yes
Tarpon ²	No	Yes	Yes	Yes	Yes
Robalo	No	Yes	Yes	Yes	Yes
Mullet	No	Yes	Yes	No	No
Anchovy ³	No	Yes	Yes	Yes	No
Darter ⁴	No	No	No	Yes	No

1 - present only at Bridge 3

2 - most of the small bait-size fish at Frontera were tarpon

3 - *Anchoa brownii*4 - family *Eleotrodæ*

TABLE 4-81

Literature Summary of Mercury Levels in Fish

Species	Country	Type of Value	Range in Value		Mean Value	Max N	N	Wet or dry	Ref
			Min	Max					
Amer. Plaice	Canada	m/r	140	120		150		*	21
Arctic Char	Norway	raw	140	420	327			*	8
Atl. Salmon	Canada	m/r	110	100		110	2	*	21
Atl. Salmon	Sweden	m/r	143	63		321	21	*	22
Atl Salmon	Canada	m/r	140	140		140	2	*	21
Atl Salmon	Canada	m/r	180	170		190	2	*	21
Atl Salmon	Sweden	m/r	148	61		375	5	*	22
Baltic Herring	Finland	m/m	90	150		200		*	23
Barracuda	predator	r	200	700				*	15
Baracuda	Predator	r	210	650				*	10
Black Crappie	Montana	r	125	650				*	10
Blackfish	Australia	m	80	640				? wet	2
Bluefish	commercial	m			600			?	5
Bluefish	LI New York	m			500			?	
Brown Trout	Norway	r	90	7,380	1,400		40	?	8
Brown Trout	Australia	m	40	350				? wet	2
Burbot	Saskatchewan	r	1,200	5,300			2	? wet	5
Burbot	Ontario	m			21,950	24,800	4	?	7
Catfish	Canada	m/r	175	10		310	10		21
Cod	Canada	m/r	190	100		340	19		21
Cod	Canada	m/r	100	40		310	9		21
Cod	LI New York	m			200			?	
Cod	Canada	m/r	150	40		240	9		21
Crucian Carp	Japan	r	200	1,700			6	dry	18
Cusk	Canada	m/r	130	90		150	10		21
Dace	Japan	r	400	4,600			9	dry	18
Fourhorn Sculpin	Baltic	r	80	1,120		68%b			13
Fourhorn Sculpin	Baltic	r	30	450		0%b			13

TABLE 4-81 (continued)

Species	Country	Type of Value	Range in Value		Mean Value	Max N	N	Wet or dry	Ref
			Min	Max					
Gaspereau	Canada	m/r	120	50		290	10		21
Goldeye	Saskatchewan	raw	900	7,200			26		5
Haddock	Canada	m/r	120	60		190	10		21
Hake	Canada	m/r	120	60		190	10		21
Halibut	commercial	m			300			?	5
Halibut	Canada	m/r	200	160		260	4		21
Herring	Canada	m/r	90	60		120	10		21
Lake Trout	commercial	m			800			?	5
Lake Trout	New York	raw	190	660				?	4
Lake Whitefish	Ontario	m	1,329	3061				? wet	3
Longnose Sucker	Saskatchewan	raw	700	1,700			7	? wet	5
Lumpfish	Canada	m/r	60	40		100	9		21
Mackeral	Canada	m/r	80	50		160	10		21
Mangrove Mullet	herb marine	m	12	29		29		?	15
Menhaden	Canada	m/r	90	70		110	10		21
Mooneye	Saskatchewan	raw	1,600	3,600			2	? wet	5
Northern Pike	Sweden	r	200	>2,000				wet	20
Northern Pike	Manitoba	m	5,000	12,000					11
Northern Pike	Ontario	m			430			?	7
Northern Pike	Ontario	m	47,141	6,723				? wet	3
Northern pike	Finland	max	1,600						23
Northern Pike	Montana	r	200	1,600					10
Northern Pike	Saskatchewan	raw	700	10,600			12	? wet	5
Northern Pike	Ontario	m	3,740	15,170		27,800	15	?	7
NZ Snapper	7 localities	raw	280	720			66	wet	16
N. Redhorse	Saskatchewan	raw	1,000	2,400			4	? wet	5
Pacific Hake	Pacific Coast	m	85	38					14
Perch	England	raw	100	500				wet	1
Pike	England	raw	80	400				wet	1
Pollock	Canada	m/r	80	50		130	10		21
Rainbow Trout	commercial	m			1,000			?	5
Redfish	Canada	m/r	130	110		160	10		21

TABLE 4-81 (continued)

Species	Country	Type of Value	Range in Value		Mean Value	Max N	N	Wet or dry	Ref
			Min	Max					
Roach	England	raw	40	320				wet	1
Rock Bass	Ontario	m	550	6,200		10,900	10	?	7
Rock Cod	predator	r	220	2,500					15
Sauger	Saskatchewan	raw	1,100	1,500			3	? wet	5
Sauger	Montana	r	190	1,400					10
Sea Raven	Canada	m/r	290	150		450	10		21
Sea Trout	Sweden	m/r	257	218		271	5		22
Sea Trout	Sweden	m/r	343	257		469	3		22
Shad	Canada	m/r	90	70		110	10		21
Silver Hake	Canada	m/r	60	40		90	10		21
Snapper	New Zealand	m	280	720			35	?	6
Striped Bass	LI New York	m			300			?	17
Thorny Skate	Canada	m/r	240	120		420	10	?	21
Tullibee	Manitoba	m	120	300					11
Walleye	Ontario	m	1,500	15,740		19,600	37	?	7
Walleye	Manitoba	m	300	500					11
Walleye	Ontario	m			360		7	?	7
Walleye	Montana	r	100	1,300					10
Walleye	Montana	r	100	1,300					10
Walleye	Ontario	m	6,110	7,748				? wet	3
Walleye	Wisconsin	r	410	1,740			22	? wet	19
Walleye	Michigan	g/m	140	470			283	?	9
Walleye	Saskatchewan	raw	600	5,300			11	? wet	5
White Crappie	Montana	r	100	600					10
White Sucker	Ontario	m	1,000	4,190			1	?	7
White Sucker	Manitoba	r	20	200					11
White Sucker	Ontario	m	1,866	2,490				? wet	3
White Sucker	Saskatchewan	raw	700	11,200			9	? wet	5
Winter Flounder	Canada	m/r	170	110		200	10		21
Yellow Perch	Saskatchewan	raw	1,400	1,400			1	? wet	5
Zacco temminchu	Japan	r	1,800	2,800			5	dry	18

TABLE 4-81 (continued)

* wet or dry weight indicated; most authors did not specify, although dry weight averages three times higher than wet weight.
m mean
r range
m/r mean/ranges

REFERENCES

- 1 Bull et al
- 2 Bycroft et al
- 3 Scott
- 4 Bache et al
- 5 Wobeser et al
- 6 Robertson et al
- 7 Fimreite & Reynolds
- 8 Underdahl & Hastein
- 9 Kelly et al
- 10 Phillips et al
- 11 Scott & Armstrong
- 12
- 13 Nuorteva
- 14 Cutshall et al, 1988
- 15 Levitan et al, 1974
- 17 Jensen & Fohrenbach
- 18 Matsunaga
- 19 Jensen
- 20 Hakanson et al 1988
- 21 Freeman
- 22 Westoo
- 23 Linko & Terho

TABLE 4-82

**Average Mercury Levels in Marine Organisms in the Caribbean
(values in ug/kg)**

Location	Common Name	Value
Mayaguez PR	Great Barracuda	968
Mayaguez PR	Red Drum	114
Mayaguez PR	Bluestriped Grunt	70
Mayaguez PR	Barbu	824
Punta Cangrejos PR	West Indian Sardine	271
Punta Cangrejos PR	Atlantic Spadefish	194
Punta Cangrejos PR	Red Mangrove	40
Punta Cangrejos PR	Great Barracuda	968
Punta Cangrejos PR	Yellowfin Mojarra	87
Punta Cangrejos PR	Red Mangrove	80
David Point St Thomas	Queen Triggerfish	400
David Point St Thomas	Red Snapper	736
David Point St Thomas	Queen Triggerfish	822
David Point St Thomas	Rock Hind	290
David Point St Thomas	Rock Hind	304
David Point St Thomas	Gray Snapper	700
Mangrove Lagoon St Thomas	Red Mangrove	20
Coral Bay St John	Mangrove Oysters	58
Coral Bay St John	Schoolmaster	155
Coral Bay St John	Porcupine Fish	78
Coral Bay St John	Red Mangrove	50
East End Point St Croix	Yellowtail Snapper	83
East End Point St Croix	Ocean Surgeon	25
East End Point St Croix	Queen Triggerfish	75
Harvey Ditch St Croix	Red Mangrove	38
Salt River St Croix	Mangrove Oysters	39
Tague Bay St Croix	Great Barracuda	271
Mayaguez PR	Pink Shrimp	30
Parguera PR	Spiny Lobster	500
Parguera PR	Lazy Crab	10
Parguera PR	Octopus	20
Parguera PR	Queen Conch	50
Parguera PR	Milk Conch	50
Parguera PR	Thick Lucina	190
Parguera PR	Mangrove Oyster	< 10
San Juan PR	Sharpnose Shark	310
Mayaguez PR	Sharpnose Shark	240
Parguera PR	Sharpnose Shark	1,290
Parguera PR	Sharpnose Shark	320
Mona Island PR	Nurse Shark	490
Parguera PR	Tiger Shark	1,160
Mayaguez PR	Hammerhead Shark	440
Parguera PR	Lemon Shark	310

FRO 001 1342

TABLE 4-82 (continued)

Location	Common Name	Value
Jobos PR	Spotted Eagle Ray	130
Mayaguez PR	Whalebone Anchovy	40
Mayaguez PR	Thread Herring	170
Jobos PR	Thread Herring	50
Mayaguez PR	Thread Herring	200
Parguera PR	Thread Herring	120
Mayaguez PR	False Pilchard	590
Guyanilla PR	Tarpon	200
Mayaguez PR	Ladyfish	730
Joyuda PR	Bonefish	120
Parguera PR	Bonefish	40
Guyanilla PR	Bonefish	160
Parguera PR	Green Moray	190
Parguera PR	Houndfish	190
Mayaguez PR	Mullet	80
Mayaguez PR	Mullet	220
Parguera PR	Yellow Goatfish	110
Parguera PR	Spotted Goatfish	110
Vieques PR	Spotted Goatfish	650
Jobos PR	Frigate Mackerel	840
Parguera PR	Frigate Mackerel	70
Aguadilla PR	Frigate Mackerel	480
Mayaguez PR	Spanish Mackerel	250
Mayaguez PR	Spanish Mackerel	300
Guanaibito PR	Spanish Mackerel	530
Mona Island PR	Spanish Mackerel	770
Jobos PR	Spanish Mackerel	230

Sources: Puerto Rico Department of Agriculture. "The Determination of Mercury in Commercially Imported Aquatic Organisms." January, 1973.
Distributed by NTIS, COM-74-10086.

Reimold, R.J. "Chlorinated Hydrocarbon Pesticides and Mercury in Coastal Biota, Puerto Rico and the U.S. Virgin Islands 1972 - 1974." Pesticides Monitoring Journal, Vol. 9, No. 1, pp. 39-43, 1975.

PRO 001 1343

TABLE 4-83

Mercury Levels in Adult Birds (ug/kg)
(given are means $\pm$ SD unless otherwise noted, range in parentheses)

Species	Liver	Muscle	Source
Double-crested Cormorant <i>Phalacrocorax auritus</i>	7.05	0.61	Braune 1987
Olivaceous Cormorant <i>Phalacrocorax olivaceus</i>	1.60 (0.5-7.8)	-	King & Cromartie 1986
Grey Heron <i>Ardea cinerea</i>	43.7 (1.6-163.8)	-	Molen et al 1982
Great Blue Heron ¹ <i>Ardea herodias</i>	8.22 (0.84-143.8)	0.41 (0.25-1.51)	Hoffman & Cornow 1979
Black-crowned Night Heron <i>Nycticorax nycticorax</i>	2.89 (0.69-17.12)	0.68 (0.21-1.15)	Hoffman & Cornow 1979
Great Egret <i>Casmerodias albus</i>	2.71 (0.87-11.62)	0.62 (0.17-2.71)	Hoffman & Cornow 1979
Great White Egret <i>Egretta alba</i>	1.30 $\pm$ 0.56	0.29 $\pm$ 0.05	Honda et al 1986
Red-necked Phalarope <i>Phalaropus lobatus</i>	-	-	Braune 1987
Snipe <i>Capella gallinago</i>	1.9 $\pm$ 0.1 (0.40-4.52)	-	Parslow et al 1982
Oystercatcher <i>Haematopus ostralegus</i>	0.73 $\pm$ 0.069 (0.42-0.86)	ND	Hutton 1981
Manx Shearwater <i>Puffinus puffinus</i>	10.2 $\pm$ 1.70 (5.66-13.9)	0.912 $\pm$ 0.250 (.03-1.56)	Osborn et al 1979

TABLE 4-83 (continued)

Species	Liver	Muscle	Source
Fulmar <i>Fulmarus glacialis</i>	29.4 $\pm$ 4.77 (19.8-44.8)	1.59 $\pm$ 0.42 (0.4-2.55)	Osborn et al 1979
Great Skua <i>Catharacta skua</i>	10.4 $\pm$ 2.70 (3.20-30.4)	1.91 $\pm$ 0.23 (1.0-3.22)	Hutton 1981
Herring Gull <i>Larus argentatus</i>	4.08 $\pm$ 0.58 (0.51-11.1)	1.29 $\pm$ 0.08 (0.66-2.60)	Hutton 1981
Herring Gull	0.48	0.10	Braune 1987
Bonaparte's Gull <i>Larus philadelphia</i>	0.45	0.07	Braune 1987
Black-legged Kittiwake <i>Rissa tridactyla</i>	0.37	0.04	Braune 1987
Common Tern <i>Sterna hirundo</i>	1.06 $\pm$ 0.60	0.99 $\pm$ 0.28	Gochfeld 1980
Common Tern	1.25	0.12	Braune 1987
Arctic Tern <i>Sterna paradisaea</i>	0.47	0.09	Braune 1987
Laughing Gull <i>Larus atricilla</i>	0.88 (0.5-1.6)	-	King and Cromartie 1986
Black Skimmer <i>Rynchops niger</i>	1.42 (0.6-16)	-	King and Cromartie 1986
Atlantic Puffin <i>Fratercula artica</i>	118.0 $\pm$ 4.98 (98.3-151)	46.7 $\pm$ 1.19 (41.5-53.4)	Osborn et al 1979

TABLE 4-83 (continued)

Species	Liver	Muscle	Source
Black Guillemot <i>Cephus grylle</i>	0.51	0.11	Braune 1987
Eurasian Wigeon <i>Anas penelope</i>	0.5 $\pm$ 0.06 (0.10-2.34)	-	Parslow et al 1982
Gadwall <i>Anas strepera</i>	0.9 $\pm$ 0.4 (0.14-2.26)	-	Parslow et al 1982
Mallard <i>Anas platyrhynchos</i>	1.2 $\pm$ 0.1 (0.05-4.62)	-	Parslow et al 1982
Pintail <i>Anas Acuta</i>	3.7 $\pm$ 0.5 (0.16-12.14)	-	Parslow et al 1982
Teal <i>Anas crecca</i>	1.5 $\pm$ 0.1 (0.15-4.37)	-	Parslow et al 1982
Pochard <i>Aythya ferina</i>	0.6 $\pm$ 0.1 (0.32-0.97)	-	Parslow et al 1982
Shoveler <i>Anas clypeata</i>	3.0 $\pm$ 0.3 (0.47-6.44)	-	Parslow et al 1982
Tufted Duck <i>Aythya fuligula</i>	2.6 $\pm$ 1.1 (0.14-13.99)	-	Parslow et al 1982
Common Eider <i>Somateria mollissima</i>	0.99	0.15	Braune 1987

1 - median
ND - not detectable

TABLE 4-84

Mercury Dosimeter Monitoring

Date	Location Number/Name	Pump	Dosimeter	Time	Time	Diff- erence	----Flow Rate----			---Dosimeter Readings (mg/m ³)---					mg/m ³
				Start	End		Start	End	Avg.	1st	2nd	3rd	4th	Total	
7/10/89	2 DNR	3984	E22983	1839	2639	800	20.29	21.13	20.71	0.034	0.015	0	0	0.049	6.16E-04
7/10/89	5 Squibb Ditch and Fence	3980	E22986	1803	2603	800	20.43	21.58	21.01	0.043	0.021	0	0	0.064	7.93E-04
7/10/89	5 Squibb Ditch and Fence - Dup.	3986	E22982	1803	2603	800	20.12	20.46	20.29	0.041	0.016	0	0	0.057	7.32E-04
7/10/89	6 Technicon Storage Shed	3981	E22984	1723	2523	800	20.44	20.63	20.54	0.034	0.013	0	0	0.047	5.96E-04
7/10/89	10 Cristiana - 817	3985	E22987	1905	2705	800	20.05	19.37	19.71	0.032	0.015	0	0	0.047	6.21E-04
7/10/89	11 Cristiana - A02	3982	E22988	1927	2727	800	20.47	19.41	19.94	0.039	0.018	0.011	0	0.068	8.88E-04
7/11/89	2 DNR	3984	E22983	849	1649	800	20.12	21.66	20.89	0.006	0.001	0	0	0.007	8.73E-05
7/11/89	5 Squibb Ditch and Fence	3980	E22986	828	1444	616	20.20	19.38	19.79	0.007	0.001	0	0	0.008	1.05E-04
7/11/89	5 Squibb Ditch and Fence - Dup.	3986	E22982	828	1628	800	20.46	19.57	20.02	0.009	0.004	0	0	0.013	1.69E-04
7/11/89	6 Technicon Storage Shed	3981	E22984	811	1611	800	20.21	19.39	19.80	0.204	0.013	0.012	0.007	0.236	3.10E-03
7/11/89	10 Cristiana - 817	3985	E22987	908	1708	800	19.91	21.33	20.62	0.009	0.002	0	0	0.011	1.39E-04
7/11/89	11 Cristiana - A02	3982	E22988	923	1723	800	20.14	20.00	20.07	0.017	0.005	0	0	0.022	2.85E-04
7/21/89	1 The Sea	3984	E22983	602	1402	800	20.81	20.03	20.42	0.002	0	0	0	0.002	2.55E-05
7/21/89	3 NIP-WJK Telephone Pole	3985	E22987	624	1424	800	20.26	18.58	19.42	0.004	0	0	0	0.004	5.36E-05
7/21/89	4 NIP-Hydia Cafe	3986	E22982	630	1430	800	19.99	18.37	19.18	0.005	0.001	0	0	0.006	8.15E-05
7/21/89	5 Squibb Ditch and Fence	3980	E22986	641	1441	800	21.32	20.72	21.02	0.004	0	0	0	0.004	4.96E-05
7/21/89	6 Technicon Storage Shed	3981	E22984	636	1436	800	21.02	20.87	20.95	0.062	0.028	0.012	0.006	0.108	1.34E-03
7/21/89	11 Cristiana - A02	3982	E22988	616	1416	800	20.03	19.54	19.79	0.005	0	0	0	0.005	6.58E-05
7/21/89	11 Cristiana - A02 - Dup.	3983	E22990	616	1416	800	10.58	9.70	10.14	0.035	0.017	0.006	0.001	0.059	1.52E-03
7/25/89	1 The Sea	3984	E22983	1147	1947	800	20.72	20.89	20.81	0.012	0.001	0	0	0.013	1.63E-04
7/25/89	3 NIP-WJK Telephone Pole	3985	E22987	1208	2008	800	20.30	19.26	19.78	0.001	0	0	0	0.001	1.32E-05
7/25/89	4 NIP-Hydia Cafe	3986	E22982	1213	2013	800	20.72	19.62	20.17	0.002	0.001	0	0	0.003	3.87E-05
7/25/89	5 Squibb Ditch and Fence	3980	E22986	1229	2029	800	20.37	20.77	20.57	0.004	0.004	0.002	0	0.010	1.27E-04
7/25/89	7 Technicon-Linde Fence	3981	E22984	1222	2022	800	20.72	20.47	20.60	0.038	0.003	0.001	0.001	0.043	5.44E-04
7/25/89	9 Alcon Field	4457	E22989	1244	2044	800	19.98	19.38	19.68	0.004	0.005	0.003	0.001	0.013	1.72E-04
7/25/89	11 Cristiana - A02	3982	E22988	1201	2001	800	20.27	19.82	20.05	0.004	0.001	0	0	0.005	6.50E-05
7/25/89	11 Cristiana - A02 - Dup.	3983	E22990	1201	2001	800	10.39	10.27	10.33	0.004	0.001	0	0	0.005	1.26E-04
7/26/89	1 The Sea	3984	E22983	1047	1847	800	20.89	20.64	20.77	0.008	0	0	0	0.008	1.00E-04
7/26/89	3 NIP-WJK Telephone Pole	3985	E22987	1108	1908	800	19.26	19.81	19.54	0.002	0	0	0	0.002	2.67E-05
7/26/89	4 NIP-Hydia Cafe	3986	E22982	1112	1912	800	19.62	19.39	19.51	0.001	0	0	0	0.001	1.34E-05
7/26/89	5 Squibb Ditch and Fence	3980	E22986	1125	1925	800	20.77	19.39	20.08	0.002	0	0	0	0.002	2.59E-05
7/26/89	7 Technicon-Linde Fence	3981	E22984	1120	1920	800	20.47	20.62	20.55	0.029	0.003	0.001	0.001	0.034	4.31E-04

TABLE 4-84 (continued)

Date	Location Number/Name	Pump	Dosimeter	Time Start	Time End	Diff- erence	----Flow Rate----			---Dosimeter Readings (mg/m ³)---					mg/m ³
							Start	End	Avg.	1st	2nd	3rd	4th	Total	
7/26/89	9 Alcon Field	4458	EZ2989	1134	1934	800	20.61	19.80	20.21	0.003	0.001	0	0	0.004	5.16E-05
7/26/89	11 Cristiana - A02	3982	EZ2988	1101	1901	800	19.82	20.22	20.02	0.002	0	0	0	0.002	2.60E-05
7/26/89	11 Cristiana - A02 - Dup.	3983	EZ2990	1101	1901	800	10.27	10.32	10.30	0.001	0	0	0	0.001	2.53E-05
7/27/89	1 The Sea	3984	EZ2983	737	1537	800	20.42	20.71	20.57	0	0	0	0	0.000	0.00E+00
7/27/89	4 HIP-Nydia Cafe	3986	EZ2982	808	1608	800	20.38	19.86	20.12	0	0	0	0	0.000	0.00E+00
7/27/89	5 Squibb-Technicon Fence	3980	EZ2986	827	1627	800	20.05	20.38	20.22	0.004	0	0	0	0.004	5.15E-05
7/27/89	7 Technicon-Linde Fence	3981	EZ2984	816	1616	800	20.05	19.74	19.90	0.033	0.001	0	0	0.034	4.45E-04
7/27/89	7 Technicon-Linde Fence - Dup.	4457	EZ2989	816	1616	800	20.29	19.93	20.11	0.019	0.001	0	0	0.020	2.59E-04
7/27/89	10 Cristiana - S17	3985	EZ2987	752	1552	800	20.61	32.86	26.74	0.007	0	0	0	0.007	6.82E-05
7/27/89	11 Cristiana - A02	3982	EZ2988	802	1602	800	20.37	19.99	20.18	0.001	0	0	0	0.001	1.29E-05
7/27/89	11 Cristiana - A02 - Dup.	3983	EZ2990	802	1602	800	10.27	10.31	10.29	0.002	0	0	0	0.002	5.06E-05
8/07/89	1 The Sea	3984	EZ2983	1021	1821	800	20.46	20.12	20.29	0.007	0.001	0	0	0.008	1.03E-04
8/07/89	4 HIP - Nydia Cafe	3986	EZ2982	1057	1857	800	20.26	19.62	19.94	0.002	0	0	0	0.002	2.61E-05
8/07/89	5 Squibb-Technicon Fence	3980	EZ2986	1125	1925	800	20.94	21.88	21.41	0.005	0	0	0	0.005	6.08E-05
8/07/89	7 Technicon-Linde Fence 2	3981	EZ2984	1112	1912	800	20.30	19.50	19.90	0.008	0.001	0.001	0	0.010	1.31E-04
8/07/89	8 Linde Field	4458	EZ2989	1141	1941	800	20.85	19.99	20.42	0.005	0	0	0	0.005	6.38E-05
8/07/89	10 Cristiana - S17	3985	EZ2987	1038	1838	800	20.73	19.74	20.24	0.005	0	0	0	0.005	6.43E-05
8/07/89	11 Cristiana - A02	3982	EZ2988	1048	1848	800	20.14	19.94	20.04	0.003	0	0	0	0.003	3.90E-05
8/07/89	11 Cristiana - A02 - Dup.	3983	EZ2990	1048	1848	800	10.67	10.08	10.38	0.002	0	0	0	0.002	5.02E-05
8/08/89	1 The Sea	3984	EZ2983	827	1627	800	20.78	19.58	20.18	0	0	0	0	0.000	0.00E+00
8/08/89	4 HIP - Nydia Cafe	3986	EZ2982	854	1654	800	19.79	19.16	19.48	0.002	0	0	0	0.002	2.67E-05
8/08/89	5 Squibb-Technicon Fence	3980	EZ2986	908	1708	800	20.38	20.61	20.50	0.002	0	0	0	0.002	2.54E-05
8/08/89	7 Technicon-Linde Fence 2	3981	EZ2984	903	1703	800	20.36	19.90	20.13	0.009	0	0	0	0.009	1.16E-04
8/08/89	8 Linde Field	4457	EZ2989	919	1719	800	20.45	19.59	20.02	0.003	0	0	0	0.003	3.90E-05
8/08/89	10 Cristiana - S17	3985	EZ2987	841	1641	800	20.70	18.46	19.58	0.001	0	0	0	0.001	1.33E-05
8/08/89	11 Cristiana - A02	2982	EZ2988	848	1648	800	19.89	19.69	19.79	0.001	0	0	0	0.001	1.32E-05
8/08/89	11 Cristiana - A02 - Dup.	3983	EZ2990	848	1648	800	10.40	10.09	10.25	0.002	0	0	0	0.002	5.08E-05
8/09/89	1 The Sea	3984	EZ2983	709	1509	800	20.56	19.64	20.10	0	0	0	0	0.000	0.00E+00
8/09/89	4 HIP-Nydia Cafe	3986	EZ2982	741	1541	800	19.88	18.99	19.44	0.002	0	0	0	0.002	2.68E-05
8/09/89	5 Squibb-Technicon Fence	3980	EZ2986	759	1559	800	20.63	19.90	20.27	0.002	0.001	0	0	0.003	3.86E-05
8/09/89	7 Technicon-Linde Fence 2	3981	EZ2984	750	1550	800	20.28	19.62	19.95	0.008	0.003	0	0	0.011	1.44E-04
8/09/89	7 Technicon-Linde Fence 2 - Dup.	3983	EZ2990	750	1550	800	10.30	10.00	10.15	0.004	0.002	0.001	0	0.007	1.80E-04
8/09/89	8 Linde Field	4458	EZ2989	813	1613	800	20.47	19.64	20.06	0.003	0.002	0	0	0.005	6.49E-05
8/09/89	10 Cristiana - S17	3985	EZ2987	724	1524	800	20.56	18.68	19.62	0.002	0	0	0	0.002	2.65E-05

TABLE 4-84 (continued)

Date	Location Number/Name	Pump	Dosimeter	Time Start	Time End	Diff- erence	----Flow Rate----			---Dosimeter Readings (mg/m ³)---					mg/m ³
							Start	End	Avg.	1st	2nd	3rd	4th	Total	
8/09/89	11 Cristiana - A02	3982	EZ2988	734	1534	800	20.03	19.47	19.75	0.002	0	0	0	0.002	2.64E-05
8/17/89	1 The Sea	3984	EZ2983	921	1721	800	20.73	20.40	20.57	0	0	0	0	0.000	0.00E+00
8/17/89	4 NIP-Nydia Cafe	3986	EZ2982	945	1745	800	19.98	19.11	19.55	0.003	0	0	0	0.003	4.00E-05
8/17/89	5 Squibb-Technicon Fence	3980	EZ2986	958	1758	800	20.81	20.20	20.51	0.001	0	0	0	0.001	1.27E-05
8/17/89	7 Technicon-Linde Fence 2	3981	EZ2984	953	1753	800	20.06	19.30	19.68	0.006	0	0	0	0.006	7.94E-05
8/17/89	8 Linde Field	4458	EZ2989	1009	1809	800	20.54	19.45	20.00	0.004	0.001	0	0	0.005	6.51E-05
8/17/89	10 Cristiana - S17	3985	EZ2987	933	1733	800	20.58	19.45	20.02	0.001	0	0	0	0.001	1.30E-05
8/17/89	11 Cristiana - A02	3982	EZ2988	940	1740	800	20.01	19.66	19.84	0.007	0.002	0.002	0	0.011	1.44E-04
8/17/89	11 Cristiana - A02 - Dup.	3983	EZ2990	940	1740	800	10.33	10.06	10.20	0.003	0	0	0	0.003	7.66E-05
8/18/89	1 The Sea	3984	EZ2983	707	1507	800	20.62	20.37	20.50	0	0	0	0	0.000	0.00E+00
8/18/89	4 NIP-Nydia Cafe	3986	EZ2982	730	1530	800	19.80	19.43	19.62	0.002	0	0	0	0.002	2.66E-05
8/18/89	5 Squibb-Technicon Fence	3980	EZ2986	739	1539	800	20.21	19.43	19.82	0.002	0	0	0	0.002	2.63E-05
8/18/89	7 Technicon-Linde Fence 2	3981	EZ2984	734	1534	800	19.99	19.28	19.64	0.011	0	0	0	0.011	1.46E-04
8/18/89	8 Linde Field	4458	EZ2989	748	1548	800	20.27	19.36	19.82	0.005	0.001	0	0	0.006	7.89E-05
8/18/89	10 Cristiana - S17	3985	EZ2987	719	1519	800	20.67	19.09	19.88	0.002	0	0	0	0.002	2.62E-05
8/18/89	11 Cristiana - A02	3982	EZ2988	725	1525	800	19.86	19.65	19.76	0.007	0	0	0	0.007	9.23E-05
8/18/89	11 Cristiana - A02 - Dup.	3983	EZ2990	725	1525	800	10.32	9.88	10.10	0.005	0	0	0	0.005	1.29E-04

TABLE 4-85

Air Sampling Results¹

Date	Location Number/Name	Mercury mg/m ³	1,1,1- TCA	Acetone	Chloro- form	Ethyl- benzene	MECL2	M+P- Xylene	O- Xylene	Toluene
7/10/89	02 DNR	*	BMDL	BMDL	BMDL	BMDL	12	20	BMDL	3.6
7/10/89	05 Squibb Ditch and Fence	*	BMDL	BMDL	BMDL	BMDL	180	BMDL	BMDL	1.9
7/10/89	05 Squibb Ditch and Fence - Dup.	*	BMDL	BMDL	BMDL	BMDL	380	BMDL	BMDL	BMDL
7/10/89	06 Technicon Storage Shed	*	BMDL	BMDL	BMDL	BMDL	35	BMDL	BMDL	BMDL
7/10/89	10 Cristiana - S17	*	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
7/10/89	11 Cristiana - A02	*	BMDL	BMDL	BMDL	BMDL	1.5	0.65	BMDL	2.4
7/11/89	02 DNR	0.000087	BMDL	BMDL	BMDL	BMDL	5.2	BMDL	BMDL	2.3
7/11/89	05 Squibb Ditch and Fence	0.000105	BMDL	BMDL	BMDL	BMDL	840	BMDL	BMDL	3.5
7/11/89	05 Squibb Ditch and Fence - Dup.	0.000169	BMDL	BMDL	BMDL	BMDL	600	BMDL	BMDL	7.4
7/11/89	06 Technicon Storage Shed	0.003104	BMDL	BMDL	BMDL	BMDL	320	1.3	BMDL	8.4
7/11/89	10 Cristiana - S17	0.000139	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
7/11/89	11 Cristiana - A02	0.000285	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
7/21/89	01 The Sea	0.000026	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/21/89	03 HIP - WJK Telephone Pole	0.000054	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/21/89	04 HIP - Nydia Cafe	0.000081	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/21/89	05 Squibb Ditch and Fence	0.000050	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/21/89	06 Technicon Storage Shed	0.001343	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/21/89	11 Cristiana - A02	0.000066	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/21/89	11 Cristiana - A02 - Dup.	*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/25/89	01 The Sea	0.000163	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/25/89	03 HIP - WJK Telephone Pole	0.000013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/25/89	04 HIP - Nydia Cafe	0.000039	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/25/89	05 Squibb Ditch and Fence	0.000127	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/25/89	07 Technicon - Linde Fence	0.000544	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/25/89	09 Alcon Field	0.000172	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/25/89	11 Cristiana - A02	0.000065	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/25/89	11 Cristiana - A02 - Dup.	0.000126	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE 4-85 (continued)

Date	Location Number/Name	Mercury mg/m ³	1,1,1- TCA	Acetone	Chloro- form	Ethyl- benzene	MECL2	M+P- Xylene	O- Xylene	Toluene
7/26/89	01 The Sea	0.000100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/26/89	03 HIP-WJK Telephone Pole	0.000027	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/26/89	04 HIP - Nydia Cafe	0.000013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/26/89	05 Squibb Ditch and Fence	0.000026	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/26/89	07 Technicon - Linde Fence	0.000431	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/26/89	09 Alcon Field	0.000052	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/26/89	11 Cristiana - A02	0.000026	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/26/89	11 Cristiana - A02 - Dup.	0.000025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/27/89	01 The Sea	0.000000	BMDL	4.5	BMDL	BMDL	28	BMDL	BMDL	2.4
7/27/89	04 HIP - Nydia Cafe	0.000000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/27/89	05 Squibb - Technicon Fence	0.000052	BMDL	350	BMDL	15	470	2.3	11	4.7
7/27/89	07 Technicon - Linde Fence	0.000445	BMDL	210	BMDL	BMDL	250	18	BMDL	6
7/27/89	07 Technicon - Linde Fence - Dup.	0.000259	BMDL	96	BMDL	BMDL	90	17	BMDL	10
7/27/89	10 Cristiana - S17	0.000068	BMDL	BMDL	BMDL	BMDL	2.5	BMDL	BMDL	15
7/27/89	11 Cristiana - A02	0.000013	BMDL	BMDL	BMDL	BMDL	2.8	BMDL	BMDL	5.5
7/27/89	11 Cristiana - A02 - Dup.	0.000051	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/07/89	01 The Sea	0.000103	BMDL	16	BMDL	BMDL	16	BMDL	BMDL	1.8
8/07/89	04 HIP - Nydia Cafe	0.000026	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/07/89	05 Squibb - Technicon Fence	0.000061	BMDL	360	7.4	BMDL	710	BMDL	BMDL	3.6
8/07/89	07 Technicon - Linde Fence 2	0.000131	BMDL	91	BMDL	BMDL	150	0.51	BMDL	4.2
8/07/89	08 Linde Field	0.000064	4.0	BMDL	BMDL	BMDL	160	BMDL	BMDL	BMDL
8/07/89	10 Cristiana - S17	0.000064	BMDL	BMDL	BMDL	BMDL	53	BMDL	BMDL	1.3
8/07/89	11 Cristiana - A02	0.000039	BMDL	BMDL	BMDL	BMDL	22	BMDL	BMDL	BMDL
8/07/89	11 Cristiana - A02 - Dup.	0.000050	BMDL	BMDL	BMDL	BMDL	58	BMDL	BMDL	2.7
8/08/89	01 The Sea	0.000000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/08/89	04 HIP - Nydia Cafe	0.000027	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/08/89	05 Squibb - Technicon Fence	0.000025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/08/89	07 Technicon - Linde Fence 2	0.000116	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/08/89	08 Linde Field	0.000039	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/08/89	10 Cristiana - S17	0.000013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/08/89	11 Cristiana - A02	0.000013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/08/89	11 Cristiana - A02 - Dup.	0.000051	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE 4-85 (continued)

Date	Location Number/Name	Mercury mg/m ³	1,1,1- TCA	Acetone	Chloro- form	Ethyl- benzene	MECL2	M+P- Xylene	O- Xylene	Toluene
8/09/89	01 The Sea	0.000000	BMDL	BMDL	BMDL	BMDL	2.9	BMDL	BMDL	BMDL
8/09/89	04 NIP - Nydia Cafe	0.000027	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/09/89	05 Squibb - Technicon Fence	0.000039	BMDL	72	BMDL	BMDL	590	4.6	BMDL	11
8/09/89	07 Technicon - Linde Fence 2	0.000144	BMDL	350	BMDL	24	350	2.8	BMDL	8.5
8/09/89	07 Technicon - Linde Fence 2 - Dup.	0.000180	BMDL	210	BMDL	0.81	340	3.3	BMDL	10
8/09/89	08 Linde Field	0.000065	3.5	110	BMDL	BMDL	230	BMDL	BMDL	5.4
8/09/89	10 Cristiana - S17	0.000027	BMDL	BMDL	BMDL	BMDL	16	BMDL	BMDL	2.6
8/09/89	11 Cristiana - A02	0.000026	BMDL	BMDL	BMDL	BMDL	7.2	BMDL	BMDL	BMDL
8/17/89	01 The Sea	0.000000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/17/89	04 NIP - Nydia Cafe	0.000040	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/17/89	05 Squibb - Technicon Fence	0.000013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/17/89	07 Technicon - Linde Fence 2	0.000079	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/17/89	08 Linde Field	0.000065	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/17/89	10 Cristiana - S17	0.000013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/17/89	11 Cristiana - A02	0.000144	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/17/89	11 Cristiana - A02 - Dup.	0.000077	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/18/89	01 The Sea	0.000000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/18/89	04 NIP - Nydia Cafe	0.000027	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/18/89	05 Squibb - Technicon Fence	0.000026	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/18/89	07 Technicon - Linde Fence 2	0.000146	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/18/89	08 Linde Field	0.000079	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/18/89	10 Cristiana - S17	0.000026	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/18/89	11 Cristiana - A02	0.000092	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/18/89	11 Cristiana - A02 - Dup.	0.000129	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

- 1 - Concentrations of all VOCs expressed as ppb
 BMDL - Below Method Detection Limit
 N/A - Not Analyzed
 * - Samples analyzed but values rejected due to QA problems

TABLE 4-86

Summary of Average Analyte Concentrations Detected
at Air Sampling Locations
(values in mg/m^3)

Station Number	Mercury	Acetone	Methylene Chloride	Ethyl Benzene	Total Xylene	Toluene
1	0.000043	0.018	0.059	0	0	0.006
2	0.000087	0	0.033	0	0.047	0.012
3	0.000031	NA	NA	NA	NA	NA
4	0.000031	NA	NA	NA	NA	NA
5	0.000055	0.055	2.101	0.014	0.012	0.021
6	0.002223	0	0.673	0	0.003	0.272
7	0.000245	0.453	0.841	0.019	0.039	0.029
8	0.000062	0.143	0.739	0	0	0.011
9	0.000111	NA	NA	NA	NA	NA
10	0.000050	0	0.054	0	0	0.016
11	0.000082	0	0.039	0	0.001	0.008

NA Not Analyzed

PRO 001 1353

TABLE 4-87

**Summary of Available Data on Atmospheric Mercury Concentrations
(values in ng/m³)**

Location/ Concentration	Source	Comments
UNSPECIFIED		
1 - 5 (range)	Cooper et al, 1974	Background concentrations in rural areas
2 - 60 (range)	Cooper et al, 1974	Urban areas
0.7 (typical value)	NRC, 1978	Remote oceanic areas
4.0 (typical value)	NRC, 1978	Rural areas
<10.0 (typical value)	NRC, 1978	Urban areas
TAMPA, FL		
1.8 - 298 (range)	Johnson & Braman, 1974	
4.48 (daytime mean)		
8.40 (nighttime mean)		
NINE STATES		
2 - 60 (range for 90% of samples)	Spittler, 1976	
TEN CITIES (WESTERN & MIDWESTERD U.S.)		
5.0 - 29.6 (range)	Cooper et al, 1974	
UNSPECIFIED		
5 (typical value)	Cooper et al, 1974	Near highway during low traffic period
10 - 12 (typical value)	Cooper et al, 1974	Near highway during heavy traffic period

Source: EPA, 1980

FRO 001 1355

TABLE 3-1

List of Replicate Pairs

Dynamac Sample Number	Dynamac Replicate Number	Analytes
CCSSD09	CCSSK01	HgT, HgI
CCSS20D	CCSSK10	HgT
CCSS01E	CCSSK02	HgT
CCSSE19	CCSSK03	HgT, HgI
CCSSG08	CCSSK08 ¹	HgT, HgI, HSL
CCSSG19	CCSSK04	HgT
CCSSI08	CCSSK05	HgT
CCSSI26	CCSSK06	HgT, HgI, HSL
CCSS13J	CCSSK07	HgT
CCSS024	CCSSK09	HgT
CCSS30P	CCSSK11	HgT
CCSSR05	CCSSK12	HgT
CCSSS05	CCSSK13	HgT
CCSST20	CCSSK14	HgT
CCSSM08	CCSSK15	HgT, HgI, HSL
TBA08D05	TBK05D05	HgT, HgI
TBB07D06	TBK07D06	HgT, HgI, HSL
TBD34D03	TBK10D03	HgT, HgI
TBD34D07	TBK11D07	HgT, HgI,
TBE23D01	TBK09D01	HgT, HgI
TBG08D03	TBK06D03	HgT, HgI
TBJ14D02	TBK08D02	HgT, HgI
TBN40D01	TBK03D01	HgT, HgI, HSL
TBQ27D06	TBK04D06	HgT, HgI
TBS15D01	TBK01D01	HgT, HgI, HSL
TBX12D07	TBK02D07	HgT, HgI
ISALCN01B	ISALCNB01	HgT, HgI
ISALCN08A	ISALCNA08	HgT
ISCLCN02B	ISCLCNB02	HgT, HgI
ISDENT05A	ISDENTA05	HgT
ISDENV05A	ISDENVA05	HgT
ISESPS01A	ISESPSA01	HgT, HSL
ISESPS03C	ISESPSC03	HgT, HgI
ISHWTP01C	ISHWTPC01	HgT, HgI
ISHWTP02A	ISHWTPA02	HgT, HgI, HSL
ISHWTP10A	ISHWTPA10	HgT
ISPCRO2A	ISPCRA02	HgT, HSL
ISPEER03A	ISPEERA03	HgT, HgI
ISREED01A	ISREEDA01	HgT
ISREED06A	ISREEDA06	HgT, HgI, HSL
ISSQBB01A	ISSQBBA01	HgT, HgI, HSL
ISSQBB03B	ISSQBBB03	HgT, HgI
ISTECH02B	ISTECHB02	HgT, HgI
ISTECH07A	ISTECHA07	HgT, HSL
ISTECH16A	ISTECHA16	HgT
ISWJKC03B	ISWJKCB03	HgT, HgI
ISBG04A	ISBGA04	HgT, HgI, HSL
ISBG05C	ISBGC05	HgT
ISBG12A	ISBGA12	HgT, HSL

FRO 001 1356

TABLE 5-1 (continued)

Dynamac Sample Number	Dynamac Replicate Number	Analytes
GWX12	GW12X	HgT, HgI
GWSQBBO6A	GWSQBBA06	HgT, HgI
GWBG06	GW06BG	HgT, HgI
SW05	SW06	HgT, HgI, HSL
SW16	SW17	HgT, HgI, HSL
FCSEDCL03A	FCSEDCLA03	HgT
FCSEDCL06B	FCSEDCLB06	HgT
FCSEDCL23A	FCSEDCLA23	HgT
FCSEDCL26A	FCSEDCLA26	HSL, OTHER
FCSEDCL30B	FCSEDCLB30	HgT
FCSEDCL36A	FCSEDCLA36	HgT
FCSEDCL46A	FCSEDCLA46	HgT
FCSEDCL54B	FCSEDCLB54	OTHER
FCSEDCL61A	FCSEDCLA61	HgT
SDSEDCL05A	SDSEDCLA05	HgT
SDSEDCL08A	SDSEDCLA08	OTHER
TDSEDCL05A	TDSEDCLA05	HgT
TDSEDCL08A	TDSEDCLA08	OTHER
TDSEDCL13A	TDSEDCLA13	HgT
TDSEDCL16A	TDSEDCLA16	HSL, OTHER
FLSED05A	FLSEDA05	HgT
FLSED11A	FLSEDA11	HSL, OTHER
FLSED15A	FLSEDA15	HgT
SEDTRANA1B	SEDTREPA1B	HgT
SEDTRANB4A	SEDTREPB4A	HgT
SEDTRAND1B	SEDTREPD1B	HgT
SEDTRANF4B	SEDTREPF4B	HgT
BGSEDCL05A	BGSEDCLA05	HgT
BGSEDCL06A	BGSEDCLA06	HSL, OTHER
CF207	CF250	HgT, HgI
CM203	CM250	HgT, HgI
C405	C450	HgT, HgI
X209	X251	HgT, HgI, HSL
X217	X250	HgT, HgI
X202	X252	HgT, HgI
X262	X265	HgT, HgI
X004	X050	HgT, HgI
X501	X550	HgT, HgI
X440	X540	HgT, HgI
TF204	TF250	HgT, HgI
TM202	TM251	HgT, HgI
TM206	TM250	HgT, HgI
T030	T050	HgT, HgI
T413	T450	HgT, HgI
T408	T408	HgT, HgI
BCOWFCS03	BCOWFCR01	HgT, HgI
MCOWFCS03	MCOWFCR01	HgT, HgI

FRO 001 1357

TABLE 5-1 (continued)

Dynamac Sample Number	Dynamac Replicate Number	Analytes
7/10/89 - SQUIBB DITCH & FENCE	7/10/89 - SQUIBB DITCH & FENCE - DUP	HSL-VOC
7/11/89 - SQUIBB DITCH & FENCE	7/11/89 - SQUIBB DITCH & FENCE - DUP	HSL-VOL
7/25/89 - CRISTIANA CCA02	7/25/89 - CRISTIANA CCA01 - DUP	HgT
7/26/89 - CRISTIANA CCA02	7/26/89 - CRISTIANA CCA02 - DUP	HgT
7/27/89 - TECH - LINDE FENCE	7/27/89 - TECH - LINDE FENCE - DUP	HgT
7/27/89 - TECH - LINDE FENCE	7/27/89 - TECH - LINDE FENCE - DUP	HSL-VOC
8/7/89 - CRISTIANA CCA02	8/7/89 - CRISTIANA CCA02 - DUP	HgT
8/7/89 - CRISTIANA CCA02	8/7/89 - CRISTIANA CCA02 - DUP	HSL-VOC
8/8/89 - CRISTIANA CCA02	8/8/89 - CRISTIANA CCA02 - DUP	HgT
8/9/89 - TECH - LINDE FENCE 2	8/9/89 - TECH - LINDE FENCE 2 - DUP	HgT
8/9/89 - TECH - LINDE FENCE 2	8/9/89 - TECH - LINDE FENCE 2 - DUP	HSL-VOC
8/17/89 - CRISTIANA CCA02	8/17/89 - CRISTIANA CCA02 - DUP	HgT
8/18/89 - CRISTIANA CCA02	8/18/89 - CRISTIANA CCA02 - DUP	HgT

1 - Sample not analyzed not HgI

HgT Total Mercury
 HgI Inorganic Mercury
 HSL Hazardous Substance List
 HSL-VOC Hazardous Substance List Volatile Organic Compounds
 OTHER Total Mercury, Inorganic Mercury, Total Organic Carbon, Sulfate,
 Sulfide

FRO 001 1358

TABLE 5-2

Mercury Data for Soil Replicate Samples (values in ug/kg)

SAMPLES							REPLICATE SAMPLES						
Dynamac Number	ETC Number	Date	Total		Inorganic		Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value				Qual	Value	Qual	Value
CCSSD09	BD0315	880120	BMDL	72	BMDL	78	CCSSK01	BD0317	880120	BMDL	61	BMDL	71
CCSS200	BD2534	880202	BMDL	70			CCSSK10	BD2535	880202	BMDL	72		
CCSS01E	BD0289	880122	BMDL	57			CCSSK02	BD0286	880122	BMDL	55		
CCSSE19	BD0314	880122		291		113	CCSSK03	BD0320	880122		332		279
CCSSG08	BD0347	880203		100	BMDL	60	CCSSK08	BD0348	880203	BMDL	79		
CCSSG19	BD0290	880122		86			CCSSK04	BD0291	880122		88		
CCSSI08	BD0294	880125		96			CCSSK05	BD0295	880125	BMDL	76		
CCSS126	BD2544	880205		88	BMDL	52	CCSSK06	BD2545	880205		88		93
CCSS13J	BD0299	880125		96			CCSSK07	BD0300	880125	BMDL	75		
CCSS024	BD0370	880126		86			CCSSK09	BD0371	880126	BMDL	73		
CCSS30P	BD0374	880126		235			CCSSK11	BD0351	880126		249		
CCSSR05	BD0357	880127	ND	0			CCSSK12	BD0358	880127	ND	0		
CCSSS05	BD0360	880127	BMDL	50			CCSSK13	BD0361	880127		123		
CCSST20	BD0378	880127		87			CCSSK14	BD0379	880127	BMDL	67		
TBA08005	BD3520	880305	ND	0	ND	0	TBK05D05	BD3521	880305	ND	0	ND	0
TBB07D06	BD3497	880310	BMDL	72	ND	0	TBK07D06	BD3475	880310	BMDL	46	ND	0
TBD34D03	BD6637	880315	ND	0	ND	0	TBK10D03	BD6638	880315	ND	0	ND	0
TBD34D07	BD6642	880315	ND	0	ND	0	TBK11D07	BD6643	880315	ND	0	ND	0
TBE23D01	BD3556	880314	ND	0	ND	0	TBK09D01	BD3557	880314	ND	0	ND	0
TBG08D03	BD3544	880309	BMDL	53	ND	0	TBK06D03	BD3545	880309	ND	0	ND	0
TBJ14D02	BD3549	880311	ND	0	ND	0	TBK08D02	BD3550	880311	ND	0	ND	0
TBN40D01	BD3480	880301		140		87	TBK03D01	BD3481	880301		120	BMDL	54
TBQ27D06	BD3513	880304	BMDL	60	ND	0	TBK04D06	BD3514	880304		97	ND	0
TBS15D01	BD3471	880225		100		110	TBK01D01	BD3472	880225		94	BMDL	66
TBX12D07	BD3581	880302	ND	0	ND	0	TBK02D07	BD3582	880302	ND	0	ND	0
ISALCN01B	BE6100	880614	ND	0	ND	0	ISALCNB01	BE6101	880614	BMDL	45	ND	0
ISALCN08A	BE6097	880614		87			ISALCNA08	BE6098	880614		154		
ISCLCN02B	CA0825	890524	BMDL	73	ND	0	ISCLCNB02	CA0826	890524	BMDL	48	ND	0
ISDENT05A	BH8803	890121	BMDL	103			ISDENTA05	BH8802	890121	BMDL	101		
ISDENV05A	CA1118	890713		107			ISDENVA05	CA1119	890713		124		

FRO 001 1359

TABLE 5-2 (continued)

SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
ISESPS01A	BE6194	880826	BMDL	58		
ISESPS03C	BE6141	880826	BMDL	69	BMDL	64
ISHWTP01C	CA1125	890720		114 *		187 *
ISHWTP02A	CA1149	890720		150 **		162
ISHWTP10A	CA1136	890720		117		
ISPCRO2A	CA0886	890524		170		
ISPEER03A	BE6086	880607		179		164
ISREED01A	BH8806	890121	BMDL	89		
ISREED06A	BH8771	890122	BMDL	72	BMDL	72
ISSQBB01A	CA0830	890523	ND	0	ND	0
ISSQBB03B	CA0811	890523		216		263
ISTECH02B	BE6106	880615		5,900		2,640
ISTECH07A	BE6185	880616		260		
ISTECH16A	BE6113	880615		17,400		
ISWJKC03B	CA1167	890714	ND	0		0
CCSSH08	BD0424	880205	ND	0	ND	0
ISBG04A	BE6189	880617		110	BMDL	68
ISBG05C	BE6134	880617		190		
ISBG12A	BE6191	880617		88		

REPLICATE SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
ISESPSA01	BE6195	880826	BMDL	49		
ISESPSC03	BE6142	880826	BMDL	58	BMDL	72
ISHWTPC01	CA1126	890720		153		149
ISHWTPA02	CA1156	890720	BMDL	100 **	BMDL	103
ISHWTPA10	CA1137	890720		167		
ISPCRA02	CA0887	890525		150		
ISPEERA03	BE6087	880607		158		138
ISREEDA01	BH8807	890121	BMDL	88		
ISREEDA06	BH8772	890123	BMDL	87	BMDL	64
ISSQBBA01	CA0831	890523	ND	0	ND	0
ISSQBBB03	CA0812	890523		216		165 **
ISTECHB02	BE6110	880615		5,450		1,320
ISTECHA07	BE6186	880616		220		
ISTECHA16	BE6114	880615		21,400		
ISWJKCB03	CA1168	890714	ND	0	ND	0
CCSSK15	BD0423	880205	ND	0	ND	0
ISBGA04	BE6190	880617		86	BMDL	60
ISBGC05	BE6135	880617	ND	0		
ISBGA12	BE6192	880617	BMDL	56		

Note: *, **, R1 and R2 identify data points originally qualified "R" (rejected by the data validation team) but judged usable for data assessment purposes (see Appendix 7 for the explanation of these qualifiers)

TABLE 5-3

Mercury Data for Cristiana Surface Soil Co-Located Samples (values in ug/kg; MDL = 80)

SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
CCSSD20	BD0416	880203	BMDL	69		
CCSSD48	BD0418	880204		148	89	
CCSSE01	BD0313	880122	BMDL	55	ND	0
CCSSE07	BD0283	880122	BMDL	64		
CCSSE19	BD0314	880122		291	113	
CCSSH07	BD0349	880203	BMDL	57		
CCSSI26	BD2544	880205		88	BMDL	52
CCSSI31	BD0401	880125		102	113	
CCSSI13	BD0402	880125		90	104	
CCSSN23	BD0363	880125	BMDL	75		
CCSSN29	BD0404	880202	BMDL	44	ND	0
CCSSN55	BD0346	880202		128	BMDL	59
CCSSO08	BD0344	880129		86		
CCSSP23	BD0335	880203		83	ND	0
CCSSP30	BD0409	880126		139	115	
CCSSQ05	BD0410	880126		101	BMDL	39
CCSSR09	BD0389	880204	BMDL	44	BMDL	44
CCSSR21	BD0341	880128		98		
CCSSS05	BD0360	880127	BMDL	50		
CCSSX17	BD0325	880127		116	120	

CO-LOCATED SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
CCSS20D	BD2534	880202	BMDL	70		
CCSS48D	BD2536	880202		112		
CCSS01E	BD0289	880122	BMDL	57		
CCSS07E	BD0281	880122		93		
CCSS19E	BD0282	880122	BMDL	58		
CCSS07H	BD2537	880202	ND	0		
CCSS26I	BD0387	880204		105		
CCSS31I	BD0298	880125		80		
CCSS13J	BD0299	880125		96		
CCSS23N	BD0364	880125	BMDL	64		
CCSS29N	BD0365	880125	BMDL	53		
CCSS55N	BD0385	880202	BMDL	74		
CCSS08O	BD0334	880203		83	ND	0
CCSS23P	BD0336	880203		91	ND	0
CCSS30P	BD0374	880126		235		
CCSS05Q	BD0354	880127		90		
CCSS09R	BD0390	880204		97		
CCSS21R	BD0384	880128	BMDL	78		
CCSS05S	BD0362	880127		96		
CCSS17X	BD0381	880127		81		

1961 100 PRO

TABLE 5-4

MSL Data for Soil Samples and Replicates (values in ug/kg)

Date	SAMPLES				REPLICATE SAMPLES			
	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
VOLATILE ORGANIC COMPOUNDS								
	<u>Acetone</u>							
880203	CCSSG08	BD0347		64.20	CCSSK08	BD0348		63.30
880205	CCSSI26	BD2544		97	CCSSK06	BD2545		108
880310	TBB07D06	BD3497		218	TBK07D06	BD3475		76.20
880301	TBN40D01	BD3480		43.40	TBK03D01	BD3481		44.50
880225	TBS15D01	BD3471		11.50	TBK01D01	BD3472	ND	0
880826	ISESPS01A	BE6194		16.20	ISESPSA01	BE6195		15.90
890720	ISHWTP02A	CA1149		25	ISHWTPA02	CA1156	ND	0
890524	ISPCR02A	CA0886		29.90	ISPCRA02	CA0887	ND	0
890122	ISREED06A	BH8771		37.60	ISREEDA06	BH8772	BMDL	9.92
890523	ISSQBB01A	CA0830	BMDL	5.23	ISSQBBA01	CA0831	BMDL	8.28
880616	ISTECH07A	BE6185	ND	0	ISTECHA07	BE6186		21.50
880205	CCSSM08	BD0424		39.20	CCSSK15	BD0423		76.20
880617	ISBG04A	BE6189		16.60	ISBGA04	BE6190		18.60
880617	ISBG12A	BE6191		16.60	ISBGA12	BE6192	ND	0
	<u>Methyl ethyl ketone</u>							
880310	TBB07D06	BD3497		20.10	TBK07D06	BD3475	ND	0
880617	ISBG04A	BE6189	ND	0	ISBGA04	BE6190		7.98

FRO 001 1362

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
VOLATILE ORGANIC COMPOUNDS (continued)								
<u>Methylene chloride</u>								
880203	CCSSG08	BD0347		7.32	CCSSK08	BD0348		7.89
880205	CCSSI26	BD2544		25.40	CCSSK06	BD2545	ND	0
880310	TBB07D06	BD3497		22.60	TBK07D06	BD3475		11.90
880301	TBN40D01	BD3480	ND	0	TBK03D01	BD3481		27.10
880826	ISESPS01A	BE6194		8.13	ISESPSA01	BE6195		7.31
890720	ISHWTP02A	CA1149		8.99	ISHWTPA02	CA1156		19.40
890524	ISPCRO2A	CA0886		15.40	ISPCRA02	CA0887		7.55
890523	ISSQBB01A	CA0830	BMDL	3.46	ISSQBBA01	CA0831	BMDL	3.62
880616	ISTECH07A	BE6185		7.04	ISTECHA07	BE6186		17.60
880205	CCSSM08	BD0424		28.30	CCSSK15	BD0423		16.80
880617	ISBG04A	BE6189		17.20	ISBGA04	BE6190		6.71
880617	ISBG12A	BE6191		17.10	ISBGA12	BE6192	BMDL	4.76
<u>Methyl isobutyl ketone</u>								
880203	CCSSG08	BD0347		42.90	CCSSK08	BD0348	ND	0
BASE/NEUTRAL EXTRACTABLES								
<u>bis (2-ethylhexyl) phthalate</u>								
880205	CCSSI26	BD2544	BMDL	147	CCSSK06	BD2545	ND	0
890720	ISHWTP02A	CA1743	ND	0	ISHWTPA02	CA1747		768
890524	ISPCRO2A	CA0886		1,220	ISPCRA02	CA0887		850
890122	ISREED06A	BH8771	BMDL	138	ISREEDA06	BH8772	BMDL	161
880617	ISBG12A	BE6191	BMDL	225	ISBGA12	BE6192	ND	0
<u>Diethyl phthalate</u>								
880826	ISESPS01A	BE6194	BMDL	19.50	ISESPSA01	BE6195	ND	0
890122	ISREED06A	BH8771	BMDL	200	ISREEDA06	BH8772	BMDL	173

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
BASE/NEUTRAL EXTRACTABLES (continued)								
<u>Di-n-butyl phthalate</u>								
880205	CCSSI26	BD2544	BMDL	267	CCSSK06	BD2545	BMDL	104
880826	ISESPS01A	BE6194	BMDL	91.80	ISESPSA01	BE6195	BMDL	80.10
890720	ISHWTP02A	CA1743		1,370	ISHWTPA02	CA1747		2,020
880205	CCSSM08	BD0424	BMDL	214	CCSSK15	BD0423	BMDL	213
<u>Di-n-octyl phthalate</u>								
890122	ISREED06A	BH8771	ND	0	ISREEDA06	BH8772	BMDL	468
880205	CCSSM08	BD0424	ND	0	CCSSK15	BD0423	BMDL	116
<u>Naphthalene</u>								
880826	ISESPS01A	BE6194	BMDL	11	ISESPSA01	BE6195	BMDL	12.30
<u>Phenanthrene</u>								
880203	CCSSG08	BD0347	ND	0	CCSSK08	BD0348	BMDL	120
ACID EXTRACTABLES								
<u>Benzoic acid</u>								
890122	ISREED06A	BH8771	ND	0	ISREEDA06	BH8772	BMDL	144
880205	CCSSM08	BD0424	ND	0	CCSSK15	BD0423	BMDL	101
ORGANOCHLORINE PESTICIDES/PCBs								
<u>Gamma-BHC</u>								
880301	TBN40D01	BD3480		11	TBK03D01	BD3481	ND	0
<u>gamma-Chlordane</u>								
890524	ISPCRO2A	CA0886		97.40	ISPCRA02	CA0887		86.80

1364
001
FRC

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
ORGANOCHLORINE PESTICIDES/PCBs (continued)								
<u>Heptachlor</u>								
880301	TBN40D01	BD3480		10	TBK03D01	BD3481	ND	0
890524	ISPCRO2A	CA0886		19	ISPCRA02	CA0887		30
RCRA METALS								
<u>Arsenic</u>								
880203	CCSSG08	BD0347		2,700 R	CCSSK08	BD0348		3,900
880205	CCSSI26	BD2544		2,300	CCSSK06	BD2545		2,400
880310	TBB07D06	BD3497	ND	330	TBK07D06	BD3475	ND	280
880301	TBN40D01	BD3480	BMDL	1,400	TBK03D01	BD3481		2,200
880225	TBS15D01	BD3471		2,000	TBK01D01	BD3472		2,300
880826	ISESPS01A	BE6194	BMDL	690	ISESPSA01	BE6195	BMDL	450
890720	ISHWTP02A	CA1149	BMDL	770	ISHWTPA02	CA1156	BMDL	700
890524	ISPCRO2A	CA0886	BMDL	1,700	ISPCRA02	CA0887	BMDL	1,900
890122	ISREED06A	BH8771	BMDL	1,200	ISREEDA06	BH8772	BMDL	1,800
890523	ISSQBB01A	CA0830	BMDL	520	ISSQBBA01	CA0831	BMDL	800
880616	ISTECH07A	BE6185	BMDL	780	ISTECHA07	BE6186	BMDL	1,600
880205	CCSSM08	BD0424	BMDL	1,000	CCSSK15	BD0423	BMDL	810
880617	ISBG04A	BE6189	BMDL	3,300	ISBGA04	BE6190	BMDL	1,600
880617	ISBG12A	BE6191	BMDL	1,400	ISBGA12	BE6192	BMDL	1,400

FRO 001 1365

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
RCRA METALS (continued)								
<u>Barium</u>								
880203	CCSSG08	BD0347		148,000	CCSSK08	BD0348		129,000
880205	CCSSI26	BD2544		134,000	CCSSK06	BD2545		127,000
880310	TBB07D06	BD3497		99,900	TBK07D06	BD3475		109,000
880301	TBN40D01	BD3480		132,000	TBK03D01	BD3481		128,000
880225	TBS15D01	BD3471		149,000	TBK01D01	BD3472		182,000
880826	ISESPS01A	BE6194		160,000	ISESPSA01	BE6195		190,000
890720	ISHWTP02A	CA1149		78,000	ISHWTPA02	CA1156		99,000
890524	ISPCR02A	CA0886		95,000	ISPCRA02	CA0887		110,000
890122	ISREED06A	BH8771		86,000	ISREEDA06	BH8772		90,000
890523	ISSQBB01A	CA0830		81,000	ISSQBA01	CA0831		120,000
880616	ISTECH07A	BE6185		50,000	ISTECHA07	BE6186		84,000
880205	CCSSM08	BD0424		127,000	CCSSK15	BD0423		145,000
880617	ISBG04A	BE6189		275,000	ISBGA04	BE6190		593,000
880617	ISBG12A	BE6191		110,000	ISBGA12	BE6192		117,000
<u>Cadmium</u>								
880203	CCSSG08	BD0347	ND	63	CCSSK08	BD0348	BMDL	190
880301	TBN40D01	BD3480	ND	120	TBK03D01	BD3481	ND	56
880225	TBS15D01	BD3471	ND	0	TBK01D01	BD3472	BMDL	150
880826	ISESPS01A	BE6194	BMDL	370	ISESPSA01	BE6195	BMDL	380
890122	ISREED06A	BH8771	BMDL	310	ISREEDA06	BH8772	ND	14
880616	ISTECH07A	BE6185	ND	62	ISTECHA07	BE6186	ND	300
880205	CCSSM08	BD0424	ND	96	CCSSK15	BD0423	ND	0
880617	ISBG04A	BE6189	ND	14	ISBGA04	BE6190	ND	0

1366
001
PRO

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
RCRA METALS (continued)								
<u>Chromium</u>								
880203	CCSSG08	BD0347		5,600	CCSSK08	BD0348		6,300
880205	CCSSI26	BD2544		9,100	CCSSK06	BD2545		6,000
880310	TBB07D06	BD3497		4,400	TBK07D06	BD3475		8,900
880301	TBN40D01	BD3480		4,000	TBK03D01	BD3481		6,800
880225	TBS15D01	BD3471		7,100	TBK01D01	BD3472		8,900
880826	ISESPS01A	BE6194		3,800	ISESPSA01	BE6195		3,300
890720	ISHWTP02A	CA1149		11,000	ISHWTPA02	CA1156		8,600
890524	ISPCR02A	CA0886		11,000	ISPCRA02	CA0887		13,000
890122	ISREED06A	BH8771		6,000	ISREEDA06	BH8772		5,600
890523	ISSQBB01A	CA0830	BMDL	960	ISSQBBA01	CA0831	BMDL	1,100
880616	ISTECH07A	BE6185		5,800	ISTECHA07	BE6186		6,000
880205	CCSSM08	BD0424		7,600	CCSSK15	BD0423		6,400
880617	ISBG04A	BE6189		28,000	ISBGA04	BE6190		28,000
880617	ISBG12A	BE6191		8,500	ISBGA12	BE6192		6,000
<u>Copper</u>								
880203	CCSSG08	BD0347		19,000	CCSSK08	BD0348		17,000
880205	CCSSI26	BD2544		37,000	CCSSK06	BD2545		29,000
880310	TBB07D06	BD3497		34,000	TBK07D06	BD3475		37,000
880301	TBN40D01	BD3480		18,000	TBK03D01	BD3481		18,000
880225	TBS15D01	BD3471		20,000	TBK01D01	BD3472		25,000
880826	ISESPS01A	BE6194		17,000	ISESPSA01	BE6195		18,000
890720	ISHWTP02A	CA1149		31,000	ISHWTPA02	CA1156		18,000
890524	ISPCR02A	CA0886		27,000	ISPCRA02	CA0887		28,000
890122	ISREED06A	BH8771		22,000	ISREEDA06	BH8772		20,000
890523	ISSQBB01A	CA0830		9,700	ISSQBBA01	CA0831		9,800
880616	ISTECH07A	BE6185		31,000	ISTECHA07	BE6186		41,000
880205	CCSSM08	BD0424		38,000	CCSSK15	BD0423		46,000
880617	ISBG04A	BE6189		74,000	ISBGA04	BE6190		77,000
880617	ISBG12A	BE6191		43,000	ISBGA12	BE6192		50,000

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
RCRA METALS (continued)								
<u>Lead</u>								
880203	CCSSG08	BD0347		4,700 R	CCSSK08	BD0348		5,200 R
880205	CCSSI26	BD2544		5,000	CCSSK06	BD2545		5,900
880310	TBB07D06	BD3497		3,500	TBK07D06	BD3475		2,400
880301	TBN40D01	BD3480		31,000	TBK03D01	BD3481		16,000
880225	TBS15D01	BD3471		28,000	TBK01D01	BD3472		28,000
880826	ISESPS01A	BE6194		8,100	ISESPSA01	BE6195		7,700
890720	ISHWTP02A	CA1149		4,600	ISHWTPA02	CA1156		3,800
890524	ISPCRO2A	CA0886		8,500 R	ISPCRA02	CA0887		8,300 R
890122	ISREED06A	BH8771		7,400	ISREEDA06	BH8772		7,200
890523	ISSQB01A	CA0830		1,900 R	ISSQBBA01	CA0831		2,600 R
880616	ISTECH07A	BE6185		19,000	ISTECHA07	BE6186		14,000
880205	CCSSM08	BD0424		3,400	CCSSK15	BD0423		4,500
880617	ISBG04A	BE6189		31,000	ISBGA04	BE6190		25,000
880617	ISBG12A	BE6191		9,700	ISBGA12	BE6192		9,100
<u>Selenium</u>								
880203	CCSSG08	BD0347	BMDL	310	CCSSK08	BD0348	BMDL	299
880205	CCSSI26	BD2544	BMDL	230	CCSSK06	BD2545	BMDL	300
880310	TBB07D06	BD3497	ND	120	TBK07D06	BD3475	ND	0
880225	TBS15D01	BD3471	ND	180	TBK01D01	BD3472	ND	180
890720	ISHWTP02A	CA1149	ND	0	ISHWTPA02	CA1156	ND	110
890524	ISPCRO2A	CA0886	ND	580	ISPCRA02	CA0887	ND	320
890523	ISSQB01A	CA0830	ND	85	ISSQBBA01	CA0831	ND	8.20
880616	ISTECH07A	BE6185	ND	0	ISTECHA07	BE6186	ND	180
880205	CCSSM08	BD0424	ND	32	CCSSK15	BD0423	ND	35
880617	ISBG04A	BE6189	ND	160	ISBGA04	BE6190	ND	73
880617	ISBG12A	BE6191	ND	150	ISBGA12	BE6192	ND	66

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
RCRA METALS (continued)								
<u>Silver</u>								
880203	CCSSG08	BD0347	ND	0	CCSSK08	BD0348	ND	210
880301	TBN40D01	BD3480	ND	0	TBK03D01	BD3481	ND	380
880826	ISESPS01A	BE6194	ND	0	ISESPSA01	BE6195	BMDL	660
890720	ISHWTP02A	CA1149	ND	460	ISHWTPA02	CA1156	ND	0
890524	ISPCR02A	CA0886	ND	110	ISPCRA02	CA0887	ND	160
890523	ISSQBB01A	CA0830	ND	0	ISSQBBA01	CA0831	ND	48
880616	ISTECH07A	BE6185	ND	0	ISTECHA07	BE6186	ND	320
880205	CCSSM08	BD0424	BMDL	550	CCSSK15	BD0423	ND	0
880617	ISBG04A	BE6189	ND	290	ISBGA04	BE6190	ND	580
880617	ISBG12A	BE6191	ND	140	ISBGA12	BE6192	ND	0.46
<u>Zinc</u>								
880203	CCSSG08	BD0347		37,000	CCSSK08	BD0348		35,000
880205	CCSSI26	BD2544		43,000	CCSSK06	BD2545		44,000
880310	TBB07D06	BD3497		34,000	TBK07D06	BD3475		44,000
880301	TBN40D01	BD3480		50,000	TBK03D01	BD3481		55,000
880225	TBS15D01	BD3471		59,000	TBK01D01	BD3472		60,000
880826	ISESPS01A	BE6194		51,000	ISESPSA01	BE6195		56,000
890720	ISHWTP02A	CA1149		82,000	ISHWTPA02	CA1156		77,000
890524	ISPCR02A	CA0886		170,000 R	ISPCRA02	CA0887		210,000 R
890122	ISREED06A	BH8771		46,000	ISREEDA06	BH8772		57,000
890523	ISSQBB01A	CA0830		85,000 R	ISSQBBA01	CA0831		95,000 R
880616	ISTECH07A	BE6185		110,000	ISTECHA07	BE6186		170,000
880205	CCSSM08	BD0424		65,000	CCSSK15	BD0423		72,000
880617	ISBG04A	BE6189		81,000	ISBGA04	BE6190		90,000
880617	ISBG12A	BE6191		80,000	ISBGA12	BE6192		85,000

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
OTHER/MISCELLANEOUS								
<u>Aluminum</u>								
880203	CCSSG08	BD0347		11,600,000	CCSSK08	BD0348		13,600,000
880205	CCSSI26	BD2544		16,000,000	CCSSK06	BD2545		13,700,000
880310	TBB07D06	BD3497		6,340,000	TBK07D06	BD3475		15,700,000
880301	TBN40D01	BD3480		9,130,000	TBK03D01	BD3481		11,100,000
880225	TBS15D01	BD3471		15,400,000	TBK01D01	BD3472		21,600,000
880826	ISESPS01A	BE6194		7,300,000	ISESPSA01	BE6195		6,920,000
890720	ISHWTP02A	CA1149		42,700,000	ISHWTPA02	CA1156		37,400,000
890524	ISPCRO2A	CA0886		21,000,000	ISPCRA02	CA0887		27,900,000
890122	ISREED06A	BH8771		10,200,000	ISREEDA06	BH8772		9,690,000
890523	ISSQBB01A	CA0830		16,300,000	ISSQBBA01	CA0831		20,000,000
880616	ISTECH07A	BE6185		8,250,000	ISTECHA07	BE6186		10,800,000
880205	CCSSM08	BD0424		17,500,000	CCSSK15	BD0423		21,400,000
880617	ISBG04A	BE6189		19,000,000	ISBGA04	BE6190		17,400,000
880617	ISBG12A	BE6191		11,900,000	ISBGA12	BE6192		12,200,000
<u>Antimony</u>								
880203	CCSSG08	BD0347	ND	150	CCSSK08	BD0348	ND	0
890720	ISHWTP02A	CA1149	BMDL	3,800	ISHWTPA02	CA1156	BMDL	16,000
890524	ISPCRO2A	CA0886	BMDL	14,000	ISPCRA02	CA0887		15,000
890122	ISREED06A	BH8771	BMDL	3,400	ISREEDA06	BH8772	BMDL	5,000
890523	ISSQBB01A	CA0830	ND	2,300	ISSQBBA01	CA0831	ND	1,400
880617	ISBG04A	BE6189	ND	0	ISBGA04	BE6190	ND	69
880617	ISBG12A	BE6191	ND	200	ISBGA12	BE6192	ND	0

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
OTHER/MISCELLANEOUS (continued)								
<u>Beryllium</u>								
880203	CCSSG08	BD0347		240	CCSSK08	BD0348		180
880205	CCSSI26	BD2544		200	CCSSK06	BD2545		220
880310	TBB07D06	BD3497		160	TBK07D06	BD3475		310
880301	TBN40D01	BD3480		200	TBK03D01	BD3481		160
880225	TBS15D01	BD3471		200	TBK01D01	BD3472		270
880826	ISESPS01A	BE6194	BMDL	140	ISESPSA01	BE6195	BMDL	150
890720	ISHWTP02A	CA1149	ND	0	ISHWTPA02	CA1156	BMDL	150
890524	ISPCRO2A	CA0886	BMDL	150 R	ISPCRA02	CA0887	BMDL	210 R
890122	ISREED06A	BH8771	ND	0 R	ISREEDA06	BH8772	ND	45 R
890523	ISSQBB01A	CA0830	ND	25 R	ISSQBBA01	CA0831	BMDL	56 R
880205	CCSSM08	BD0424		140	CCSSK15	BD0423		190
<u>Calcium</u>								
880203	CCSSG08	BD0347		2,860,000	CCSSK08	BD0348		2,960,000
880205	CCSSI26	BD2544		2,530,000	CCSSK06	BD2545		2,380,000
880310	TBB07D06	BD3497		1,500,000	TBK07D06	BD3475		2,300,000
880301	TBN40D01	BD3480		9,010,000	TBK03D01	BD3481		5,510,000
880225	TBS15D01	BD3471		2,790,000	TBK01D01	BD3472		3,030,000
880826	ISESPS01A	BE6194		2,300,000	ISESPSA01	BE6195		2,500,000
890720	ISHWTP02A	CA1149		11,400,000	ISHWTPA02	CA1156		6,800,000
890524	ISPCRO2A	CA0886		2,900,000	ISPCRA02	CA0887		3,500,000
890122	ISREED06A	BH8771		3,000,000	ISREEDA06	BH8772		3,300,000
890523	ISSQBB01A	CA0830		3,200,000	ISSQBBA01	CA0831		4,780,000
880616	ISTECH07A	BE6185		7,760,000	ISTECHA07	BE6186		12,700,000
880205	CCSSM08	BD0424		3,000,000	CCSSK15	BD0423		4,020,000
880617	ISBG04A	BE6189		590,000	ISBGA04	BE6190		580,000
880617	ISBG12A	BE6191		3,550,000	ISBGA12	BE6192		3,540,000

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES				
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value	
OTHER/MISCELLANEOUS (continued)									
<u>Cobalt</u>									
880203	CCSSG08	BD0347		8,500	CCSSK08	BD0348		7,200	
880205	CCSSI26	BD2544		6,700	CCSSK06	BD2545		7,400	
880310	TBB07D06	BD3497	BMDL	5,600	TBK07D06	BD3475		9,100	
880301	TBN40D01	BD3480	BMDL	7,100	TBK03D01	BD3481		11,000	
880225	TBS15D01	BD3471		7,800	TBK01D01	BD3472		11,000	
880826	ISESPS01A	BE6194		6,100	ISESPSA01	BE6195		7,100	
890720	ISHWTP02A	CA1149		12,000	ISHWTPA02	CA1156		15,000	
890524	ISPCRO2A	CA0886		17,000	ISPCRA02	CA0887		23,000	
890122	ISREED06A	BH8771		9,800	ISREEDA06	BH8772		9,000	
890523	ISSQBB01A	CA0830		15,000	ISSQBBA01	CA0831		19,000	
880616	ISTECH07A	BE6185	BMDL	4,900	ISTECHA07	BE6186		16,000	
880205	CCSSM08	BD0424		14,000	CCSSK15	BD0423		13,000	
880617	ISBG04A	BE6189		19,000	ISBGA04	BE6190		41,000	
880617	ISBG12A	BE6191		12,000	ISBGA12	BE6192		7,800	
<u>Iron</u>									
880203	CCSSG08	BD0347		34,000,000	CCSSK08	BD0348		20,200,000	
880205	CCSSI26	BD2544		23,400,000	CCSSK06	BD2545		22,000,000	
880310	TBB07D06	BD3497		9,060,000	TBK07D06	BD3475		18,200,000	
880301	TBN40D01	BD3480		17,000,000	TBK03D01	BD3481		19,300,000	
880225	TBS15D01	BD3471		23,700,000	TBK01D01	BD3472		33,500,000	
880826	ISESPS01A	BE6194		12,600,000	ISESPSA01	BE6195		14,100,000	
890720	ISHWTP02A	CA1149		37,700,000	ISHWTPA02	CA1156		44,900,000	
890524	ISPCRO2A	CA0886		40,000,000	ISPCRA02	CA0887		56,000,000	
890122	ISREED06A	BH8771		21,300,000	ISREEDA06	BH8772		17,900,000	
890523	ISSQBB01A	CA0830		16,600,000	ISSQBBA01	CA0831		20,400,000	
880616	ISTECH07A	BE6185		22,800,000	ISTECHA07	BE6186		30,000,000	
880205	CCSSM08	BD0424		30,400,000	CCSSK15	BD0423		36,700,000	
880617	ISBG04A	BE6189		49,900,000	ISBGA04	BE6190		54,400,000	
880617	ISBG12A	BE6191		30,000,000	ISBGA12	BE6192		29,700,000	

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES				
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value	
OTHER/MISCELLANEOUS (continued)									
<u>Magnesium</u>									
880203	CCSSG08	BD0347		1,580,000	CCSSK08	BD0348		1,600,000	
880205	CCSSI26	BD2544		2,290,000	CCSSK06	BD2545		2,400,000	
880310	TBB07D06	BD3497		2,270,000	TBK07D06	BD3475		2,960,000	
880301	TBN40D01	BD3480		4,100,000	TBK03D01	BD3481		4,100,000	
880225	TBS15D01	BD3471		2,610,000	TBK01D01	BD3472		2,180,000	
880826	ISESPS01A	BE6194		3,440,000	ISESPSA01	BE6195		3,230,000	
890720	ISHWTP02A	CA1149		6,000,000	ISHWTPA02	CA1156		6,140,000	
890524	ISPCR02A	CA0886		5,910,000	ISPCRA02	CA0887		6,930,000	
890122	ISREED06A	BH8771		2,500,000	ISREEDA06	BH8772		2,700,000	
890523	ISSQBB01A	CA0830		9,130,000	ISSQBBA01	CA0831		11,800,000	
880616	ISTECH07A	BE6185		2,580,000	ISTECHA07	BE6186		3,630,000	
880205	CCSSM08	BD0424		9,770,000	CCSSK15	BD0423		10,600,000	
880617	ISBG04A	BE6189		3,320,000	ISBGA04	BE6190		3,060,000	
880617	ISBG12A	BE6191		6,820,000	ISBGA12	BE6192		8,050,000	
<u>Manganese</u>									
880203	CCSSG08	BD0347		717,000	CCSSK08	BD0348		545,000	
880205	CCSSI26	BD2544		600,000	CCSSK06	BD2545		561,000	
880310	TBB07D06	BD3497		147,000	TBK07D06	BD3475		289,000	
880301	TBN40D01	BD3480		568,000	TBK03D01	BD3481		564,000	
880225	TBS15D01	BD3471		537,000	TBK01D01	BD3472		930,000	
880826	ISESPS01A	BE6194		589,000	ISESPSA01	BE6195		664,000	
890720	ISHWTP02A	CA1149		483,000	ISHWTPA02	CA1156		332,000	
890524	ISPCR02A	CA0886		570,000 R	ISPCRA02	CA0887		646,000 R	
890122	ISREED06A	BH8771		543,000	ISREEDA06	BH8772		615,000	
890523	ISSQBB01A	CA0830		722,000	ISSQBBA01	CA0831		1,090,000	
880616	ISTECH07A	BE6185		452,000	ISTECHA07	BE6186		981,000	
880205	CCSSM08	BD0424		1,160,000	CCSSK15	BD0423		1,120,000	
880617	ISBG04A	BE6189		1,100,000	ISBGA04	BE6190		3,460,000	
880617	ISBG12A	BE6191		564,000	ISBGA12	BE6192		693,000	

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES				
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value	
OTHER/MISCELLANEOUS (continued)									
<u>Nickel</u>									
880203	CCSSG08	BD0347		1,500	CCSSK08	BD0348		1,500	
880205	CCSSI26	BD2544		2,000	CCSSK06	BD2545	BMDL	1,600	
880310	TBB07D06	BD3497		2,600	TBK07D06	BD3475		3,400	
880301	TBN40D01	BD3480		2,100	TBK03D01	BD3481	BMDL	1,700	
880225	TBS15D01	BD3471		3,500	TBK01D01	BD3472		2,700	
880826	ISESPS01A	BE6194	BMDL	2,300	ISESPSA01	BE6195	BMDL	2,300	
890720	ISHWTP02A	CA1149	BMDL	5,000	ISHWTPA02	CA1156	BMDL	3,000	
890524	ISPCR02A	CA0886	BMDL	4,200	ISPCRA02	CA0887	BMDL	4,300	
890122	ISREED06A	BH8771	BMDL	1,900	ISREEDA06	BH8772	BMDL	2,800	
890523	ISSQBB01A	CA0830	BMDL	2,100	ISSQBBA01	CA0831	BMDL	1,500	
880616	ISTECH07A	BE6185		3,900	ISTECHA07	BE6186		4,000	
880205	CCSSM08	BD0424		4,100	CCSSK15	BD0423		3,400	
880617	ISBG04A	BE6189		10,000	ISBGA04	BE6190		9,300	
880617	ISBG12A	BE6191		4,800	ISBGA12	BE6192		4,800	
<u>Potassium</u>									
880203	CCSSG08	BD0347		390,000	CCSSK08	BD0348		400,000	
880205	CCSSI26	BD2544		350,000	CCSSK06	BD2545		290,000	
880310	TBB07D06	BD3497		360,000	TBK07D06	BD3475		500,000	
880301	TBN40D01	BD3480		260,000	TBK03D01	BD3481		280,000	
880225	TBS15D01	BD3471		340,000	TBK01D01	BD3472		410,000	
880826	ISESPS01A	BE6194		590,000	ISESPSA01	BE6195		680,000	
890720	ISHWTP02A	CA1149		800,000	ISHWTPA02	CA1156		540,000	
890524	ISPCR02A	CA0886		480,000	ISPCRA02	CA0887		590,000	
890122	ISREED06A	BH8771		150,000	ISREEDA06	BH8772		140,000	
890523	ISSQBB01A	CA0830		130,000	ISSQBBA01	CA0831		140,000	
880616	ISTECH07A	BE6185		200,000	ISTECHA07	BE6186		200,000	
880205	CCSSM08	BD0424		970,000	CCSSK15	BD0423		870,000	
880617	ISBG04A	BE6189		730,000	ISBGA04	BE6190		640,000	
880617	ISBG12A	BE6191		920,000	ISBGA12	BE6192		1,300,000	

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
OTHER/MISCELLANEOUS (continued)								
<u>Sodium</u>								
880203	CCSSG08	BD0347		200,000	CCSSK08	BD0348		130,000
880205	CCSSI26	BD2544		130,000	CCSSK06	BD2545		120,000
880310	TBB07D06	BD3497		220,000	TBK07D06	BD3475		280,000
880301	TBN40D01	BD3480		120,000	TBK03D01	BD3481		110,000
880225	TBS15D01	BD3471		310,000	TBK01D01	BD3472		370,000
880826	ISESPS01A	BE6194		190,000	ISESPSA01	BE6195		160,000
890720	ISHWTP02A	CA1149		640,000	ISHWTPA02	CA1156		670,000
890524	ISPCRO2A	CA0886		250,000	ISPCRA02	CA0887		260,000
890122	ISREED06A	BH8771	BMDL	34,000	ISREEDA06	BH8772	BMDL	77,000
890523	ISSQBB01A	CA0830		2,000,000	ISSQBBA01	CA0831		2,500,000
880616	ISTECH07A	BE6185		120,000	ISTECHA07	BE6186		150,000
880205	CCSSM08	BD0424		180,000	CCSSK15	BD0423		300,000
880617	ISBG04A	BE6189		120,000	ISBGA04	BE6190		130,000
880617	ISBG12A	BE6191		180,000	ISBGA12	BE6192		180,000
<u>Thallium</u>								
880203	CCSSG08	BD0347	ND	150	CCSSK08	BD0348	ND	0
880310	TBB07D06	BD3497	ND	140	TBK07D06	BD3475	ND	140
880301	TBN40D01	BD3480	ND	130	TBK03D01	BD3481	ND	23
880826	ISESPS01A	BE6194	ND	79	ISESPSA01	BE6195	ND	0
890720	ISHWTP02A	CA1149	ND	290	ISHWTPA02	CA1156	ND	180
890523	ISSQBB01A	CA0830	ND	0	ISSQBBA01	CA0831	ND	34
880616	ISTECH07A	BE6185	ND	190	ISTECHA07	BE6186	ND	2.80
880617	ISBG04A	BE6189	ND	2.60	ISBGA04	BE6190	ND	2.60
<u>Vanadium</u>								
880203	CCSSG08	BD0347		92,000	CCSSK08	BD0348		60,000
880205	CCSSI26	BD2544		67,000	CCSSK06	BD2545		60,000
880310	TBB07D06	BD3497		54,000	TBK07D06	BD3475		71,000

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES			
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
OTHER/MISCELLANEOUS (continued)								
Vanadium (continued)								
880301	TBN40D01	BD3480		51,000	TBK03D01	BD3481		57,000
880225	TBS15D01	BD3471		62,000	TBK01D01	BD3472		89,000
880826	ISESPS01A	BE6194		32,000	ISESPSA01	BE6195		39,000
890720	ISHWTP02A	CA1149		120,000	ISHWTPA02	CA1156		140,000
890524	ISPCRO2A	CA0886		110,000	ISPCRA02	CA0887		150,000
890122	ISREED06A	BH8771		64,000	ISREEDA06	BH8772		48,000
890523	ISSQBB01A	CA0830		35,000	ISSQBBA01	CA0831		41,000
880616	ISTECH07A	BE6185		56,000	ISTECHA07	BE6186		72,000
880205	CCSSM08	BD0424		60,000	CCSSK15	BD0423		75,000
880617	ISBG04A	BE6189		140,000	ISBGA04	BE6190		150,000
880617	ISBG12A	BE6191		73,000	ISBGA12	BE6192		68,000
% Solid (values in mg/kg)								
880120	CCSSD09	BD0315		77.40	CCSSK01	BD0317		78.40
880202	CCSS20D	BD2534		74.10	CCSSK10	BD2535		72.70
880122	CCSS01E	BD0289		84.90	CCSSK02	BD0286		86.60
880122	CCSSE19	BD0314		85	CCSSK03	BD0320		85.60
880203	CCSSG08	BD0347		79.80	CCSSK08	BD0348		80.90
880122	CCSSG19	BD0290		83.30	CCSSK04	BD0291		81.80
880125	CCSSI08	BD0294		83.80	CCSSK05	BD0295		83.60
880205	CCSSI26	BD2544		77.50	CCSSK06	BD2545		77.40
880125	CCSS13J	BD0299		74.70	CCSSK07	BD0300		74.70
880126	CCSS024	BD0370		87.90	CCSSK09	BD0371		87.90
880126	CCSS30P	BD0374		81.70	CCSSK11	BD0351		83.80
880127	CCSSR05	BD0357		84.30	CCSSK12	BD0358		90.10
880127	CCSSS05	BD0360		80.20	CCSSK13	BD0361		81.40
880127	CCSST20	BD0378		82.80	CCSSK14	BD0379		83.30
880305	TBA08D05	BD3520		78.90	TBK05D05	BD3521		78.40
880310	TBB07D06	BD3497		77.40	TBK07D06	BD3475		79.10
880315	TBD34D03	BD6637		90.40	TBK10D03	BD6638		90.10
880315	TBD34D07	BD6642		84.80	TBK11D07	BD6643		84.20

TABLE 5-4 (continued)

SAMPLES					REPLICATE SAMPLES				
Date	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value	
OTHER/MISCELLANEOUS (continued)									
% Solid (values in mg/kg) (continued)									
880314	TBE23D01	BD3556		89.70	TBK09D01	BD3557		90.10	
880309	TBG08D03	BD3544		83.70	TBK06D03	BD3545		84.10	
880311	TBJ14D02	BD3549		88.90	TBK08D02	BD3550		93.60	
880301	TBN40D01	BD3480		82.40	TBK03D01	BD3481		82	
880304	TBQ27D06	BD3513		80.20	TBK04D06	BD3514		74.40	
880225	TBS15D01	BD3471		73	TBK01D01	BD3472		72.30	
880302	TBX12D07	BD3581		79.50	TBK02D07	BD3582		79.80	
880826	ISESPS01A	BE6194		89.10	ISESPSA01	BE6195		90.30	
890122	ISREED06A	BH8771		71.80	ISREEDA06	BH8772		69	
890523	ISSQBB01A	CA0830		86	ISSQBBA01	CA0831		87.30	
880616	ISTECH07A	BE6185		74.70	ISTECHA07	BE6186		72.30	
880614	ISALCN01B	BE6100		89.40	ISALCNB01	BE6101		88.10	
880614	ISALCN08A	BE6097		77.70	ISALCNA08	BE6098		78	
890524	ISCLCN02B	CA0825		82.40	ISCLCNB02	CA0826		82.90	
890121	ISDENT05A	BH8803		62.30	ISDENTA05	BH8802		63.40	
890713	ISDENV05A	CA1118		75.10	ISDENVA05	CA1119		85.60	
880826	ISESPS03C	BE6141		80.90	ISESPSC03	BE6142		82.80	
890720	ISHWTP01C	CA1125		76.90	ISHWTPC01	CA1126		80.80	
890720	ISHWTP10A	CA1136		68.60	ISHWTPA10	CA1137		66.90	
880607	ISPEER03A	BE6086		80.30	ISPEERA03	BE6087		81.20	
890121	ISREED01A	BH8806		72.30	ISREEDA01	BH8807		72.80	
890523	ISSQBB03B	CA0811		85.10	ISSQBBB03	CA0812		85.10	
880615	ISTECH02B	BE6106		89.30	ISTECHB02	BE6110		87.80	
880615	ISTECH16A	BE6113		81.10	ISTECHA16	BE6114		80.60	
890714	ISWJKC03B	CA1167		84.70	ISWJKCB03	CA1168		85.60	
880205	CCSSM08	BD0424		76.50	CCSSK15	BD0423		68.90	
880617	ISBG04A	BE6189		79.20	ISBGA04	BE6190		78.70	
880617	ISBG12A	BE6191		84.30	ISBGA12	BE6192		87.60	
880617	ISBG05C	BE6134		83.30	ISBGC05	BE6135		82.60	

R - Data rejected by data validation team

TABLE 5-5

Mercury Data for Water Sample Replicates (values in ug/l; MDL = 0.2)

SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
SW05	BD7649	880413	ND	0	ND	0
SW16	BD7658	880414	ND	0	ND	0
GWX12	BE4673	880602		0.33		0.4
GWSQB806A	CA0802	890522	ND	0	ND	0 **
GWBG06	BE4671	880601	ND	0	BMDL	0.12

REPLICATE SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
SW06	BD7650	880413	ND	0	ND	0
SW17	BD7659	880414		0.86		0.55
GW12X	BE4674	880602		0.33 **		0.5 *
GWSQB8A06	CA0803	890522	ND	0	ND	0 **
GW068G	BE4672	880601	ND	0	BMDL	0.15

Note: *, **, R1 and R2 identify data points originally qualified "R" (rejected by the data validation team) but judged usable for data assessment purposes (see Appendix 7 for the explanation of these qualifiers)

PRO 001 1378

TABLE 5-6

HSL Data for Surface Water Samples and Replicates (values in ug/l)

		SAMPLES				REPLICATE SAMPLES			
Date	Parameter	Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
VOLATILE ORGANIC COMPOUNDS									
880413	Acetone	SW05	BD7649		11.70	SW06	BD7650		24.00
880414	Acetone	SW16	BD7658		205.00	SW17	BD7659		130.00
880413	Benzene	SW05	BD7649	BMDL	2.69	SW06	BD7650	BMDL	2.64
880413	Carbon disulfide	SW05	BD7649	BMDL	1.60	SW06	BD7650	BMDL	2.10
880414	Methyl ethyl ketone	SW16	BD7658	ND	0.00	SW17	BD7659		21.40
880414	Methylene chloride	SW16	BD7658	ND	0.00	SW17	BD7659		19.50
880413	Toluene	SW05	BD7649	ND	0.00	SW06	BD7650	BMDL	1.03
BASE/NEUTRAL EXTRACTABLES									
880413	Di-n-octyl phthalate	SW05	BD7649	BMDL	3.76	SW06	BD7650	BMDL	4.42
880413	Isophorone	SW05	BD7649	BMDL	17.50	SW06	BD7650	BMDL	16.80
RCRA METALS									
880413	Arsenic	SW05	BD7649	BMDL	3.70	SW06	BD7650	BMDL	4.10
880414	Arsenic	SW16	BD7658	BMDL	8.30	SW17	BD7659		10.00
880413	Barium	SW05	BD7649		110.00	SW06	BD7650		100.00
880414	Barium	SW16	BD7658		170.00	SW17	BD7659		281.00
880414	Cadmium	SW16	BD7658	ND	0.06	SW17	BD7659	ND	0.03
880413	Chromium	SW05	BD7649	ND	1.20	SW06	BD7650	BMDL	7.30
880414	Chromium	SW16	BD7658	ND	4.20	SW17	BD7659		65.00
880413	Copper	SW05	BD7649	ND	1.30	SW06	BD7650	BMDL	3.60
880414	Copper	SW16	BD7658		14.00	SW17	BD7659		29.00
880413	Lead	SW05	BD7649	BMDL	1.00	SW06	BD7650	ND	0.57
880414	Lead	SW16	BD7658		6.90	SW17	BD7659		22.00
880413	Selenium	SW05	BD7649	ND	0.66	SW06	BD7650	ND	0.32
880413	Zinc	SW05	BD7649		39.00	SW06	BD7650		43.00
880414	Zinc	SW16	BD7658		69.00	SW17	BD7659		190.00

TABLE 5-6 (continued)

Date	Parameter	SAMPLES				REPLICATE SAMPLES			
		Dynamac Number	ETC Number	Qual	Value	Dynamac Number	ETC Number	Qual	Value
	OTHER/MISCELLANEOUS								
880413	Aluminum	SW05	BD7649		48.00	SW06	BD7650		53.00
880414	Aluminum	SW16	BD7658		1,700.00	SW17	BD7659		4,850.00
880414	Antimony	SW16	BD7658	ND	0.47	SW17	BD7659	ND	0.47
880413	Beryllium	SW05	BD7649	ND	0.06	SW06	BD7650	ND	0.06
880414	Beryllium	SW16	BD7658	ND	0.07	SW17	BD7659	BMDL	0.38
880413	Calcium	SW05	BD7649		41,500.00	SW06	BD7650		41,100.00
880414	Calcium	SW16	BD7658		25,300.00	SW17	BD7659		27,500.00
880413	Cobalt	SW05	BD7649	ND	4.70	SW06	BD7650	ND	3.20
880414	Cobalt	SW16	BD7658	ND	3.20	SW17	BD7659	BMDL	14.00
880413	Iron	SW05	BD7649		210.00	SW06	BD7650		230.00
880414	Iron	SW16	BD7658		9,200.00	SW17	BD7659		20,100.00
880413	Magnesium	SW05	BD7649		12,900.00	SW06	BD7650		12,700.00
880414	Magnesium	SW16	BD7658		7,270.00	SW17	BD7659		8,810.00
880413	Manganese	SW05	BD7649		630.00	SW06	BD7650		630.00
880414	Manganese	SW16	BD7658		4,040.00	SW17	BD7659		2,370.00
880413	Nickel	SW05	BD7649	ND	0.15	SW06	BD7650	ND	0.90
880414	Nickel	SW16	BD7658	ND	1.20	SW17	BD7659		65.00
880413	Potassium	SW05	BD7649		23,600.00	SW06	BD7650		23,800.00
880414	Potassium	SW16	BD7658		4,600.00	SW17	BD7659		5,100.00
880413	Sodium	SW05	BD7649		675,000.00	SW06	BD7650		682,000.00
880414	Sodium	SW16	BD7658		36,300.00	SW17	BD7659		34,700.00
880413	Thallium	SW05	BD7649	ND	0.00	SW06	BD7650	ND	1.80
880413	Vanadium	SW05	BD7649	BMDL	2.20	SW06	BD7650	BMDL	2.70
880414	Vanadium	SW16	BD7658	BMDL	6.90	SW17	BD7659		42.00

TABLE 5-7

Mercury Data for Sediment Sample Replicates (values in ug/kg; MDL = 80)

SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
FCSEDCLO3A	BE0681	880419		84		
FCSEDCLO6B	BE1702	880505		89		
FCSEDCLO23A	BE0730	880503		198		
FCSEDCLO26A	BE1782	880502		96	87	
FCSEDCLO30B	BE0722	880502		119		
FCSEDCLO36A	BE0717	880427		183		
FCSEDCLO46A	BE0703	880425		292		
FCSEDCLO54B	BE0745	880422		425	273 **	
FCSEDCLO61A	BE0685	880420		590		
FLSEDO5A	BE1737	880512		180		
FLSED11A	BE4756	880523	ND	0	BMDL	58
FLSED15A	BE1806	880516		117		
SDSEDCLO5A	BE1706	880505		538		
SDSEDCLO8A	BE1758	880506		3,540	1,990	
TDSEDCLO5A	BE1714	880506		33,280		
TDSEDCLO8A	BE1763	880509		141	3,530	
TDSEDCLO13A	BE1723	880509		277		
TDSEDCLO16A	BE1880	880510		197	158	
SEDTRANA1B	BE3878	880519	BMDL	76		
SEDTRANB4A	BE1846	880519		199		
SEDTRAND1B	BE1818	880517		184		
SEDTRANF4B	BE1826	880518		113		
BGSEDCLO5A	BE0676	880418	BMDL	50		
BGSEDCLO6A	BE0768	880418	ND	0	ND	0

REPLICATE SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
FCSEDCLOA03	BE0679	880419		86		
FCSEDCLOB06	BE1703	880505		89		
FCSEDCLOA23	BE0731	880503		223		
FCSEDCLOA26	BE1781	880502	BMDL	70		90
FCSEDCLOB30	BE0723	880502	BMDL	65		
FCSEDCLOA36	BE0718	880427		170		
FCSEDCLOA46	BE0704	880425		252		
FCSEDCLOB54	BE0746	880422		227	294 **	
FCSEDCLOA61	BE0686	880420		97		
FLSEDA05	BE1738	880512		214		
FLSEDA11	BE4757	880523	ND	0	BMDL	55
FLSEDA15	BE1757	880516		106		
SDSEDCLOA05	BE1707	880505		518		
SDSEDCLOA08	BE1759	880506		4,500		2,010
TDSEDCLOA05	BE1715	880506		23,660		
TDSEDCLOA08	BE1764	880509		794		4,480
TDSEDCLOA13	BE1724	880509		265		
TDSEDCLOA16	BE1881	880510		176		149
SEDTREPA1B	BE3879	880519		89		
SEDTREPB4A	BE1847	880519		229		
SEDTREPD1B	BE1817	880517		98		
SEDTREPF4B	BE1825	880518		150		
BGSEDCLOA05	BE0680	880418	ND	41		
BGSEDCLOA06	BE0769	880418	ND	0	ND	0

Note: *, **, R1 and R2 identify data points originally qualified "R" (rejected by the data validation team) but judged usable for data assessment purposes (see Appendix 7 for the explanation of these qualifiers)

TABLE 5-8

NSL Data for Sediment Samples and Replicates

Parameter	SAMPLES					REPLICATE SAMPLES				
	Dynamac Number	ETC Number	Date	Qual	Value	Dynamac Number	ETC Number	Date	Qual	Value
VOLATILE ORGANIC COMPOUNDS										
Acetone	FCSEDCL26A	BE1782	880502		85.60	FCSEDCLA26	BE1781	880502		64.60
Acetone	FLSED11A	BE4756	880523		185	FLSEDA11	BE4757	880523		2,290
Acetone	TDSEDCL16A	BE1880	880510		185	TDSEDCLA16	BE1881	880510		222
Acetone	BGSEDCL06A	BE0768	880418		108	BGSEDCLA06	BE0769	880418		69.90
Carbon disulfide	FLSED11A	BE4756	880523		17.30	FLSEDA11	BE4757	880523		209
Chlorobenzene	TDSEDCL16A	BE1880	880510	BMDL	0.75	TDSEDCLA16	BE1881	880510	ND	0
Methyl chloride	FLSED11A	BE4756	880523		13.80	FLSEDA11	BE4757	880523		239
Methyl ethyl ketone	FLSED11A	BE4756	880523		18.60	FLSEDA11	BE4757	880523		95.20
Methyl ethyl ketone	TDSEDCL16A	BE1880	880510		39.60	TDSEDCLA16	BE1881	880510		38.80
Methyl ethyl ketone	BGSEDCL06A	BE0768	880418		15.50	BGSEDCLA06	BE0769	880418	ND	0
Methylene chloride	FCSEDCL26A	BE1782	880502	ND	0	FCSEDCLA26	BE1781	880502		5.92
Methylene chloride	FLSED11A	BE4756	880523	BMDL	2.91	FLSEDA11	BE4757	880523		33.20
Methylene chloride	TDSEDCL16A	BE1880	880510	ND	0	TDSEDCLA16	BE1881	880510		109
Toluene	TDSEDCL16A	BE1880	880510		115	TDSEDCLA16	BE1881	880510		14.60
Toluene	BGSEDCL06A	BE0768	880418	BMDL	2.50	BGSEDCLA06	BE0769	880418	ND	0
Vinyl acetate	FLSED11A	BE4756	880523	BMDL	6.72	FLSEDA11	BE4757	880523	ND	0
Vinyl acetate	TDSEDCL16A	BE1880	880510	ND	0	TDSEDCLA16	BE1881	880510	BMDL	2.95
BASE/NEUTRAL EXTRACTABLES										
bis(2-ethylhexyl)phthalate	FCSEDCL26A	BE1782	880502	BMDL	160	FCSEDCLA26	BE1781	880502	BMDL	318
Benzyl alcohol	FLSED11A	BE4756	880523	BMDL	205	FLSEDA11	BE4757	880523	BMDL	453
RCRA METALS										
Arsenic	FCSEDCL26A	BE1782	880502	BMDL	1,700	FCSEDCLA26	BE1781	880502	ND	320
Arsenic	FLSED11A	BE4756	880523		2,400	FLSEDA11	BE4757	880523		2,800
Arsenic	TDSEDCL16A	BE1880	880510	BMDL	1,300	TDSEDCLA16	BE1881	880510	BMDL	1,200
Arsenic	BGSEDCL06A	BE0768	880418	ND	250	BGSEDCLA06	BE0769	880418	BMDL	410

TABLE 5-8 (continued)

Parameter	SAMPLES					REPLICATES				
	Dynamac Number	ETC Number	Date	Qual	Value	Dynamac Number	ETC Number	Date	Qual	Value
RCRA METALS (continued)										
Barium	FCSEDCL26A	BE1782	880502		80,000	FCSEDCLA26	BE1781	880502		65,000
Barium	FLSED11A	BE4756	880523		78,100	FLSEDA11	BE4757	880523		143,000
Barium	TDSEDCL16A	BE1880	880510		78,600	TDSEDCLA16	BE1881	880510		78,800
Barium	BGSEDCL06A	BE0768	880418		30,000	BGSEDCLA06	BE0769	880418		31,000
Cadmium	FCSEDCL26A	BE1782	880502	BMDL	320	FCSEDCLA26	BE1781	880502	BMDL	270
Cadmium	BGSEDCL06A	BE0768	880418	ND	7	BGSEDCLA06	BE0769	880418	ND	91
Chromium	FCSEDCL26A	BE1782	880502		13,000	FCSEDCLA26	BE1781	880502		7,800
Chromium	FLSED11A	BE4756	880523	BMDL	2,200	FLSEDA11	BE4757	880523		4,100
Chromium	TDSEDCL16A	BE1880	880510		5,300	TDSEDCLA16	BE1881	880510		2,800
Chromium	BGSEDCL06A	BE0768	880418		7,700	BGSEDCLA06	BE0769	880418		4,500
Copper	FCSEDCL26A	BE1782	880502		28,000	FCSEDCLA26	BE1781	880502		20,000
Copper	FLSED11A	BE4756	880523		22,000	FLSEDA11	BE4757	880523		39,000
Copper	TDSEDCL16A	BE1880	880510		24,000	TDSEDCLA16	BE1881	880510		21,000
Copper	BGSEDCL06A	BE0768	880418		21,000	BGSEDCLA06	BE0769	880418		18,000
Lead	FCSEDCL26A	BE1782	880502		4,800	FCSEDCLA26	BE1781	880502	BMDL	1,900
Lead	FLSED11A	BE4756	880523		8,100	FLSEDA11	BE4757	880523		5,500
Lead	TDSEDCL16A	BE1880	880510		5,300	TDSEDCLA16	BE1881	880510		5,500
Lead	BGSEDCL06A	BE0768	880418	BMDL	1,700	BGSEDCLA06	BE0769	880418	BMDL	1,600
Selenium	FCSEDCL26A	BE1782	880502	ND	71	FCSEDCLA26	BE1781	880502	ND	0
Selenium	FLSED11A	BE4756	880523	ND	56	FLSEDA11	BE4757	880523	ND	86
Selenium	TDSEDCL16A	BE1880	880510	ND	0	TDSEDCLA16	BE1881	880510	ND	43
Selenium	BGSEDCL06A	BE0768	880418	ND	67	BGSEDCLA06	BE0769	880418	ND	72
Silver	FCSEDCL26A	BE1782	880502	ND	300	FCSEDCLA26	BE1781	880502	BMDL	660
Silver	BGSEDCL06A	BE0768	880418	ND	280	BGSEDCLA06	BE0769	880418	ND	350
Zinc	FCSEDCL26A	BE1782	880502		91,000	FCSEDCLA26	BE1781	880502		76,000
Zinc	FLSED11A	BE4756	880523		41,000	FLSEDA11	BE4757	880523		63,000
Zinc	TDSEDCL16A	BE1880	880510		69,000	TDSEDCLA16	BE1881	880510		61,000
Zinc	BGSEDCL06A	BE0768	880418		22,000	BGSEDCLA06	BE0769	880418		20,000

TABLE 5-8 (continued)

Parameter	SAMPLES					REPLICATE SAMPLES				
	Dynamac Number	ETC Number	Date	Qual	Value	Dynamac Number	ETC Number	Date	Qual	Value
OTHER/MISCELLANEOUS										
Aluminum	FCSEDCL26A	BE1782	880502		15,500,000	FCSEDCLA26	BE1781	880502		12,700,000
Aluminum	FLSED11A	BE4756	880523		7,680,000	FLSEDA11	BE4757	880523		11,200,000
Aluminum	TDSEDCL16A	BE1880	880510		18,000,000	TDSEDCLA16	BE1881	880510		12,800,000
Aluminum	BGSEDCL06A	BE0768	880418		3,850,000	BGSEDCLA06	BE0769	880418		4,620,000
Antimony	BGSEDCL06A	BE0768	880418	ND	0	BGSEDCLA06	BE0769	880418	ND	110
Beryllium	FCSEDCL26A	BE1782	880502		470	FCSEDCLA26	BE1781	880502		470
Beryllium	BGSEDCL06A	BE0768	880418		280	BGSEDCLA06	BE0769	880418		260
Calcium	FCSEDCL26A	BE1782	880502		2,560,000	FCSEDCLA26	BE1781	880502		1,800,000
Calcium	FLSED11A	BE4756	880523		1,000,000	FLSEDA11	BE4757	880523		1,700,000
Calcium	TDSEDCL16A	BE1880	880510		1,980,000	TDSEDCLA16	BE1881	880510		1,200,000
Calcium	BGSEDCL06A	BE0768	880418		1,200,000	BGSEDCLA06	BE0769	880418		1,200,000
Cobalt	FCSEDCL26A	BE1782	880502		21,000	FCSEDCLA26	BE1781	880502		19,000
Cobalt	FLSED11A	BE4756	880523	BMDL	4,500	FLSEDA11	BE4757	880523		7,000
Cobalt	TDSEDCL16A	BE1880	880510		12,000	TDSEDCLA16	BE1881	880510		9,500
Cobalt	BGSEDCL06A	BE0768	880418		5,300	BGSEDCLA06	BE0769	880418		5,100
Iron	FCSEDCL26A	BE1782	880502		41,300,000	FCSEDCLA26	BE1781	880502		35,500,000
Iron	FLSED11A	BE4756	880523		19,800,000	FLSEDA11	BE4757	880523		30,900,000
Iron	TDSEDCL16A	BE1880	880510		28,100,000	TDSEDCLA16	BE1881	880510		24,400,000
Iron	BGSEDCL06A	BE0768	880418		25,500,000	BGSEDCLA06	BE0769	880418		22,700,000
Magnesium	FCSEDCL26A	BE1782	880502		9,020,000	FCSEDCLA26	BE1781	880502		7,110,000
Magnesium	FLSED11A	BE4756	880523		2,070,000	FLSEDA11	BE4757	880523		3,590,000
Magnesium	TDSEDCL16A	BE1880	880510		4,320,000	TDSEDCLA16	BE1881	880510		4,220,000
Magnesium	BGSEDCL06A	BE0768	880418		1,420,000	BGSEDCLA06	BE0769	880418		1,090,000
Manganese	FCSEDCL26A	BE1782	880502		874,000	FCSEDCLA26	BE1781	880502		743,000
Manganese	FLSED11A	BE4756	880523		120,000	FLSEDA11	BE4757	880523		222,000
Manganese	TDSEDCL16A	BE1880	880510		491,000	TDSEDCLA16	BE1881	880510		502,000
Manganese	BGSEDCL06A	BE0768	880418		266,000	BGSEDCLA06	BE0769	880418		156,000
Nickel	FCSEDCL26A	BE1782	880502		6,600	FCSEDCLA26	BE1781	880502		3,800
Nickel	FLSED11A	BE4756	880523	ND	230	FLSEDA11	BE4757	880523	ND	0
Nickel	TDSEDCL16A	BE1880	880510	BMDL	920	TDSEDCLA16	BE1881	880510	BMDL	580
Nickel	BGSEDCL06A	BE0768	880418		5,900	BGSEDCLA06	BE0769	880418	BMDL	2,600

FRO 001 1384

TABLE 5-8 (continued)

Parameter	SAMPLES					REPLICATE SAMPLES				
	Dynamac Number	ETC Number	Date	Qual	Value	Dynamac Number	ETC Number	Date	Qual	Value
OTHER/MISCELLANEOUS (continued)										
Potassium	FCSEDCL26A	BE1782	880502		280,000	FCSEDCLA26	BE1781	880502		190,000
Potassium	FLSED11A	BE4756	880523		550,000	FLSEDA11	BE4757	880523		950,000
Potassium	TDSEDCL16A	BE1880	880510		290,000	TDSEDCLA16	BE1881	880510		190,000
Potassium	BGSEDCL06A	BE0768	880418		290,000	BGSEDCLA06	BE0769	880418		440,000
Sodium	FCSEDCL26A	BE1782	880502		200,000	FCSEDCLA26	BE1781	880502		160,000
Sodium	FLSED11A	BE4756	880523		1,600,000	FLSEDA11	BE4757	880523		2,690,000
Sodium	TDSEDCL16A	BE1880	880510		180,000	TDSEDCLA16	BE1881	880510		150,000
Sodium	BGSEDCL06A	BE0768	880418		98,000	BGSEDCLA06	BE0769	880418		100,000
Thallium	FCSEDCL26A	BE1782	880502	ND	130	FCSEDCLA26	BE1781	880502	ND	140
Thallium	FLSED11A	BE4756	880523	ND	0	FLSEDA11	BE4757	880523	ND	46
Thallium	BGSEDCL06A	BE0768	880418	ND	120	BGSEDCLA06	BE0769	880418	ND	47
Total Organic Carbon	FCSEDCL26A	BE1782	880502		3,810	FCSEDCLA26	BE1781	880502		9,370
Total Organic Carbon	FCSEDCL26A	BE1782	880502		3,570	FCSEDCLA26	BE1781	880502		9,140
Total Organic Carbon	FCSEDCL54B	BE0745	880422		180,000	FCSEDCLB54	BE0746	880422		286,000
Total Organic Carbon	FCSEDCL54B	BE0745	880422		174,000	FCSEDCLB54	BE0746	880422		266,000
Total Organic Carbon	FLSED11A	BE4756	880523		34,600	FLSEDA11	BE4757	880523		49,400
Total Organic Carbon	FLSED11A	BE4756	880523		34,800	FLSEDA11	BE4757	880523		48,300
Total Organic Carbon	SDSEDCL08A	BE1758	880506		32,700	SDSEDCLA08	BE1759	880506		41,600
Total Organic Carbon	SDSEDCL08A	BE1758	880506		34,900	SDSEDCLA08	BE1759	880506		39,200
Total Organic Carbon	TDSEDCL16A	BE1880	880510		20,200	TDSEDCLA16	BE1881	880510		36,200
Total Organic Carbon	TDSEDCL16A	BE1880	880510		19,300	TDSEDCLA16	BE1881	880510		35,600
Total Organic Carbon	TDSEDCL08A	BE1763	880509		15,000	TDSEDCLA08	BE1764	880509		13,900
Total Organic Carbon	TDSEDCL08A	BE1763	880509		14,000	TDSEDCLA08	BE1764	880509		14,500
Total Organic Carbon	BGSEDCL06A	BE0768	880418		8,500	BGSEDCLA06	BE0769	880418		7,590
Total Organic Carbon	BGSEDCL06A	BE0768	880418		9,040	BGSEDCLA06	BE0769	880418		7,740
Vanadium	FCSEDCL26A	BE1782	880502		120,000	FCSEDCLA26	BE1781	880502		110,000
Vanadium	FLSED11A	BE4756	880523		48,000	FLSEDA11	BE4757	880523		82,000
Vanadium	TDSEDCL16A	BE1880	880510		80,000	TDSEDCLA16	BE1881	880510		71,000
Vanadium	BGSEDCL06A	BE0768	880418		99,000	BGSEDCLA06	BE0769	880418		79,000

TABLE 5-8 (continued)

Parameter	SAMPLES					REPLICATE SAMPLES				
	Dynamac Number	ETC Number	Date	Qual	Value	Dynamac Number	ETC Number	Date	Qual	Value
OTHER/MISCELLANEOUS (continued)										
% Solid	FCSEDCL26A	BE1782	880502		83	FCSEDCLA26	BE1781	880502		80.10
% Solid	FCSEDCL54B	BE0745	880422		38.10	FCSEDCLB54	BE0746	880422		41.80
% Solid	FCSEDCL03A	BE0681	880419		75.90	FCSEDCLA03	BE0679	880419		74.10
% Solid	FCSEDCL06B	BE1702	880505		75.70	FCSEDCLB06	BE1703	880505		75.20
% Solid	FCSEDCL23A	BE0730	880503		78.70	FCSEDCLA23	BE0731	880503		77.10
% Solid	FCSEDCL30B	BE0722	880502		74.20	FCSEDCLB30	BE0723	880502		74.40
% Solid	FCSEDCL36A	BE0717	880427		68.10	FCSEDCLA36	BE0718	880427		77.80
% Solid	FCSEDCL46A	BE0703	880425		55.40	FCSEDCLA46	BE0704	880425		67.20
% Solid	FCSEDCL61A	BE0685	880420		57.20	FCSEDCLA61	BE0686	880420		57.50
% Solid	FLSED11A	BE4756	880523		55.50	FLSEDA11	BE4757	880523		36.30
% Solid	FLSED05A	BE1737	880512		53.30	FLSEDA05	BE1738	880512		54.20
% Solid	FLSED15A	BE1806	880516		54.50	FLSEDA15	BE1757	880516		48.90
% Solid	SDSEDCL08A	BE1758	880506		63.50	SDSEDCLA08	BE1759	880506		64.20
% Solid	SDSEDCL05A	BE1706	880505		83.20	SDSEDCLA05	BE1707	880505		83
% Solid	TDSEDCL16A	BE1880	880510		73.20	TDSEDCLA16	BE1881	880510		72.70
% Solid	TDSEDCL08A	BE1763	880509		71.10	TDSEDCLA08	BE1764	880509		72
% Solid	TDSEDCL05A	BE1714	880506		56.40	TDSEDCLA05	BE1715	880506		66.90
% Solid	TDSEDCL13A	BE1723	880509		73.60	TDSEDCLA13	BE1724	880509		74.40
% Solid	SEDTRANA1B	BE3878	880519		89.70	SEDTREPA1B	BE3879	880519		89.70
% Solid	SEDTRANB4A	BE1846	880519		74.40	SEDTREP4A	BE1847	880519		73.30
% Solid	SEDTRAND1B	BE1818	880517		76.10	SEDTREP01B	BE1817	880517		77.60
% Solid	SEDTRANF4B	BE1826	880518		85	SEDTREP4B	BE1825	880518		86.30
% Solid	BGSEDCL06A	BE0768	880418		88.40	BGSEDCLA06	BE0769	880418		82.80
% Solid	BGSEDCL05A	BE0676	880418		79.90	BGSEDCLA05	BE0680	880418		77.40

TABLE 5-9

Mercury Data for Biota Replicate Samples
(values in ug/kg; MDL = 80)

SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
CF207	BF1186	880227	BMDL	48	ND	0
CM203	BF1163	880224	ND	0	ND	0
X209	BH1318	880226	ND	0	ND	0
X217	BF0992	880227	BMDL	56	ND	0
X202	BF1104	880226		112	ND	0
X262	BF1090	880225		128 R1	ND	0
X004	BF1093	880224	BMDL	56 R1	ND	0
X501	BF1086	880326		244 R1	ND	0
X440	BF1114	880326	BMDL	52	ND	0
TF204	BF1145	880225	BMDL	78	ND	0
TM202	BF1012	880225	BMDL	48	ND	0
TM206	BF1150	880225	ND	0	ND	0
T030	BF1006	880324	ND	0	ND	0
T413	BF0997	880326	ND	0	ND	0
BCOWFCS03	BE4738	880616	ND	0	ND	0
MCOFWCS03	BE7283	880616	ND	0	ND	0

REPLICATE SAMPLES

Dynamac Number	ETC Number	Date	Total		Inorganic	
			Qual	Value	Qual	Value
CF250	BF1172	880227	BMDL	36	ND	0
CM250	BF1193	880224	ND	0	ND	0
X251	BH1325	880226	ND	0	ND	0
X250	BF0993	880227	BMDL	60	ND	0
X252	BF1107	880226		128	ND	0
X265	BF1106	880225		120	ND	0
X050	BF1094	880224	BMDL	44 R1	ND	0
X550	BF1103	880326		232	ND	0
X540	BF1136	880326	BMDL	44	ND	0
TF250	BF1082	880225	BMDL	64	ND	0
TM251	BF1005	880225	ND	0	ND	0
TM250	BF1097	880225	ND	0	ND	0
T050	BF1004	880324	ND	0	ND	0
T450	BF1031	880326	ND	0	ND	0
BCOWFCR01	BE4745	880616	ND	0	ND	0
MCOFWCR01	BE7290	880616	ND	0	ND	0

Note: *, **, R1 and R2 identify data points originally qualified "R" (rejected by the data validation team) but judged usable for data assessment purposes (see Appendix 7 for the explanation of these qualifiers)

TABLE 5-10

HSL Data for Biota Samples and Replicates (values in ug/kg)

Parameter	SAMPLE		REPLICATE SAMPLE	
	Qual	Value	Qual	Value
BASE/NEUTRAL EXTRACTABLES				
Di-n-octyl phthalate	ND	0	BMDL	368
ACID EXTRACTABLES				
Benzoic acid	BMDL	854	ND	0
ORGANOCHLORINE PESTICIDES/PCBs				
4,4'-DDE	ND	0		28
RCRA METALS				
Arsenic	ND	160	ND	190
Barium		4,800	BMDL	3,800
Chromium	BMDL	920	BMDL	870
Copper	BMDL	1,100	BMDL	680
Lead	ND	130	ND	780
Selenium	ND	1	ND	63
Silver	ND	260	ND	0
Zinc		17,000		15,000
OTHER/MISCELLANEOUS				
Aluminum	ND	1,400	ND	2,000
Antimony	ND	1,900	ND	1,600
Calcium		16,600,000		10,500,000
Iron		29,000		26,000
Magnesium		510,000		430,000
Manganese		11,000		8,700
Nickel	ND	460	ND	0
Potassium		2,900,000		2,200,000
Sodium		1,200,000		1,100,000
Vanadium	ND	410	ND	0

FOR SAMPLE: Dynamac Number = X209; ETC Number = BH 1318
 FOR REPLICATE: Dynamac Number = X251; ETC Number = BH 1325
 SAMPLE DATE: 2/26/88

FRO 001 1388

TABLE 5-11

Mercury Data for Air Samples and Duplicates

SAMPLES

Date	Location Number/Name	Mercury mg/m ³
7/11/89	05 SQUIBB DITCH & FENCE	1.05E-04
7/27/89	07 TECHNICON-LINDE FENCE	4.45E-04
8/09/89	07 TECHNICON-LINDE FENCE 2	1.44E-04
7/25/89	11 CRISTIANA-A02	6.50E-05
7/26/89	11 CRISTIANA-A02	2.60E-05
7/27/89	11 CRISTIANA-A02	1.29E-05
8/07/89	11 CRISTIANA-A02	3.90E-05
8/08/89	11 CRISTIANA-A02	1.32E-05
8/17/89	11 CRISTIANA-A02	1.44E-04
8/18/89	11 CRISTIANA-A02	9.23E-05

DUPLICATE SAMPLES

Date	Location Number/Name	Mercury mg/m ³
7/11/89	05 SQUIBB DITCH & FENCE - DUP	1.69E-04
7/27/89	07 TECHNICON-LINDE FENCE - DUP	2.59E-04
8/09/89	07 TECHNICON-LINDE FENCE 2 - DUP	1.80E-04
7/25/89	11 CRISTIANA-A02 - DUP	1.26E-04
7/26/89	11 CRISTIANA-A02 - DUP	2.53E-05
7/27/89	11 CRISTIANA-A02 - DUP	5.06E-05
8/07/89	11 CRISTIANA-A02 - DUP	5.02E-5
8/08/89	11 CRISTIANA-A02 - DUP	5.08E-05
8/17/89	11 CRISTIANA-A02 - DUP	7.66E-05
8/18/89	11 CRISTIANA-A02 - DUP	1.29E-04

PRO 001 1389

TABLE 5-12

NSL Data for Air Samples and Replicates (values in ppb by volume)

SAMPLES

Date	Location Number/Name	Parameter	Value
7/27/89	07 TECHNICON-LINDE FENCE	acetone	210
8/09/89	07 TECHNICON-LINDE FENCE 2	acetone	350
8/09/89	07 TECHNICON-LINDE FENCE 2	ethylbenzene	24
7/10/89	05 SQUIBB DITCH & FENCE	methylene chloride	180
7/11/89	05 SQUIBB DITCH & FENCE	methylene chloride	840
7/27/89	07 TECHNICON-LINDE FENCE	methylene chloride	250
8/09/89	07 TECHNICON-LINDE FENCE 2	methylene chloride	350
8/07/89	11 CRISTIANA-A02	methylene chloride	22
7/27/89	07 TECHNICON-LINDE FENCE	m+p-xylene	18
8/09/89	07 TECHNICON-LINDE FENCE 2	m+p-xylene	2.8
7/10/89	05 SQUIBB DITCH & FENCE	toluene	1.9
7/11/89	05 SQUIBB DITCH & FENCE	toluene	3.5
7/27/89	07 TECHNICON-LINDE FENCE	toluene	6
8/09/89	07 TECHNICON-LINDE FENCE 2	toluene	8.5
8/07/89	11 CRISTIANA-A02	toluene	BMDL

DUPLICATE SAMPLES

Date	Location Number/Name	Parameter	Value
7/27/89	07 TECH-LINDE FENCE - DUP	acetone	96
8/09/89	07 TECH-LINDE FENCE-2 - DUP	acetone	210
8/09/89	07 TECH-LINDE FENCE-2 - DUP	ethylbenzene	0.81
7/10/89	05 SQUIBB DITCH & FENCE - DUP	methylene chloride	380
7/11/89	05 SQUIBB DITCH & FENCE - DUP	methylene chloride	600
7/27/89	07 TECH-LINDE FENCE - DUP	methylene chloride	90
8/09/89	07 TECH-LINDE FENCE-2-DUP	methylene chloride	340
8/07/89	11 CRISTIANA-A02 - DUP	methylene chloride	58
7/27/89	07 TECH-LINDE FENCE - DUP	m+p-xylene	17
8/09/89	07 TECH-LINDE FENCE 2 - DUP	m+p-xylene	3.3
7/10/89	05 SQUIBB DITCH & FENCE - DUP	toluene	BMDL
7/11/89	05 SQUIBB DITCH & FENCE - DUP	toluene	7.4
7/27/89	07 TECH-LINDE FENCE - DUP	toluene	10
8/09/89	07 TECH-LINDE FENCE 2 - DUP	toluene	10
8/07/89	11 CRISTIANA-A02-DUP	toluene	2.7

TABLE 5-13

List of Tripblanks
(Dynamac Number - Tripblank)

ETC Number	Date	ETC Number	Date
BD3450	880128	BE6160	880609
BD3451	880128	BE6161	880614
BD3452	880129	BE6162	880615
BD3453	880203	BE6163	880615
BD3454	880203	BE6164	880617
BD3455	880204	BE7316	880616
BD3456	880205	BG4473	880826
BD3457	880205	BG4474	880826
BD3460	880225	BG4476	880829
BD3462	880222	BH8782	890123
BD3463	880301	BH8783	890123
BD3465	880308	BH8784	890123
BD3466	880309	BH8785	890123
BD3467	880224	BH8786	890123
BD3468	880310	CA0846	890524
BD7667	880413	CA0847	890524
BD7668	880414	CA0848	890524
BE0490	880414	CA0850	890525
BE0775	880418	CA0852	890523
BE0776	880419	CA0853	890525
BE1788	880425	CA0862	890525
BE1789	880421	CA0863	890525
BE1790	880504	CA1109	890715
BE1791	880502	CA1110	890713
BE1792	880427	CA1111	890715
BE1885	880505	CA1122	890714
BE1886	880509	CA1157	890722
BE2562	880523	CA1159	890714
BE4759	880523	CA1160	890722
BE4770	880525	CA1161	890722
BE6158	880607	CA1176	890717
BE6159	880609	CA1182	890722

TABLE 5-14
Tripblank Data (values in ug/l)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
VOLATILE ORGANIC COMPOUNDS						
1,1,2,2-Tetrachloroethane						
TRIPBLANK	BD3455	880204		4.97	U	4.0
2-Hexanone						
TRIPBLANK	BD7667	880413		13.20		4.0
TRIPBLANK	BH8783	890123	BMDL	5.60	J	10.0
Acetone						
TRIPBLANK	BD3450	880128		125.00		4.0
TRIPBLANK	BD3451	880128		14.40		4.0
TRIPBLANK	BD3453	880203		9.26	U	4.0
TRIPBLANK	BD3455	880204		9.86	U	4.0
TRIPBLANK	BD3456	880205		7.44	U	4.0
TRIPBLANK	BD3457	880205		8.73	U	4.0
TRIPBLANK	BD3462	880222		15.80		4.0
TRIPBLANK	BD3468	880310		27.40	J	4.0
TRIPBLANK	BD7667	880413		18.80		4.0
TRIPBLANK	BD7668	880414		12.90		4.0
TRIPBLANK	BE1792	880427		4.48	UJ	4.0
TRIPBLANK	BE2562	880523		4.32	UJ	4.0
TRIPBLANK	BE6158	880607		8.76	U	4.0
TRIPBLANK	BE6161	880614		12.60		4.0
TRIPBLANK	BG4473	880826		8.13	UJ	4.0
TRIPBLANK	BG4474	880826		11.90		4.0
TRIPBLANK	BG4476	880829		6.77	U	4.0
TRIPBLANK	BH8782	890123		10.60		10.0
TRIPBLANK	BH8784	890123	BMDL	6.13	UJ	10.0
TRIPBLANK	BH8785	890123	BMDL	5.08	U	10.0
TRIPBLANK	BH8786	890123	BMDL	5.49	U	10.0
TRIPBLANK	CA0847	890524		12.40		10.0
TRIPBLANK	CA0853	890525	BMDL	8.50	U	10.0
TRIPBLANK	CA0862	890525	BMDL	7.97	U	10.0
TRIPBLANK	CA0863	890525	BMDL	6.87	U	10.0
TRIPBLANK	CA1109	890715		12.00	J	10.0
Methyl chloride						
TRIPBLANK	BH8784	890123	BMDL	1.84	UJ	10.0
Methyl ethyl ketone						
TRIPBLANK	BD7667	880413		11.60	J	4.0
TRIPBLANK	BD7668	880414		8.18	U	4.0
Methylene chloride						
TRIPBLANK	BD3450	880128		5.04		4.0
TRIPBLANK	BD3451	880128	BMDL	2.84	U	4.0
TRIPBLANK	BD3452	880129	BMDL	2.47	U	4.0
TRIPBLANK	BD3453	880203	BMDL	3.21	U	4.0

TABLE 5-14 (continued)

Dynamac Number	ETC Number	Date	Lab Qual	Value	QA Qual	MDL
Methylene chloride (continued)						
TRIPBLANK	BD3455	880204		15.00		4.0
TRIPBLANK	BD3456	880205		8.11		4.0
TRIPBLANK	BD3457	880205		11.00		4.0
TRIPBLANK	BD3460	880225		7.27	J	4.0
TRIPBLANK	BD3462	880222		7.70		4.0
TRIPBLANK	BD3465	880308		4.13	UJ	4.0
TRIPBLANK	BD3466	880309		5.22		4.0
TRIPBLANK	BD3467	880224		4.49	U	2.8
TRIPBLANK	BD3468	880310		4.39	U	4.0
TRIPBLANK	BD7667	880413		18.90		4.0
TRIPBLANK	BE1790	880504		4.83	U	4.0
TRIPBLANK	BE1791	880502		5.13		4.0
TRIPBLANK	BE1792	880427	BMDL	2.25	U	4.0
TRIPBLANK	BE1885	880505		18.90	J	4.0
TRIPBLANK	BE1886	880509		20.00	J	4.0
TRIPBLANK	BE4759	880523	BMDL	2.47	U	4.0
TRIPBLANK	BE4770	880525	BMDL	1.65	U	4.0
TRIPBLANK	BE6158	880607	BMDL	3.37	U	4.0
TRIPBLANK	BE6161	880614	BMDL	3.46	U	4.0
TRIPBLANK	BE6163	880615		4.26	U	4.0
TRIPBLANK	BG4473	880826	BMDL	2.26	U	4.0
TRIPBLANK	BG4474	880826	BMDL	3.88	U	4.0
TRIPBLANK	CA0846	890524	BMDL	3.91	U	5.0
TRIPBLANK	CA0847	890524	BMDL	3.12	U	5.0
TRIPBLANK	CA0848	890524	BMDL	3.08	U	5.0
TRIPBLANK	CA0852	890523	BMDL	3.34	U	5.0
TRIPBLANK	CA0853	890525	BMDL	2.78	U	5.0
TRIPBLANK	CA0862	890525	BMDL	3.83	U	5.0
TRIPBLANK	CA1109	890715		14.30	J	5.0
TRIPBLANK	CA1110	890713		12.70	J	5.0
TRIPBLANK	CA1111	890715		13.40	J	5.0
TRIPBLANK	CA1122	890714		16.30		5.0
TRIPBLANK	CA1157	890722		8.58	J	5.0
TRIPBLANK	CA1159	890714		15.90		5.0
TRIPBLANK	CA1160	890722		7.06	J	5.0
TRIPBLANK	CA1161	890722		11.10	J	2.8
TRIPBLANK	CA1176	890717		19.00	U	5.0
TRIPBLANK	CA1182	890722		9.27	U	5.0
Methyl-iso-butyl ketone						
TRIPBLANK	BD7667	880413		10.50		4.0
TRIPBLANK	BH8783	890123	BMDL	2.42	UJ	10.0
o+p-Xylenes						
TRIPBLANK	BD7667	880413	BMDL	1.45	UJ	4.0

J - Estimated

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

TABLE 5-15

Field Blank Data

Mercury (ug/l)

Dynamac Number	ETC Number	Date	Total Mercury			Inorganic Mercury			MDL
			Lab Qual	Value	QA Qual	Lab Qual	Value	QA Qual	
FB01	BD7665	880413	ND	0	U	ND	0	U	0.2
FB02	BD7666	880414	ND	0	U	ND	0	U	0.2
GWFB01	BE4691	880602	ND	0	U	ND	0	U	0.2
BCOWBLANK (ug/kg)	BE4746	880616	ND	0	UJ	BMDL	36	UR2	80.0

HSL (ug/l)

Dynamac Number	ETC Number	Date	Parameter	Lab Qual	Value	QA Qual	MDL
-------------------	---------------	------	-----------	-------------	-------	------------	-----

VOLATILE ORGANIC COMPOUNDS

FB01	BD7665	880413	Acetone		27.8		4
FB01	BD7665	880413	Chloroform		6.93		4
FB02	BD7666	880414	Methyl ethyl ketone		5.96	U	4
FB01	BD7665	880413	Methylene chloride		18.7	U	4

BASE/NEUTRAL EXTRACTABLES

FB01	BD7665	880413	Di-n-octyl phthalate	BMDL	2.84	UJ	20
------	--------	--------	----------------------	------	------	----	----

RCRA METALS

FB01	BD7665	880413	Arsenic	ND	0.27	U	10
FB02	BD7666	880414	Barium	BMDL	2.1		4.7
FB01	BD7665	880413	Chromium	ND	1.2	U	32
FB02	BD7666	880414	Chromium	BMDL	5.5	U	21
FB01	BD7665	880413	Copper	ND	0.4	U	6.5
FB02	BD7666	880414	Copper	ND	1.9	U	10
FB01	BD7665	880413	Lead	ND	0.8	U	5
FB02	BD7666	880414	Lead	ND	0.74	U	5
FB02	BD7666	880414	Silver	ND	0.25	U	9.9
FB01	BD7665	880413	Zinc	BMDL	4.5		20
FB02	BD7666	880414	Zinc	ND	3		20

PRO 001 1394

TABLE 5-15 (continued)

HSL (ug/l) (continued)

Dynamac Number	ETC Number	Date	Parameter	Lab Qual	Value	QA Qual	MDL
<i>OTHER/MISCELLANEOUS COMPOUNDS</i>							
FB01	BD7665	880413	Aluminum	BMDL	18	U	40
FB02	BD7666	880414	Aluminum	BMDL	40	U	110
FB01	BD7665	880413	Beryllium	ND	0.059	U	0.89
FB01	BD7665	880413	Calcium	BMDL	34	U	130
FB02	BD7666	880414	Calcium	BMDL	27	U	120
FB01	BD7665	880413	Cobalt	ND	3.5	U	27
FB02	BD7666	880414	Cobalt	BMDL	6		19
FB01	BD7665	880413	Cyanide, Total		< 50	NA	50
FB02	BD7666	880414	Cyanide, Total		< 50	NA	50
FB02	BD7666	880414	Iron	ND	26	U	200
FB01	BD7665	880413	Magnesium	BMDL	20		60
FB02	BD7666	880414	Magnesium	BMDL	16		41
FB02	BD7666	880414	Manganese	BMDL	2.4		6.7
FB02	BD7666	880414	Nickel	ND	1.8	U	14
FB01	BD7665	880413	Potassium	BMDL	22		100
FB02	BD7666	880414	Potassium	BMDL	42		100
FB01	BD7665	880413	Sodium		130		100
FB02	BD7666	880414	Sodium		620		300
FB01	BD7665	880413	Thallium	BMDL	2.9		10
FB02	BD7666	880414	Vanadium	ND	2.2	U	21

J - Estimated

NA - Not applicable

U - Not detected, associated value below the Sample Quantitation Limit

UJ - Not detected, associated value is estimated and is below the Sample Quantitation Limit

Note: *, **, R1 and R2 identify data points originally qualified "R" (rejected by the data validation team) but judged usable for data assessment purposes (see Appendix 7 for the explanation of these qualifiers)

FRO 001 1395

FRO 001 1396

TABLE 6-1
EXPOSURE CONCENTRATIONS

Receptors and Media	Samples Location	Chemical Name	Avg. Exposure Concentration Arithmetic* Mean Y	Reasonable Maximum Exposure Concentration (UCL 95%)*
I. CURRENT LAND USE:				
<u>1. Local Residents</u>				
A. Biota (ug/kg)	Fish & crab (Whole, edible or filet) collected from the Frontera Lagoons (Table 4-74)	Mercury	49	58
B. Sediment (ug/kg)	Frontera Lagoon surface sediments (Table 4-43) (Table 4-52)	Mercury	154	220
		Acetone	1,423	2,980
		MEK	222	624 •
		Methylene Chloride	97	338 •
		Carbon Disulfide	91	230 •
		Methyl Chloride	507	1,730 •
<u>2. Workers</u>				
A. Soils (ug/kg)	Technicon industrial soils (Table 4-18) (Table 4-23)	Mercury	1,175 **	296,913
		Arsenic	753 **	1,600 •
		Cadmium	202 **	410 •
		Lead	16,585 **	100,000 •
	Peerless Tube soils (Table 4-21)	Arsenic	—	430,000
	WJK soils (Table 4-21)	Cadmium	—	10,000
B. Air (mg/m3)	Stations 5 & 7 (Table 4-86)	Mercury	0.00015	0.000275
		Acetone	0.43	0.933 •
		Methylene Chloride	1.5	2.73 •
		Ethyl Benzene	0.017	0.059 •
		Xylene (Total)	0.026	0.083 •
		Toluene	0.025	0.045 •
II. FUTURE LAND USE:				
<u>1. Hypothetical Christiansa Residents</u>				
A. Soil (ug/kg)	Cristiana surface and test boring surface soils(0-3") (Table 4-2)	Mercury	97	104
B. Air (mg/m3)	Stations 10 & 11 (Table 4-86)	Mercury	0.0000693	0.000112
		Methylene Chloride	0.047	0.152 •
		Xylene (Total)	0.00027	0.003 •
		Toluene	0.013	0.062 •

TABLE 6-1
EXPOSURE CONCENTRATIONS

Receptors and Media	Samples Location	Chemical Name	Avg. Exposure Concentration Arithmetic* Mean Y	Reasonable Maximum Exposure Concentration (UCL 95%)*
C. Surface Water (ug/l)	Surface Water Sampling Locations 8 - 10 (Table 4-35) (Table 4-37)	Acetone	116	189 •
		Ethyl Benzene	3.2	6.9 •
		MIBK	89	220 •
		Xylene (Total)	15	32.5 •
		Toluene	14	19.5 •
D. Sediments (ug/kg)	Frontera Creek Sediment Locations 33 - 42 (0-6") (Table 4-43) (Table 4-52)	Mercury	114	197 •
		Acetone	246	619 •
2. Hypothetical Local Residents A. Air (mg/m3)	Modeled values for Hypothetical Community (Table I, Append. 3)	Mercury	0.00014	0.0002 •
		Acetone	0.09	0.2 •
		Ethyl Benzene	0.007	0.085 •
		Methylene Chloride	0.56	0.63 •
		Toluene	0.008	0.12 •
		Xylene (Total)	0.005	0.017 •
B. Surface Water (ug/l)	Frontera Creek Midstream locations 11 - 17 (Table 4-35) (Table 4-37)	Mercury	0.22	0.48 •
		Acetone	751	2,870 •
		Ethyl Benzene	26	97 •
		MIBK	1,041	4,650 •
		Methylene Chloride	329	1,890 •
		Toluene	4.3	15.9 •
C. Sediments (ug/kg)	The highest measured concentrations of midstream or down- stream locations at Frontera Creek (Table 4-43) (Table 4-52)	Mercury	506	2,900 •
		Acetone	428	1,430 •
		Carbon Disulfide	270	540 •
		Methyl Chloride	21	26.5 •
		MEK	165	232 •
		Xylene (Total)	10	13.5 •

TABLE 6-1
EXPOSURE CONCENTRATIONS

Receptors and Media	Samples Location	Chemical Name	Avg. Exposure Concentration Arithmetic* Mean Y	Reasonable Maximum Exposure Concentration (UCL 95%)**
D. Technicon Sediments(ug/kg)	Technicon ditch and transect samples (Table 4-43)	Mercury	7,139	88,500 •
3. Hypothetical Workers Technicon Sediments (ug/kg)	Technicon ditch and transect samples (Table 4-43)	Mercury	7,139	88,500 •

*One-half the detection limit was used for sampling results listed as n.d. (not detected)

**Values marked with "*" are the geometric means.

***Values represent the 95th% upper confidence limit of the mean (UCL 95%) unless otherwise indicated. The UCL 95% was calculated using the equation $UCL\ 95\% = \exp \{1 + 0.5S^2 + [(H-S)1/(N-1)^{1/2}]\}$ from Gilbert, "Statistical Methods for Environmental Pollution Monitoring" Van Nostrand Reinhold Company, New York (1987)

@Maximum measured concentration is used because UCL 95% exceeded this maximum.

TABLE 6-2

**Comparison of Exposure Factors for Ingestion of Aquatic Biota
Local Residents - Current Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
IR	Ingestion Rate		
	Adult	13.8 kg/year	48.2 kg/year
	Child	2.3 kg/year	8.0 kg/year
FI	Fraction Ingested from Frontera Study Area	0.5	1.0
ED	Exposure Duration		
	Adult	9 years	30 years
	Child	6 years	6 years
BW	Body Weight		
	Adult	70 kg	70 kg
	Child	16 kg	16 kg
AT	Averaging Time	ED x 365 days *	ED x 365 days *
CF	Conversion Factor	10^{-3} mg/ug	10^{-3} mg/ug

* 70 x 365 for carcinogenic risk calculations

FRO 001 1400

TABLE 6-3

**Comparison of Exposure Factors for Dermal Contact with Sediments
Local Residents - Current Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
SA	Skin Surface Area Adult	3,800 cm ² /event	6,480 cm ² /event
AF	Soil Adherence Factor	2.77 mg/cm ²	2.77 mg/cm ²
CF	Conversion Factor	10 ⁻⁹ kg/ug	10 ⁻⁹ kg/ug
ABS	Dermal Absorption Factor		
	Mercury	10%	25%
	Other VOCs	25%	50%
EF	Exposure Frequency Adult	26 events/year	52 events/year
ED	Exposure Duration Adult	9 years	30 years
BW	Body Weight Adult	70 kg	93 kg
AT	Averaging Time	ED x 365 days *	ED x 365 days *

* 70 x 365 for carcinogenic risk factor

FRO 001 1401

TABLE 6-4

Comparison of Exposure Factors for Inhalation
Workers - Current Land Use

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
IR	Inhalation Rate Adult	1.2 m ³ /hr	1.8 m ³ /hr
ET	Exposure Time Adult	1 hr/day	4 hrs/day
EF	Exposure Frequency	250 days/year	250 days/year
ED	Exposure Duration Adult	9 years	30 years
BW	Body Weight Adult	70 kg	70 kg
AT	Averaging Time	ED x 365 days *	ED x 365 days *
ABS	Absorption Factor		
	Mercury	0.8	0.8
	Other VOCs	1.0	1.0

* 70 x 365 for carcinogenic risk calculations

FRO 001 1402

TABLE 6-5

**Comparison of Exposure Factors for Incidental Ingestion of Surface Soils
Workers - Current Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
IR	Ingestion Rate Adult	100 mg/day	100 mg/day
CF	Conversion Factor	10^{-9} kg/ug	10^{-9} kg/ug
FI	Fraction Ingested from Potentially Contaminated Areas Adult	0.50	1.0
EF	Exposure Frequency	50 days/year	250 days/year
ED	Exposure Duration Adult	9 years	30 years
BW	Body Weight Adult	70 kg	70 kg
AT	Averaging Time	ED x 365 days*	ED x 365 days*
ABS	Absorption Factor Mercury	25%	50%
	Arsenic and Cadmium	50%	100%
* 70 x 365 for carcinogenic risk calculations			

TABLE 6-6

**Comparison of Exposure Factors for Dermal Contact with Surface Soils
Workers - Current Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
SA	Skin Surface Area	3,120 cm ² /event	4,000 cm ² /event
AF	Soil Adherence Factor	1.45 mg/cm ²	2.77 mg/cm ²
CF	Conversion Factor	10 ⁻⁹ kg/ug	10 ⁻⁹ kg/ug
ABS	Dermal Absorption Factor		
	Mercury	1%	10%
	Arsenic and Cadmium	25%	50%
EF	Exposure Frequency	50 events/year	250 events/year
ED	Exposure Duration	9 years	30 years
BW	Body Weight	70 kg	93 kg
AT	Averaging Time	ED x 365 days *	ED x 365 days *

* 70 x 365 for carcinogenic risk calculations

TABLE 6-7

**Comparison of Exposure Factors for Incidental Ingestion of Surface Soils
Cristiana Residents - Future Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
IR	Ingestion Rate		
	Adult	100 mg/day	100 mg/day
	Child	200 mg/day	200 mg/day
CF	Conversion Factor	10^{-9} kg/ug	10^{-9} kg/ug
FI	Fraction Ingested from Potentially Contaminated Areas		
	Adult	0.65	1
	Child	1	1
EF	Exposure Frequency	365 days/year	365 days/year
ED	Exposure Duration		
	Adult	9 years	30 years
	Child	6 years	6 years
BW	Body Weight		
	Adult	70 kg	70 kg
	Child	16 kg	16 kg
AT	Averaging Time	ED x 365 days*	ED x 365 days*
ABS	Absorption Factor		
	Mercury	0.25	0.50

* 70 x 365 for carcinogenic risk calculations

TABLE 6-8

**Comparison of Exposure Factors for Dermal Contact with Soils
Cristiana Residents - Future Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
SA	Skin Surface Area		
	Adult	8,600 cm ² /event	10,300 cm ² /event
	Child	3,500 cm ² /event	4,200 cm ² /event
AF	Soil Adherence Factor	1.45 mg/cm ²	2.77 mg/cm ²
CF	Conversion Factor	10 ⁻⁹ kg/ug	10 ⁻⁹ kg/ug
ABS	Dermal Absorption Factor	1%	10%
EF	Exposure Frequency		
	Adult	237 events/year	365 events/year
	Child	365 events/year	365 events/year
ED	Exposure Duration		
	Adult	9 years	30 years
	Child	6 years	6 years
BW	Body Weight		
	Adult	70 kg	93 kg
	Child	16 kg	21 kg
AT	Averaging Time	ED x 365 days*	ED x 365 days*

* 70 x 365 for carcinogenic risk calculations

FRO 001 1406

TABLE 6-9

Comparison of Exposure Factors for Inhalation
Cristiana and Local Residents - Future Land Use

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
IR	Inhalation Rate		
	Adult	0.83 m ³ /hr	1.2 m ³ /hr
	Child	0.67 m ³ /hr	0.97 m ³ /hr
ET	Exposure Time		
	Adult	16 hrs/day	24 hrs/day
	Child	24 hrs/day	24 hrs/day
ABS	Absorption Factor		
	Mercury	0.80	0.80
	Methylene Chloride	1.0	1.0
EF	Exposure Frequency	365 days/year	365 days/year
ED	Exposure Duration		
	Adult	9 years	30 years
	Child	6 years	6 years
BW	Body Weight		
	Adult	70 kg	70 kg
	Child	16 kg	16 kg
AT	Averaging Time	ED x 365 days *	ED x 365 days *
* 70 x 365 for carcinogenic risk calculations			

FRO 001 1407

TABLE 6-10

**Comparison of Exposure Factors for Dermal Contact with Surface Water
Cristiana and Local Residents - Future Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
SA	Skin Surface Area		
	Adult	3,800 cm ² /event	6,480 cm ² /event
	Child	2,500 cm ² /events	4,263 cm ² /event
CF	Conversion Factor	10 ⁻⁶	10 ⁻⁶
		1·mg/cm ³ ·ug	1·mg/cm ³ ·ug
PC	Permeability Constant		
	Mercury	2.2x10 ⁻³ cm/hr	2.2x10 ⁻³ cm/hr
	Other VOCs	1 cm/hr	1 cm/hr
ET	Exposure Time		
	Adult	0.5 hour/day	1 hour/day
	Child	1 hour/day	2 hour/day
EF	Exposure Frequency		
	Adult	26 days/year	52 days/year
	Child	52 days/year	104 days/year
ED	Exposure Duration		
	Adult	9 years	30 years
	Child	2 years	2 years
BW	Body Weight		
	Adult	70 kg	93 kg
	Child	16 kg	21 kg
AT	Averaging Time	ED x 365 days *	ED x 365 days *

* 70 x 365 for carcinogenic risk factor

FRO 001 1408

TABLE 6-11

**Comparison of Exposure Factors for Dermal Contact with Sediments
Cristiana and Local Residents - Future Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case (Cristiana Only)	Reasonable Maximum Exposures
SA	Skin Surface Area		
	Adult	3,800 cm ² /event	6,480 cm ² /event
	Child	2,500 cm ² /event	4,263 cm ² /event
AF	Soil Adherence Factor	2.77 mg/cm ²	2.77 mg/cm ²
CF	Conversion Factor	10 ⁻⁹ kg/ug	10 ⁻⁹ kg/ug
ABS	Dermal Absorption Factor		
	Mercury	10%	25%
	Other VOCs	25%	50%
EF	Exposure Frequency		
	Adult	26 events/year	52 events/year
	Child	52 events/year	104 events/year
ED	Exposure Duration		
	Adult	9 years	30 years
	Child	2 years	2 years
BW	Body Weight		
	Adult	70 kg	93 kg
	Child	16 kg	21 kg
AT	Averaging Time	ED x 365 days *	ED x 365 days *

* 70 x 365 for carcinogenic risk factor

FRO 001 1409

TABLE 6-12

**Comparison of Exposure Factors for Hypothetical Future Incidental
Ingestion of Technicon Ditch Sediments
Local Residents Future Land Use**

Reasonable Case And Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
IR	Ingestion Rate		
	Adult	100 mg/day	100 mg/day
	Child	200 mg/day	200 mg/day
CF	Conversion Factor	10^{-9} kg/ug	10^{-9} kg/ug
FI	Fraction Ingested from Potentially Contaminated Areas		
	Adult	0.5	0.5
	Child	0.5	0.5
EF	Exposure Frequency		
	Adult	13 days/year	26 days/year
	Child	26 days/year	52 days/year
ED	Exposure Duration		
	Adult	9 years	30 years
	Child	2 years	2 years
BW	Body Weight		
	Adult	70 kg	70 kg
	Child	16 kg	16 kg
AT	Averaging Time	ED x 365 days*	ED x 365 days*
ABS	Gastrointestinal Absorption Factor		
	Mercury	0.25	0.50

* 70 x 365 for carcinogenic risk calculations

FRO 001 1410

TABLE 6-13

**Comparison of Exposure Factors for Hypothetical Future Incidental
Ingestion of Technicon Ditch Sediments
Workers - Future Land Use**

Reasonable Case And Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
IR	Ingestion Rate Adult	100 mg/day	100 mg/day
CF	Conversion Factor	10^{-9} kg/ug	10^{-9} kg/ug
FI	Fraction Ingested from Potentially Contaminated Areas Adult	0.5	0.5
EF	Exposure Frequency Adult	50 days/year	250 days/year
ED	Exposure Duration Adult	9 years	30 years
BW	Body Weight Adult	70 kg	70 kg
	Child	16 kg	16 kg
AT	Averaging Time	ED x 365 days*	ED x 365 days*
ABS	Gastrointestinal Absorption Factor Mercury	0.25	0.50

* 70 x 365 for carcinogenic risk calculations

FRO 001 1411

TABLE 6-14

**Exposure Factors for Hypothetical Future Dermal Contact with
Technicon Ditch Sediments
Local Residents - Future Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
SA	Skin Surface Area		
	Adult	8,600 cm ² /event	10,300 cm ² /event
	Child	3,500 cm ² /event	4,200 cm ² /event
AF	Soil Adherence Factor	1.45 mg/cm ²	2.77 mg/cm ²
CF	Conversion Factor	10 ⁻² kg/ug	10 ⁻⁹ kg/ug
ABS	Dermal Absorption Factor	1%	10%
EF	Exposure Frequency		
	Adult	13 events/year	26 events/year
	Child	26 events/year	52 events/year
ED	Exposure Duration		
	Adult	9 years	30 years
	Child	2 years	2 years
BW	Body Weight		
	Adult	70 kg	93 kg
	Child	16 kg	21 kg
AT	Averaging Time	ED x 365 days*	ED x 365 days*

* 70 x 365 for carcinogenic risk calculations

TABLE 6-15

**Exposure Factors for Hypothetical Future Dermal Contact with
Technicon Ditch Sediments
Workers - Future Land Use**

Reasonable Case and Reasonable Maximum Exposure Scenarios

Exposure Factors		Reasonable Case	Reasonable Maximum Exposures
SA	Skin Surface Area Adult	3,120 cm ² /event	4,000 cm ² /event
AF	Soil Adherence Factor	1.45 mg/cm ²	2.77 mg/cm ²
CF	Conversion Factor	10 ⁻⁹ kg/ug	10 ⁻⁹ kg/ug
ABS	Dermal Absorption Factor	1%	10%
EF	Exposure Frequency Adult	50 events/year	250 events/year
ED	Exposure Duration Adult	9 years	30 years
BW	Body Weight Adult	70 kg	93 kg
	Child	16 kg	21 kg
AT	Averaging Time	ED x 365 days*	ED x 365 days*

* 70 x 365 for carcinogenic risk calculations

FRO 001 1413

TABLE 6-16
Calculated Daily Intakes (mg/kg/day) Of Non-Carcinogens*
Assuming Average(a) And Reasonable Maximum Exposures(b)

Receptor/Media And Pathway	Mercury		Methylene Chloride		Toluene		Xylene		Acetone		MIBK	
	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult
I. CURRENT LAND USE												
<u>1. Local Residents</u>												
Dermal Contact-FL Sed. (a)	-	1.6E-7	-	2.6E-7	-	-	-	-	-	3.8E-6	-	-
Dermal Contact-FL Sed. (b)	-	1.5E-6	-	4.6E-6	-	-	-	-	-	4.1E-5	-	-
Ingestion - Biota (a)	9.6E-6	1.3E-5	-	-	-	-	-	-	-	-	-	-
Ingestion - Biota (b)	7.9E-5	1.1E-4	-	-	-	-	-	-	-	-	-	-
<u>2. Workers</u>												
Ingestion - Soil (a)	-	2.9E-8	-	-	-	-	-	-	-	-	-	-
Ingestion - Soil (b)	-	1.5E-4	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Soil (a)	-	8.1E-8	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Soil (b)	-	2.4E-3	-	-	-	-	-	-	-	-	-	-
Inhalation - Air (a)	-	1.8E-6	-	1.8E-2	-	2.9E-2	-	3.1E-4	-	5.0E-3	-	-
Inhalation - Air (b)	-	1.9E-5	-	1.9E-1	-	3.2E-3	-	5.8E-3	-	6.6E-2	-	-
II. FUTURE LAND USE												
<u>1. Hypothetical Christiana Residents</u>												
Ingestion - Soil (a)	3.0E-7	2.3E-8	-	-	-	-	-	-	-	-	-	-
Ingestion - Soil (b)	6.5E-7	7.4E-8	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Soil (a)	3.1E-7	1.7E-7	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Soil (b)	5.8E-6	3.2E-6	-	-	-	-	-	-	-	-	-	-
Inhalation - Air (a)	5.6E-5	1.1E-5	4.7E-2	8.9E-3	1.3E-2	2.5E-3	2.7E-4	5.1E-5	-	-	-	-
Inhalation - Air (b)	1.3E-4	3.7E-5	2.2E-1	6.3E-2	9.0E-2	2.6E-2	4.4E-3	1.2E-3	-	-	-	-
Dermal Contact - SW (a)	5.4E-9	4.7E-10	-	-	3.1E-4	2.7E-5	3.3E-4	2.9E-5	2.6E-3	2.2E-4	2.0E-3	1.7E-4
Dermal Contact - SW (b)	3.3E-8	2.8E-9	-	-	2.3E-3	1.9E-4	3.8E-3	3.2E-4	2.2E-2	1.9E-3	2.5E-2	2.2E-3
Dermal Contact - Sed. (a)	7.0E-7	1.2E-7	-	-	-	-	-	-	3.8E-6	6.6E-7	-	-
Dermal Contact - Sed. (b)	7.9E-6	1.4E-6	-	-	-	-	-	-	5.0E-5	8.5E-6	-	-

TABLE 6-16

*Calculated Daily Intakes (mg/kg/day) Of Non-Carcinogens**
Assuming Average(a) And Reasonable Maximum Exposures(b)

Receptor/Media And Pathway	<u>Mercury</u>		<u>Methylene Chloride</u>		<u>Toluene</u>		<u>Xylene</u>		<u>Acetone</u>		<u>MIBK</u>	
	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult
<u>2. Hypothetical Local Residents</u>												
Inhalation - Air (a)	1.1E-5	2.1E-6	5.6E-1	1.1E-1	8.0E-3	1.5E-3	5.0E-3	9.5E-4	9.0E-2	1.7E-2	-	-
Inhalation - Air (b)	2.3E-4	6.6E-5	9.2E-1	2.6E-1	1.7E-1	4.9E-2	2.5E-2	7.0E-3	2.9E-1	8.2E-2	-	-
Dermal Contact - SW (a)	1.1E-8	9.4E-10	7.3E-3	6.4E-4	9.6E-5	8.3E-6	9.6E-4	8.3E-5	1.7E-2	1.5E-3	2.3E-2	2.0E-3
Dermal Contact - SW (b)	1.2E-7	1.0E-8	2.2E-1	1.9E-2	1.8E-3	1.6E-4	3.3E-2	2.8E-3	3.3E-1	2.8E-2	5.4E-1	4.6E-2
Dermal Contact - Sed. (a)	3.1E-6	5.4E-7	-	-	-	-	1.5E-7	2.7E-8	6.6E-6	1.1E-6	-	-
Dermal Contact - Sed. (b)	1.2E-4	2.6E-5	-	-	-	-	1.1E-6	2.5E-7	1.1E-4	2.6E-5	-	-
Ingestion - Tech. Ditch												
Sed. (a)	7.9E-7	4.5E-8	-	-	-	-	-	-	-	-	-	-
Ingestion - Tech. Ditch												
Sed. (b)**	3.9E-5	2.3E-6	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Tech. Ditch												
Sed. (a)	1.6E-6	4.5E-7	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Tech. Ditch												
Sed. (b)**	7.0E-4	1.9E-4	-	-	-	-	-	-	-	-	-	-
<u>3. Workers</u>												
Ingestion - Tech. Ditch												
Sed. (a)	-	1.7E-7	-	-	-	-	-	-	-	-	-	-
Ingestion - Tech. Ditch												
Sed. (a)	-	2.2E-5	-	-	-	-	-	-	-	-	-	-
Dermal Contact Tech. Ditch												
Sed. (a)	-	6.3E-7	-	-	-	-	-	-	-	-	-	-
Dermal Contact Tech. Ditch												
Sed. (b)	-	7.2E-4	-	-	-	-	-	-	-	-	-	-

TABLE 6-16
Calculated Daily Intakes (mg/kg/day) Of Non-Carcinogens*
Assuming Average(a) And Reasonable Maximum Exposures(b)

Receptor/Media And Pathway	<u>Ethyl Benzene</u>		<u>MEK</u>		<u>Methyl Chloride</u>		<u>Carbon Disulfide</u>		<u>Arsenic</u>		<u>Cadmium</u>	
	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult
I. CURRENT LAND USE												
1. Local Residents												
Dermal Contact-FL Sed. (a)	-	-	-	5.9E-7	-	1.4E-6	-	4.9E-7	-	-	-	-
Dermal Contact-FL Sed. (b)	-	-	-	8.6E-6	-	2.4E-5	-	3.2E-6	-	-	-	-
Ingestion - Biota (a)	-	-	-	-	-	-	-	-	-	-	-	-
Ingestion - Biota (b)	-	-	-	-	-	-	-	-	-	-	-	-
2. Workers***												
Ingestion - Soil (a)	-	-	-	-	-	-	-	-	-	3.7E-8	-	9.9E-9
Ingestion - Soil (b)	-	-	-	-	-	-	-	-	-	1.6E-6	-	4.0E-7
Dermal Contact - Soil (a)	-	-	-	-	-	-	-	-	-	1.3E-6	-	3.5E-7
Dermal Contact - Soil (b)	-	-	-	-	-	-	-	-	-	6.5E-5	-	1.7E-5
Inhalation - Air (a)	-	2.0E-4	-	-	-	-	-	-	-	-	-	-
Inhalation - Air (b)	-	4.2E-3	-	-	-	-	-	-	-	-	-	-
II. FUTURE LAND USE												
1. Hypothetical Christians Residents												
Ingestion - Soil (a)	-	-	-	-	-	-	-	-	-	-	-	-
Ingestion - Soil (b)	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Soil (a)	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Soil (b)	-	-	-	-	-	-	-	-	-	-	-	-
Inhalation - Air (a)	-	-	-	-	-	-	-	-	-	-	-	-
Inhalation - Air (b)	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact - SW (a)	7.1E-5	6.2E-6	-	-	-	-	-	-	-	-	-	-
Dermal Contact - SW (b)	8.0E-4	6.8E-5	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Sed. (a)	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Sed. (b)	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 6-16
Calculated Daily Intakes (mg/kg/day) Of Non-Carcinogens*
Assuming Average(a) And Reasonable Maximum Exposures(b)

Receptor/Media And Pathway	<u>Ethyl Benzene</u>		<u>MEK</u>		<u>Methyl Chloride</u>		<u>Carbon Disulfide</u>		<u>Arsenic</u>		<u>Cadmium</u>	
	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult
2. Hypothetical Local Residents												
Inhalation - Air (a)	7.0E-3	1.3E-3	-	-	-	-	-	-	-	-	-	-
Inhalation - Air (b)	1.2E-1	3.5E-2	-	-	-	-	-	-	-	-	-	-
Dermal Contact - SW (a)	5.8E-4	5.0E-5	-	-	-	-	-	-	-	-	-	-
Dermal Contact - SW (b)	1.1E-2	9.6E-4	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Sed. (a)	-	-	2.5E-6	4.4E-7	4.9E-7	5.6E-8	1.3E-5	7.2E-7	-	-	-	-
Dermal Contact - Sed. (b)	-	-	1.9E-5	4.2E-6	2.1E-6	4.8E-7	4.3E-5	9.9E-6	-	-	-	-
Ingestion - Tech. Ditch												
Sed. (a)	-	-	-	-	-	-	-	-	-	-	-	-
Ingestion - Tech. Ditch												
Sed. (b)**	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Tech. Ditch												
Sed. (a)	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Tech. Ditch												
Sed. (b)**	-	-	-	-	-	-	-	-	-	-	-	-
3. Workers												
Ingestion - Tech. Ditch												
Sed. (a)	-	-	-	-	-	-	-	-	-	-	-	-
Ingestion - Tech. Ditch												
Sed. (a)	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact Tech. Ditch												
Sed. (a)	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact Tech. Ditch												
Sed. (b)	-	-	-	-	-	-	-	-	-	-	-	-

(a) Reasonable Average Exposure

(b) Reasonable Maximum Exposure (RME)

*The averaging time is based on 6 years for children (except those noted "***" are two years), and 9 and 30 years for adults, respectively, for the average and worst case. Daily intakes for carcinogens are based on 70 years averaging time.

***Calculated daily intake for workers at Peerless Tube and WJK hypothetically exposed to maximum detected concentrations of arsenic and cadmium in soils are 4.2E-4 (As) and 9.8E-6 (Cd) for direct ingestion pathway, and 1.8E-2 (As) and 9.1E-4 (Cd) for dermal contact pathway, assuming reasonable maximum exposure.

TABLE 6-17

Toxicity Values for Noncarcinogenic Effects

Chemical	RfD (mg/kg-day)	Confidence Level ¹	Critical Effect	RfD Source	UF and MF ²
<u>Oral Route</u>					
Acetone	1.00E-01	Low	Hepatic effects	IRIS	UF = 1,000 for H,A,S,L MF = 1
Arsenic	1.00E-03				Health Effects Summary Tables, USEPA 1990
Cadmium	1.00E-03				Health Effects Summary Tables, USEPA 1990
Carbon Disulfide	1.00E-01	Medium	Fetal Toxicity Teratogenicity	IRIS	UF = 100 for H,A MF = 1
Ethyl Benzene	1.00E-01	Low	Hepatic and Renal Effects	IRIS	UF = 1,000 for H,A,S MF = 1
Mercury	3.00E-04	Medium	Neurological Effects	IRIS	UF = 10 for L MF = 1
Methyl Ethyl Ketone	5.00E-02	Medium	No adverse effects	IRIS	UF = 1,000 for H,A,S,L MF = 1
Methyl Isobutyl Ketone	5.00E-02	Low	Hepatic Effects	IRIS	UF = 1,000 for H,A,S,L MF = 1
Methyl Chloride ⁵	2.40E-01	Low	Neurological effects	Dynamac	UF = 100 for H,A MF = 1
Methylene Chloride	6.00E-02	Medium	Hepatic Effects	IRIS	UF = 100 for H,A MF = 1
Toluene	2.00E-01	Medium	Hepatic and Renal Effects	IRIS	UF = 1,000 for H,A,S MF = 1
Xylene	2.00E+00	Medium	Hyperactivity, decrease in body weight and increased mortality	IRIS	UF = 100 for H,A MF = 1
<u>Dermal Route³</u>					
Acetone	1.00E-01	Low ³	-	-	-
Arsenic	1.00E-03				Health Effects Summary Tables, USEPA 1990
Cadmium	1.00E-03				Health Effects Summary Tables, USEPA 1990
Carbon Disulfide	1.00E-01	Low ³	-	-	-
Ethyl Benzene	1.00E-01	Low ³	-	-	-
Mercury	3.00E-04	Low ³	-	-	-
Methyl Ethyl Ketone	5.00E-02	Low ³	-	-	-
Methyl Isobutyl Ketone	5.00E-02	Low ³	-	-	-

TABLE 6-17

Toxicity Values for Noncarcinogenic Effects

Chemical	RfD (mg/kg-day)	Confidence Level ¹	Critical Effect	RfD Source	UF and MF ²
Methyl Chloride ⁵	2.40E-01	Low ³	-	-	-
Methylene Chloride	6.00E-02	Low ³	-	-	-
Toluene	2.00E-01	Low ³	-	-	-
Xylene	2.00E+00	Low ³	-	-	-
<u>Inhalation Route</u>					
Acetone	2.99E+00	Low ⁶	Narcosis, local	HEA	-
Ethyl Benzene	1.00E-01	Low ³	-	-	-
Mercury	3.00E-04	Low ³	-	-	-
Methylene Chloride	6.00E-02	Low ³	-	-	-
Toluene	2.00E+00	Low ⁶	-	FR ⁴	-
Xylene	3.00E-01	Low ⁶	-	FR ⁴	-

1 - Confidence level from IRIS

2 - UF = Uncertainty Factor; MF = Modifying Factor

Uncertainty Adjustments:

M = variation in human sensitivity

A = animal to human extrapolation

S = extrapolation from subchronic to chronic NOAEL

L = extrapolation from LOAEL to NOAEL

3 - If dermal or inhalation RfDs are not available, oral RfDs were used, in such circumstances confidence levels were judged low

4 - 55FR 30798 - July 27, 1990 Federal Register, Proposed Corrective Action Rule for Solid Waste Management Units

5 - RfD estimates by Dynamac based on data obtained from IRIS and ATDSR

6 - Confidence level judged low since RfD for inhalation exposures not reviewed by EPA and/or cited by IRIS

TABLE 6-18

Toxicity Values for Carcinogenic Effects

Route	Slope Factor (mg/kg-day) ⁻¹	Weight of Evidence Classification	Source
<u>Oral</u>			
Methylene Chloride	7.50E-03	B2	IRIS
Arsenic	1.75E-00	A	IRIS(2/91)
<u>Dermal</u>			
Methylene Chloride	7.50E-03	B2	IRIS
Arsenic	1.75E-00	A	IRIS(2/91)
<u>Inhalation</u>			
Methylene Chloride	1.40E-02	B2	IRIS

PRO 001 1420

TABLE 6-19
Summary of Noncarcinogenic Hazard Quotients
Reasonable Case

Receptor Group/Pathway	<u>Mercury</u>		<u>Methylene Chloride</u>		<u>Acetone</u>		<u>MEK</u>		<u>MIBK</u>		<u>Arsenic</u>	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
I. CURRENT LAND USE												
<u>1. Local Residents</u>												
Ingestion of Aquatic Biota	4.4E-2	3.2E-2	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Sediments	5.5E-4	-	4.3E-6	-	3.8E-5	-	1.2E-5	-	-	-	-	-
TOTAL HI	4.4E-2	3.2E-2	4.3E-6	-	3.8E-5	-	1.2E-5	-	-	-	-	-
<u>2. Workers</u>												
Inhalation	5.9E-3	-	2.9E-1	-	1.7E-3	-	-	-	-	-	-	-
Incidental Ingestion	9.8E-5	-	-	-	-	-	-	-	-	-	3.7E-5	-
Dermal Contact Soil	3.5E-4	-	-	-	-	-	-	-	-	-	1.3E-3	-
TOTAL HI	6.3E-3	-	2.9E-1	-	1.7E-3	-	-	-	-	-	1.3E-3	-
TOTAL CURRENT HI	5.1E-2	3.2E-2	2.9E-1	-	1.7E-3	-	1.2E-5	-	-	-	1.3E-3	-
II. FUTURE LAND USE												
<u>1. Cristiana Residents</u>												
Incidental Ingestion	7.5E-5	1.1E-3	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Soil	5.8E-4	1.0E-3	-	-	-	-	-	-	-	-	-	-
Inhalation	3.5E-2	1.8E-1	1.5E-1	7.9E-1	-	-	-	-	-	-	-	-
Dermal Contact - SW	1.6E-7	1.8E-5	-	-	2.2E-3	2.6E-2	-	-	3.4E-3	4.0E-2	-	-
Dermal Contact - Sediments	4.1E-4	2.3E-3	-	-	6.6E-6	3.8E-5	-	-	-	-	-	-
TOTAL HI	3.6E-2	1.9E-1	1.5E-1	7.9E-1	2.2E-3	2.6E-2	-	-	3.4E-3	4.0E-2	-	-

TABLE 6-19
Summary of Noncarcinogenic Hazard Quotients
Reasonable Case

Receptor Group/Pathway	<u>Mercury</u>		<u>Methylene Chloride</u>		<u>Acetone</u>		<u>MEK</u>		<u>MIBK</u>		<u>Arsenic</u>	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
Inhalation	7.1E-3	3.8E-2	1.8E+0	9.4E+0	5.7E-3	3.0E-2	-	-	-	-	-	-
Dermal Contact - SW	3.1E-6	3.6E-5	1.1E-2	1.2E-1	1.5E-2	1.7E-1	-	-	4.0E-2	4.6E-1	-	-
Dermal Contact - Sediments	1.8E-3	1.0E-2	-	-	1.1E-5	6.6E-5	-	-	-	-	-	-
Incidental Ingestion - Technicon Ditch Sediments	1.5E-4	2.6E-3	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Technicon Ditch Sediments	1.5E-3	5.4E-3	-	-	-	-	-	-	-	-	-	-
TOTAL HI	1.1E-2	5.6E-2	1.8E+0	9.5E+0	2.0E-2	2.0E-1	-	-	4.0E-2	4.6E-1	-	-
<u>3. Future Workers</u>												
Incidental Ingestion - Technicon Ditch Sediments	5.8E-4	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact - Technicon Ditch Sediments	2.1E-3	-	-	-	-	-	-	-	-	-	-	-
TOTAL HI	2.7E-3	-	-	-	-	-	-	-	-	-	-	-

TABLE 6-19
Summary of Noncarcinogenic Hazard Quotients
Reasonable Case

Receptor Group/Pathway	<u>Cadmium</u>		<u>Carbon Disulfide</u>		<u>Ethyl Benzene</u>		<u>Methyl Chloride</u>		<u>Toluene</u>		<u>Xylene</u>	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
I. CURRENT LAND USE												
<u>1. Local Residents</u>												
Ingestion of Aquatic Biota	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact with Sediments	-	-	4.9E-6	-	-	-	5.7E-6	-	-	-	-	-
TOTAL HI	-	-	4.9E-6	-	-	-	5.7E-6	-	-	-	-	-
<u>2. Workers</u>												
Inhalation	9.9E-6	-	-	-	2.0E-3	-	-	-	1.5E-4	-	1.0E-3	-
Incidental Ingestion	3.5E-4	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact Soil	3.6E-4	-	-	-	-	-	-	-	-	-	-	-
TOTAL HI	3.6E-4	-	-	-	2.0E-3	-	-	-	1.5E-4	-	1.0E-3	-
TOTAL CURRENT HI	3.6E-4	-	4.9E-6	-	2.0E-3	-	5.7E-6	-	1.5E-4	-	1.0E-3	-
II. FUTURE LAND USE												
<u>1. Cristiana Residents</u>												
Incidental Ingestion	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact	-	-	-	-	-	-	-	-	-	-	-	-
Inhalation	-	-	-	-	-	-	-	-	1.2E-3	6.5E-3	1.7E-4	9.0E-4
Dermal Contact with Surface Water	-	-	-	-	6.2E-5	7.1E-4	-	-	9.0E-5	1.0E-3	1.4E-5	1.7E-4
Dermal Contact with Sediment	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL HI	-	-	-	-	6.2E-5	7.1E-4	-	-	1.3E-3	7.6E-3	1.8E-4	1.1E-3

TABLE 6-19
Summary of Noncarcinogenic Hazard Quotients
Reasonable Case

Receptor Group/Pathway	Cadmium		Carbon Disulfide		Ethyl Benzene		Methyl Chloride		Toluene		Xylene	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
<u>2. Future Local Residents</u>												
Inhalation	-	-	-	-	1.3E-2	7.0E-2	-	-	7.6E-4	4.0E-3	3.2E-3	1.7E-2
Dermal Contact - SW	-	-	-	-	5.0E-4	5.8E-3	-	-	2.8E-5	3.2E-4	4.2E-5	4.8E-4
Dermal Contact - Sediment	-	-	7.2E-6	1.3E-4	-	-	2.3E-7	2.1E-6	-	-	-	-
Incidental Ingestion	-	-	-	-	-	-	-	-	-	-	-	-
Technicon Ditch Sediments	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact	-	-	-	-	-	-	-	-	-	-	-	-
Technicon Ditch Sediments	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL HI	-	-	7.2E-6	1.3E-4	1.3E-2	7.6E-2	2.3E-7	2.1E-6	1.3E-3	1.2E-2	3.4E-3	1.8E-2
<u>3. Future Workers</u>												
Incidental Ingestion	-	-	-	-	-	-	-	-	-	-	-	-
Technicon Ditch Sediments	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact	-	-	-	-	-	-	-	-	-	-	-	-
Technicon Ditch Sediments	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL HI	-	-	-	-	-	-	-	-	-	-	-	-

• Hazard Quotient - DI+RfD
HI Hazard Index - E(HQ)

TABLE 6-20
Summary of Noncarcinogenic Hazard Quotients*
Reasonable Maximum Exposures

Receptor Group/Pathway	<u>Mercury</u>		<u>Methylene Chloride</u>		<u>Acetone</u>		<u>MEK</u>		<u>MIBK</u>	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
I. CURRENT LAND USE										
<u>1. Local Residents</u>										
Ingestion of Aquatic Biota	3.6E-1	2.6E-1	-	-	-	-	-	-	-	-
Dermal Contact with Sediments	5.0E-3	-	7.7E-5	-	4.1E-4	-	1.7E-4	-	-	-
TOTAL HI	3.7E-1	2.6E-1	7.7E-5	-	4.1E-4	-	1.7E-4	-	-	-
<u>2. Workers</u>										
Inhalation	6.4E-2	-	3.2E+0	-	2.2E-2	-	-	-	-	-
Incidental Ingestion Soil	4.8E-1	-	-	-	-	-	-	-	-	-
Dermal Contact Soil	8.1E+0	-	-	-	-	-	-	-	-	-
TOTAL HI	8.6E+0	-	3.2E+0	-	2.2E-2	-	-	-	-	-
TOTAL CURRENT HI	9.0E+0	2.6E-1	3.2E+0	-	2.2E-2	-	1.7E-4	-	-	-
II. FUTURE LAND USE										
<u>1. Cristiana Residents</u>										
Incidental Ingestion Soil	2.5E-4	2.2E-3	-	-	-	-	-	-	-	-
Dermal Contact Soil	1.1E-2	1.9E-2	-	-	-	-	-	-	-	-
Inhalation	1.2E-1	4.4E-1	1.0E+0	3.7E+0	-	-	-	-	-	-
Dermal Contact with Surface Water	9.5E-6	1.1E-4	-	-	1.9E-2	2.2E-1	-	-	4.4E-2	5.1E-1
Dermal Contact with Sediment	4.5E-3	2.6E-2	-	-	8.5E-5	5.0E-4	-	-	-	-
TOTAL HI	1.4E-1	4.8E-1	1.0E+0	3.7E+0	1.9E-2	2.2E-1	-	-	4.4E-2	5.1E-1

TABLE 6-20
Summary of Noncarcinogenic Hazard Quotients*
Reasonable Maximum Exposures

Receptor Group/Pathway	<u>Mercury</u>		<u>Methylene Chloride</u>		<u>Acetone</u>		<u>MEK</u>		<u>MIBK</u>	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
<u>2. Future Local Residents</u>										
Inhalation	2.2E-1	7.8E-1	4.3E+0	1.5E+1	2.8E-2	9.7E-2	-	-	-	-
Dermal Contact - Fronters										
Creek Surface Water	3.5E-5	4.1E-4	3.1E-1	3.6E+0	2.8E-1	3.3E+0	-	-	9.2E-1	1.1E+1
Dermal Contact - Fronters										
Creek Sediments	8.8E-2	3.9E-1	-	-	-	2.6E-4	1.1E-3	-	-	-
Incidental Ingestion										
Technicon Ditch Sediments	7.5E-3	1.3E-1	-	-	-	-	-	-	-	-
Dermal Contact										
Technicon Ditch Sediments	6.4E-1	2.3E+0	-	-	-	-	-	-	-	-
TOTAL HI	9.6E-1	3.6E+0	4.6E+0	1.9E+1	3.1E-1	3.4E+0	-	-	9.2E-1	1.1E+1
<u>3. Future Workers</u>										
Direct Contact										
Technicon Ditch Sediments	7.2E-2	-	-	-	-	-	-	-	-	-
Dermal Contact										
Technicon Ditch Sediments	2.4E+0	-	-	-	-	-	-	-	-	-
TOTAL HI	2.5E+0	-	-	-	-	-	-	-	-	-

TABLE 6-20
Summary of Noncarcinogenic Hazard Quotients*
Reasonable Maximum Exposures

Receptor Group/Pathway	<u>Carbon Disulfide</u>		<u>Ethyl Benzene</u>		<u>Methyl Chloride</u>		<u>Toluene</u>		<u>Xylene</u>		<u>Arsenic</u>		<u>Cadmium</u>	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
I. CURRENT LAND USE														
<u>1. Local Residents</u>														
Ingestion of Aquatic Biota	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact with Sediments	3.2E-5	-	-	-	9.9E-5	-	-	-	-	-	-	-	-	-
TOTAL HI	3.2E-5	-	-	-	9.9E-5	-	-	-	-	-	-	-	-	-
<u>2. Workers**</u>														
Inhalation	-	-	4.2E-2	-	-	-	1.6E-3	-	2.0E-2	-	-	-	-	-
Incidental Ingestion Soil	-	-	-	-	-	-	-	-	-	-	1.6E-3	-	4.0E-4	-
Dermal Contact Soil	-	-	-	-	-	-	-	-	-	-	6.6E-2	-	1.7E-2	-
TOTAL HI	-	-	4.2E-2	-	-	-	1.6E-3	-	2.0E-2	-	6.7E-2	-	1.7E-2	-
TOTAL CURRENT HI	3.2E-5	-	4.2E-2	-	9.9E-5	-	1.6E-3	-	2.0E-2	-	6.7E-2	-	1.7E-2	-
II. FUTURE LAND USE														
<u>1. Cristiana Residents</u>														
Incidental Ingestion Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inhalation	-	-	-	-	-	-	1.3E-2	4.5E-2	4.1E-3	1.5E-2	-	-	-	-
Dermal Contact with Surface Water	-	-	6.8E-4	8.0E-3	-	-	6.4E-3	7.5E-3	1.6E-4	1.9E-3	-	-	-	-
Dermal Contact with Sediment	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL HI	-	-	6.8E-4	8.0E-3	-	-	1.3E-2	5.3E-2	4.3E-3	1.6E-2	-	-	-	-

TABLE 6-20
Summary of Noncarcinogenic Hazard Quotients*
Reasonable Maximum Exposures

Receptor Group/Pathway	<u>Carbon Disulfide</u>		<u>Ethyl Benzene</u>		<u>Methyl Chloride</u>		<u>Toluene</u>		<u>Xylene</u>		<u>Arsenic</u>		<u>Cadmium</u>	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
2. Future Local Residents														
Inhalation	-	-	3.5E-1	1.2E+0	-	-	2.5E-2	8.7E-2	2.3E-2	8.2E-2	-	-	-	-
Dermal Contact - Frontera Creek Surface Water	-	-	9.6E-3	1.1E-1	-	-	5.3E-4	6.1E-3	1.4E-3	1.6E-2	-	-	-	-
Dermal Contact - Frontera Creek Sediments	9.9E-5	4.3E-4	-	-	2.0E-6	8.8E-6	-	-	1.2E-7	5.4E-7	-	-	-	-
Incidental Ingestion Technicon Ditch Sediments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact Technicon Ditch Sediments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL HI	9.9E-5	4.3E-4	3.6E-1	1.3E+0	2.0E-6	8.8E-6	2.5E-2	9.3E-2	2.5E-2	9.9E-2	-	-	-	-
3. Future Workers														
Direct Contact Technicon Ditch Sediments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dermal Contact Technicon Ditch Sediments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL HI	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL FUTURE HI	9.9E-5	4.3E-4	3.6E-1	1.4E+0	2.0E-6	8.8E-6	3.9E-2	1.5E-1	2.9E-2	1.2E-1	-	-	-	-

* Hazard Quotient - DI+RfD

** The hazard quotient for a Peerless Tube worker assuming hypothetical reasonable maximum exposures to the maximum detected arsenic concentration in soil was estimated at 4.1E-1 and 1.8E+1 for the incidental ingestion and dermal contact pathways, respectively. The respective HQ's for WJK workers hypothetically exposed to cadmium were 9.8E-3 and 4.2E-1.

HI Hazard Index - E(HQ)

TABLE 6-21

Hazard Indices for Reasonable Case and Reasonable Maximum Exposures

Receptor Group/Pathway	Reasonable Case				Reasonable Maximum Exposure Case							
	HQ(1) Mercury		HI VOCs(3)		HQ Mercury		HI VOCs(3)		HQ Arsenic		HQ Cadmium	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
I. CURRENT LAND USE												
<i><u>1. Local Residents</u></i>												
Ingestion of Aquatic Biota	4.4E-02	3.2E-02	-	-	3.6E-01	2.6E-01	-	-	-	-	-	-
Dermal Contact with Sediments	5.5E-04	-	6.5E-05	-	5.0E-03	-	7.9E-04	-	-	-	-	-
TOTAL HI	4.5E-02	3.2E-02	6.5E-05	-	3.7E-01	2.6E-01	7.9E-04	-	-	-	-	-
<i><u>2. Workers</u></i>												
Inhalation	5.9E-03	-	3.0E-01	-	6.4E-02	-	3.3E+00	-	-	-	-	-
Incidental Ingestion Soil**	9.6E-05	-	-	-	4.8E-01	-	-	-	1.6E-03	-	4.0E-04	-
Dermal Contact Soil**	2.7E-04	-	-	-	8.1E+0	-	-	-	6.6E-02	-	1.7E-02	-
TOTAL HI	6.2E-03	-	3.0E-01	-	8.6E+0	-	3.3E+00	-	6.7E-02	-	1.7E-02	-
TOTAL CURRENT HI	5.1E-02	3.2E-02	3.0E-01	-	9.0E+0	2.6E-01	3.3E+0	-	6.7E-02	-	1.7E-02	-
II. FUTURE LAND USE												
<i><u>1. Cristiana Residents</u></i>												
Ingestion of Soil	7.5E-05	1.0E-03	-	-	2.5E-04	2.2E-03	-	-	-	-	-	-
Dermal Contact with Soil	5.8E-04	1.0E-03	-	-	1.6E-02	1.9E-02	-	-	-	-	-	-
Inhalation	3.5E-02	1.9E-01	1.5E-01	8.0E-01	1.2E-01	4.4E-01	1.0E+0	3.8E+00	-	-	-	-
Dermal Contact with Surface Water	1.6E-06	1.8E-05	5.9E-03	6.8E-02	9.5E-06	1.1E-04	6.4E-02	7.4E-01	-	-	-	-
Dermal Contact with Sediment	4.1E-04	2.3E-03	6.6E-06	3.8E-05	4.5E-03	2.6E-02	8.5E-05	5.0E-04	-	-	-	-
TOTAL HI	3.6E-02	1.9E-01	1.6E-01	8.6E-01	1.4E-01	4.8E-01	1.1E+0	4.5E+00	-	-	-	-

TABLE 6-21
Hazard Indices for Reasonable Case and Reasonable Maximum Exposures

Receptor Group/Pathway	Reasonable Case				Reasonable Maximum Exposure Case							
	HQ(1) Mercury		HI VOCs(3)		HQ Mercury		HI VOCs(3)		HQ Arsenic		HQ Cadmium	
	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child	Adult	Child
2. Future Local Residents												
Inhalation	7.1E-03	3.8E-02	1.8E-00	9.5E+00	2.2E-01	7.8E-01	4.8E+0	1.7E+1	-	-	-	-
Dermal Contact with Surface Water	3.1E-06	3.6E-05	6.6E-02	7.6E-01	3.5E-05	4.1E-04	1.5E+0	1.8E+1	-	-	-	-
Dermal Contact with Sediments	1.8E-03	1.0E-02	1.9E-05	2.0E-04	8.8E-02	3.9E-01	3.6E-4	1.6E-03	-	-	-	-
Incidental Ingestion of Technicon Ditch Sediments	1.5E-04	2.6E-03	-	-	7.5E-03	1.3E-01	-	-	-	-	-	-
Dermal Contact with Technicon Ditch Sediments	1.5E-03	5.4E-03	-	-	6.4E-01	2.3E+0	-	-	-	-	-	-
TOTAL HI	1.1E-02	5.6E-02	1.9E+00	1.0E+01	9.6E-01	3.6E+0	6.3E+0	3.5E+1	-	-	-	-
3. Future Workers												
Incidental Ingestion of Technicon Ditch Sediments	2.1E-03	-	-	-	7.2E-02	-	-	-	-	-	-	-
Dermal Contact with Technicon Ditch Sediments	2.7E-03	-	-	-	2.4E+0	-	-	-	-	-	-	-
TOTAL HI	4.9E-02	2.46E-01	2.0E+00	1.1E+01	2.5E+0	-	-	-	-	-	-	-

* Hazard Quotient = DI/RfD

** For Peerless Tube workers, and assuming reasonable maximum exposures, the HQ arsenic due to incidental ingestion of or dermal contact with arsenic in soil was estimated at 4.1E-1 and 1.8E+1, respectively. For WJK workers, the HQ cadmium was estimated at 9.8E-3 and 4.2E-1, respectively.

HI Hazard Index = SUM(HQ)

TABLE 6-22

*Summary of Potential Carcinogenic Risks
Associated with Methylene Chloride*

Reasonable Case

Group/Pathway	<u>Methylene Chloride</u>		<u>Arsenic</u>		Total
	Adult	Child	Adult	Child	
I. CURRENT LAND USE					
<u>1. Local Residents</u>					
Dermal Contact - Sediments	1.9E-10	NA	-	-	1.9E-10
<u>2. Workers</u>					
Inhalation	3.2E-5	NA	-	-	3.2E-5
Incidental Soil Ingestion	-	NA	2.8E-8	-	2.8E-8
Dermal Contact with Soil	-	NA	2.8E-7	-	2.8E-7
TOTAL CURRENT RISK	3.2E-5	NA	3.1E-7	-	3.2E-5
II. FUTURE CURRENT RISK					
<u>1. Cristiana Residents</u>					
Inhalation	1.6E-5	5.7E-5	-	-	7.3E-5
<u>2. Local Residents</u>					
Inhalation	1.9E-4	6.8E-4	-	-	8.7E-4
SW Dermal Contact	4.5E-7	1.6E-6	-	-	2.0E-6

TABLE 6-23

*Summary of Potential Carcinogenic Risks**Reasonable Maximum Exposures*

Group/Pathway	<u>Methylene Chloride</u>		<u>Arsenic</u>		Total
	Adult	Child	Adult	Child	
I. CURRENT LAND USE					
<u>1. Local Residents</u>					
Dermal Contact - Sediments	1.5E-8	-	-	-	1.5E-8
<u>2. Workers</u>					
Inhalation	1.2E-3	-	-	-	1.2E-3
Incidental Soil Ingestion**	-	-	1.2E-6	-	1.2E-6
Dermal Contact with Soil**	-	-	4.9E-5	-	4.9E-5
TOTAL CURRENT RISK	1.2E-3	-	5.0E-5	-	1.2E-3
II. FUTURE LAND USE					
<u>1. Cristiana Residents</u>					
Inhalation	3.8E-4	2.6E-4	-	-	6.4E-4
TOTAL	3.8E-4	2.6E-4	-	-	6.4E-4
<u>2. Future Local Residents</u>					
Inhalation	1.6E-3	1.1E-3	-	-	2.7E-3
Dermal Contact with SW	6.0E-5	4.7E-5	-	-	1.1E-4
TOTAL					
<u>3. Future Workers</u>					
	-	-	-	-	-

**Assuming reasonable maximum exposures, the total lifetime carcinogenic risk for a hypothetical Peerless Tube worker exposed over a lifetime to the maximum detected arsenic concentration in soil was estimated at 3.2E-4 and 1.3E-2 for the direct ingestion and dermal contact pathways, respectively.

FRO 001 1433

TABLE 7-1

Recommended Remedial Action Objectives for Mercury

Environmental Media	Significant Source	Available Pathway	Potential Receptor	Unacceptable Hazard/ Reasonable /Reasonable Maximum Exp.	Unacceptable Risk/ Reasonable /Reasonable Maximum Exp.	Concentrations Potential ARARs ¹	Significantly Exceed ARARs	Remedial Action Objectives
SOILS								
Cristiana	No	Yes	Yes	No/No	No/No	None available	NA	None Required
Industrial	No	Yes	Yes	No/No	No/No	None available	NA	None required
Technicon	Yes	Yes	Yes	No/Yes	No/No	None available	NA	No significant exposure ⁴
SEDIMENTS								
Technicon Ditch	Yes	Yes	Yes	No/Yes	No/No	None available	NA	No significant exposure ⁴
Frontera Creek	No	Yes	Yes	No/No	No/No	None available	NA	None required
Frontera Lagoons	No	Yes	Yes	No/No	No/No	None available	NA	None required
SURFACE WATER								
Frontera Creek	No	Yes	Yes	No/No	No/No	1 ug/l (BOB WQS); 0.144 ug/l AWQC	No ³	None required
Frontera Lagoons	No	Yes	Yes	No/No	No/No	0.144 ug/l AWQC; 1 ug/l (WSR)	No	None required
GROUNDWATER								
	No	No	Yes	No/No	No/No	2 ug/l MCL (SDWA)	No	None required
BIOTA								
	No	Yes	Yes	No/No	No/No	1,000 ug/l (FDA Action Level)	No	None required
AIR								
Technicon	Yes	Yes	Yes	No/No	No/No	1 ug/m3 (NESHAPS) ²	No	None required
Study Area	No	Yes	Yes	No/No	No/No	1 ug/m3 (NESHAPS)	No	None required

1 Chemical-specific ARARs

2 1 ug/mg3 forms the toxicological basis of the NESHAPS Emission Standard.

3 Not directly applicable since surface water samples were unfiltered; quantifiable concentrations of mercury from unfiltered samples exceeded the AWQC for filtered samples for the protection of freshwater life for chronic exposures in only three samples, including one sample for which no mercury was reported in a split sample. Moreover, the highest value reported was 0.86 ug/l and all results were below the WSR of 1 ug/l.

4 This is defined as no significant exposure to concentrations of mercury resulting in an unacceptable hazard or risk.

TABLE 7-2

Recommended Remedial Action Objectives for Volatile Organics in Air

Environmental Media	Significant Source ¹	Available Pathway	Potential Receptor	Unacceptable Hazard - Reasonable / Res. Max. Exposure	Unacceptable Risk - Res. / Maximum Res. Exposure	Potential ARARs ²	Concentrations Significantly Exceed ARARs	Remedial Action Objectives
Acetone	Maybe	Yes	Yes	No/No	N/A	750 ppm (OSHA PEL)	No	Insufficient data
Ethyl Benzene	Maybe	Yes	Yes	No/Yes	N/A	100 ppm (OSHA PEL)	No	Insufficient data
Methylene Chloride	Maybe	Yes	Yes	Yes/Yes	Yes/Yes	500 ppm (OSHA PEL)	No	Insufficient data
Toluene	No	Yes	Yes	No/No	N/A	200 ppm (OSHA PEL)	No	None required
Xylene	Maybe	Yes	Yes	No/No	N/A	100 ppm (OSHA PEL)	No	Insufficient data

¹ Available data suggest a potentially significant source exists upwind of Technicon for some volatile organic chemicals

² Includes chemical-specific ARARs only; location-specific ARARs might be relevant if remedial action objectives conflicted with downgradient uses of Frontera Creek or the Frontera lagoons.

TABLE 7-3

Recommended Remedial Action Objectives for Volatile Organics in Frontera Creek Surface Water

Contaminant	Significant Source ¹	Available Pathway	Potential Receptor ²	Unacceptable Hazard - Reasonable/ Reas. Max. Exposure	Unacceptable Risk-Reas./ Max. Reas. Exposure	Potential ARARs ¹ (ug/l)	Concentrations Significantly Exceed ARARs	Remedial Action Objectives
Acetone	Maybe	Yes	Yes	No/Yes ³	N/A	None available	N/A	Insufficient data
Carbon Disulfide	No	Yes	Yes	No/No	N/A	None available	N/A	None required
Ethyl Benzene	Maybe	Yes	Yes	No/No	N/A	1400 (AWQL) ⁵ 3300 (AWQL) ⁶ 3.2x10 ⁴ (AWQL) ⁷	No	Insufficient data
Methylene Chloride	Maybe	Yes	Yes	No/Yes ³	No/Yes ⁴	0.19 (AWQL) ⁵ 15.7 (AWQL) ⁶ 1.1x10 ⁴ (AWQL) ⁷	Maybe ⁸	Insufficient data
MIBK	Maybe	Yes	Yes	No/Yes ³	N/A	None available	N/A	Insufficient data
Toluene	No	Yes	Yes	No/No	N/A	14300 (AWQL) ⁵ 44000 (AWQL) ⁶ 1.7x10 ⁴ (AWQL) ⁷	No	None required
Xylene	Maybe	Yes	Yes	No/No	N/A	None available	No	Insufficient data

1 Includes chemical-specific ARARs only; location specific ARARs might be relevant if remedial action objectives conflicted with downgradient area at Frontera Creek or Frontera lagoons

2 Pathway and receptors likely to be available only for future exposures to water quality in Frontera Creek.

3 Hazard quotient for acetone, methylene, chloride, and MIBK exceeds 1 for children and only for hypothetical future dermal contact with Frontera Creek surface water near industrial areas. Hazard Index for all other VOCs combined also slightly exceeds one for children.

4 Carcinogenic risk associated with dermal contact with Frontera Creek surface water is within acceptable range 10^{-4} to 10^{-6} , except for hypothetical future local residents where it is slightly exceeded this target level. The potential risk 1.1×10^{-4} is estimated.

5 AWQL — Protection of human health — water and fish consumption.

6 AWQL — Protection of human health — fish consumption only.

7 Lowest effect concentration for freshwater fish chronic exposures.

8 Exceedances of criteria for protection of human health for unfiltered samples at only three locations for a chemical.

TABLE 7-4

Recommended Remedial Action Objectives for Inorganic Chemicals in Frontera Creek Surface Soil

Contaminant	Significant Source ¹	Available Pathway ²	Potential Receptor ²	Unacceptable Hazard Reasonable/ Reas. Max. Exposure	Unacceptable Risk Reas./ Max. Reas. Exposure	Potential ARARs ¹	Concentrations Significantly Exceed ARARs	Remedial Action Objectives
Cadmium	Maybe	Maybe	Yes	No/No	N/A	None available	N/A	None required
Arsenic	Maybe	Maybe	Yes	No/Yes	No/Yes	None available	N/A	Insufficient data

1 Includes chemical-specific ARARs only; location specific ARARs might be relevant if remedial action objectives conflicted with downgradient area at Frontera Creek or Frontera lagoons

2 Pathway and receptors likely to be available only for future exposures to water quality in Frontera Creek.