

## **CRUISE REPORT**

**Cruise Number:** SU-9503 Leg-1

**FOCI Number:** FOCI

**NOAA Ship:** SURVEYOR

**Area of Operations:** Bering Sea

**Itinerary:** Departed Dutch Harbor, August 22, 1995

Arrived Dutch Harbor, September 6, 1995

### **Participating Organizations:**

**Chief Scientist:**

William Parker

**Affiliation:**

NOAA/PMEL

**Personnel:**

Carol Dewitt

Carrie Hadden

Nancy McCallister

**Affiliation:**

NOAA/PMEL

NOAA/PMEL

Teacher-at-Sea

### **Objectives of Cruise:**

Deploy four Pressure Gauge Moorings. Recover two surface, three ADCP Trawl Resistant Moorings and three subsurface Aanderaa Current Meter Moorings. Conduct CTD operations.

### **Summary of Operations:**

Surveyor proceeded from Dutch Harbor to begin CTD Line I. Mooring F-94B03 was recovered during Line 1 CTD transit. CTD Lines II, III, IV were occupied with Mooring F-9402 recovered at the finish of Line IV. CTD Lines V, VI, IX and X were completed north of Amuka Pass. Mooring F-9401 was recovered after completion of Line X.

With poor weather clearing we returned to Amukta Pass to complete four Pressure Gauge Mooring deployments and CTD Line VII and VIII.

After completing Line XI in the Bering, the Surveyor recovered moorings: F-95BSM-3A, F-95BSS-3, F-95BSM-2A, F-95BSS-2, F-95BSS-1.

The last CTD sections occupied were Line XVI in the Gulf and Lines XV, XIV, XIII and XII, the Unimak CTD square.

The order of cruise operations is listed in the attachment.

### **Operations:**

CTD casts: 112

Mooring deployments: 4

Mooring recoveries: 8

**Acknowledgements:**

We would thank the C.O. Mike McCallister and the officers and crew of the NOAA Ship Surveyor for their cooperation and assistance in meeting the cruise objectives. Special thanks to the Field Operations Officers, Lt. James Bunn, Chief Survey Tech Earl Krick, Survey Techs Michale Bates, Mindy Kayl, Chief King Claggett and the deck force for their help and assistance.

TABLE 1 SU95-03 CRUISE SUMMARY

Physical Oceanography										18 August - 6 September 1995
Date	Date	Time	Cast	DSDB	Depth	Latitude	Longitude	Comments		
(JD)	(GMT)	(GMT)	No.	ID	(m)					
21-Aug	233	1402	CTD001	1	47	54° 27.3' N	165° 00.0' W	Line XVI, Station 95		
		1510	CTD002	2	135	54° 24.8' N	165° 07.7' W	Line XVI, Station 94		
		1640	CTD003	3	182	54° 22.1' N	165° 16.1' W	Line XVI, Station 93		
		1748	CTD004	4	151	54° 19.9' N	165° 25.4' W	Line XVI, Station 92		
								Dutch Harbor		
22-Aug	234	0125	CTD005	5	88	54° 14.9' N	165° 50.3' W	Line XV, Station 91		
		0301	CTD006	6	489	54° 21.6' N	165° 55.8' W	Line XV, Station 90		
		0432	CTD007	7	453	54° 28.4' N	166° 02.8' W	Line XV, Station 89		
		0554	CTD008	8	421	54° 34.6' N	166° 09.0' W	Line XV, Station 88		
		0709	CTD009	9	293	54° 41.3' N	166° 14.9' W	Line XV, Station 87		
		0820	CTD010	10	224	54° 45.0' N	166° 03.1' W	Line XIV, Station 86		
		0927	CTD011	11	182	54° 48.4' N	165° 51.3' W	Line XIV, Station 85		
		1027	CTD012	12	160	54° 52.0' N	165° 40.3' W	Line XIV, Station 84		
		1134	CTD013	13	133	54° 55.7' N	165° 28.2' W	Line XIV, Station 83		
		1235	CTD014	14	113	54° 59.2' N	165° 17.2' W	Line XIV, Station 82		
		1339	CTD015	15	109	55° 02.9' N	165° 06.0' W	Line XIII, Station 81		
		1443	CTD016	16	88	54° 56.3' N	164° 59.4' W	Line XIII, Station 80		
								Dutch Harbor		
24-Aug	236	0412	CTD017	17	7191	50° 42.6' N	173° 29.6' W	Line I, Station 1		
		0803	CTD018	18	5579	51° 01.1' N	173° 32.7' W	Line I, Station 2		
		1133	CTD019	19	4741	51° 13.9' N	173° 31.3' W	Line I, Station 3		
		1543	CTD020	20	4743	51° 28.8' N	173° 32.2' W	Line I, Station 4		
		1905	CTD021	21	4212	51° 37.8' N	173° 32.0' W	Line I, Station 5		
		2212	CTD022	22	3484	51° 43.6' N	173° 32.4' W	Line I, Station 6		
Aug	237	0048	CTD023	23	1590	51° 49.5' N	173° 32.8' W	Line I, Station 7		
		0221	CTD024	24	800	51° 52.8' N	173° 32.5' W	Line I, Station 8		
		0535		25	1180	51° 52.3' N	173° 31.1' W	Recovered mooring F-95B03		
		0916	CTD025	26	112	51° 54.9' N	173° 30.8' W	Line I, Station 9		
		1738	CTD026	27	1207	52° 09.1' N	176° 07.3' W	Line II, Station 10		
		2020	CTD027	28	1306	52° 09.3' N	176° 08.1' W	Line II, Station 10		
		2214	CTD028	29	2292	52° 12.2' N	176° 08.4' W	Line II, Station 11		
26-Aug	238	0005	CTD029	30	2914	52° 17.0' N	176° 07.4' W	Line II, Station 12		
		0300	CTD030	31	3569	52° 32.4' N	176° 07.5' W	Line II, Station 13		
		0540	CTD031	32	3705	52° 45.9' N	176° 07.2' W	Line II, Station 14		
		0826	CTD032	33	3739	53° 01.6' N	176° 06.5' W	Line II, Station 15		
		1207	CTD033	34	3760	53° 28.1' N	176° 06.5' W	Line II, Station 16		
		1534	CTD034	35	3806	53° 28.3' N	175° 29.7' W	Line III, Station 17		
		1842	CTD035	36	3716	53° 28.0' N	174° 50.1' W	Line III, Station 18		
		2201	CTD036	37	3654	53° 29.2' N	174° 07.5' W	Line IV, Station 19		
27-Aug	239	0128	CTD037	38	3509	53° 09.4' N	174° 07.0' W	Line IV, Station 20		
		0335	CTD038	39	3394	53° 00.6' N	174° 06.5' W	Line IV, Station 20A		
		0822	CTD039	40	3296	52° 52.1' N	174° 07.0' W	Line IV, Station 21		
		1030	CTD040	41	2583	52° 42.2' N	174° 06.3' W	Line IV, Station 21A		
		1237	CTD041	42	2105	52° 33.4' N	174° 06.7' W	Line IV, Station 22		
		1428	CTD042	43	1203	52° 27.5' N	174° 06.6' W	Line IV, Station 23		
		1542	CTD043	44	724	52° 25.5' N	174° 06.7' W	Line IV, Station 24		
		1650		45	1033	52° 26.3' N	174° 05.7' W	Recovered mooring F-94B02		
		2138	CTD044	46	1998	52° 44.7' N	173° 39.7' W	Line V, Station 25		
Aug	240	0030	CTD045	47	2914	53° 00.0' N	173° 20.3' W	Line V, Station 26		
		0354	CTD046	48	3142	53° 19.7' N	172° 49.5' W	Line V, Station 27		
		0742	CTD047	49	3381	53° 43.7' N	172° 11.0' W	Line VI, Station 28		

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		Oceanography							18 August - 6 September 1995	
Date (JD)	Date (GMT)	Time (GMT)	Cast No.	DSDB ID	Depth (m)	Latitude	Longitude	Comments		
		1032	CTD048	50	2588	53° 22.8' N	172° 11.0' W	Line VI, Station 29		
		1320	CTD049	51	1764	53° 05.5' N	172° 11.5' W	Line VI, Station 30		
		1604	CTD050	52	1164	52° 48.0' N	172° 11.6' W	Line VI, Station 31		
		1741	CTD051	53	776	52° 41.8' N	172° 10.6' W	Line VI, Station 32		
		1928	CTD052	54	797	52° 36.8' N	171° 50.3' W	Line IX, Station 47		
		2217	CTD053	55	1503	52° 57.4' N	171° 33.1' W	Line IX, Station 48		
29-Aug	241	0106	CTD054	56	2172	53° 10.8' N	171° 22.4' W	Line IX, Station 49		
		0406	CTD055	57	2942	53° 28.0' N	171° 06.6' W	Line IX, Station 50		
		0708	CTD051	58	1873	53° 49.0' N	170° 49.7' W	Line IX, Station 51		
		0948	CTD057	59	1878	54° 04.9' N	170° 35.6' W	Line X, Station 52		
		1239	CTD058	60	1954	53° 48.3' N	170° 31.5' W	Line X, Station 53		
		1535	CTD059	61	2675	53° 30.6' N	170° 26.2' W	Line X, Station 54		
		1752	CTD060	62	1812	53° 19.5' N	170° 24.3' W	Line X, Station 55		
		2005	CTD061	63	1420	53° 10.0' N	170° 23.1' W	Line X, Station 56		
		2140	CTD062	64	910	53° 08.0' N	170° 15.8' W	Line X, Station 57		
		2252	CTD063	65	540	53° 04.9' N	170° 15.6' W	Line X, Station 58		
30-Aug	242	0101		66		53° 08.4' N	170° 17.6' W	Recovered mooring F-94B01		
		0656	CTD064	67	410	52° 37.0' N	170° 56.8' W	Line VII, Station 38		
		0823	CTD065	68	464	52° 27.5' N	171° 05.0' W	Line VII, Station 37		
		1038	CTD066	69	516	52° 25.4' N	171° 32.1' W	Line VII, Station 36		
		1215	CTD067	70	293	52° 22.5' N	171° 44.4' W	Line VII, Station 35		
		1335	CTD068	71	343	52° 21.9' N	171° 58.8' W	Line VII, Station 34		
		1446	CTD069	72	387	52° 22.0' N	171° 07.9' W	Line VII, Station 33		
		2214		73	314	52° 23.7' N	172° 10.6' W	Deploy mooring AP4		
31-Aug	243	0015		74	319	52° 22.3' N	171° 57.3' W	Deploy mooring AP3		
		0152		75	317	52° 21.3' N	171° 43.0' W	Deploy mooring AP2		
		0253		76	315	52° 20.9' N	171° 36.0' W	Deploy mooring AP1		
		0605	CTD070	77	309	52° 28.5' N	170° 34.0' W	Line VIII, Station 39		
		0728	CTD071	78	520	52° 19.8' N	170° 31.8' W	Line VIII, Station 40		
		0909	CTD072	79	1344	52° 11.8' N	170° 31.0' W	Line VIII, Station 41		
		1127	CTD073	80	2809	52° 05.5' N	170° 27.1' W	Line VIII, Station 42		
		1425	CTD074	81	3424	51° 57.0' N	170° 23.4' W	Line VIII, Station 43		
		1735	CTD075	82	3623	51° 46.0' N	170° 18.3' W	Line VIII, Station 44		
		2109	CTD076	83	3754	51° 31.2' N	170° 12.2' W	Line VIII, Station 45		
1-Sep	244	0159	CTD077	84	7156	51° 14.4' N	170° 04.0' W	Line VIII, Station 46		
		1503	CTD078	85	1370	53° 32.9' N	168° 34.9' W	Line XI, Station 59		
		1700	CTD079	86	1320	53° 37.8' N	168° 35.4' W	Line XI, Station 60		
		1857	CTD080	87	1670	53° 45.7' N	168° 36.2' W	Line XI, Station 61		
		2122	CTD081	88	1933	53° 57.6' N	168° 40.6' W	Line XI, Station 62		
2-Sep	245	0005	CTD082	89	2101	54° 15.0' N	168° 44.3' W	Line XI, Station 63		
		0256	CTD083	90	1428	54° 32.6' N	168° 50.5' W	Line XI, Station 64		
		1445	CTD084	91	121	56° 01.9' N	166° 25.6' W	CTD at mooring F-95BSM-3A		
		1724		92	123	56° 02.0' N	166° 24.3' W	Recovered mooring F-95BSM-3A/F-95BSS-3		
3-Sep	246	0321	CTD085	93	73	56° 35.9' N	164° 39.0' W	CTD at mooring F-95BSM-2A		
		0539		94	78	56° 35.4' N	164° 37.2' W	Recovered mooring F-95BSM-2A/F-95BSS-2		
		1644	CTD086	95	66	55° 05.1' N	164° 32.6' W	CTD at mooring F-95BSS-1		
		1802		96	68	55° 04.5' N	164° 32.1' W	Recovered mooring F-95BSS-1		
4-Sep	247	0527	CTD087	97	84	54° 30.7' N	163° 59.7' W	Line XVI, Station 86		
		0639	CTD088	98	79	54° 23.8' N	163° 54.1' W	Line XVI, Station 87		
		0741	CTD089	99	110	54° 17.8' N	163° 48.5' W	Line XVI, Station 88		
		0842	CTD090	100	78	54° 11.9' N	163° 40.7' W	Line XVI, Station 89		

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Physical Oceanography

18 August - 6 September 1995

(JD)	Date (GMT)	Time (GMT)	Cast No.	DSDB ID	Depth (m)	Latitude	Longitude	Comments
		0949	CTD091	101	89	54° 04.3' N	163° 34.8' W	Line XVI, Station 90
		1100	CTD092	102	96	53° 57.9' N	163° 29.2' W	Line XVI, Station 91
		1228	CTD093	103	675	53° 51.9' N	163° 24.3' W	Line XVI, Station 92
		1452	CTD094	104	1683	53° 44.7' N	163° 18.1' W	Line XVI, Station 93
		1716	CTD095	105	2433	53° 37.5' N	163° 10.9' W	Line XVI, Station 94
5-Sep	248	0103	CTD096	106	52	54° 27.3' N	165° 00.5' W	Line XV, Station 85
		0315	CTD097	107	133	54° 25.3' N	165° 08.7' W	Line XV, Station 84
		0420	CTD098	108	170	54° 22.4' N	165° 16.9' W	Line XV, Station 83
		0521	CTD099	109	148	54° 20.3' N	165° 25.3' W	Line XV, Station 82
		0701	CTD100	110	78	54° 15.0' N	165° 50.0' W	Line XIV, Station 81
		0906	CTD101	111	543	54° 28.3' N	166° 03.2' W	Line XIV, Station 79
		1033	CTD102	112	424	54° 34.7' N	166° 09.6' W	Line XIV, Station 78
		1213	CTD103	113	291	54° 41.4' N	166° 15.2' W	Line XIV, Station 77
		1351	CTD104	114	224	54° 44.9' N	166° 03.3' W	Line XIV, Station 76
		1516	CTD105	115	165	54° 48.5' N	165° 52.1' W	Line XIII, Station 75
		1727	CTD106	116	147	54° 51.9' N	165° 40.3' W	Line XIII, Station 74
		1924	CTD107	117	123	54° 55.6' N	165° 28.7' W	Line XIII, Station 73
		2052	CTD108	118	114	54° 59.4' N	165° 17.9' W	Line XIII, Station 72
		2213	CTD109	119	110	55° 03.1' N	165° 05.3' W	Line XII, Station 71
		2327	CTD110	120	88	54° 56.1' N	164° 59.1' W	Line XII, Station 70
6-Sep	249	0034	CTD111	121	74	54° 49.3' N	164° 53.4' W	Line XII, Station 69
		0135	CTD112	122	46	54° 43.2' N	164° 47.0' W	Line XII, Station 68