

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-0-F1-01-00-MET-S	97-0-F1-02-00-MET-S	97-0-F1-03-00-MET-S	97-0-F2-01-00-MET-S
Lab ID	97-0-F1-01-00-MET-S	97-0-F1-02-00-MET-S	97-0-F1-03-00-MET-S	97-0-F2-01-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4647 g	0.4658 g	0.4655 g	0.4547 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/16/1997	7/16/1997	7/16/1997	7/16/1997
Extract Date	1/30/1998	1/30/1998	1/30/1998	1/30/1998
Analysis Date	1/30/1998	1/30/1998	1/30/1998	1/30/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.12	0.13	0.12	0.06
Al - Aluminum (%)	7.96	7.95	7.77	6.84
As - Arsenic (ug/g)	14.8	16	16	6
Ba - Barium (ug/g)	836	894	804	649
Be - Beryllium (ug/g)	1.2	1.32	1.17	0.89
Ca - Calcium (%)	1.26	1.3	2.27	4.57
Cd - Cadmium (ug/g)	0.1	0.1	0.09	0.08
Cr - Chromium (ug/g)	86	95.3	85.9	51
Cu - Copper (ug/g)	52	51.9	49.5	22.6
Fe - Iron (%)	5.31	4.85	4.81	2.79
Hg - Mercury (ug/g)	0.11	0.111	0.125	0.048
K - potassium (%)	1.79	1.72	1.51	1.59
Mg - Magnesium (%)	1.66	1.65	1.43	1.25
Mn - Manganese (ug/g)	848	846	846	605
Ni - Nickel (ug/g)	49.5	51.4	47	25.3
Pb - Lead (ug/g)	13.6	14.5	12.9	8
Sb - Antimony (ug/g)	1.62	1.74	1.52	0.47
Se - Selenium (ug/g)	0.31	0.35	0.22	0.24
Sn - Tin (ug/g)	1.79	1.91	1.73	1.06
Tl - Thallium (ug/g)	0.42	0.47	0.42	0.37
V - Vanadium (ug/g)	174	180	160	88.4
Zn - Zinc (ug/g)	129	125	132	76.5

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-0-F2-02-00-MET-S	97-0-F2-02-00-MET-S	97-0-F2-03-00-MET-S	97-0-F4-01-00-MET-S
Lab ID	97-0-F2-02-00-MET-S	97-0-F2-02-00-MET-S	97-0-F2-03-00-MET-S	97-0-F4-01-00-MET-S
	#1	#2		#1
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	QC	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4596 g	0.4555 g	0.4664 g	0.4767 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/16/1997	7/16/1997	7/16/1997	7/15/1997
Extract Date	1/30/1998	1/30/1998	1/30/1998	1/18/1998
Analysis Date	1/30/1998	1/30/1998	1/30/1998	1/18/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.06	0.05	0.06	0.04
Al - Aluminum (%)	6.68	6.83	6.83	6.02
As - Arsenic (ug/g)	5.7	5.9	5.2	4.2
Ba - Barium (ug/g)	657	649	671	550
Be - Beryllium (ug/g)	0.92	0.97	0.97	0.94
Ca - Calcium (%)	4.25	4.45	3.67	3.84
Cd - Cadmium (ug/g)	0.08	0.1	0.11	0.1
Cr - Chromium (ug/g)	42.8	49	44.5	56
Cu - Copper (ug/g)	27.4	22.6	21	21.8
Fe - Iron (%)	2.94	2.88	2.88	3.93
Hg - Mercury (ug/g)	0.038	NA	0.05	0.027
K - potassium (%)	1.5	1.59	1.42	1.38
Mg - Magnesium (%)	1.16	1.31	1.12	1.49
Mn - Manganese (ug/g)	650	639	630	1000
Ni - Nickel (ug/g)	28	25	24.7	27.2
Pb - Lead (ug/g)	8.4	8.1	8.2	7.8
Sb - Antimony (ug/g)	0.46	0.5	0.51	0.52
Se - Selenium (ug/g)	0.12	0.12	0.14	0.33
Sn - Tin (ug/g)	1.09	1.15	1.11	1.17
Tl - Thallium (ug/g)	0.38	0.39	0.41	0.32
V - Vanadium (ug/g)	95	87.4	87	115
Zn - Zinc (ug/g)	64.8	69.1	68.1	82

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-0-F4-01-00-MET-S	97-0-F4-02-00-MET-S	97-0-F4-02-00-MET-S	97-0-F4-03-00-MET-S
Lab ID	97-0-F4-01-00-MET-S	97-0-F4-02-00-MET-S	97-0-F4-02-00-MET-S	97-0-F4-03-00-MET-S
	#2	#1	#2	
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	QC	SAMP	QC	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4767 g	0.455 g	NA NA	0.4554 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/15/1997	7/15/1997	7/15/1997	7/15/1997
Extract Date	1/18/1998	1/18/1998	NA	1/18/1998
Analysis Date	1/18/1998	1/18/1998	NA	1/18/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	NA	0.04	NA	0.04
Al - Aluminum (%)	NA	6.42	NA	6.08
As - Arsenic (ug/g)	NA	3.8	NA	4.1
Ba - Barium (ug/g)	NA	518	NA	547
Be - Beryllium (ug/g)	NA	0.94	NA	1.02
Ca - Calcium (%)	NA	4.13	NA	4.24
Cd - Cadmium (ug/g)	NA	0.09	NA	0.09
Cr - Chromium (ug/g)	NA	47.7	NA	47.6
Cu - Copper (ug/g)	NA	20.3	NA	21.6
Fe - Iron (%)	NA	3.86	NA	3.92
Hg - Mercury (ug/g)	0.031	0.023	NA	0.025
K - potassium (%)	NA	1.39	NA	1.45
Mg - Magnesium (%)	NA	1.54	NA	1.59
Mn - Manganese (ug/g)	NA	841	NA	900
Ni - Nickel (ug/g)	NA	24.8	NA	26.2
Pb - Lead (ug/g)	NA	7.3	NA	7.7
Sb - Antimony (ug/g)	NA	0.48	NA	0.51
Se - Selenium (ug/g)	NA	0.32	NA	0.26
Sn - Tin (ug/g)	NA	1.01	NA	1.07
Tl - Thallium (ug/g)	NA	0.33	NA	0.34
V - Vanadium (ug/g)	NA	113	NA	113
Zn - Zinc (ug/g)	NA	75	NA	78.5

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-0-F5-01-00-MET-S	97-0-F5-02-00-MET-S	97-0-F5-03-00-MET-S	97-0-F6-01-00-MET-S
Lab ID	97-0-F5-01-00-MET-S	97-0-F5-02-00-MET-S	97-0-F5-03-00-MET-S	97-0-F6-01-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4514 g	0.4576 g	0.452 g	0.4969 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/15/1997	7/15/1997	7/15/1997	7/15/1997
Extract Date	1/18/1998	1/18/1998	1/18/1998	1/30/1998
Analysis Date	1/18/1998	1/18/1998	1/18/1998	1/30/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.08	0.1	0.07	0.05
Al - Aluminum (%)	7.03	6.6	7.24	7.95
As - Arsenic (ug/g)	10.4	12.1	9.4	14.5
Ba - Barium (ug/g)	863	924	862	901
Be - Beryllium (ug/g)	1.33	1.4	1.32	1.29
Ca - Calcium (%)	2.3	2.26	2.73	1.95
Cd - Cadmium (ug/g)	0.1	0.11	0.1	0.1
Cr - Chromium (ug/g)	55.4	72.8	64.5	76.9
Cu - Copper (ug/g)	33.3	39.2	32	39.3
Fe - Iron (%)	3.83	4.15	3.95	4.24
Hg - Mercury (ug/g)	0.039	0.042	0.038	0.037
K - potassium (%)	1.78	1.69	1.71	1.72
Mg - Magnesium (%)	1.46	1.46	1.46	1.45
Mn - Manganese (ug/g)	848	939	817	984
Ni - Nickel (ug/g)	31.8	35.7	30.8	36.8
Pb - Lead (ug/g)	12.1	13.3	11.8	13.1
Sb - Antimony (ug/g)	0.95	1.09	0.93	1.05
Se - Selenium (ug/g)	0.29	0.29	0.29	0.11
Sn - Tin (ug/g)	1.74	1.86	1.71	1.83
Tl - Thallium (ug/g)	0.44	0.48	0.42	0.46
V - Vanadium (ug/g)	114	134	128	144
Zn - Zinc (ug/g)	97.6	111	97.5	117

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-0-F6-02-00-MET-S	97-0-F6-03-00-MET-S	97-0-F8-01-00-MET-S	97-0-F8-01-00-MET-S
Lab ID	97-0-F6-02-00-MET-S	97-0-F6-03-00-MET-S	97-0-F8-01-00-MET-S	97-0-F8-01-00-MET-S
SDG	NA	NA	#1 NA	#2 NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	QC
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4645 g	0.4523 g	0.4873 g	NA NA
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/15/1997	7/15/1997	7/15/1997	7/15/1997
Extract Date	1/30/1998	1/30/1998	1/30/1998	NA
Analysis Date	1/30/1998	1/30/1998	1/30/1998	NA
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.05	0.06	0.05	NA
Al - Aluminum (%)	8.23	7.81	8.01	NA
As - Arsenic (ug/g)	10.6	13.9	13.5	NA
Ba - Barium (ug/g)	745	865	906	NA
Be - Beryllium (ug/g)	1.09	1.27	1.29	NA
Ca - Calcium (%)	3.05	2.53	2.13	NA
Cd - Cadmium (ug/g)	0.09	0.1	0.1	NA
Cr - Chromium (ug/g)	48	70.8	71.1	NA
Cu - Copper (ug/g)	30.9	39.4	40.1	NA
Fe - Iron (%)	3.99	4.01	4.2	NA
Hg - Mercury (ug/g)	0.028	0.032	0.037	NA
K - potassium (%)	1.56	1.82	1.96	NA
Mg - Magnesium (%)	1.6	1.67	1.6	NA
Mn - Manganese (ug/g)	933	923	945	NA
Ni - Nickel (ug/g)	28.8	33.3	35.5	NA
Pb - Lead (ug/g)	10.2	12.4	13.3	NA
Sb - Antimony (ug/g)	0.73	1.01	1.08	NA
Se - Selenium (ug/g)	0.14	0.12	0.07	NA
Sn - Tin (ug/g)	1.39	1.7	1.88	NA
Tl - Thallium (ug/g)	0.35	0.45	0.49	NA
V - Vanadium (ug/g)	127	137	140	NA
Zn - Zinc (ug/g)	132	103	109	NA

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-0-F8-02-00-MET-S	97-0-F8-03-00-MET-S	97-0-F13-01-00-MET-S	97-0-F13-02-00-MET-S
Lab ID	97-0-F8-02-00-MET-S	97-0-F8-03-00-MET-S	97-0-F13-01-00-MET-S	97-0-F13-02-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4714 g	0.4648 g	0.4571 g	0.4557 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/15/1997	7/15/1997	7/16/1997	7/16/1997
Extract Date	1/30/1998	1/30/1998	1/30/1998	1/30/1998
Analysis Date	1/30/1998	1/30/1998	1/30/1998	1/30/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---

METALS				
Ag - Silver (ug/g)	0.05	0.05	0.06	0.05
Al - Aluminum (%)	8.19	7.77	7.25	7.48
As - Arsenic (ug/g)	14.8	13	7.2	6.9
Ba - Barium (ug/g)	914	863	706	742
Be - Beryllium (ug/g)	1.31	1.23	1.2	1.15
Ca - Calcium (%)	2.3	2.57	2.09	2.01
Cd - Cadmium (ug/g)	0.1	0.1	0.06	0.08
Cr - Chromium (ug/g)	69.8	67	68.8	51.8
Cu - Copper (ug/g)	39	32.1	26.6	22.6
Fe - Iron (%)	4.46	4.11	3.6	3.34
Hg - Mercury (ug/g)	0.042	0.032	0.056	0.05
K - potassium (%)	2.03	1.92	1.75	1.66
Mg - Magnesium (%)	1.69	1.64	1.48	1.3
Mn - Manganese (ug/g)	994	889	705	649
Ni - Nickel (ug/g)	35.9	30.2	28.7	26.7
Pb - Lead (ug/g)	13.3	12.1	10.2	10.1
Sb - Antimony (ug/g)	1.05	0.91	0.72	0.68
Se - Selenium (ug/g)	0.07	0.08	0.1	0.1
Sn - Tin (ug/g)	1.84	1.61	1.34	1.3
Tl - Thallium (ug/g)	0.48	0.44	0.4	0.4
V - Vanadium (ug/g)	138	134	110	95
Zn - Zinc (ug/g)	116	100	103	87.3

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-0-F13-03-00-MET-S	97-0-F14-01-00-MET-S	97-0-F14-02-00-MET-S	97-0-F14-02-00-MET-S
Lab ID	97-0-F13-03-00-MET-S	97-0-F14-01-00-MET-S	97-0-F14-02-00-MET-S #1	97-0-F14-02-00-MET-S #2
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	QC
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.455 g	0.4629 g	0.4717 g	0.4554 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/16/1997	7/16/1997	7/16/1997	7/16/1997
Extract Date	1/30/1998	1/30/1998	1/30/1998	1/30/1998
Analysis Date	1/30/1998	1/30/1998	1/30/1998	1/30/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.05	0.12	0.12	0.12
Al - Aluminum (%)	7.22	7.27	7.22	7.3
As - Arsenic (ug/g)	7	8.8	8.2	8.8
Ba - Barium (ug/g)	711	688	709	717
Be - Beryllium (ug/g)	1.08	1.07	1.07	1.08
Ca - Calcium (%)	2.07	2	2.04	2.26
Cd - Cadmium (ug/g)	0.04	0.08	0.1	0.1
Cr - Chromium (ug/g)	60.7	86.3	86.6	87.8
Cu - Copper (ug/g)	25.2	43.5	45.1	45.5
Fe - Iron (%)	3.22	4.5	4.5	4.54
Hg - Mercury (ug/g)	0.058	0.12	0.112	NA
K - potassium (%)	1.81	1.71	1.75	1.81
Mg - Magnesium (%)	1.43	1.73	1.73	1.89
Mn - Manganese (ug/g)	615	757	743	752
Ni - Nickel (ug/g)	27.4	39.6	41.1	41.3
Pb - Lead (ug/g)	10	11.3	12.8	11.6
Sb - Antimony (ug/g)	0.69	0.97	1.02	1.02
Se - Selenium (ug/g)	0.05	0.28	0.26	0.29
Sn - Tin (ug/g)	1.31	1.48	1.61	1.58
Tl - Thallium (ug/g)	0.39	0.38	0.39	0.39
V - Vanadium (ug/g)	95.2	134	138	136
Zn - Zinc (ug/g)	76.5	120	113	117

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-0-F14-03-00-MET-S	97-1-01-01-00-MET-S	97-1-F1-01-00-MET-S	97-1-F1-02-00-MET-S
Lab ID	97-0-F14-03-00-MET-S	97-1-01-01-00-MET-S	97-1-F1-01-00-MET-S	97-1-F1-02-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4833 g	0.4515 g	0.4538 g	0.4763 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/16/1997	7/14/1997	7/13/1997	7/13/1997
Extract Date	1/30/1998	1/14/1998	1/14/1998	1/14/1998
Analysis Date	1/30/1998	1/14/1998	1/14/1998	1/14/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---

METALS				
Ag - Silver (ug/g)	0.12	0.06	0.08	0.06
Al - Aluminum (%)	7.05	7.32	7.39	7.47
As - Arsenic (ug/g)	11.6	5.4	7.6	7.4
Ba - Barium (ug/g)	677	738	797	792
Be - Beryllium (ug/g)	1.04	1.04	1.16	1.04
Ca - Calcium (%)	2.13	2.63	2.13	2.18
Cd - Cadmium (ug/g)	0.1	0.09	0.09	0.1
Cr - Chromium (ug/g)	91.8	51.7	60.9	59.8
Cu - Copper (ug/g)	45.3	22.2	27.2	27.8
Fe - Iron (%)	4.43	3.63	3.85	3.94
Hg - Mercury (ug/g)	0.114	0.031	0.041	0.044
K - potassium (%)	1.77	1.34	1.53	1.39
Mg - Magnesium (%)	1.84	1.21	1.47	1.29
Mn - Manganese (ug/g)	741	799	923	1090
Ni - Nickel (ug/g)	38.9	24.3	29.8	27.6
Pb - Lead (ug/g)	10.9	10.3	11.8	11.5
Sb - Antimony (ug/g)	0.99	0.64	0.79	0.77
Se - Selenium (ug/g)	0.29	0.16	0.19	0.22
Sn - Tin (ug/g)	1.48	1.34	1.51	1.5
Tl - Thallium (ug/g)	0.37	0.39	0.42	0.4
V - Vanadium (ug/g)	135	115	134	115
Zn - Zinc (ug/g)	113	82.3	96.9	92.3

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-1-F1-03-00-MET-S	97-1-02-01-00-MET-S	97-1-02-01-00-MET-S	97-1-F2-01-00-MET-S
Lab ID	97-1-F1-03-00-MET-S	97-1-02-01-00-MET-S	97-1-02-01-00-MET-S	97-1-F2-01-00-MET-S
		#1	#2	
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	QC	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.466 g	0.4563 g	0.4605 g	0.459 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/13/1997	7/14/1997	7/14/1997	7/14/1997
Extract Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Analysis Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---

METALS				
Ag - Silver (ug/g)	0.07	0.08	0.06	0.07
Al - Aluminum (%)	7.53	7.35	7.4	7.31
As - Arsenic (ug/g)	8.2	4.8	5.7	8.1
Ba - Barium (ug/g)	803	744	739	783
Be - Beryllium (ug/g)	1.09	1.05	1.05	1.04
Ca - Calcium (%)	2.1	2.43	2.58	2.28
Cd - Cadmium (ug/g)	0.11	0.11	0.11	0.11
Cr - Chromium (ug/g)	55.6	53	56.3	56.5
Cu - Copper (ug/g)	28.4	21	20.8	30.9
Fe - Iron (%)	3.86	3.37	3.39	3.91
Hg - Mercury (ug/g)	0.042	0.029	NA	0.04
K - potassium (%)	1.42	1.46	1.44	1.64
Mg - Magnesium (%)	1.33	1.25	1.24	1.44
Mn - Manganese (ug/g)	738	699	729	1110
Ni - Nickel (ug/g)	28.9	23.3	22.9	29.6
Pb - Lead (ug/g)	11.8	10.5	10.5	12.5
Sb - Antimony (ug/g)	0.8	0.68	0.69	0.76
Se - Selenium (ug/g)	0.25	0.19	0.22	0.42
Sn - Tin (ug/g)	1.5	1.39	1.38	1.57
Tl - Thallium (ug/g)	0.42	0.38	0.39	0.38
V - Vanadium (ug/g)	131	107	106	120
Zn - Zinc (ug/g)	94.4	77.7	80.7	99.5

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-1-F2-02-00-MET-S	97-1-F2-03-00-MET-S	97-1-03-01-00-MET-S	97-1-04-01-00-MET-S
Lab ID	97-1-F2-02-00-MET-S	97-1-F2-03-00-MET-S	97-1-03-01-00-MET-S	97-1-04-01-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4512 g	0.5002 g	0.4956 g	0.4795 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/14/1997	7/14/1997	7/14/1997	7/14/1997
Extract Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Analysis Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---

METALS				
Ag - Silver (ug/g)	0.08	0.08	0.06	0.07
Al - Aluminum (%)	7.21	7.32	7.59	8.16
As - Arsenic (ug/g)	7.3	7.7	6	11.9
Ba - Barium (ug/g)	773	767	758	913
Be - Beryllium (ug/g)	1.01	1.06	1.11	1.19
Ca - Calcium (%)	2.26	2.1	2.14	2.23
Cd - Cadmium (ug/g)	0.14	0.17	0.11	0.1
Cr - Chromium (ug/g)	65.1	67.3	59.3	59.4
Cu - Copper (ug/g)	32.4	31.1	23.9	41.1
Fe - Iron (%)	4.04	4.06	3.47	4.24
Hg - Mercury (ug/g)	0.047	0.047	0.037	0.052
K - potassium (%)	1.54	1.5	1.46	1.69
Mg - Magnesium (%)	1.46	1.37	1.26	1.61
Mn - Manganese (ug/g)	983	1220	677	977
Ni - Nickel (ug/g)	32	31.7	25	34
Pb - Lead (ug/g)	13	13	10.7	13.4
Sb - Antimony (ug/g)	0.81	0.8	0.71	1.08
Se - Selenium (ug/g)	0.46	0.35	0.21	0.28
Sn - Tin (ug/g)	1.63	1.67	1.4	1.85
Tl - Thallium (ug/g)	0.41	0.4	0.4	0.46
V - Vanadium (ug/g)	135	128	117	140
Zn - Zinc (ug/g)	105	102	85.3	113

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-1-05-01-00-MET-S	97-1-06-01-00-MET-S	97-1-07-01-00-MET-S	97-1-08-01-00-MET-S
Lab ID	97-1-05-01-00-MET-S	97-1-06-01-00-MET-S	97-1-07-01-00-MET-S	97-1-08-01-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4866 g	0.4578 g	0.4808 g	0.4531 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/14/1997	7/13/1997	7/14/1997	7/14/1997
Extract Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Analysis Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.06	0.06	0.07	0.06
Al - Aluminum (%)	7.99	7.66	7.82	7.63
As - Arsenic (ug/g)	8.9	6.8	10.4	6.4
Ba - Barium (ug/g)	805	805	888	785
Be - Beryllium (ug/g)	1.12	1.09	1.18	1.05
Ca - Calcium (%)	2.33	2.07	1.87	2.22
Cd - Cadmium (ug/g)	0.09	0.1	0.1	0.1
Cr - Chromium (ug/g)	56.8	66	68.3	59.1
Cu - Copper (ug/g)	27.2	27.9	35.2	28.2
Fe - Iron (%)	3.64	3.93	4.01	4.08
Hg - Mercury (ug/g)	0.031	0.044	0.049	0.041
K - potassium (%)	1.49	1.51	1.44	1.47
Mg - Magnesium (%)	1.3	1.36	1.37	1.44
Mn - Manganese (ug/g)	741	1010	750	887
Ni - Nickel (ug/g)	25.8	28.2	31.2	27.7
Pb - Lead (ug/g)	10.8	11.8	12.9	11.7
Sb - Antimony (ug/g)	0.75	0.79	0.95	0.79
Se - Selenium (ug/g)	0.15	0.1	0.25	0.16
Sn - Tin (ug/g)	1.41	1.54	1.71	1.52
Tl - Thallium (ug/g)	0.41	0.41	0.47	0.4
V - Vanadium (ug/g)	125	120	139	135
Zn - Zinc (ug/g)	93.9	96.1	106	97.1

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-1-09-01-00-MET-S	97-1-12-01-00-MET-S	97-1-13-01-00-MET-S	97-1-14-01-00-MET-S
Lab ID	97-1-09-01-00-MET-S	97-1-12-01-00-MET-S	97-1-13-01-00-MET-S	97-1-14-01-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4944 g	0.4632 g	0.4671 g	0.4579 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/14/1997	7/14/1997	7/13/1997	7/14/1997
Extract Date	1/14/1998	1/18/1998	1/18/1998	1/18/1998
Analysis Date	1/14/1998	1/18/1998	1/18/1998	1/18/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.07	0.09	0.08	0.09
Al - Aluminum (%)	7.4	7.25	7.3	7.55
As - Arsenic (ug/g)	7.5	8.1	10.1	10.3
Ba - Barium (ug/g)	811	914	813	881
Be - Beryllium (ug/g)	1.05	1.36	1.21	1.32
Ca - Calcium (%)	2.1	2.22	2.03	2.23
Cd - Cadmium (ug/g)	0.11	0.09	0.14	0.1
Cr - Chromium (ug/g)	61.1	73.8	76.4	61.9
Cu - Copper (ug/g)	29.6	40	36.6	39.2
Fe - Iron (%)	3.9	4.23	4.4	4.21
Hg - Mercury (ug/g)	0.049	0.05	0.058	0.067
K - potassium (%)	1.58	1.86	2.03	1.88
Mg - Magnesium (%)	1.4	1.57	1.82	1.62
Mn - Manganese (ug/g)	880	822	845	922
Ni - Nickel (ug/g)	27.6	39.8	39.9	37.5
Pb - Lead (ug/g)	12.5	13.7	13.6	13.2
Sb - Antimony (ug/g)	0.83	1.07	0.94	1.04
Se - Selenium (ug/g)	0.33	0.27	0.53	0.24
Sn - Tin (ug/g)	1.61	1.96	1.74	1.84
Tl - Thallium (ug/g)	0.41	0.48	0.43	0.47
V - Vanadium (ug/g)	123	139	133	133
Zn - Zinc (ug/g)	99.3	117	114	111

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-1-15-01-00-MET-S	97-1-15-01-00-MET-S	97-1-15-02-00-MET-S	97-1-15-03-00-MET-S
Lab ID	97-1-15-01-00-MET-S	97-1-15-01-00-MET-S	97-1-15-02-00-MET-S	97-1-15-03-00-MET-S
	#1	#2		
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	QC	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4565 g	0.4565 g	0.4566 g	0.4546 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/13/1997	7/13/1997	7/13/1997	7/13/1997
Extract Date	1/18/1998	1/18/1998	1/18/1998	1/18/1998
Analysis Date	1/18/1998	1/18/1998	1/18/1998	1/18/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.06	NA	0.06	0.07
Al - Aluminum (%)	7.25	NA	7.14	7.06
As - Arsenic (ug/g)	8.4	NA	8.7	8.5
Ba - Barium (ug/g)	786	NA	803	800
Be - Beryllium (ug/g)	1.28	NA	1.19	1.21
Ca - Calcium (%)	2.12	NA	2.25	2.26
Cd - Cadmium (ug/g)	0.08	NA	0.09	0.11
Cr - Chromium (ug/g)	62.1	NA	58.4	64.2
Cu - Copper (ug/g)	26.6	NA	27.9	28
Fe - Iron (%)	3.79	NA	3.66	3.8
Hg - Mercury (ug/g)	0.049	0.042	0.035	0.047
K - potassium (%)	1.7	NA	1.7	1.77
Mg - Magnesium (%)	1.43	NA	1.44	1.52
Mn - Manganese (ug/g)	910	NA	819	853
Ni - Nickel (ug/g)	30.8	NA	31.2	31.9
Pb - Lead (ug/g)	11.3	NA	11.4	12
Sb - Antimony (ug/g)	0.82	NA	0.81	0.8
Se - Selenium (ug/g)	0.27	NA	0.18	0.22
Sn - Tin (ug/g)	1.58	NA	1.57	1.59
Tl - Thallium (ug/g)	0.4	NA	0.41	0.41
V - Vanadium (ug/g)	120	NA	120	113
Zn - Zinc (ug/g)	92.9	NA	89.3	89.6

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-1-15-04-00-MET-S	97-1-15-05-00-MET-S	97-1-15-06-00-MET-S	97-1-15-07-00-MET-S
Lab ID	97-1-15-04-00-MET-S	97-1-15-05-00-MET-S	97-1-15-06-00-MET-S	97-1-15-07-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4604 g	0.4727 g	0.4905 g	0.4857 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/13/1997	7/13/1997	7/13/1997	7/13/1997
Extract Date	1/18/1998	1/18/1998	1/18/1998	1/18/1998
Analysis Date	1/18/1998	1/18/1998	1/18/1998	1/18/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---

METALS

Ag - Silver (ug/g)	0.07	0.07	0.08	0.06
Al - Aluminum (%)	6.86	7.39	7.42	7.29
As - Arsenic (ug/g)	8.5	7.4	7.8	8.6
Ba - Barium (ug/g)	803	813	832	798
Be - Beryllium (ug/g)	1.24	1.25	1.31	1.24
Ca - Calcium (%)	2.27	2.43	2.36	2.36
Cd - Cadmium (ug/g)	0.08	0.09	0.09	0.09
Cr - Chromium (ug/g)	65.2	65.2	66.3	61.8
Cu - Copper (ug/g)	27.6	29.4	28.3	27.4
Fe - Iron (%)	3.82	3.9	3.87	3.79
Hg - Mercury (ug/g)	0.043	0.045	0.042	0.044
K - potassium (%)	1.75	1.82	1.87	1.83
Mg - Magnesium (%)	1.5	1.57	1.56	1.56
Mn - Manganese (ug/g)	827	775	789	839
Ni - Nickel (ug/g)	32.2	31.8	32.2	31.4
Pb - Lead (ug/g)	11.6	11.7	12	11.5
Sb - Antimony (ug/g)	0.83	0.83	0.86	0.83
Se - Selenium (ug/g)	0.27	0.23	0.17	0.32
Sn - Tin (ug/g)	1.58	1.58	1.6	1.57
Tl - Thallium (ug/g)	0.41	0.41	0.43	0.41
V - Vanadium (ug/g)	119	122	125	126
Zn - Zinc (ug/g)	99.4	96.8	96.6	94.2

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-1-18-01-00-MET-S	97-1-18-01-00-MET-S	97-1-20-01-00-MET-S	97-1-20-01-00-MET-S
Lab ID	97-1-18-01-00-MET-S	97-1-18-01-00-MET-S	97-1-20-01-00-MET-S	97-1-20-01-00-MET-S
	#1	#2	#1	#2
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	QC	SAMP	QC
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.457 g	0.4558 g	0.4808 g	0.4808 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/14/1997	7/14/1997	7/14/1997	7/14/1997
Extract Date	1/18/1998	1/18/1998	1/18/1998	1/18/1998
Analysis Date	1/18/1998	1/18/1998	1/18/1998	1/18/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.07	0.07	0.05	0.05
Al - Aluminum (%)	7.31	7.33	6.57	6.57
As - Arsenic (ug/g)	10.6	11.8	5.9	5.9
Ba - Barium (ug/g)	854	866	753	753
Be - Beryllium (ug/g)	1.34	1.35	1.12	1.12
Ca - Calcium (%)	2.12	2.03	2.3	NA
Cd - Cadmium (ug/g)	0.1	0.1	0.09	0.09
Cr - Chromium (ug/g)	72.9	71.3	55.5	55.5
Cu - Copper (ug/g)	36.7	36.8	24	24
Fe - Iron (%)	4.09	4.17	3.42	3.42
Hg - Mercury (ug/g)	0.053	NA	0.032	0.032
K - potassium (%)	1.88	1.95	1.62	NA
Mg - Magnesium (%)	1.7	1.69	1.35	NA
Mn - Manganese (ug/g)	861	894	720	720
Ni - Nickel (ug/g)	36.9	37.1	30.1	30.1
Pb - Lead (ug/g)	12.9	12.9	10.2	10.2
Sb - Antimony (ug/g)	0.98	0.98	0.69	0.69
Se - Selenium (ug/g)	0.34	0.34	0.2	0.2
Sn - Tin (ug/g)	1.95	1.93	1.5	1.5
Tl - Thallium (ug/g)	0.46	0.45	0.39	0.39
V - Vanadium (ug/g)	134	141	107	NA
Zn - Zinc (ug/g)	107	111	81.3	81.3

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-2-01-01-00-MET-S	97-2-F1-01-00-MET-S	97-2-F1-02-00-MET-S	97-2-F1-03-00-MET-S
Lab ID	97-2-01-01-00-MET-S	97-2-F1-01-00-MET-S	97-2-F1-02-00-MET-S	97-2-F1-03-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4587 g	0.4604 g	0.4673 g	0.4753 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/12/1997	7/12/1997	7/12/1997	7/12/1997
Extract Date	1/5/1998	1/14/1998	1/14/1998	1/14/1998
Analysis Date	1/5/1998	1/14/1998	1/14/1998	1/14/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---

METALS				
Ag - Silver (ug/g)	0.06	0.09	0.1	0.1
Al - Aluminum (%)	7.31	7.65	7.65	7.74
As - Arsenic (ug/g)	9.2	13.1	11.3	10.3
Ba - Barium (ug/g)	916	886	869	861
Be - Beryllium (ug/g)	1.14	1.24	1.27	1.32
Ca - Calcium (%)	1.98	2.07	2.06	1.91
Cd - Cadmium (ug/g)	0.2	0.11	0.12	0.11
Cr - Chromium (ug/g)	78.8	75	73.9	74.5
Cu - Copper (ug/g)	41.2	38.8	39.2	39.5
Fe - Iron (%)	4.31	4.24	4.29	4.33
Hg - Mercury (ug/g)	0.059	0.057	0.054	0.066
K - potassium (%)	1.61	1.64	1.87	1.65
Mg - Magnesium (%)	1.8	1.73	1.8	1.57
Mn - Manganese (ug/g)	831	962	893	896
Ni - Nickel (ug/g)	35.4	37.3	37.6	37.5
Pb - Lead (ug/g)	14.4	13.6	13.8	13.6
Sb - Antimony (ug/g)	1.09	1.03	1.03	1.01
Se - Selenium (ug/g)	0.4	0.32	0.38	0.37
Sn - Tin (ug/g)	1.82	1.81	1.81	1.78
Tl - Thallium (ug/g)	0.5	0.46	0.49	0.48
V - Vanadium (ug/g)	147	139	150	147
Zn - Zinc (ug/g)	123	110	112	114

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-2-02-01-00-MET-S	97-2-F2-01-00-MET-S	97-2-02-02-00-MET-S	97-2-F2-02-00-MET-S
Lab ID	97-2-02-01-00-MET-S	97-2-F2-01-00-MET-S	97-2-02-02-00-MET-S	97-2-F2-02-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4589 g	0.4524 g	0.4531 g	0.4659 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/13/1997	7/9/1997	7/13/1997	7/9/1997
Extract Date	1/5/1998	1/14/1998	1/5/1998	1/14/1998
Analysis Date	1/5/1998	1/14/1998	1/5/1998	1/14/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.05	0.09	0.05	0.08
Al - Aluminum (%)	7.39	7.32	7	7.56
As - Arsenic (ug/g)	6.3	10.6	6.5	7.8
Ba - Barium (ug/g)	913	816	775	829
Be - Beryllium (ug/g)	1.04	1.2	0.98	1.23
Ca - Calcium (%)	2.02	1.69	2.09	1.67
Cd - Cadmium (ug/g)	0.12	0.11	0.11	0.13
Cr - Chromium (ug/g)	71.1	76.3	66.2	63
Cu - Copper (ug/g)	33.9	39.5	29.4	38.3
Fe - Iron (%)	3.92	4.32	3.76	4.41
Hg - Mercury (ug/g)	0.053	0.072	0.05	0.068
K - potassium (%)	1.42	1.8	1.5	1.88
Mg - Magnesium (%)	1.55	1.84	1.6	1.83
Mn - Manganese (ug/g)	729	1170	824	914
Ni - Nickel (ug/g)	30.8	39.2	28.4	40.6
Pb - Lead (ug/g)	12.9	14.1	12	14.2
Sb - Antimony (ug/g)	0.88	0.96	0.8	0.97
Se - Selenium (ug/g)	0.43	0.42	0.26	0.35
Sn - Tin (ug/g)	1.58	1.72	1.51	1.74
Tl - Thallium (ug/g)	0.43	0.47	0.4	0.44
V - Vanadium (ug/g)	129	155	119	150
Zn - Zinc (ug/g)	106	120	100	116

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-2-02-03-00-MET-S	97-2-02-03-00-MET-S	97-2-F2-03-00-MET-S	97-2-02-04-00-MET-S
Lab ID	97-2-02-03-00-MET-S	97-2-02-03-00-MET-S	97-2-F2-03-00-MET-S	97-2-02-04-00-MET-S
	#1	#2		
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	QC	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4665 g	0.4665 g	0.4591 g	0.4587 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/13/1997	7/13/1997	7/9/1997	7/13/1997
Extract Date	1/5/1998	1/5/1998	1/14/1998	1/5/1998
Analysis Date	1/5/1998	1/5/1998	1/14/1998	1/5/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---

METALS				
Ag - Silver (ug/g)	0.06	NA	0.08	0.05
Al - Aluminum (%)	7.34	NA	7.44	6.76
As - Arsenic (ug/g)	7.6	NA	10.6	7.2
Ba - Barium (ug/g)	820	NA	833	805
Be - Beryllium (ug/g)	1	NA	1.27	0.99
Ca - Calcium (%)	1.89	NA	1.49	1.98
Cd - Cadmium (ug/g)	0.12	NA	0.13	0.11
Cr - Chromium (ug/g)	68.1	NA	80.9	71.2
Cu - Copper (ug/g)	33.4	NA	38.9	31.5
Fe - Iron (%)	3.96	NA	4.54	3.86
Hg - Mercury (ug/g)	0.05	0.056	0.066	0.052
K - potassium (%)	1.64	NA	1.65	1.55
Mg - Magnesium (%)	1.73	NA	1.65	1.62
Mn - Manganese (ug/g)	717	NA	1340	780
Ni - Nickel (ug/g)	31.3	NA	40.7	30.5
Pb - Lead (ug/g)	13.2	NA	14.3	12.8
Sb - Antimony (ug/g)	0.88	NA	0.99	0.84
Se - Selenium (ug/g)	0.36	NA	0.42	0.22
Sn - Tin (ug/g)	1.65	NA	1.85	1.58
Tl - Thallium (ug/g)	0.44	NA	0.48	0.42
V - Vanadium (ug/g)	127	NA	152	123
Zn - Zinc (ug/g)	107	NA	120	106

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-2-02-05-00-MET-S	97-2-02-06-00-MET-S	97-2-02-07-00-MET-S	97-2-02-07-00-MET-S
Lab ID	97-2-02-05-00-MET-S	97-2-02-06-00-MET-S	97-2-02-07-00-MET-S	97-2-02-07-00-MET-S
SDG	NA	NA	#1 NA	#2 NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	QC
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4633 g	0.4548 g	0.4639 g	NA NA
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/13/1997	7/13/1997	7/13/1997	7/13/1997
Extract Date	1/5/1998	1/5/1998	1/5/1998	NA
Analysis Date	1/5/1998	1/5/1998	1/5/1998	NA
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.05	0.05	0.05	NA
Al - Aluminum (%)	6.93	6.66	6.84	NA
As - Arsenic (ug/g)	5.7	6.7	6.8	NA
Ba - Barium (ug/g)	801	826	819	NA
Be - Beryllium (ug/g)	1.01	1.03	0.96	NA
Ca - Calcium (%)	2.15	2.06	1.94	NA
Cd - Cadmium (ug/g)	0.12	0.13	0.11	NA
Cr - Chromium (ug/g)	68.6	73.7	70.4	NA
Cu - Copper (ug/g)	31.2	33	32.3	NA
Fe - Iron (%)	3.87	4.13	3.98	NA
Hg - Mercury (ug/g)	0.053	0.05	0.059	NA
K - potassium (%)	1.71	1.62	1.53	NA
Mg - Magnesium (%)	1.7	1.71	1.59	NA
Mn - Manganese (ug/g)	688	718	754	NA
Ni - Nickel (ug/g)	29.3	30.9	30.8	NA
Pb - Lead (ug/g)	12.5	13	13	NA
Sb - Antimony (ug/g)	0.83	0.88	0.87	NA
Se - Selenium (ug/g)	0.32	0.33	0.43	NA
Sn - Tin (ug/g)	1.58	1.65	1.62	NA
Tl - Thallium (ug/g)	0.41	0.43	0.43	NA
V - Vanadium (ug/g)	122	130	128	NA
Zn - Zinc (ug/g)	105	110	108	NA

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-2-03-01-00-MET-S	97-2-03-01-00-MET-S	97-2-04-01-00-MET-S	97-2-05-01-00-MET-S
Lab ID	97-2-03-01-00-MET-S	97-2-03-01-00-MET-S	97-2-04-01-00-MET-S	97-2-05-01-00-MET-S
	#1	#2		
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	QC	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4579 g	0.4586 g	0.468 g	0.467 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/9/1997	7/9/1997	7/13/1997	7/10/1997
Extract Date	1/5/1998	1/5/1998	1/5/1998	1/5/1998
Analysis Date	1/5/1998	1/5/1998	1/5/1998	1/5/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.06	0.06	0.05	0.05
Al - Aluminum (%)	7.33	7.63	6.94	7.57
As - Arsenic (ug/g)	10.4	10.7	7.6	11
Ba - Barium (ug/g)	911	887	810	887
Be - Beryllium (ug/g)	1.09	1.08	1.02	1.07
Ca - Calcium (%)	1.65	1.71	2.13	1.72
Cd - Cadmium (ug/g)	0.13	0.14	0.1	0.13
Cr - Chromium (ug/g)	80.9	80.8	66	73.7
Cu - Copper (ug/g)	40.1	40	30.9	38.1
Fe - Iron (%)	4.53	4.53	3.78	4.44
Hg - Mercury (ug/g)	0.071	NA	0.046	0.056
K - potassium (%)	1.67	1.61	1.57	1.64
Mg - Magnesium (%)	1.8	1.74	1.6	1.77
Mn - Manganese (ug/g)	900	933	748	983
Ni - Nickel (ug/g)	36.5	35.1	27.7	33.5
Pb - Lead (ug/g)	14.9	14.4	12	14
Sb - Antimony (ug/g)	1.11	1.07	0.83	1.04
Se - Selenium (ug/g)	0.26	0.33	0.32	0.25
Sn - Tin (ug/g)	1.87	1.79	1.57	1.79
Tl - Thallium (ug/g)	0.5	0.48	0.41	0.48
V - Vanadium (ug/g)	147	147	121	139
Zn - Zinc (ug/g)	123	127	100	121

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-2-06-01-00-MET-S	97-2-07-01-00-MET-S	97-2-08-01-00-MET-S	97-2-09-01-00-MET-S
Lab ID	97-2-06-01-00-MET-S	97-2-07-01-00-MET-S	97-2-08-01-00-MET-S	97-2-09-01-00-MET-S
SDG	NA	NA	NA	#1 NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4551 g	0.4594 g	0.4614 g	0.4579 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/13/1997	7/9/1997	7/9/1997	7/12/1997
Extract Date	1/5/1998	1/5/1998	1/14/1998	1/14/1998
Analysis Date	1/5/1998	1/5/1998	1/14/1998	1/14/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---

METALS				
Ag - Silver (ug/g)	0.05	0.06	0.07	0.09
Al - Aluminum (%)	7.45	7.62	7.64	7.58
As - Arsenic (ug/g)	10.3	8.7	8.8	8.8
Ba - Barium (ug/g)	862	878	848	815
Be - Beryllium (ug/g)	1.02	1.01	1.22	1.21
Ca - Calcium (%)	2.04	1.94	1.77	1.74
Cd - Cadmium (ug/g)	0.09	0.14	0.11	0.14
Cr - Chromium (ug/g)	69.8	74.9	80.5	77.3
Cu - Copper (ug/g)	35.4	37.5	39.7	39
Fe - Iron (%)	4.13	4.3	4.46	4.44
Hg - Mercury (ug/g)	0.053	0.047	0.061	0.059
K - potassium (%)	1.62	1.72	1.64	1.65
Mg - Magnesium (%)	1.71	1.76	1.63	1.64
Mn - Manganese (ug/g)	889	813	886	1060
Ni - Nickel (ug/g)	31	33.2	39.5	38.8
Pb - Lead (ug/g)	13.2	14	14.1	14.2
Sb - Antimony (ug/g)	0.95	1	0.97	0.94
Se - Selenium (ug/g)	0.44	0.43	0.38	0.42
Sn - Tin (ug/g)	1.66	1.74	1.73	1.69
Tl - Thallium (ug/g)	0.45	0.47	0.45	0.47
V - Vanadium (ug/g)	130	141	158	153
Zn - Zinc (ug/g)	114	119	118	118

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-2-09-01-00-MET-S	97-2-10-01-00-MET-S	97-2-10-01-00-MET-S	97-2-11-01-00-MET-S
Lab ID	97-2-09-01-00-MET-S	97-2-10-01-00-MET-S	97-2-10-01-00-MET-S	97-2-11-01-00-MET-S
	#2	#1	#2	
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	QC	SAMP	QC	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4579 g	0.4742 g	0.4591 g	0.4562 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/12/1997	7/9/1997	7/9/1997	7/9/1997
Extract Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Analysis Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	NA	0.09	0.08	0.09
Al - Aluminum (%)	NA	7.5	7.64	7.69
As - Arsenic (ug/g)	NA	9.3	9.9	13.7
Ba - Barium (ug/g)	NA	837	869	844
Be - Beryllium (ug/g)	NA	1.17	1.27	1.26
Ca - Calcium (%)	NA	1.68	1.76	1.71
Cd - Cadmium (ug/g)	NA	0.12	0.13	0.11
Cr - Chromium (ug/g)	NA	74.7	79.9	75.7
Cu - Copper (ug/g)	NA	39.6	40.9	40.2
Fe - Iron (%)	NA	4.5	4.54	4.57
Hg - Mercury (ug/g)	0.056	0.07	NA	0.067
K - potassium (%)	NA	1.71	1.64	1.78
Mg - Magnesium (%)	NA	1.72	1.64	1.83
Mn - Manganese (ug/g)	NA	828	856	2140
Ni - Nickel (ug/g)	NA	38.4	39.6	38.9
Pb - Lead (ug/g)	NA	14.1	14.5	14.1
Sb - Antimony (ug/g)	NA	1.02	1.07	1.02
Se - Selenium (ug/g)	NA	0.49	0.45	0.56
Sn - Tin (ug/g)	NA	1.78	1.86	1.77
Tl - Thallium (ug/g)	NA	0.5	0.5	0.48
V - Vanadium (ug/g)	NA	154	159	153
Zn - Zinc (ug/g)	NA	118	122	123

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-2-13-01-00-MET-S	97-2-14-01-00-MET-S	97-2-15-01-00-MET-S	97-2-22-01-00-MET-S
Lab ID	97-2-13-01-00-MET-S	97-2-14-01-00-MET-S	97-2-15-01-00-MET-S	97-2-22-01-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4673 g	0.4544 g	0.4552 g	0.4599 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/13/1997	7/13/1997	7/13/1997	7/13/1997
Extract Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Analysis Date	1/14/1998	1/14/1998	1/14/1998	1/14/1998
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.09	0.1	0.09	0.1
Al - Aluminum (%)	7.73	7.37	7.7	7.62
As - Arsenic (ug/g)	9	9.2	8.6	9.5
Ba - Barium (ug/g)	822	844	865	862
Be - Beryllium (ug/g)	1.15	1.18	1.27	1.17
Ca - Calcium (%)	2.18	1.55	2.02	1.89
Cd - Cadmium (ug/g)	0.1	0.12	0.11	0.12
Cr - Chromium (ug/g)	59.2	74.1	74	71.4
Cu - Copper (ug/g)	34.3	38.3	39.2	37.8
Fe - Iron (%)	3.85	4.18	4.29	4.25
Hg - Mercury (ug/g)	0.05	0.057	0.056	0.059
K - potassium (%)	1.74	1.72	1.85	1.7
Mg - Magnesium (%)	1.56	1.68	1.8	1.66
Mn - Manganese (ug/g)	735	792	791	765
Ni - Nickel (ug/g)	29	36.7	36.4	35
Pb - Lead (ug/g)	12.3	13.6	13.7	13.5
Sb - Antimony (ug/g)	0.92	0.96	1	0.99
Se - Selenium (ug/g)	0.32	0.39	0.46	0.36
Sn - Tin (ug/g)	1.62	1.7	1.77	1.76
Tl - Thallium (ug/g)	0.45	0.48	0.48	0.49
V - Vanadium (ug/g)	137	147	140	146
Zn - Zinc (ug/g)	101	116	115	114

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-3-01-01-00-MET-S	97-3-F1-01-00-MET-S	97-3-F1-02-00-MET-S	97-3-F1-03-00-MET-S
Lab ID	97-3-01-01-00-MET-S	97-3-F1-01-00-MET-S	97-3-F1-02-00-MET-S	97-3-F1-03-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4427 g	0.4559 g	0.4448 g	0.4341 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/10/1997	7/10/1997	7/10/1997	7/10/1997
Extract Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Analysis Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---

METALS

Ag - Silver (ug/g)	0.1	0.09	0.09	0.08
Al - Aluminum (%)	7.35	7.31	7.23	7.19
As - Arsenic (ug/g)	7.9	7.8	8.2	10.7
Ba - Barium (ug/g)	880	928	896	897
Be - Beryllium (ug/g)	1.48	1.41	1.43	1.38
Ca - Calcium (%)	1.96	1.93	1.95	1.97
Cd - Cadmium (ug/g)	0.17	0.17	0.16	0.14
Cr - Chromium (ug/g)	67.6	73.4	73.2	65.1
Cu - Copper (ug/g)	38.5	38.6	39.6	40.1
Fe - Iron (%)	4.38	4.42	4.49	4.65
Hg - Mercury (ug/g)	0.053	0.063	0.065	0.06
K - potassium (%)	1.96	1.97	1.95	1.89
Mg - Magnesium (%)	1.93	1.9	1.94	1.93
Mn - Manganese (ug/g)	723	827	866	1060
Ni - Nickel (ug/g)	39.2	39.9	39.2	39
Pb - Lead (ug/g)	13.8	14.6	14.1	13.8
Sb - Antimony (ug/g)	1.14	1.22	1.18	1.19
Se - Selenium (ug/g)	0.38	0.32	0.29	0.3
Sn - Tin (ug/g)	1.86	1.95	1.84	1.85
Tl - Thallium (ug/g)	0.44	0.52	0.49	0.48
V - Vanadium (ug/g)	148	157	154	154
Zn - Zinc (ug/g)	126	124	123	129

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-3-02-01-00-MET-S	97-3-F2-01-00-MET-S	97-3-F2-02-00-MET-S	97-3-F2-03-00-MET-S
Lab ID	97-3-02-01-00-MET-S	97-3-F2-01-00-MET-S	97-3-F2-02-00-MET-S	97-3-F2-03-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.469 g	0.4446 g	0.444 g	0.4383 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/11/1997	7/10/1997	7/10/1997	7/10/1997
Extract Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Analysis Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.08	0.09	0.08	0.11
Al - Aluminum (%)	7.45	7.32	7.24	7.25
As - Arsenic (ug/g)	10.3	10.5	10.3	12.6
Ba - Barium (ug/g)	878	905	867	875
Be - Beryllium (ug/g)	1.44	1.48	1.4	1.42
Ca - Calcium (%)	1.73	1.87	1.93	1.87
Cd - Cadmium (ug/g)	0.15	0.14	0.13	0.12
Cr - Chromium (ug/g)	73.2	77.3	73.4	80.4
Cu - Copper (ug/g)	40	39.6	37.1	38.9
Fe - Iron (%)	4.57	4.65	4.5	4.51
Hg - Mercury (ug/g)	0.06	0.059	0.065	0.063
K - potassium (%)	1.85	1.95	2.02	1.84
Mg - Magnesium (%)	1.87	1.92	1.97	1.84
Mn - Manganese (ug/g)	1240	904	887	991
Ni - Nickel (ug/g)	39.9	39.9	37.8	39
Pb - Lead (ug/g)	14.1	14.1	13.5	13.8
Sb - Antimony (ug/g)	1.16	1.2	1.1	1.11
Se - Selenium (ug/g)	0.27	0.37	0.33	0.29
Sn - Tin (ug/g)	1.76	1.89	1.8	1.82
Tl - Thallium (ug/g)	0.49	0.49	0.47	0.47
V - Vanadium (ug/g)	146	154	134	129
Zn - Zinc (ug/g)	127	127	120	122

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-3-03-01-00-MET-S	97-3-04-01-00-MET-S	97-3-05-01-00-MET-S	97-3-06-01-00-MET-S
Lab ID	97-3-03-01-00-MET-S	97-3-04-01-00-MET-S	97-3-05-01-00-MET-S	97-3-06-01-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4361 g	0.4545 g	0.4396 g	0.4405 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/12/1997	7/11/1997	7/12/1997	7/10/1997
Extract Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Analysis Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.09	0.09	0.08	0.08
Al - Aluminum (%)	6.66	7.24	7.4	7.64
As - Arsenic (ug/g)	9.8	8	8.6	12.1
Ba - Barium (ug/g)	826	892	869	895
Be - Beryllium (ug/g)	1.45	1.45	1.39	1.45
Ca - Calcium (%)	1.92	1.59	1.84	1.88
Cd - Cadmium (ug/g)	0.13	0.15	0.15	0.14
Cr - Chromium (ug/g)	70.6	79.5	72.1	76
Cu - Copper (ug/g)	33.9	38.8	36.2	37.4
Fe - Iron (%)	4.67	4.48	4.63	4.45
Hg - Mercury (ug/g)	0.05	0.057	0.056	0.057
K - potassium (%)	1.72	1.78	1.91	1.91
Mg - Magnesium (%)	1.8	1.71	1.91	1.86
Mn - Manganese (ug/g)	1570	857	867	1090
Ni - Nickel (ug/g)	35.4	39.5	37.7	38.6
Pb - Lead (ug/g)	13.1	14.2	13.9	14
Sb - Antimony (ug/g)	1.06	1.2	1.14	1.16
Se - Selenium (ug/g)	0.28	0.31	0.4	0.27
Sn - Tin (ug/g)	1.75	1.95	1.76	1.86
Tl - Thallium (ug/g)	0.44	0.47	0.48	0.47
V - Vanadium (ug/g)	150	157	142	142
Zn - Zinc (ug/g)	126	128	125	128

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-3-08-01-00-MET-S	97-3-09-01-00-MET-S	97-3-09-01-00-MET-S	97-3-10-01-00-MET-S
Lab ID	97-3-08-01-00-MET-S	97-3-09-01-00-MET-S	97-3-09-01-00-MET-S	97-3-10-01-00-MET-S
		#1	#2	
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	QC	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4158 g	0.4236 g	0.4156 g	0.4255 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/12/1997	7/11/1997	7/11/1997	7/11/1997
Extract Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Analysis Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.08	0.09	0.09	0.08
Al - Aluminum (%)	7.08	7.49	7.27	7.64
As - Arsenic (ug/g)	8	9.6	10.1	7.9
Ba - Barium (ug/g)	877	869	867	893
Be - Beryllium (ug/g)	1.42	1.41	1.38	1.42
Ca - Calcium (%)	1.63	1.82	1.83	1.79
Cd - Cadmium (ug/g)	0.19	0.15	0.16	0.18
Cr - Chromium (ug/g)	78.3	76.9	78.4	80.7
Cu - Copper (ug/g)	37.5	37.6	37.6	38.7
Fe - Iron (%)	4.58	4.54	4.63	4.47
Hg - Mercury (ug/g)	0.053	0.067	0.064	0.062
K - potassium (%)	1.88	1.84	1.8	1.83
Mg - Magnesium (%)	1.86	1.85	1.79	1.86
Mn - Manganese (ug/g)	1040	1110	1080	838
Ni - Nickel (ug/g)	39.6	39.3	38	39.7
Pb - Lead (ug/g)	14.5	14.1	13.7	14.4
Sb - Antimony (ug/g)	1.19	1.13	1.14	1.18
Se - Selenium (ug/g)	0.42	0.35	0.3	0.3
Sn - Tin (ug/g)	1.84	1.84	1.8	1.85
Tl - Thallium (ug/g)	0.49	0.48	0.46	0.46
V - Vanadium (ug/g)	150	148	143	140
Zn - Zinc (ug/g)	124	122	124	125

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-3-11-01-00-MET-S	97-3-12-01-00-MET-S	97-3-13-01-00-MET-S	97-3-13-02-00-MET-S
Lab ID	97-3-11-01-00-MET-S	97-3-12-01-00-MET-S	97-3-13-01-00-MET-S	97-3-13-02-00-MET-S
SDG	NA	NA	NA	NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4245 g	0.4005 g	0.4375 g	0.4246 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/12/1997	7/11/1997	7/12/1997	7/12/1997
Extract Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Analysis Date	11/20/1997	11/20/1997	11/20/1997	11/20/1997
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.09	0.08	0.08	0.1
Al - Aluminum (%)	7.48	7.35	6.55	6.75
As - Arsenic (ug/g)	9.5	7.7	10.7	12
Ba - Barium (ug/g)	884	871	896	910
Be - Beryllium (ug/g)	1.38	1.41	1.47	1.47
Ca - Calcium (%)	1.51	1.6	1.7	1.62
Cd - Cadmium (ug/g)	0.23	0.19	0.16	0.14
Cr - Chromium (ug/g)	76.7	76.9	74.5	72.5
Cu - Copper (ug/g)	36.1	35.5	37.7	41.5
Fe - Iron (%)	4.44	4.42	4.48	4.71
Hg - Mercury (ug/g)	0.065	0.06	0.058	0.062
K - potassium (%)	1.62	1.79	1.64	1.55
Mg - Magnesium (%)	1.71	1.85	1.73	1.66
Mn - Manganese (ug/g)	937	1010	1160	1360
Ni - Nickel (ug/g)	37.2	38.5	39	39.9
Pb - Lead (ug/g)	13.8	14.3	14.4	14.8
Sb - Antimony (ug/g)	1.19	1.17	1.18	1.16
Se - Selenium (ug/g)	0.41	0.37	0.37	0.28
Sn - Tin (ug/g)	1.79	1.81	1.9	1.92
Tl - Thallium (ug/g)	0.45	0.44	0.48	0.5
V - Vanadium (ug/g)	147	134	143	154
Zn - Zinc (ug/g)	126	125	129	133

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-3-13-03-00-MET-S	97-3-13-04-00-MET-S	97-3-13-05-00-MET-S	97-3-13-05-00-MET-S
Lab ID	97-3-13-03-00-MET-S	97-3-13-04-00-MET-S	97-3-13-05-00-MET-S	97-3-13-05-00-MET-S
SDG	NA	NA	#1 NA	#2 NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	QC
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4142 g	0.4116 g	0.4442 g	NA NA
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/12/1997	7/12/1997	7/12/1997	7/12/1997
Extract Date	11/20/1997	11/20/1997	11/20/1997	NA
Analysis Date	11/20/1997	11/20/1997	11/20/1997	NA
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.1	0.09	0.09	NA
Al - Aluminum (%)	7.38	7.62	6.36	NA
As - Arsenic (ug/g)	8.9	11.1	8.3	NA
Ba - Barium (ug/g)	880	872	872	NA
Be - Beryllium (ug/g)	1.4	1.45	1.38	NA
Ca - Calcium (%)	1.75	1.58	1.63	NA
Cd - Cadmium (ug/g)	0.16	0.15	0.17	NA
Cr - Chromium (ug/g)	72.2	70.5	75.3	NA
Cu - Copper (ug/g)	37	38.7	35.8	NA
Fe - Iron (%)	4.46	4.53	4.41	NA
Hg - Mercury (ug/g)	0.06	0.056	0.058	NA
K - potassium (%)	1.96	1.6	1.69	NA
Mg - Magnesium (%)	2.01	1.75	1.77	NA
Mn - Manganese (ug/g)	1160	1210	1080	NA
Ni - Nickel (ug/g)	38.4	38.5	37.5	NA
Pb - Lead (ug/g)	14.2	14.1	13.9	NA
Sb - Antimony (ug/g)	1.16	1.13	1.17	NA
Se - Selenium (ug/g)	0.37	0.29	0.38	NA
Sn - Tin (ug/g)	1.82	1.76	1.77	NA
Tl - Thallium (ug/g)	0.48	0.44	0.47	NA
V - Vanadium (ug/g)	151	152	154	NA
Zn - Zinc (ug/g)	129	126	124	NA

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-3-13-06-00-MET-S	97-3-13-07-00-MET-S	97-3-14-01-00-MET-S	97-3-14-01-00-MET-S
Lab ID	97-3-13-06-00-MET-S	97-3-13-07-00-MET-S	97-3-14-01-00-MET-S	97-3-14-01-00-MET-S
SDG	NA	NA	#1 NA	#2 NA
File	NA	NA	NA	NA
Sample Type	SAMP	SAMP	SAMP	QC
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	0.4204 g	0.4124 g	0.4506 g	NA NA
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	NA	NA	NA	NA
Field Date	7/12/1997	7/12/1997	7/12/1997	7/12/1997
Extract Date	11/20/1997	11/20/1997	11/20/1997	NA
Analysis Date	11/20/1997	11/20/1997	11/20/1997	NA
Min Reporting Limit	NA	NA	NA	NA
Units	---	---	---	---
METALS				
Ag - Silver (ug/g)	0.09	0.08	0.08	NA
Al - Aluminum (%)	6.45	6.06	6.97	NA
As - Arsenic (ug/g)	13.4	7.6	7	NA
Ba - Barium (ug/g)	855	875	864	NA
Be - Beryllium (ug/g)	1.38	1.4	1.35	NA
Ca - Calcium (%)	1.65	1.68	1.62	NA
Cd - Cadmium (ug/g)	0.16	0.18	0.18	NA
Cr - Chromium (ug/g)	71.2	68.2	80.2	NA
Cu - Copper (ug/g)	36.5	37.2	36.6	NA
Fe - Iron (%)	4.57	4.48	4.52	NA
Hg - Mercury (ug/g)	0.06	0.062	0.059	NA
K - potassium (%)	1.78	1.5	1.86	NA
Mg - Magnesium (%)	1.88	1.64	1.92	NA
Mn - Manganese (ug/g)	1280	965	791	NA
Ni - Nickel (ug/g)	37.1	38.1	37.7	NA
Pb - Lead (ug/g)	13.7	14.1	14.2	NA
Sb - Antimony (ug/g)	1.15	1.17	1.19	NA
Se - Selenium (ug/g)	0.3	0.33	0.32	NA
Sn - Tin (ug/g)	1.75	1.78	1.78	NA
Tl - Thallium (ug/g)	0.46	0.47	0.45	NA
V - Vanadium (ug/g)	142	144	132	NA
Zn - Zinc (ug/g)	127	125	125	NA

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Not Surrogate Corrected) - Surface Sediment - METALS

Field ID	97-3-15-01-00-MET-S	97-3-20-01-00-MET-S	97-3-20-01-00-MET-S
Lab ID	97-3-15-01-00-MET-S	97-3-20-01-00-MET-S	97-3-20-01-00-MET-S
		#1	#2
SDG	NA	NA	NA
File	NA	NA	NA
Sample Type	SAMP	SAMP	QC
Matrix	Sediment	Sediment	Sediment
Sample Size	0.439 g	0.4298 g	0.4298 g
Weight Basis	DRY	DRY	DRY
Associated Blank	NA	NA	NA
Field Date	7/12/1997	7/11/1997	7/11/1997
Extract Date	11/20/1997	11/20/1997	11/20/1997
Analysis Date	11/20/1997	11/20/1997	11/20/1997
Min Reporting Limit	NA	NA	NA
Units	---	---	---

METALS			
Ag - Silver (ug/g)	0.08	0.1	NA
Al - Aluminum (%)	7.16	5.64	NA
As - Arsenic (ug/g)	8.5	8	NA
Ba - Barium (ug/g)	885	872	NA
Be - Beryllium (ug/g)	1.34	1.35	NA
Ca - Calcium (%)	1.73	1.68	NA
Cd - Cadmium (ug/g)	0.17	0.16	NA
Cr - Chromium (ug/g)	76.2	73.7	NA
Cu - Copper (ug/g)	36.2	37	NA
Fe - Iron (%)	4.46	4.45	NA
Hg - Mercury (ug/g)	0.06	0.067	0.066
K - potassium (%)	1.77	1.73	NA
Mg - Magnesium (%)	1.88	1.84	NA
Mn - Manganese (ug/g)	1150	849	NA
Ni - Nickel (ug/g)	38.8	38	NA
Pb - Lead (ug/g)	14.3	14	NA
Sb - Antimony (ug/g)	1.16	1.15	NA
Se - Selenium (ug/g)	0.31	0.25	NA
Sn - Tin (ug/g)	1.8	1.83	NA
Tl - Thallium (ug/g)	0.49	0.48	NA
V - Vanadium (ug/g)	136	139	NA
Zn - Zinc (ug/g)	125	128	NA