

Copy for Dr. Sorenson

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6/21/89

**MANGANESE NODULE RESOURCE DATA,
SEA SCOPE EXPEDITION**

Prepared for:

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

By:

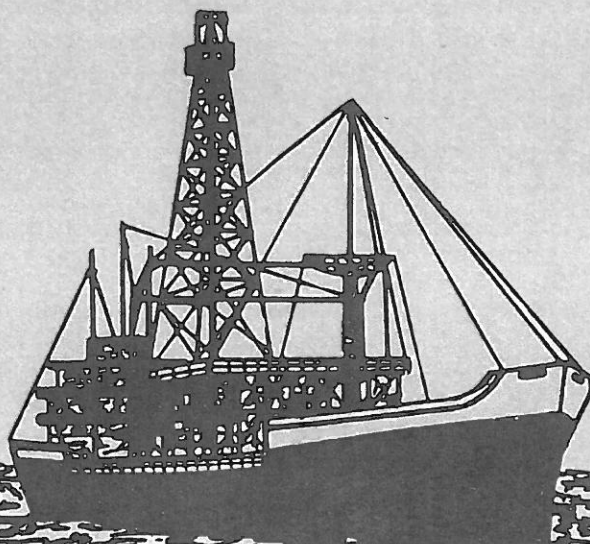
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Final Report

Grant No. G0284008-02-MAS
Manganese Nodule Resource Data,
Sea Scope Expedition

June 15, 1981



APPENDIX B
AVERAGE METAL CONTENT OF NODULES AT SEA SCOPE STATIONS
BASED UPON XRF ANALYSES AT ORE MICROSCOPY LABORATORY
WASHINGTON STATE UNIVERSITY

(See Appendix C for individual nodule analyses.)

SHIP STA.	LATITUDE	LONGITUDE	MN	FE	NI (MEAN WEIGHT PERCENT)	CU	CO	ZN
003	14.44N	117.15W	28.90	06.41	01.37	01.14	00.15	00.17
004	14.21N	118.88W	22.98	07.33	01.12	00.97	00.18	00.14
005	13.91N	120.81W	29.35	06.43	01.42	01.22	00.23	00.16
006	13.67N	122.31W	22.39	07.82	01.19	01.09	00.26	00.13
007	14.25N	123.70W	28.10	06.31	01.41	01.22	00.24	00.16
008	15.10N	125.17W	28.37	06.83	01.34	01.07	00.26	00.15
009	15.13N	125.13W	28.30	06.56	01.31	01.22	00.22	00.17
013	15.04N	125.14W	28.37	06.91	01.40	01.10	00.26	00.14
014	14.91N	126.62W	14.41	11.06	00.58	00.36	00.15	00.06
016	13.26N	126.80W	27.15	06.03	01.45	01.25	00.23	00.15
017	13.14N	128.60W	27.82	05.98	01.45	01.22	00.26	00.15
019	20.95N	113.96W	24.37	06.86	01.26	01.25	00.17	00.13
020	20.93N	113.95W	25.91	10.25	01.11	00.72	00.15	00.16
021	20.91N	113.96W	25.90	09.88	01.12	00.74	00.15	00.16
022	20.95N	113.96W	25.40	08.55	01.10	00.80	00.14	00.16
023	20.94N	113.93W	25.73	09.90	01.06	00.71	00.14	00.16
024	20.88N	113.97W	26.34	09.17	01.05	00.80	00.14	00.14
025	20.95N	113.99W	26.11	10.45	01.08	00.69	00.15	00.16
026	20.93N	113.97W	25.99	09.82	00.99	00.76	00.15	00.15
027	20.94N	113.97W	26.20	09.86	01.09	00.74	00.15	00.16
028	20.96N	113.99W	26.41	10.32	01.10	00.69	00.15	00.17
029	20.97N	113.99W	26.31	10.38	01.09	00.67	00.15	00.17
030	20.91N	113.97W	26.20	10.16	01.13	00.70	00.15	00.15
031	20.96N	113.93W	26.25	09.72	01.10	00.71	00.14	00.15
032	20.92N	113.93W	26.05	09.81	01.13	00.72	00.14	00.15
033	20.95N	113.96W	26.47	09.97	01.12	00.69	00.15	00.16
036	19.61N	115.30W	26.78	09.19	01.17	00.79	00.17	00.17
037	19.66N	115.31W	27.34	08.19	01.14	00.83	00.17	00.18
038	19.69N	115.33W	26.99	08.78	01.20	00.83	00.18	00.17
041	12.53N	122.46W	31.00	04.96	01.32	01.37	00.17	00.19
044	19.98N	166.08W	09.56	12.56	00.60	00.41	00.19	00.07
050	06.84N	166.89W	23.12	14.73	00.64	00.44	00.35	00.07
052	06.83N	167.02W	23.14	14.07	00.69	00.47	00.33	00.07
053	06.78N	166.88W	24.34	11.90	00.92	00.66	00.30	00.10
057	07.80N	156.32W	26.41	08.23	01.29	01.34	00.22	00.11
058	07.83N	154.82W	27.55	06.93	01.39	01.46	00.19	00.13
059	08.10N	153.92W	28.91	06.04	01.45	01.57	00.18	00.15
060	08.10N	152.60W	20.03	09.12	01.01	00.80	00.23	00.09
063	08.27N	150.99W	28.85	06.55	01.46	01.37	00.21	00.15
065	08.74N	147.53W	30.40	05.65	01.50	01.28	00.19	00.15

SHIP STA.	LATITUDE	LONGITUDE	MN	FE	NI (MEAN WEIGHT PERCENT)	CU	CO	ZN
066	08.73N	147.59W	29.34	05.30	01.51	01.37	00.18	00.14
068	08.58N	147.78W	29.53	05.32	01.45	01.37	00.17	00.14
069	08.97N	146.67W	30.52	05.54	01.35	01.16	00.19	00.15
070	08.96N	145.81W	29.43	04.75	01.63	01.40	00.16	00.15
072	08.98N	145.11W	30.79	05.60	01.46	01.24	00.18	00.15
074	09.66N	146.33W	25.71	07.24	01.28	01.06	00.20	00.12
079	11.13N	148.07W	29.34	06.25	01.43	01.19	00.22	00.14
080	10.98N	148.33W	26.32	06.28	01.34	01.15	00.21	00.13
083	11.12N	148.50W	23.43	04.73	01.20	01.00	00.19	00.13
084	11.93N	146.45W	25.92	06.44	01.30	01.01	00.23	00.13
085	11.80N	148.66W	28.92	05.71	01.34	01.32	00.20	00.14
086	12.02N	149.30W	26.86	06.47	01.30	01.15	00.23	00.14
087	11.97N	150.31W	26.00	05.87	01.28	01.18	00.21	00.12
089	11.49N	149.18W	23.88	07.79	01.19	00.86	00.26	00.12
090	11.51N	148.58W	20.65	04.59	01.06	00.94	00.16	00.12
091	23.50N	161.01W	27.36	05.72	01.21	01.18	00.21	00.15
092	25.06N	163.65W	09.99	12.83	00.51	00.31	00.21	00.06
093	26.50N	165.96W	15.30	12.75	00.71	00.44	00.24	00.06
094	28.40N	169.05W	22.56	11.79	01.00	00.61	00.30	00.09
095	30.28N	172.27W	20.26	11.80	00.87	00.62	00.28	00.07
096	31.33N	174.02W	16.66	11.09	00.69	00.47	00.20	00.06
097	31.29N	174.03W	16.79	12.21	00.62	00.43	00.23	00.06
098	31.28N	174.03W	17.70	12.73	00.64	00.45	00.25	00.06
099	31.26N	174.03W	19.56	12.29	00.73	00.52	00.25	00.06
103	31.66N	175.60W	18.92	12.21	00.75	00.51	00.24	00.07
104	31.97N	177.33W	13.57	08.79	00.71	00.45	00.15	00.07
105	32.41N	179.18W	03.98	06.48	00.18	00.10	00.08	00.08
106	33.13N	177.08E	19.56	12.89	00.62	00.33	00.31	00.07
111	40.30N	173.77E	08.73	07.60	00.50	00.24	00.10	00.07
112	40.34N	175.63E	12.38	10.45	00.57	00.31	00.12	00.06
114	39.35N	179.73E	17.06	10.70	00.75	00.49	00.15	00.08
115	38.94N	178.62W	18.75	09.83	00.50	00.40	00.15	00.06
122	37.72N	174.49W	18.36	13.91	00.49	00.22	00.35	00.05
124	33.74N	168.84W	18.62	13.63	00.70	00.39	00.34	00.06
125	31.73N	165.72W	15.95	10.85	00.70	00.43	00.15	00.08
126	30.67N	164.31W	19.90	12.05	00.87	00.56	00.30	00.07
127	30.69N	164.44W	20.88	12.19	00.87	00.56	00.31	00.08
131	30.63N	164.41W	16.71	12.01	00.63	00.44	00.23	00.06
132	30.66N	164.35W	20.38	12.43	00.88	00.54	00.31	00.08
134	27.53N	161.16W	21.80	10.94	01.00	00.66	00.29	00.08

SHIP STA.	LATITUDE	LONGITUDE	MN	FE	NI (MEAN WEIGHT PERCENT)	CU	CO	ZN
135	25.26N	160.30W	04.42	25.95	01.05	00.21	00.25	00.06
138	21.85N	159.37W	06.55	13.60	00.27	00.08	00.25	00.05
141	21.88N	159.32W	20.92	18.93	00.29	00.06	00.76	00.04
148	25.00N	153.07W	17.79	12.65	00.66	00.46	00.33	00.07
149	27.57N	150.57W	11.40	06.74	00.74	00.46	00.22	00.06
150	30.01N	147.98W	10.13	12.96	00.51	00.30	00.29	00.06
151	33.05N	144.52W	19.65	12.44	00.85	00.61	00.29	00.07
152	36.01N	141.02W	15.03	13.89	00.55	00.34	00.34	00.05
153	37.52N	138.51W	16.11	13.57	00.61	00.38	00.33	00.06
154	39.00N	136.02W	16.05	10.63	00.78	00.45	00.25	00.08
155	36.02N	132.91W	16.34	14.81	00.58	00.38	00.26	00.06
156	32.99N	130.11W	19.22	11.34	00.92	00.64	00.21	00.09
157	33.12N	126.62W	15.84	09.97	00.78	00.52	00.18	00.08

APPENDIX C
CONTENT OF MAJOR METALS IN SEA SCOPE MANGANESE NODULES
ANALYZED BY XRF AT ORE MICROSCOPY LABORATORY
WASHINGTON STATE UNIVERSITY

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE (WEIGHT PERCENT)	NI	CU	CO	ZN
001	14.44N	117.15W	003	01	28.34	06.56	01.37	01.15	00.15	00.16
002	14.44N	117.15W	003	02	29.45	06.26	01.37	01.13	00.15	00.17
003	14.21N	118.88W	004	01	28.90	06.43	01.41	01.18	00.19	00.17
004	14.21N	118.88W	004	02	30.72	05.84	01.42	01.22	00.18	00.19
005	14.21N	118.88W	004	03	29.08	07.12	01.37	01.05	00.19	00.17
006	14.21N	118.88W	004	04	15.31	11.95	00.55	00.49	00.16	00.07
007	14.21N	118.88W	004	05	27.02	07.57	01.37	01.15	00.21	00.16
008	14.21N	118.88W	004	06	06.83	05.08	00.62	00.72	00.13	00.07
009	13.91N	120.81W	005	01	32.03	05.45	01.22	01.07	00.17	00.21
010	13.91N	120.81W	005	02	29.75	06.30	01.40	01.26	00.24	00.17
011	13.91N	120.81W	005	03	29.25	06.72	01.46	01.27	00.24	00.15
012	13.91N	120.81W	005	04	27.18	06.92	01.46	01.24	00.24	00.14
013	13.91N	120.81W	005	05	28.52	06.75	01.54	01.26	00.24	00.15
014	13.67N	122.31W	006	01	17.14	08.82	01.01	00.87	00.22	00.12
015	13.67N	122.31W	006	02	24.59	07.79	01.24	01.18	00.27	00.14
016	13.67N	122.31W	006	03	25.96	06.66	01.30	01.26	00.28	00.15
017	13.67N	122.31W	006	04	22.63	06.72	01.27	01.11	00.26	00.14
018	13.67N	122.31W	006	05	21.64	09.10	01.14	01.02	00.25	00.12
019	14.25N	123.70W	007	01	28.05	06.53	01.45	01.19	00.22	00.15
020	14.25N	123.70W	007	02	30.14	06.28	01.38	01.26	00.22	00.18
021	14.25N	123.70W	007	03	28.87	06.06	01.39	01.25	00.21	00.17
022	14.25N	123.70W	007	04	27.72	06.99	01.46	01.19	00.30	00.14
023	14.25N	123.70W	007	05	25.70	05.71	01.38	01.21	00.25	00.15
024	15.10N	125.17W	008	01	28.88	06.12	01.36	01.03	00.20	00.16
025	15.10N	125.17W	008	02	28.82	06.80	01.35	01.16	00.25	00.15
026	15.10N	125.17W	008	03	29.16	06.03	01.29	01.14	00.21	00.17
027	15.10N	125.17W	008	04	27.30	07.78	01.34	00.97	00.31	00.12
028	15.10N	125.17W	008	05	27.71	07.42	01.36	01.04	00.31	00.13
029	15.13N	125.13W	009	01	28.94	06.42	01.29	01.28	00.22	00.16
030	15.13N	125.13W	009	02	29.03	06.30	01.40	01.31	00.20	00.17
031	15.13N	125.13W	009	03	27.12	07.13	01.25	01.13	00.22	00.16
032	15.13N	125.13W	009	04	28.82	05.79	01.30	01.34	00.22	00.19
033	15.13N	125.13W	009	05	27.61	07.17	01.29	01.06	00.24	00.15
034	15.04N	125.14W	013	01	29.13	06.67	01.43	01.13	00.25	00.14
035	15.04N	125.14W	013	02	28.12	06.77	01.36	01.08	00.25	00.14
036	15.04N	125.14W	013	03	27.64	06.71	01.41	01.08	00.25	00.14
037	15.04N	125.14W	013	04	28.64	06.88	01.41	01.09	00.27	00.15
038	15.04N	125.14W	013	05	28.32	07.51	01.38	01.11	00.30	00.14
039	14.91N	126.62W	014	01	16.89	11.56	00.67	00.41	00.15	00.07
040	14.91N	126.62W	014	02	18.74	10.07	00.85	00.54	00.14	00.09

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE	NI	CU	CO	ZN
					(WEIGHT PERCENT)					
041	14.91N	126.62W	014	03	11.59	11.08	00.44	00.29	00.14	00.05
042	14.91N	126.62W	014	04	13.41	10.98	00.53	00.33	00.15	00.05
043	14.91N	126.62W	014	05	11.42	11.63	00.39	00.24	00.15	00.04
044	13.26N	126.80W	016	01	28.57	05.39	01.54	01.31	00.21	00.18
045	13.26N	126.80W	016	02	26.30	06.97	01.34	01.15	00.26	00.14
046	13.26N	126.80W	016	03	27.33	06.17	01.43	01.21	00.25	00.16
047	13.26N	126.80W	016	04	28.90	05.17	01.56	01.42	00.20	00.16
048	13.26N	126.80W	016	05	24.67	06.45	01.38	01.16	00.21	00.12
049	13.14N	128.60W	017	01	29.48	06.13	01.50	01.20	00.22	00.15
050	13.14N	128.60W	017	02	23.90	05.30	01.37	01.28	00.28	00.11
051	13.14N	128.60W	017	03	28.03	05.94	01.32	01.19	00.24	00.18
052	13.14N	128.60W	017	04	29.47	05.90	01.54	01.26	00.25	00.16
053	13.14N	128.60W	017	05	28.24	06.63	01.50	01.19	00.30	00.13
054	20.95N	113.96W	019	01	26.71	06.23	01.41	01.42	00.18	00.14
055	20.95N	113.96W	019	02	28.83	05.69	01.54	01.57	00.17	00.14
056	20.95N	113.96W	019	03	26.03	06.65	01.40	01.44	00.19	00.13
057	20.95N	113.96W	019	04	13.10	09.75	00.62	00.38	00.12	00.06
058	20.95N	113.96W	019	05	27.18	05.98	01.35	01.43	00.17	00.16
059	20.93N	113.95W	020	01	25.77	10.24	01.08	00.72	00.15	00.16
060	20.93N	113.95W	020	02	26.27	10.27	01.09	00.71	00.15	00.17
061	20.93N	113.95W	020	03	25.95	10.19	01.14	00.73	00.15	00.16
062	20.93N	113.95W	020	04	25.66	10.28	01.11	00.71	00.15	00.16
063	20.91N	113.96W	021	01	25.34	10.12	01.12	00.73	00.15	00.15
064	20.91N	113.96W	021	02	26.79	09.39	01.14	00.79	00.14	00.18
065	20.91N	113.96W	021	03	25.26	10.16	01.08	00.69	00.14	00.15
066	20.91N	113.96W	021	04	26.19	09.83	01.15	00.74	00.15	00.17
067	20.95N	113.96W	022	01	27.58	08.12	01.21	00.85	00.14	00.16
068	20.95N	113.96W	022	02	28.49	07.12	01.21	00.88	00.11	00.19
069	20.95N	113.96W	022	03	28.35	08.35	01.13	00.78	00.12	00.21
070	20.95N	113.96W	022	04	17.52	09.39	00.83	00.64	00.17	00.10
071	20.95N	113.96W	022	05	25.06	09.77	01.11	00.84	00.18	00.15
072	20.94N	113.93W	023	01	25.09	09.66	01.03	00.74	00.14	00.14
073	20.94N	113.93W	023	02	25.61	10.14	01.07	00.71	00.14	00.16
074	20.94N	113.93W	023	03	25.53	09.83	01.08	00.72	00.14	00.15
075	20.94N	113.93W	023	04	26.50	09.85	01.04	00.68	00.14	00.18
076	20.94N	113.93W	023	05	25.94	10.00	01.07	00.71	00.14	00.16
077	20.88N	113.97W	024	01	26.38	09.08	01.04	00.81	00.14	00.15
078	20.88N	113.97W	024	02	26.49	09.22	01.06	00.81	00.15	00.13
079	20.88N	113.97W	024	03	26.15	09.21	01.04	00.79	00.14	00.15
080	20.95N	113.99W	025	01	27.08	10.17	01.08	00.66	00.15	00.18

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE	NI	CU	CO	ZN
					(WEIGHT PERCENT)					
081	20.95N	113.99W	025	02	26.00	10.62	01.15	00.76	00.15	00.15
082	20.95N	113.99W	025	03	26.30	10.47	01.10	00.73	00.15	00.16
083	20.95N	113.99W	025	04	26.03	10.24	01.10	00.69	00.15	00.15
084	20.95N	113.99W	025	05	25.15	10.76	00.97	00.62	00.15	00.14
085	20.93N	113.97W	026	01	26.61	09.33	01.17	00.79	00.14	00.15
086	20.93N	113.97W	026	02	26.14	09.79	00.71	00.76	00.15	00.14
087	20.93N	113.97W	026	03	25.21	10.35	01.08	00.73	00.15	00.15
088	20.94N	113.97W	027	01	26.44	09.98	01.02	00.77	00.15	00.15
089	20.94N	113.97W	027	02	25.66	10.14	01.10	00.70	00.15	00.16
090	20.94N	113.97W	027	03	26.33	09.57	01.11	00.77	00.14	00.16
091	20.94N	113.97W	027	04	26.37	09.73	01.14	00.72	00.15	00.17
092	20.96N	113.99W	028	01	26.89	09.89	01.11	00.72	00.14	00.18
093	20.96N	113.99W	028	02	26.67	10.18	01.12	00.71	00.15	00.16
094	20.96N	113.99W	028	03	26.53	10.25	01.12	00.66	00.15	00.17
095	20.96N	113.99W	028	04	26.31	10.39	01.06	00.67	00.15	00.17
096	20.96N	113.99W	028	05	25.63	10.89	01.08	00.69	00.16	00.15
097	20.97N	113.99W	029	01	26.04	10.72	01.13	00.68	00.16	00.16
098	20.97N	113.99W	029	02	26.44	10.23	01.10	00.67	00.15	00.18
099	20.97N	113.99W	029	03	26.38	09.99	01.04	00.65	00.14	00.18
100	20.97N	113.99W	029	04	26.07	10.23	01.05	00.70	00.15	00.17
101	20.97N	113.99W	029	05	26.61	10.74	01.13	00.63	00.16	00.16
102	20.91N	113.97W	030	01	25.74	10.04	01.12	00.70	00.15	00.15
103	20.91N	113.97W	030	02	26.56	10.14	01.13	00.69	00.16	00.16
104	20.91N	113.97W	030	03	26.29	10.29	01.13	00.72	00.15	00.15
105	20.96N	113.93W	031	01	26.61	09.98	01.13	00.68	00.15	00.16
106	20.96N	113.93W	031	02	26.17	09.69	01.14	00.75	00.14	00.15
107	20.96N	113.93W	031	03	25.85	09.47	01.08	00.70	00.14	00.15
108	20.96N	113.93W	031	04	26.38	09.72	01.12	00.72	00.14	00.15
109	20.92N	113.93W	032	01	25.66	09.72	01.12	00.71	00.14	00.14
110	20.92N	113.93W	032	02	26.36	09.49	01.17	00.74	00.14	00.15
111	20.92N	113.93W	032	03	26.14	10.21	01.11	00.72	00.15	00.15
112	20.95N	113.96W	033	01	24.90	10.05	01.09	00.67	00.14	00.14
113	20.95N	113.96W	033	02	26.62	09.63	01.16	00.72	00.15	00.15
114	20.95N	113.96W	033	03	26.92	10.01	01.07	00.65	00.14	00.17
115	20.95N	113.96W	033	04	27.10	10.00	01.17	00.72	00.15	00.16
116	20.95N	113.96W	033	05	26.83	10.15	01.13	00.70	00.15	00.16
117	19.61N	115.30W	036	01	27.47	08.98	01.16	00.74	00.17	00.19
118	19.61N	115.30W	036	02	26.35	09.30	01.15	00.77	00.17	00.16
119	19.61N	115.30W	036	03	26.44	09.02	01.20	00.85	00.17	00.15
120	19.61N	115.30W	036	04	26.86	09.44	01.17	00.80	00.17	00.16

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE	NI	CU	CO	ZN
					(WEIGHT PERCENT)					
121	12.53N	122.46W	041	01	30.46	04.59	01.38	01.51	00.15	00.21
122	12.53N	122.46W	041	02	30.46	04.38	01.36	01.52	00.15	00.23
123	12.53N	122.46W	041	03	30.87	04.84	01.41	01.43	00.17	00.20
124	12.53N	122.46W	041	04	31.16	05.60	01.14	01.18	00.22	00.13
125	12.53N	122.46W	041	05	32.06	05.39	01.33	01.20	00.18	00.18
126	19.66N	115.31W	037	01	28.19	07.12	01.22	00.93	00.18	00.22
127	19.66N	115.31W	037	02	27.78	08.32	01.12	00.82	00.17	00.17
128	19.66N	115.31W	037	03	26.04	09.12	01.07	00.75	00.17	00.15
129	19.69N	115.33W	038	01	27.49	07.81	01.29	00.90	00.18	00.19
130	19.69N	115.33W	038	02	26.64	08.14	01.27	00.90	00.18	00.18
131	19.69N	115.33W	038	03	26.38	09.45	01.17	00.80	00.19	00.15
132	19.69N	115.33W	038	04	27.47	09.12	01.13	00.79	00.17	00.16
133	19.69N	115.33W	038	05	26.99	09.38	01.13	00.77	00.18	00.18
134	19.98N	166.08W	044	01	10.45	13.39	00.61	00.42	00.20	00.07
135	19.98N	166.08W	044	02	07.10	11.93	00.48	00.29	00.17	00.06
136	19.98N	166.08W	044	03	11.14	12.37	00.72	00.51	00.21	00.07
137	06.84N	166.89W	050	01	22.61	14.92	00.65	00.43	00.37	00.07
138	06.84N	166.89W	050	02	22.74	14.73	00.60	00.42	00.33	00.06
139	06.84N	166.89W	050	03	23.86	13.84	00.63	00.52	00.32	00.07
140	06.84N	166.89W	050	04	22.77	15.34	00.64	00.39	00.35	00.07
141	06.84N	166.89W	050	05	23.62	14.80	00.67	00.46	00.37	00.07
142	06.83N	167.02W	052	01	22.97	14.43	00.67	00.42	00.35	00.07
143	06.83N	167.02W	052	02	23.42	14.05	00.68	00.48	00.33	00.07
144	06.83N	167.02W	052	03	23.02	13.89	00.74	00.52	00.33	00.08
145	06.83N	167.02W	052	04	23.16	13.92	00.65	00.47	00.31	00.07
146	06.78N	166.88W	053	01	23.78	11.63	00.94	00.72	00.31	00.10
147	06.78N	166.88W	053	02	24.32	12.23	00.89	00.59	00.31	00.09
148	06.78N	166.88W	053	03	25.15	11.64	00.99	00.70	00.31	00.11
149	06.78N	166.88W	053	04	23.44	12.45	00.80	00.62	00.28	00.08
150	06.78N	166.88W	053	05	25.00	11.55	00.99	00.66	00.30	00.10
151	07.80N	156.32W	057	01	27.16	07.82	01.39	01.52	00.23	00.12
152	07.80N	156.32W	057	02	26.55	08.21	01.30	01.28	00.21	00.11
153	07.80N	156.32W	057	03	26.04	08.38	01.21	01.22	00.22	00.11
154	07.80N	156.32W	057	04	25.35	08.45	01.26	01.37	00.21	00.11
155	07.80N	156.32W	057	05	26.96	08.29	01.29	01.33	00.23	00.12
156	07.83N	154.82W	058	01	28.89	06.36	01.50	01.59	00.18	00.14
157	07.83N	154.82W	058	02	29.32	06.40	01.42	01.61	00.19	00.15
158	07.83N	154.82W	058	03	26.31	07.50	01.30	01.31	00.19	00.12
159	07.83N	154.82W	058	04	26.12	07.40	01.36	01.41	00.19	00.13
160	07.83N	154.82W	058	05	27.10	07.00	01.36	01.40	00.18	00.13

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE	NI	CU	CO	ZN
					(WEIGHT PERCENT)					
161	08.10N	153.92W	059	01	29.66	05.61	01.47	01.65	00.16	00.16
162	08.10N	153.92W	059	02	26.16	06.81	01.42	01.37	00.20	00.13
163	08.10N	153.92W	059	03	30.45	05.71	01.44	01.61	00.17	00.16
164	08.10N	153.92W	059	04	29.35	06.04	01.46	01.64	00.17	00.15
165	08.10N	152.60W	060	01	22.67	10.27	01.06	00.82	00.27	00.10
166	08.10N	152.60W	060	02	26.26	10.05	01.12	00.88	00.29	00.09
167	08.10N	152.60W	060	03	12.36	08.82	00.68	00.58	00.16	00.07
168	08.10N	152.60W	060	04	19.20	08.74	01.09	00.77	00.24	00.10
169	08.10N	152.60W	060	05	19.67	07.74	01.09	00.93	00.21	00.10
170	08.27N	150.99W	063	01	28.27	06.78	01.39	01.32	00.20	00.15
171	08.27N	150.99W	063	02	28.79	06.71	01.42	01.30	00.22	00.15
172	08.27N	150.99W	063	03	29.40	05.96	01.60	01.47	00.20	00.15
173	08.27N	150.99W	063	04	29.82	06.47	01.48	01.41	00.21	00.15
174	08.27N	150.99W	063	05	27.97	06.84	01.43	01.34	00.20	00.14
175	08.74N	147.53W	065	01	29.38	05.95	01.59	01.38	00.23	00.13
176	08.74N	147.53W	065	02	29.84	05.58	01.55	01.31	00.18	00.14
177	08.74N	147.53W	065	03	31.00	05.56	01.37	01.17	00.18	00.17
178	08.74N	147.53W	065	04	30.57	05.71	01.51	01.26	00.17	00.16
179	08.74N	147.53W	065	05	31.19	05.46	01.50	01.26	00.17	00.17
180	08.73N	147.59W	066	01	29.10	05.40	01.31	01.21	00.19	00.13
181	08.73N	147.59W	066	02	29.36	05.68	01.54	01.28	00.18	00.14
182	08.73N	147.59W	066	03	29.08	05.46	01.64	01.35	00.18	00.14
183	08.73N	147.59W	066	04	29.73	05.14	01.51	01.49	00.18	00.15
184	08.73N	147.59W	066	05	29.45	04.83	01.57	01.53	00.16	00.14
185	08.58N	147.78W	068	01	30.31	05.44	01.51	01.39	00.16	00.16
186	08.58N	147.78W	068	02	26.99	04.96	01.48	01.44	00.15	00.14
187	08.58N	147.78W	068	03	29.33	05.37	01.42	01.41	00.19	00.11
188	08.58N	147.78W	068	04	30.33	05.06	01.46	01.36	00.17	00.15
189	08.58N	147.78W	068	05	30.68	05.76	01.37	01.24	00.17	00.14
190	08.97N	146.67W	069	01	31.42	05.36	01.38	01.18	00.17	00.16
191	08.97N	146.67W	069	02	29.61	05.72	01.32	01.13	00.20	00.13
192	08.96N	145.81W	070	01	29.15	04.71	01.68	01.30	00.17	00.16
193	08.96N	145.81W	070	02	29.97	04.47	01.65	01.51	00.16	00.16
194	08.96N	145.81W	070	03	27.96	04.56	01.72	01.45	00.16	00.13
195	08.96N	145.81W	070	04	30.05	04.90	01.57	01.32	00.16	00.16
196	08.96N	145.81W	070	05	30.01	05.09	01.54	01.42	00.17	00.16
197	08.98N	145.11W	072	01	30.00	06.24	01.28	01.09	00.20	00.13
198	08.98N	145.11W	072	02	31.63	05.24	01.47	01.30	00.17	00.17
199	08.98N	145.11W	072	03	31.24	05.70	01.46	01.16	00.18	00.15
200	08.98N	145.11W	072	04	30.43	04.96	01.67	01.49	00.18	00.15

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE (WEIGHT PERCENT)	NI	CU	CO	ZN
201	08.98N	145.11W	072	05	30.65	05.85	01.41	01.14	00.18	00.14
202	09.66N	146.33W	074	01	28.29	06.04	01.53	01.18	00.20	00.15
203	09.66N	146.33W	074	02	28.85	06.27	01.53	01.16	00.19	00.13
204	09.66N	146.33W	074	03	26.69	07.06	01.45	01.07	00.20	00.13
205	09.66N	146.33W	074	04	28.54	06.09	01.17	01.26	00.20	00.14
206	09.66N	146.33W	074	05	16.16	10.75	00.70	00.62	00.19	00.07
207	11.13N	148.07W	079	01	30.36	05.90	01.39	01.10	00.21	00.16
208	11.13N	148.07W	079	02	29.00	06.52	01.41	01.10	00.22	00.13
209	11.13N	148.07W	079	03	28.52	06.30	01.39	01.20	00.24	00.13
210	11.13N	148.07W	079	04	28.58	06.51	01.47	01.23	00.23	00.13
211	11.13N	148.07W	079	05	30.23	06.02	01.47	01.31	00.22	00.15
212	10.98N	148.33W	080	01	24.51	07.10	01.36	01.17	00.20	00.13
213	10.98N	148.33W	080	02	26.93	06.47	01.41	01.31	00.23	00.12
214	10.98N	148.33W	080	03	28.92	05.83	01.44	01.21	00.20	00.15
215	10.98N	148.33W	080	04	28.91	06.27	01.38	01.22	00.21	00.15
216	10.98N	148.33W	080	05	22.33	05.73	01.13	00.84	00.20	00.12
217	11.02N	148.50W	083	01	30.52	06.09	01.38	00.94	00.21	00.16
218	11.02N	148.50W	083	02	29.70	05.86	01.49	01.34	00.23	00.13
219	11.12N	148.50W	083	03	28.92	06.26	01.51	01.37	00.24	00.13
220	11.12N	148.50W	083	04	04.58	00.72	00.42	00.36	00.07	00.11
221	11.93N	146.45W	084	01	27.88	07.47	01.27	01.00	00.25	00.14
222	11.93N	146.45W	084	02	29.07	06.34	01.42	01.23	00.23	00.15
223	11.93N	146.45W	084	03	28.87	06.26	01.39	01.17	00.22	00.15
224	11.93N	146.45W	084	04	28.86	06.53	01.46	00.96	00.23	00.14
225	11.93N	146.45W	084	05	29.62	06.14	01.43	01.18	00.22	00.15
226	11.93N	146.45W	084	06	11.21	05.87	00.81	00.54	00.20	00.06
227	11.80N	148.66W	085	01	29.08	06.13	01.37	01.27	00.22	00.12
228	11.80N	148.66W	085	02	29.33	05.70	01.35	01.28	00.21	00.13
229	11.80N	148.66W	085	03	30.03	05.52	01.37	01.36	00.20	00.14
230	11.80N	148.66W	085	04	29.25	05.48	01.38	01.34	00.20	00.14
231	11.80N	148.66W	085	05	26.93	05.72	01.22	01.33	00.19	00.16
232	12.02N	149.30W	086	01	28.82	06.68	01.26	01.13	00.23	00.15
233	12.02N	149.30W	086	02	30.13	05.96	01.26	01.20	00.21	00.16
234	12.02N	149.30W	086	03	27.92	06.13	01.43	01.23	00.24	00.14
235	12.02N	149.30W	086	04	24.36	06.63	01.23	01.16	00.20	00.12
236	12.02N	149.30W	086	05	23.06	06.93	01.33	01.03	00.26	00.11
237	11.97N	150.31W	087	01	29.54	06.21	01.26	01.13	00.23	00.13
238	11.97N	150.31W	087	02	28.31	06.01	01.41	01.28	00.22	00.14
239	11.97N	150.31W	087	03	29.61	06.43	01.29	01.21	00.22	00.14
240	11.97N	150.31W	087	04	16.40	03.96	01.09	01.03	00.18	00.14

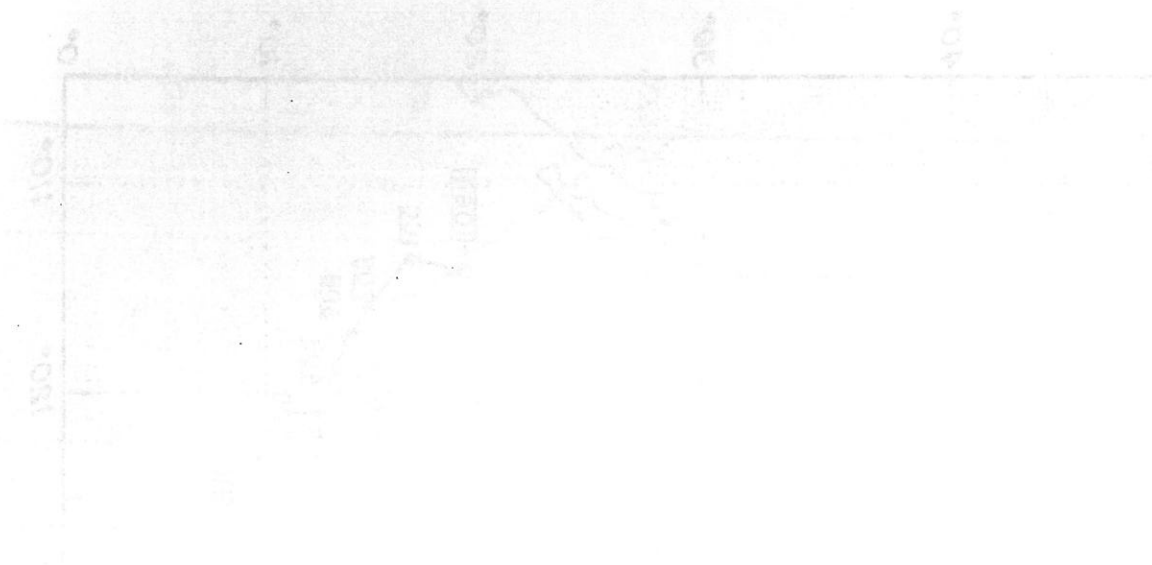
REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE	NI	CU	CO	ZN
						(WEIGHT PERCENT)				
241	11.97N	150.31W	087	05	26.12	06.74	01.35	01.23	00.22	00.07
242	11.49N	149.18W	089	01	14.92	07.02	00.88	00.54	00.23	00.12
243	11.49N	149.18W	089	02	23.75	07.84	01.20	00.90	00.26	00.12
244	11.49N	149.18W	089	03	24.49	08.41	01.22	00.85	00.26	00.11
245	11.49N	149.18W	089	04	29.09	06.24	01.45	01.13	00.25	00.14
246	11.49N	149.18W	089	05	27.17	09.44	01.20	00.89	00.30	00.11
247	11.51N	148.58W	090	01	31.11	05.87	01.30	01.14	00.19	00.15
248	11.51N	148.58W	090	02	04.50	00.59	00.42	00.35	00.06	00.08
249	11.51N	148.58W	090	03	18.91	03.03	01.13	01.08	00.15	00.12
250	11.51N	148.58W	090	04	25.19	06.39	01.23	01.02	00.21	00.13
251	11.51N	148.58W	090	05	23.54	07.09	01.21	01.12	00.20	00.13
252	23.50N	161.01W	091	01	31.35	04.93	01.30	01.26	00.20	00.18
253	23.50N	161.01W	091	02	31.75	05.36	01.20	01.09	00.20	00.17
254	23.50N	161.01W	091	03	16.01	05.37	01.00	01.08	00.23	00.10
255	23.50N	161.01W	091	04	25.79	07.30	01.28	01.25	00.24	00.13
256	23.50N	161.01W	091	05	31.92	05.65	01.27	01.20	00.19	00.15
257	25.06N	163.65W	092	01	09.44	12.26	00.52	00.37	00.19	00.05
258	25.06N	163.65W	092	02	14.31	16.26	00.45	00.25	00.32	00.07
259	25.06N	163.65W	092	03	04.85	12.19	00.30	00.19	00.12	00.04
260	25.06N	163.65W	092	04	11.35	10.62	00.77	00.43	00.22	00.07
261	26.50N	165.96W	093	01	03.65	16.25	00.24	00.19	00.12	00.03
262	26.50N	165.96W	093	02	06.76	12.36	00.37	00.20	00.16	00.04
263	26.50N	165.96W	093	03	21.39	11.93	00.93	00.57	00.31	00.08
264	26.50N	165.96W	093	04	22.17	11.84	00.97	00.56	00.30	00.08
265	26.50N	165.96W	093	05	22.54	11.37	01.06	00.66	00.33	00.09
266	28.40N	169.05W	094	01	22.15	11.85	00.99	00.58	00.30	00.09
267	28.40N	169.05W	094	02	22.39	12.09	00.92	00.62	00.30	00.08
268	28.40N	169.05W	094	03	22.96	11.40	01.08	00.69	00.29	00.09
269	28.40N	169.05W	094	04	22.66	12.27	00.96	00.57	00.31	00.08
270	28.40N	169.05W	094	05	22.66	11.36	01.05	00.59	00.29	00.09
271	30.28N	172.27W	095	01	20.17	12.97	00.80	00.55	00.31	00.06
272	30.28N	172.27W	095	02	19.51	12.60	00.79	00.62	00.29	00.06
273	30.28N	172.27W	095	03	20.83	11.07	00.92	00.65	00.26	00.07
274	30.28N	172.27W	095	04	21.09	11.16	00.96	00.69	00.26	00.08
275	30.28N	172.27W	095	05	19.69	11.20	00.88	00.58	00.28	00.08
276	31.33N	174.02W	096	01	14.72	11.97	00.52	00.34	00.22	00.05
277	31.33N	174.02W	096	02	11.93	12.09	00.40	00.25	00.20	00.04
278	31.33N	174.02W	096	03	18.21	09.59	00.92	00.57	00.13	00.08
279	31.33N	174.02W	096	04	18.51	10.58	00.81	00.57	00.21	00.07
280	31.33N	174.02W	096	05	19.93	11.22	00.78	00.60	00.24	00.07

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE (WEIGHT PERCENT)	NI	CU	CO	ZN
281	31.29N	174.03W	097	01	20.38	11.74	00.80	00.56	00.24	00.07
282	31.29N	174.03W	097	02	20.58	12.41	00.77	00.55	00.26	00.07
283	31.29N	174.03W	097	03	17.74	12.39	00.67	00.49	00.24	00.06
284	31.29N	174.03W	097	04	12.65	12.08	00.39	00.28	00.20	00.05
285	31.29N	174.03W	097	05	12.58	12.43	00.45	00.28	00.20	00.05
286	31.28N	174.03W	098	01	19.65	13.28	00.72	00.49	00.29	00.06
287	31.28N	174.03W	098	02	19.17	13.14	00.71	00.51	00.28	00.07
288	31.28N	174.03W	098	03	20.24	12.33	00.74	00.59	00.26	00.07
289	31.28N	174.03W	098	04	15.83	12.74	00.54	00.35	00.22	00.05
290	31.28N	174.03W	098	05	13.60	12.18	00.47	00.31	00.21	00.05
291	31.26N	174.03W	099	01	19.45	12.56	00.73	00.53	00.27	00.07
292	31.26N	174.03W	099	02	19.28	12.40	00.71	00.49	00.25	00.06
293	31.26N	174.03W	099	03	18.78	12.27	00.68	00.47	00.24	00.07
294	31.26N	174.03W	099	04	19.90	11.81	00.78	00.54	00.23	00.06
295	31.26N	174.03W	099	05	20.40	12.39	00.75	00.56	00.25	00.06
296	31.66N	175.60W	103	01	20.19	12.71	00.72	00.47	00.26	00.07
297	31.66N	175.60W	103	02	19.02	13.37	00.69	00.45	00.27	00.07
298	31.66N	175.60W	103	03	18.56	12.18	00.71	00.50	00.25	00.07
299	31.66N	175.60W	103	04	19.03	12.79	00.72	00.46	00.24	00.07
300	31.66N	175.60W	103	05	18.23	10.61	00.84	00.59	00.20	00.08
301	31.66N	175.60W	103	06	18.47	11.57	00.81	00.57	00.23	00.08
302	31.97N	177.33W	104	01	13.75	10.18	00.69	00.45	00.18	00.07
303	31.97N	177.33W	104	02	16.08	09.84	00.81	00.50	00.18	00.08
304	31.97N	177.33W	104	03	02.55	05.33	00.13	00.07	00.07	00.02
305	31.97N	177.33W	104	04	17.01	09.38	00.95	00.60	00.17	00.09
306	31.97N	177.33W	104	05	18.48	09.23	00.97	00.65	00.16	00.10
307	32.41N	179.18W	105	01	05.53	07.54	00.24	00.13	00.11	00.03
308	32.41N	179.18W	105	02	03.46	04.74	00.18	00.10	00.07	00.03
309	32.41N	179.18W	105	03	04.57	06.63	00.20	00.12	00.09	00.26
310	32.41N	179.18W	105	04	03.77	06.23	00.18	00.10	00.08	00.04
311	32.41N	179.18W	105	05	02.55	07.25	00.12	00.07	00.07	00.03
312	33.13N	177.08E	106	01	20.48	12.71	00.71	00.35	00.30	00.08
313	33.13N	177.08E	106	02	20.43	13.65	00.78	00.42	00.27	00.08
314	33.13N	177.08E	106	03	17.98	12.71	00.39	00.21	00.36	00.05
315	33.13N	177.08E	106	04	18.59	12.93	00.38	00.22	00.40	00.04
316	33.13N	177.08E	106	05	20.30	12.43	00.85	00.47	00.24	00.09
317	40.30N	173.77E	111	01	10.67	07.54	00.61	00.29	00.10	00.10
318	40.30N	173.77E	111	02	10.99	08.66	00.67	00.29	00.11	00.09
319	40.30N	173.77E	111	03	05.34	08.36	00.28	00.12	00.09	00.04
320	40.30N	173.77E	111	04	05.06	06.57	00.24	00.10	00.09	00.04

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NO. NO.	MN	FE	NI	CU	CO	ZN
					(WEIGHT PERCENT)					
321	40.30N	173.77E	111	05	11.60	06.86	00.72	00.39	00.09	00.10
322	40.34N	175.63E	112	01	13.54	10.21	00.65	00.35	00.12	00.07
323	40.34N	175.63E	112	02	13.18	10.71	00.59	00.34	00.13	00.06
324	40.34N	175.63E	112	03	15.50	10.31	00.76	00.41	00.12	00.08
325	40.34N	175.63E	112	04	10.04	10.73	00.42	00.24	00.10	00.05
326	40.34N	175.63E	112	05	09.66	10.28	00.41	00.23	00.13	00.04
327	39.35N	179.73E	114	01	19.91	10.46	00.92	00.55	00.15	00.10
328	39.35N	179.73E	114	02	17.91	10.91	00.83	00.49	00.15	00.08
329	39.35N	179.73E	114	03	15.83	11.03	00.75	00.46	00.15	00.07
330	39.35N	179.73E	114	04	17.93	09.32	00.73	00.65	00.13	00.09
331	39.35N	179.73E	114	05	13.74	11.80	00.53	00.32	00.16	00.06
332	38.94N	178.62W	115	01	22.69	09.13	00.50	00.43	00.15	00.06
333	38.94N	178.62W	115	02	23.98	08.41	00.50	00.46	00.13	00.06
334	38.94N	178.62W	115	03	21.93	09.58	00.56	00.51	00.16	00.07
335	38.94N	178.62W	115	04	12.76	10.91	00.49	00.31	00.15	00.06
336	38.94N	178.62W	115	05	12.41	11.12	00.45	00.27	00.15	00.05
337	37.72N	174.49W	122	01	18.36	13.91	00.49	00.22	00.35	00.05
338	33.74N	168.84W	124	01	18.58	14.07	00.64	00.34	00.36	00.06
339	33.74N	168.84W	124	02	18.75	13.95	00.66	00.35	00.34	00.06
340	33.74N	168.84W	124	03	19.13	13.71	00.76	00.41	00.33	00.06
341	33.74N	168.84W	124	04	18.47	13.69	00.71	00.40	00.34	00.06
342	33.74N	168.84W	124	05	18.16	12.74	00.72	00.45	00.32	00.06
343	31.73N	165.72W	125	01	11.53	11.87	00.38	00.24	00.16	00.05
344	31.73N	165.72W	125	02	17.60	10.41	00.83	00.51	00.15	00.09
345	31.73N	165.72W	125	03	17.90	10.51	00.85	00.50	00.15	00.09
346	31.73N	165.72W	125	04	17.70	10.55	00.84	00.50	00.15	00.09
347	31.73N	165.72W	125	05	15.00	10.90	00.62	00.39	00.15	00.06
348	30.67N	164.31W	126	01	19.94	12.79	00.77	00.44	00.33	00.07
349	30.67N	164.31W	126	02	20.35	12.60	00.84	00.51	00.32	00.07
350	30.67N	164.31W	126	03	21.73	12.01	01.00	00.65	00.28	00.08
351	30.67N	164.31W	126	04	20.11	10.55	00.99	00.67	00.26	00.08
352	30.67N	164.31W	126	05	17.39	12.32	00.75	00.54	00.29	00.07
353	30.69N	164.44W	127	01	21.56	12.63	00.89	00.56	00.32	00.08
354	30.69N	164.44W	127	02	22.42	11.53	00.98	00.63	00.29	00.08
355	30.69N	164.44W	127	03	20.20	12.77	00.76	00.47	00.33	00.07
356	30.69N	164.44W	127	04	19.69	11.25	00.92	00.63	00.27	00.08
357	30.69N	164.44W	127	05	20.51	12.79	00.82	00.50	00.33	00.07
358	30.63N	164.41W	131	01	19.27	11.94	00.75	00.52	00.24	00.08
359	30.63N	164.41W	131	02	19.59	11.91	00.76	00.53	00.24	00.07
360	30.63N	164.41W	131	03	13.82	12.46	00.46	00.30	00.22	00.05

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE (WEIGHT PERCENT)	NI	CU	CO	ZN
361	30.63N	164.41W	131	04	16.19	11.52	00.66	00.48	00.22	00.06
362	30.63N	164.41W	131	05	14.67	12.21	00.53	00.37	00.22	00.06
363	30.66N	164.35W	132	01	20.61	13.18	00.81	00.48	00.35	00.07
364	30.66N	164.35W	132	02	20.16	12.50	00.76	00.43	00.33	00.07
365	30.66N	164.35W	132	03	21.11	12.05	00.94	00.59	00.30	00.08
366	30.66N	164.35W	132	04	20.84	12.23	00.97	00.62	00.29	00.08
367	30.66N	164.35W	132	05	19.16	12.21	00.91	00.60	00.30	00.08
368	27.53N	161.16W	134	01	21.71	11.46	00.96	00.66	00.30	00.08
369	27.53N	161.16W	134	02	21.55	10.94	01.02	00.60	00.28	00.08
370	27.53N	161.16W	134	03	23.35	10.98	01.07	00.68	00.30	00.09
371	27.53N	161.16W	134	04	22.15	11.48	00.97	00.65	00.29	00.08
372	27.53N	161.16W	134	05	20.25	09.86	00.98	00.69	00.27	00.08
373	25.26N	160.30W	135	01	04.42	25.95	01.05	00.21	00.25	00.06
374	21.85N	159.37W	138	01	01.84	14.93	00.19	00.06	00.11	00.03
375	21.85N	159.37W	138	02	11.26	12.26	00.34	00.10	00.38	00.07
376	21.88N	159.32W	141	01	20.92	18.93	00.29	00.06	00.76	00.04
377	25.00N	153.07W	148	01	18.21	13.07	00.65	00.48	00.33	00.07
378	25.00N	153.07W	148	02	18.56	12.32	00.73	00.48	00.32	00.08
379	25.00N	153.07W	148	03	19.59	12.45	00.76	00.58	00.33	00.08
380	25.00N	153.07W	148	04	17.71	13.52	00.58	00.40	00.34	00.07
381	25.00N	153.07W	148	05	14.90	11.87	00.59	00.35	00.32	00.06
382	27.57N	150.57W	149	01	11.17	07.30	00.61	00.40	00.23	00.05
383	27.57N	150.57W	149	02	06.94	03.37	00.60	00.39	00.14	00.06
384	27.57N	150.57W	149	03	12.80	07.41	00.82	00.50	00.23	00.07
385	27.57N	150.57W	149	04	13.44	07.97	00.85	00.53	00.25	00.07
386	27.57N	150.57W	149	05	12.67	07.64	00.82	00.48	00.23	00.07
387	30.01N	147.98W	150	01	09.96	09.36	00.49	00.29	00.31	00.06
388	30.01N	147.98W	150	02	11.12	17.40	00.68	00.38	00.26	00.08
389	30.01N	147.98W	150	03	09.32	12.13	00.37	00.22	00.29	00.04
390	33.05N	144.52W	151	01	21.07	12.39	00.93	00.74	00.28	00.07
391	33.05N	144.52W	151	02	19.11	12.82	00.77	00.59	00.29	00.06
392	33.05N	144.52W	151	03	17.38	11.96	00.75	00.53	00.27	00.06
393	33.05N	144.52W	151	04	18.84	12.54	00.86	00.56	00.29	00.07
394	33.05N	144.52W	151	05	21.86	12.50	00.96	00.62	00.30	00.07
395	36.01N	141.02W	152	01	08.27	11.53	00.37	00.26	00.24	00.05
396	36.01N	141.02W	152	02	19.15	13.52	00.70	00.40	00.36	00.06
397	36.01N	141.02W	152	03	12.73	13.44	00.56	00.33	00.32	00.05
398	36.01N	141.02W	152	04	18.10	15.19	00.59	00.37	00.37	00.06
399	36.01N	141.02W	152	05	16.92	15.78	00.52	00.34	00.39	00.05
400	37.52N	138.51W	153	01	16.01	13.46	00.61	00.38	00.33	00.06

REC. NO.	LATITUDE	LONGITUDE	SHIP STA.	NOD. NO.	MN	FE	NI	CU	CO	ZN
					(WEIGHT PERCENT)					
401	37.52N	138.51W	153	02	15.61	13.48	00.58	00.38	00.32	00.06
402	37.52N	138.51W	153	03	16.34	13.97	00.59	00.34	00.32	00.06
403	37.52N	138.51W	153	04	16.48	13.35	00.64	00.40	00.33	00.06
404	39.00N	136.02W	154	01	16.60	11.42	00.80	00.44	00.26	00.07
405	39.00N	136.02W	154	02	13.86	09.22	00.82	00.50	00.19	00.07
406	39.00N	136.02W	154	03	15.96	10.55	00.72	00.43	00.26	00.08
407	39.00N	136.02W	154	04	15.88	10.90	00.75	00.41	00.25	00.07
408	39.00N	136.02W	154	05	17.94	11.07	00.80	00.46	00.27	00.09
409	36.02N	132.91W	155	01	17.52	15.54	00.61	00.40	00.27	00.06
410	36.02N	132.91W	155	02	17.43	14.87	00.59	00.39	00.27	00.06
411	36.02N	132.91W	155	03	17.96	14.86	00.67	00.42	00.27	00.06
412	36.02N	132.91W	155	04	11.92	14.17	00.40	00.29	00.22	00.05
413	36.02N	132.91W	155	05	16.89	14.62	00.63	00.41	00.26	00.06
414	32.99N	130.11W	156	01	13.27	10.75	00.63	00.44	00.21	00.06
415	32.99N	130.11W	156	02	20.89	11.46	00.98	00.70	00.20	00.09
416	32.99N	130.11W	156	03	22.00	11.13	01.10	00.78	00.20	00.10
417	32.99N	130.11W	156	04	20.70	12.02	00.98	00.64	00.22	00.09
418	33.12N	126.62W	157	01	20.72	11.08	00.96	00.61	00.22	00.10
419	33.12N	126.62W	157	02	16.96	09.86	00.86	00.61	00.19	00.09
420	33.12N	126.62W	157	03	09.85	08.98	00.51	00.34	00.14	00.05

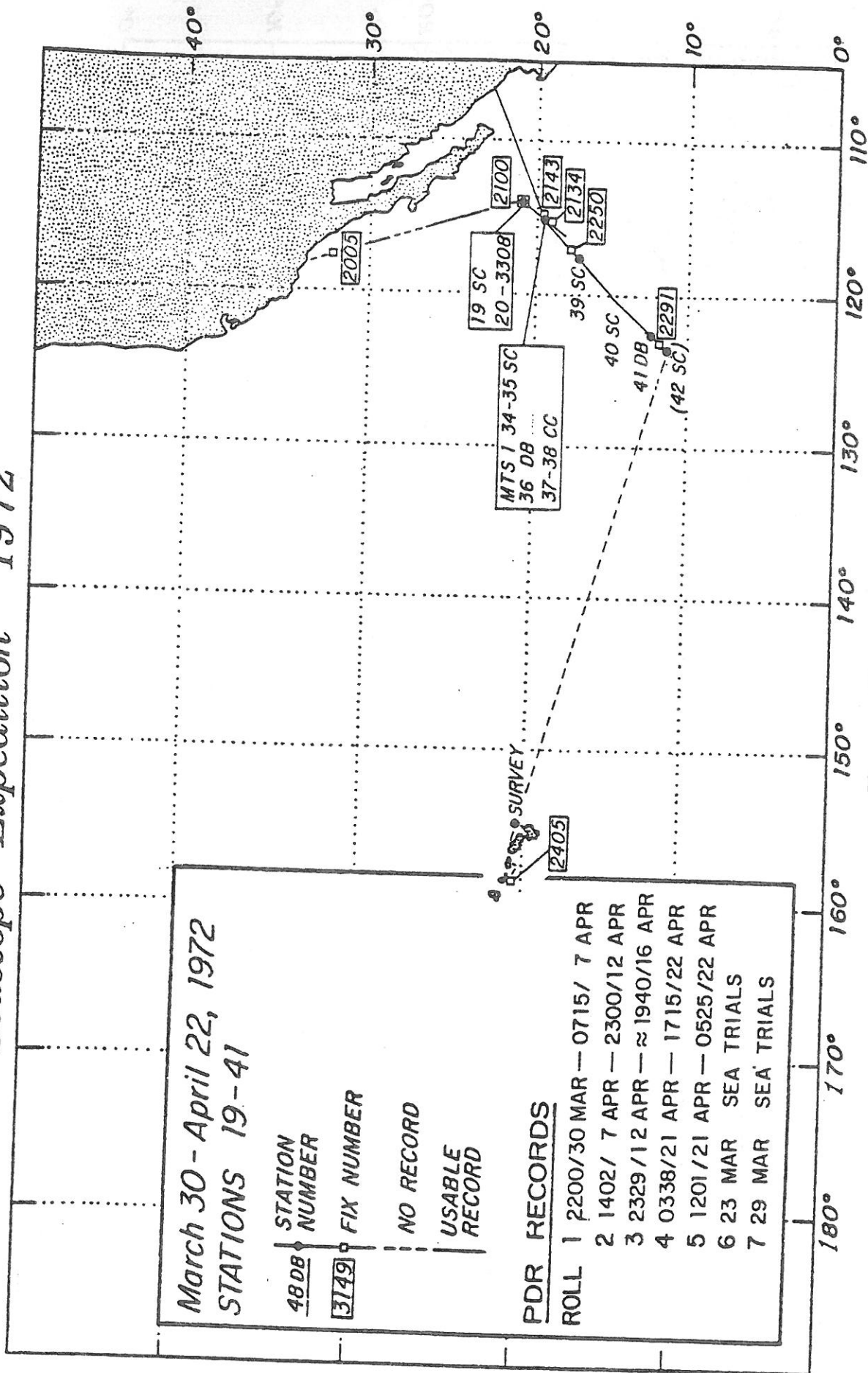


APPENDIX D
SEA SCOPE EXPEDITION 1972
CRUISE TRACKS

(Maps in this Appendix are reproduced from J. Greenslate et al., op. cit.)

Explanation: PDR = Precision Depth Recorder.

Seascope Expedition 1972

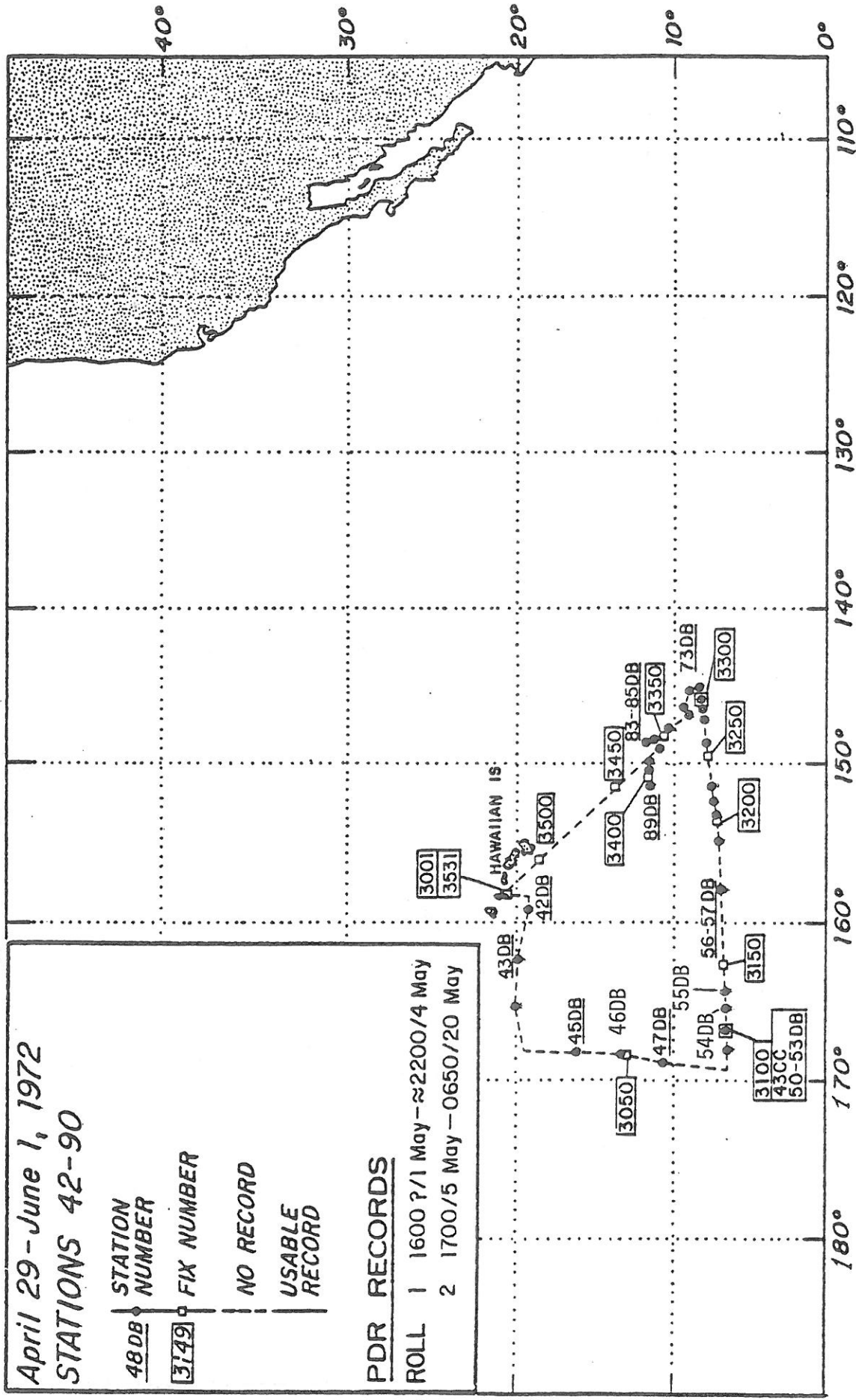


Map 7

Leg 2

Map 7. Cruise track, Sea Scope Expedition 1972, Leg 2.

Seascope Expedition 1972

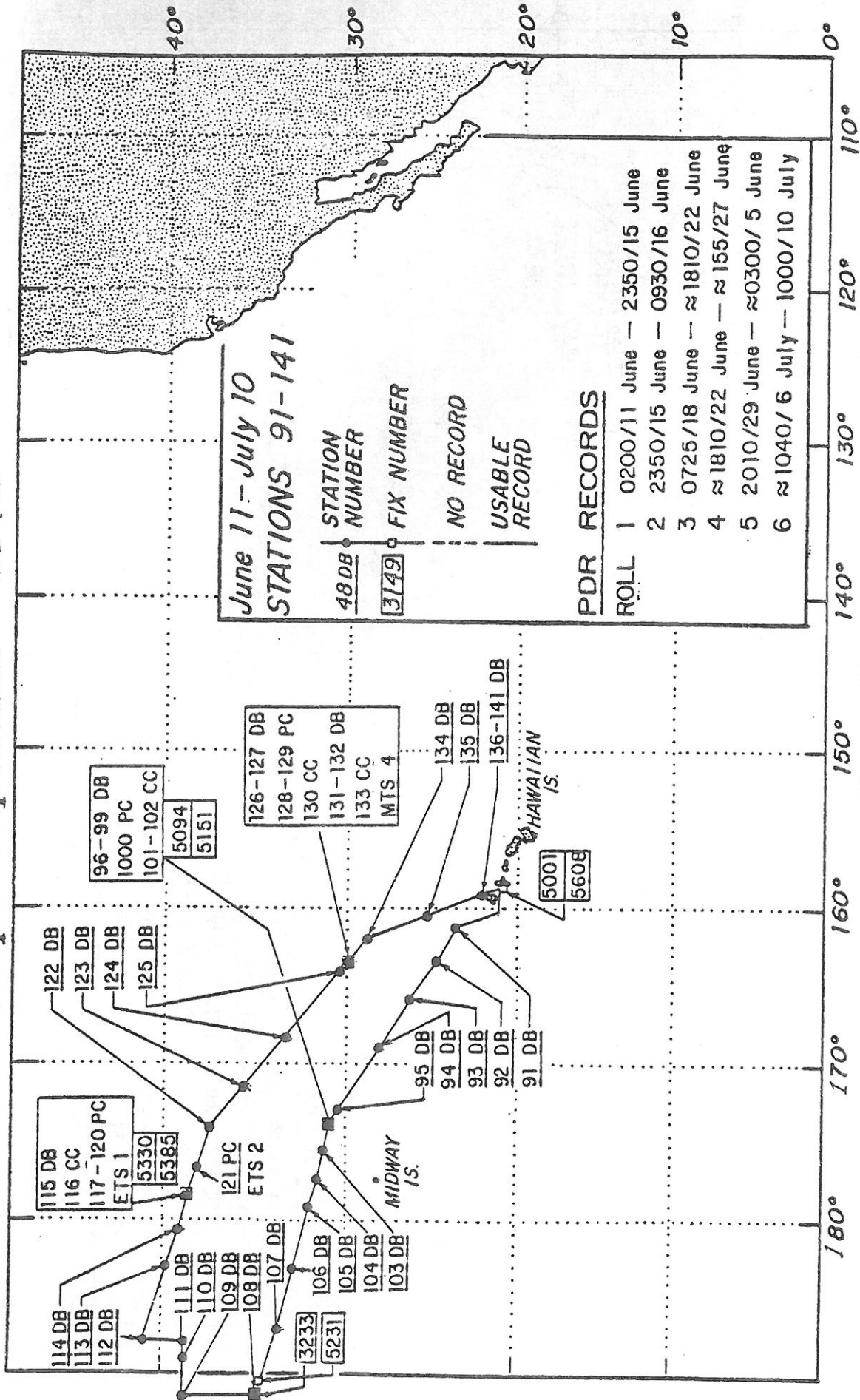


Leg 3

Map 8

Map 8. Cruise track, Sea Scope Expedition 1972, Leg 3.

Seascope Expedition 1972

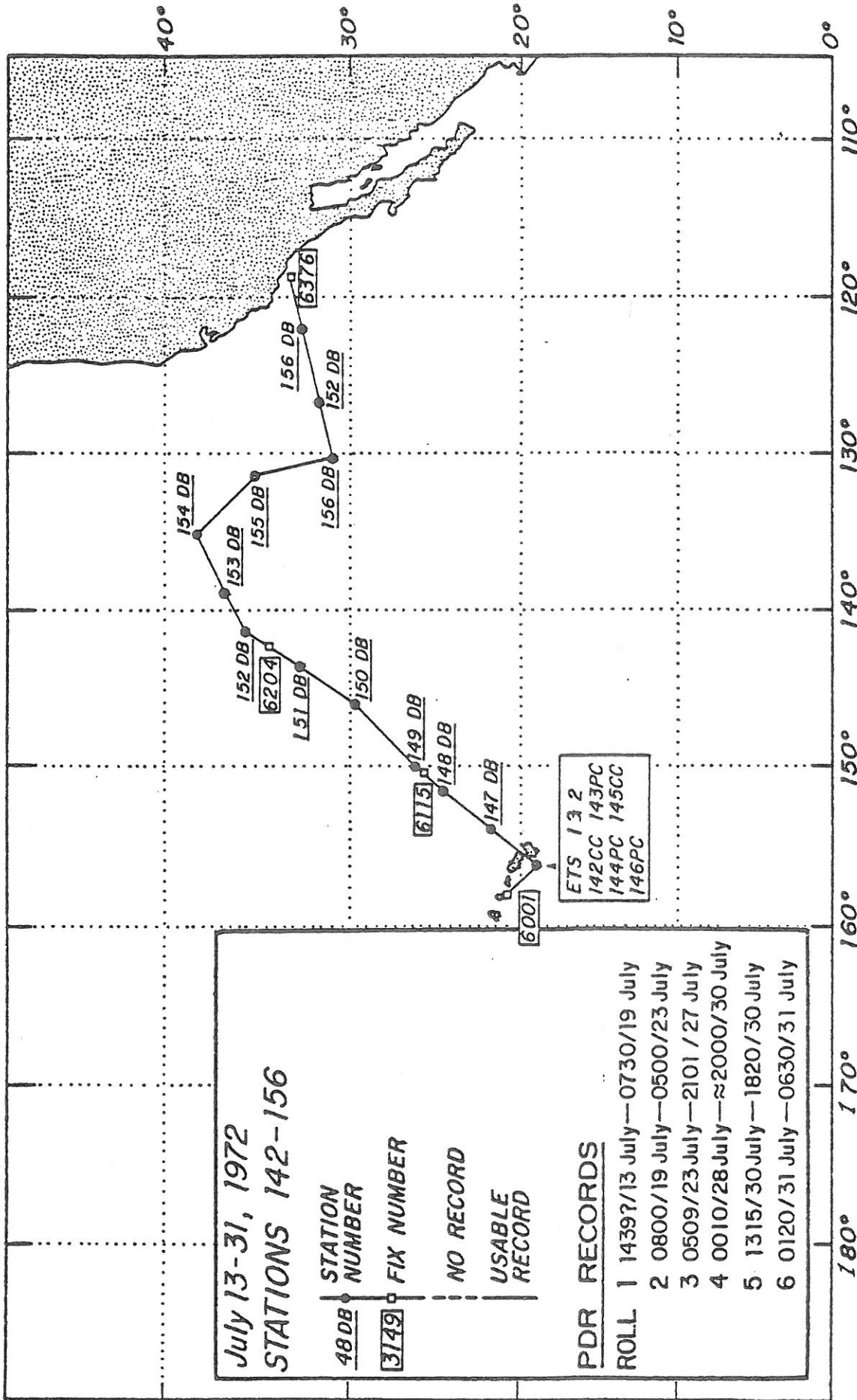


Leg 5

Map 9

Map 9. Cruise track, Sea Scope Expedition 1972, Leg 5.

Seascope Expedition 1972



Leg 6

Map 10

Map 10. Cruise Track, Sea Scope Expedition 1972, Leg 6.