

Table 1: 1998 MMS Shelikof Strait and Outermost Cook Inlet Stations Sampled

Station ID	Station Type(1)	Sample Type	Latitude	Longitude	Depth (m)	Date	Time	Analysis/Replicates										Comments
								Organics	Metals	GS/TOC	RGS-P450	Fish/P450	TOX	Oil Degraders	Geo. Core (2)	CTD	QC	
Z0-F1	Fixed	Sed. Grabs/Core	59°36.32	151°20.15	78	7/3/1998	0758-0846	3	3	3	1	NA	1	1	1 Core	1	NA	1 Gravity core (230 cm) for Geo. and Chem., 1 Archive core
Z0-F2	Fixed	Sed. Grabs	59°31.57	151°48.88	96	7/3/1998	0514-0538	1	1	1	1	NA	NA	1	NA	1	NA	
Z0-F4	Fixed	Sed. Grabs	59°01.86	152°45.55	161	7/2/1998	1457-1514	1	1	1	1	NA	NA	1	NA	1	NA	
Z0-F5	Fixed	Sed. Grabs	59°08.70	153°27.22	43	7/2/1998	1742-1754	1	1	1	1	NA	NA	1	NA	1	NA	
Z0-F6	Fixed	Sed. Grabs	59°34.94	153°14.36	25	7/2/1998	2111-2136	1	1	1	1	NA	1	1	NA	1	NA	
Z0-F8	Fixed	Sed. Grabs/Core	59°31.24	153°07.66	35	7/2/1998	2218-2345	1	1	1	1	NA	NA	1	6 Cores	1	NA	Sediment Cores (2)
Z0-F13	Fixed	Sed. Grabs	59°34.30	151°38.25	74	7/3/1998	0614-0624	1	1	1	1	NA	NA	1	NA	1	NA	
Z0-F14	Fixed	Sed. Grabs	59°33.67	151°31.97	119	7/3/1998	0654-0709	1	1	1	1	NA	NA	1	NA	1	NA	
Z0-F7a	Fixed, Long-line	Fish	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	Fish sampling not conducted because fish catch limit nearly met after first three sets.
Z1-R16	Random	Sed. Grabs	58°24.66	153°21.37	174	7/2/1998	0015-0036	1	1	1	1	NA	NA	1	NA	1	NA	
Z1-R17	Random	Sed. Grabs	58°38.33	152°55.47	156	7/2/1998	0758-0812	1	1	1	NA	NA	NA	1	NA	1	NA	
Z1-R19	Random	Sed. Grabs	58°32.91	153°36.61	72	7/2/1998	0326-0342	1	1	1	NA	NA	NA	1	NA	1	1	QC: 1 Van-Veen grab equipment blank
Z1-R21	Random	Sed. Grabs	58°49.01	153°00.40	146	7/2/1998	1145-1210	1	1	1	1	NA	NA	1	NA	1	NA	
Z1-R22	Random	Sed. Grabs	58°51.80	153°05.83	160	7/2/1998	1254-1315	1	1	1	NA	NA	NA	1	NA	1	NA	
Z1-R23	Random	Sed. Grabs	58°38.16	153°26.41	46	7/2/1998	0550-0602	1	1	1	NA	NA	NA	1	NA	1	NA	
Z1-F1	Fixed	Sed. Grabs	58°27.82	153°23.29	186	7/2/1998	0111-0223	3	3	3	1	NA	NA	1	NA	1	NA	
Z1-F2	Fixed	Sed. Grabs	58°31.68	152°53.07	212	6/28/1998	0350-0412	1	1	1	1	NA	NA	1	NA	1	NA	Station sampled in transit to Zone 4
Z1-R3b	Fixed-Optional	Sed. Grabs/Core	58°48.11	153°08.15	191	7/4/1998	0128-0147	NA	NA	NA	NA	NA	NA	NA	6 Cores	NA	NA	Cores collected (archived) as substitute for unsuccessful gravity core at Z2-R16 (2)
Z1-R23a	Fixed, Long-line	Fish	58°38.11	153°15.90	152-158	7/2/1998	0505-0922	9*	9*	NA	9*	30	NA	NA	NA	NS	NA	Fish composites: 4 Pacific cod, 3 halibut; Individual fish samples: 1 halibut, 1 skate
Z2-R16	Random	Sed. Grabs/Core	58°05.81	153°56.62	200	7/1/1998	1145-1406	1	1	1	1	NA	NA	1	6 Cores	1	NA	Sediment Cores (2). Gravity core poor penetration. Did not retain core.
Z2-R17	Random	Sed. Grabs	58°13.61	153°46.54	195	7/1/1998	1828-1851	1	1	1	1	NA	NA	1	NA	1	NA	
Z2-R19	Random	Sed. Grabs	58°02.80	154°22.07	166	7/1/1998	0920-0942	1	1	1	NA	NA	NA	1	NA	1	NA	
Z2-R20	Random	Sed. Grabs	58°05.65	154°06.63	253	7/1/1998	1050-1109	1	1	1	1	NA	NA	1	NA	1	NA	
Z2-R21	Random	Sed. Grabs	57°54.89	154°06.41	200	7/1/1998	0550-0620	1	1	1	NA	NA	NA	1	NA	1	NA	
Z2-R23	Random	Sed. Grabs	57°54.56	154°16.67	212	7/1/1998	0650-0723	1	1	1	NA	NA	NA	1	NA	1	2	QC: 1 field blank and 1 Van-Veen grab equipment blank
Z2-F1	Fixed	Sed. Grabs	57°59.02	154°21.34	283	7/1/1998	0756-0846	1	1	1	1	NA	1	1	NA	1	NA	Samples collected from homogenized composite of 2 grabs
Z2-F2	Fixed	Sed. Grabs	58°06.11	153°41.24	197	7/1/1998	1513-1604	3	3	3	1	NA	NA	3	NA	1	NA	
Z2-F3	Fixed	Sed. Grabs	57°44.26	154°02.13	241	6/30/1998	2333-2359	3	3	3	1	NA	NA	1	NA	1	NA	Soft mud - extended grab feet
Z2-F4	Fixed	Sed. Grabs	57°54.52	153°36.87	252	7/1/1998	0303-0400	3	3	3	1	NA	NA	1	NA	1	NA	
Z2-R14a	Fixed, Long-line	Fish	58°16.79	153°54.39	256	7/1/1998	1735-2218	12*	12*	NA	12*	51	NA	NA	NA	NS	2	Fish composites: 4 Halibut , 5 Pacific cod, 1 Arrowtooth flounder; Individual fish sample: 1 halibut; QC: 1 fish dissection tools equipment blank; 1 dissection deck blank
Z3-R7	Random	Sed. Grabs/Core	57°08.42	155°04.47	217	6/28/1998	1416-1619	1	1	1	1	NA	NA	1	NS	1	NA	Seas too high for box core
Z3-R11	Random	Sed. Grabs	57°10.44	155°29.76	265	6/29/1998	0504-0702	1	1	1	NA	NA	1	1	NA	1	NA	TOX composite from 3 grabs, others taken from grab 1
Z3-R14	Random	Sed. Grabs	57°16.09	155°29.99	272	6/29/1998	0830-1140	1	1	1	NA	NA	1	1	NA	1	NA	All samples collected from homogenized 2 grabs (other 5 grab attempts pre-trips)
Z3-R16	Random	Sed. Grabs	57°26.85	155°30.64	296	6/29/1998	1317-1340	1	1	1	1	NA	NA	1	NA	1	NA	
Z3-R17	Random	Sed. Grabs	57°18.20	155°54.82	240	6/29/1998	1638-1701	1	1	1	NA	NA	NA	1	NA	1	NA	
Z3-R18	Random	Sed. Grabs	57°32.47	155°16.09	270	6/30/1998	1314-1331	1	1	1	1	NA	NA	1	NA	1	NA	
Z3-F1	Fixed	Sed. Grabs	57°36.69	155°21.26	327	6/30/1998	1420-1610	1	1	1	1	NA	1	1	NA	1	NA	All samples collected from composite of 3 grabs
Z3-F2	Fixed	Sed. Grabs	57°46.81	155°00.23	320	6/30/1998	1805-1956	3	3	3	1	NA	1	1	NA	1	NA	TOX was composite of 3 grabs, all others from individual grabs
Z3-R1a	Fixed, Long-line	Fish	57°22.76	155°37.28	290	6/29/1998	1520-1910	9*	9*	NA	9*	36	NA	NA	NA	NS	NA	Fish composites: 1 Arrowtooth flounder, 1 Black cod, 3 Pacific cod, 3 halibut; Individual fish sample: 1 Aleutian skate
Z4-F1	Fixed	Sed. Grabs	56°38.96	155°54.58	281	6/30/1998	0520-0652	3	3	3	1	NA	NA	1	NS	1	NA	Cores collected at Z4F4 instead due to weather.

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Z4-F2	Fixed	Sed. Grabs	56°57.01	155°19.77	253	6/28/1998	1817-2137	3	3	3	1	NA	NA	1	NA	1	NA	
Z4-F3	Fixed	Sed. Grabs	57°01.04	155°53.25	300	6/28-29/98	2350-0230	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	No samples collected due to unacceptable substrate
Z4-F4	Fixed, Alternate	Sed. Grabs/Core	56°48.06	155°47.96	290	6/30/1998	0059-0347	3	3	3	1	NA	NA	1	5 Cores	1	NA	Alternate for Z4F3; Cores collected here instead of at Z4F1 due to weather (2)
AC1	Fixed-Source	Sed. Grabs	59°01.09	149°50.16	225	6/27/1998	1559-1721	3	3	3	NA	NA	NA	1	NA	1	NA	Offshore Alaska Coastal Current station. Shake-down gear, sampling with 2 shifts
St. Augustine - Ash	Fixed-Source, Optional	Beach Sediment Grabs	59°23.70	153°29.10	NA	7/4/1998	0751-0848	NA	1	TBD (TOC)	NA	NA	NA	NA	NA	NS	NA	Beach sample collected at St. Augustine Island for volcanic ash. Went ashore by Zodiac.
St. Augustine - Sediment	Fixed-Source, Optional	Offshore Sediment Grabs	59°24.74	153°30.94	15	7/4/1998	920	1	1	1	NA	NA	NA	NA	NA	NA	NA	Offshore Augustine Island grab sediments collected, hoping to find evidence of ash layer.
Toxicity Reference	Fixed, Optional	Sed. Grabs	59°49.04	149°46.58	130	7/5/1998	1542	NA	NA	NA	NA	NA	1	NA	NA	NS	NA	Sediment collected as toxicity reference sediment sample, near Holgate Glacier
Grain Size Grab (Zone 2)	Fixed, Optional	Sed. Grabs	58°16.35	154°05.36	37	7/1/1998	2000	NA	NA	GS (1)	NA	NA	NA	NA	NA	NA	NA	Grain size sample taken while soaking long-line fishing gear at Z2R14a
Homer Coal (Coal Bay)	Fixed-Source	Coal Grabs	59°38.62	151°29.07	NA	7/7/1998	1500	1	TBD	TBD (TOC)	NA	NA	NA	NA	NA	NA	NA	Coal source sample collected from Coal Bay beach, Homer
Ninilchik Coal	Fixed-Source	Coal Grabs	60°02.33	151°44.32	NA	7/7/1998	1300	1	TBD	TBD (TOC)	NA	NA	NA	NA	NA	NA	NA	Coal source sample collected from coal seam in Ninilchik bluff
Well Creek Oil	Fixed-Source	Oil Seep Grabs	59°40.60	153°19.70	NA	7/7/1998	1255-1409	2	TBD	TBD (TOC)	NA	NA	NA	NA	NA	NA	NA	Oil seep sample collected at Well Creek "beaver ponds". Transport by helicopter.
Matanuska Coal	Fixed-Source	Coal Grabs	NA	NA	NA	5/16/1998	PM	1	TBD	TBD (TOC)	NA	NA	NA	NA	NA	NA	NA	Source Sample-Coal sample collected from exposed coal seam Northwest of Sutton, AK
Coyote Lake Coal	Fixed-Source	Coal Grabs	NA	NA	NA	5/16/1998	PM	1	TBD	TBD (TOC)	NA	NA	NA	NA	NA	NA	NA	Source Sample- Coal sample collected from coal pocket at Coyote Lake (Sutton, AK)
Susitna River	Fixed-Source	Surface Water	NA	NA	NA	5/13/1998	AM	NS	1	NA	NA	NA	NA	NA	NA	NA	NA	Source Sample - Collected at Deshka Landing, ~mile 82.5 on George Parks Hwy
Matanuska River	Fixed-Source	Surface Water	NA	NA	NA	5/13/1998	AM	NS	1	NA	NA	NA	NA	NA	NA	NA	NA	Source Sample - Collected at intersection of Old Glenn Hwy and Matanuska River
Matanuska River	Fixed-Source	Sediment	NA	NA	NA	5/13/1998	AM	1	TBD	NA	NA	NA	NA	NA	NA	NA	NA	Source Sample - Collected at intersection of Old Glenn Hwy and Matanuska River
Knik River	Fixed-Source	Surface Water	NA	NA	NA	5/13/1998	AM	NS	1	NA	NA	NA	NA	NA	NA	NA	NA	Source Sample - Collected at intersection of Old Glenn Hwy and Knik River
Copper River	Fixed-Source	Surface Water	NA	NA	NA	5/16/1998	630-730	NS	2	NA	NA	NA	NA	NA	NA	NA	NA	Source Samples- Sample "C1" from Copper River Hwy mile 25, and "C2" from mile 28
Copper River	Fixed-Source	Sediment	NA	NA	NA	5/16/1998	730	1	TBD	NA	NA	NA	NA	NA	NA	NA	NA	Source Sample - Copper River Highway mile 25
Susitna River	Fixed-Source	Surface Water	NA	NA	NA	6/25/1998	PM	NS	1	NA	NA	NA	NA	NA	NA	NA	NA	Source Sample-Collected at intersection of Susitna R. and Parks Hwy, ~mile 101
Matanuska River	Fixed-Source	Surface Water	NA	NA	NA	6/25/1998	AM	NS	1	NA	NA	NA	NA	NA	NA	NA	NA	Source Sample - Collected at intersection of Old Glenn Hwy and Matanuska River
Knik River	Fixed-Source	Surface Water	NA	NA	NA	6/25/1998	AM	NS	1	NA	NA	NA	NA	NA	NA	NA	NA	Source Sample - Collected at intersection of Old Glenn Hwy and Knik River

Notes:
NA = Not applicable
NS = Not sampled
TBD = To be determined (i.e., optional analyses)
(1) An alternate station was substituted for a fixed or random station when necessary (i.e., not acceptable % of silt/clay)
The fourth fish station in Zone 0 was not sampled because it was unnecessary as dictated by catch results.
(2) Cores were collected from each station: 1 - chemistry, 1- grain size/TOC, 1 - geochronology, 1 - archive, 1 - fish scale, 1 - x-ray
One gravity core was collected from Z0-F1. Additional geochronology cores were sampled for archive.
* Each sample is a composite of 3 - 5 fish livers.