

TIDES⁶

During processing, soundings were reduced to MLLW using data from 3 tide gauges. These gauges were operated by a sub-contractor, LCMF, and the data was delivered to the processing ship at the end of every Julian day.

Gauge	Location	Latitude	Longitude
9455869	North Foreland	61.0425	150.1636
9455912	Fire Island	61.1731	150.2061
9455821	Moose Point	60.9564	150.6833
9455866	Point Possession	61.0344	150.4033

The gauge at Pt. Possession was operational during the survey but had not been in place long enough to have a datum. Consequently, it was not used for any of the processing.

Tidal zones for this survey were defined after preliminary survey work in the fall of 1998 (SOL 52-DGNC-8-90028, Task Order #1). The zones used have generally the same shape as the NOAA preliminary zones in the survey area but form a finer mesh. The maximum time difference across any zone boundary in the new scheme was 2 minutes. The following plot shows the area around Sheet A and the tide zone layout.

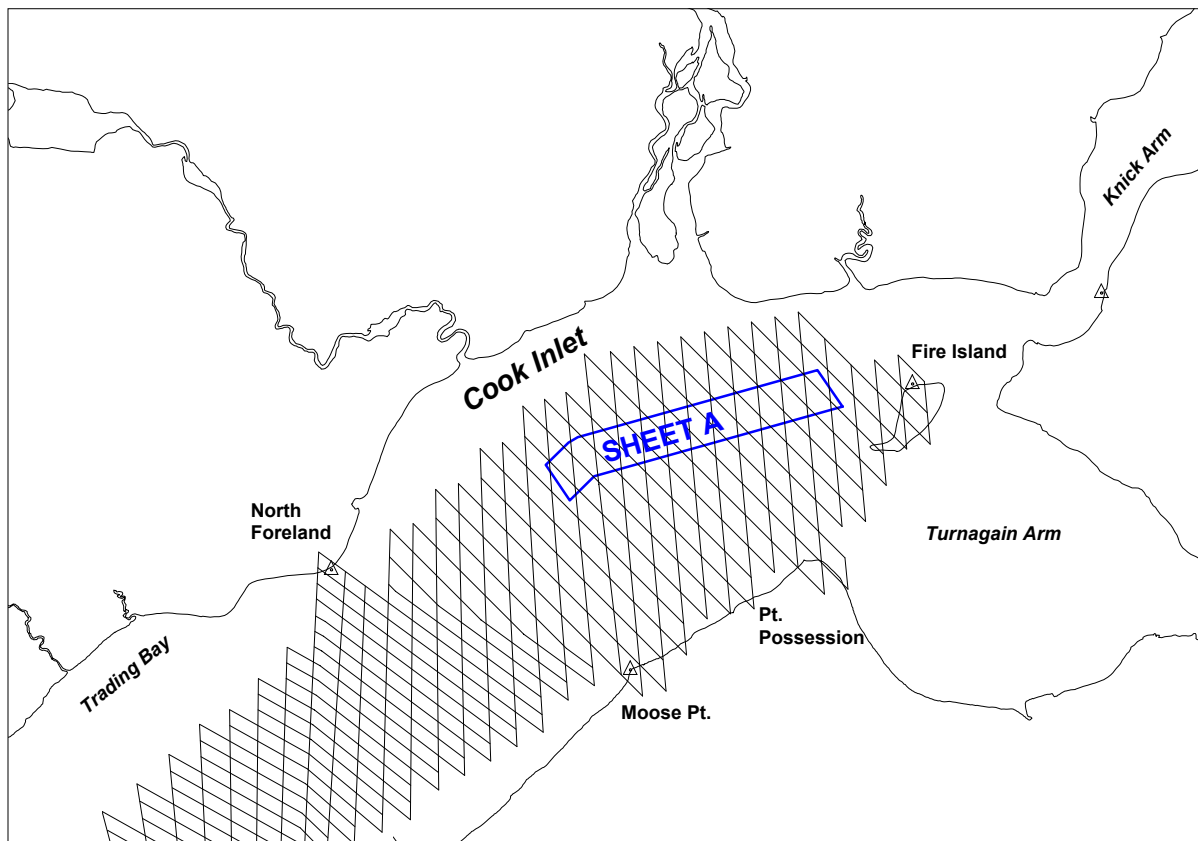


Table of tide zones used in Sheet A processing.

LCMF Zone	Primary Reference		Time min	Range Ratio	Secondary Reference		Time min	Range Ratio	LCMF Zone
	Name	Number			Name	Number			
8	Fire Is.	9455912	-6	0.950	Moose Pt	9455824	34	1.087	8
9	Fire Is.	9455912	-6	0.960	Moose Pt	9455824	34	1.099	9
10	Fire Is.	9455912	-6	0.970	Moose Pt	9455824	34	1.111	10
12	Fire Is.	9455912	-8	0.940	Moose Pt	9455824	32	1.075	12
13	Fire Is.	9455912	-8	0.950	Moose Pt	9455824	32	1.087	13
14	Fire Is.	9455912	-8	0.960	Moose Pt	9455824	32	1.099	14
15	Fire Is.	9455912	-8	0.970	Moose Pt	9455824	32	1.111	15
18	Fire Is.	9455912	-10	0.940	Moose Pt	9455824	30	1.075	18
19	Fire Is.	9455912	-10	0.950	Moose Pt	9455824	30	1.087	19
20	Fire Is.	9455912	-10	0.960	Moose Pt	9455824	30	1.099	20
23	Fire Is.	9455912	-12	0.930	Moose Pt	9455824	28	1.064	23
24	Fire Is.	9455912	-12	0.940	Moose Pt	9455824	28	1.075	24
25	Fire Is.	9455912	-12	0.950	Moose Pt	9455824	28	1.087	25
29	Fire Is.	9455912	-14	0.920	Moose Pt	9455824	26	1.053	29
30	Fire Is.	9455912	-14	0.930	Moose Pt	9455824	26	1.064	30
31	Fire Is.	9455912	-14	0.940	Moose Pt	9455824	26	1.075	31
35	Fire Is.	9455912	-16	0.910	Moose Pt	9455824	24	1.042	35
36	Fire Is.	9455912	-16	0.920	Moose Pt	9455824	24	1.053	36

LCMF	Primary Reference		Time	Range		Secondary Reference		Time	Range	LCMF
Zone	Name	Number	min	Ratio		Name	Number	min	Ratio	Zone
37	Fire Is.	9455912	-16	0.930		Moose Pt	9455824	24	1.064	37
41	Fire Is.	9455912	-18	0.900		Moose Pt	9455824	22	1.031	41
42	Fire Is.	9455912	-18	0.910		Moose Pt	9455824	22	1.042	42
43	Fire Is.	9455912	-18	0.920		Moose Pt	9455824	22	1.053	43
49	Fire Is.	9455912	-20	0.890		Moose Pt	9455824	20	1.020	49
50	Fire Is.	9455912	-20	0.900		Moose Pt	9455824	20	1.031	50
51	Fire Is.	9455912	-20	0.910		Moose Pt	9455824	20	1.042	51
57	Moose Pt	9455824	18	1.010		Fire Is.	9455912	-22	0.880	57
58	Moose Pt	9455824	18	1.020		Fire Is.	9455912	-22	0.890	58
59	Moose Pt	9455824	18	1.031		Fire Is.	9455912	-22	0.900	59
63	Moose Pt	9455824	16	1.000		Fire Is.	9455912	-24	0.870	63
64	Moose Pt	9455824	16	1.010		Fire Is.	9455912	-24	0.880	64
65	Moose Pt	9455824	16	1.020		Fire Is.	9455912	-24	0.890	65
69	Moose Pt	9455824	14	0.989		N. F'land	9455869	28	1.131	69
70	Moose Pt	9455824	14	1.000		Fire Is.	9455912	-26	0.870	70
71	Moose Pt	9455824	14	1.010		Fire Is.	9455912	-26	0.880	71
76	Moose Pt	9455824	12	0.978		N. F'land	9455869	26	1.118	76
77	Moose Pt	9455824	12	0.989		N. F'land	9455869	26	1.131	77
78	Moose Pt	9455824	12	1.000		Fire Is.	9455912	-28	0.870	78
84	Moose Pt	9455824	10	0.978		N. F'land	9455869	24	1.118	84
85	Moose Pt	9455824	10	0.989		N. F'land	9455869	24	1.131	85
90	Moose Pt	9455824	8	0.967		N. F'land	9455869	22	1.106	90
91	Moose Pt	9455824	8	0.978		N. F'land	9455869	22	1.118	91
92	Moose Pt	9455824	8	0.989		N. F'land	9455869	22	1.131	92

Tide Zones in Sheet A.

Appendix D - Tides and Water Levels

Abstract of Times of hydrography

YEAR	DAY	START TIME (UTC)	END TIME (UTC)	COMMENTS
1999	127	04:37:45	18:39:07	Patch Test (Halibut Cove)
1999	129	01:10:11	21:57:38	On Site
1999	132	00:52:01	23:59:59	
1999	133	00:00:00	23:59:59	
1999	134	00:00:00	23:59:59	
1999	135	00:00:00	23:45:27	
1999	136	00:09:32	23:59:59	
1999	137	00:00:00	23:12:54	
1999	138	01:10:50	23:22:20	
1999	139	00:49:12	23:59:59	
1999	140	00:00:00	23:59:59	
1999	141	00:00:00	18:31:07	
1999	145	14:00:57	20:06:12	
1999	146	00:23:32	19:07:38	
1999	147	03:58:43	19:20:52	
1999	148	01:36:24	23:59:59	
1999	149	00:00:00	00:14:59	
1999	150			
1999	151			
1999	152	13:11:36	23:59:59	
1999	153	00:00:00	23:47:03	
1999	154	00:04:09	23:49:15	
1999	155	00:32:28	23:59:59	
1999	156	00:00:00	23:18:24	
1999	157	00:07:28	23:59:59	
1999	158	00:04:00	23:43:45	
1999	159	00:02:00	23:59:59	
1999	160	00:00:00	23:59:59	
1999	161	00:00:00	21:58:05	
1999	162	19:00:04	23:59:59	
1999	163	00:00:00	23:57:40	
1999	164	00:01:53	23:59:59	
1999	165	00:00:00	23:38:22	End of Survey

All time UTC.