OCEANOGRAPHICAL STATION LIST

VOLUME 77

TEMPERATURE AND SALINITY OBSERVATIONS FROM
AUSTRALIAN TUNA FISHING VESSELS IN 1966

DIVISION OF FISHERIES AND OCEANOGRAPHY
COMMONWEALTH SCIENTIFIC AND INDUSTRIAL
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CONTENTS

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CSIRO Aust. Oceanogr. Stn List 77.

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Temperature and Salinity Observations from Australian Tuna Fishing Vessels in 1966

I. INTRODUCTION

In 1961 a programme for the systematic measurement of sea-water temperatures from fishing vessels was begun by CSIRO (CSIRO Aust. 1961; Vaux 1961). The data presented in this volume are the result of such measurements made from fishing vessels during the course of their normal fishing operations on the South Australian and eastern Australian tuna fishing grounds during 1966.

II. METHODS

Temperature.—Fishermen were issued with surface thermometers and instructions for their use (Vaux 1961). Thermometers were graduated in whole degrees over the range 30-120 degF with an accuracy of $\pm$ 0.5 degF. Temperatures were taken in degF and converted to degC (nearest tenth) before listing. Temperatures listed in this volume are considered accurate to about $\pm$0.5 degC although on some vessels a higher accuracy was probably achieved. On some vessels, temperatures were also taken by a continuous-recording thermograph.

Salinity.—Water samples for subsequent salinity analysis were taken by several vessels. The samples were analysed at either Cronulla or Port Lincoln using a chlorinity-temperature meter of the conductivity type (Hamon 1956) and converting from chlorinity to salinity by the relation -

$$\text{Salinity} = 0.03 + 1.805 \times \text{Chlorinity}$$

Salinities are considered accurate to about $\pm$ 0.05‰.

Accuracy of Positions.—For reporting the position of sampling, fishermen used a grid reference system (Kesteven and Williams 1962) consisting of rectangles of approximately 6 x 5 nautical miles (actually 6 x 6 minutes of latitude and longitude). A fisherman's position wrong by one grid rectangle could be in error, therefore, by up to 6 miles. South Australian positions may be in error by twice this amount as vessels operate for longer periods out of sight of land. Errors greater than this are considered to be infrequent. Grid references were converted to latitude and longitude by computer before listing.

REFERENCES

CSIRO AUST. (1961).—Tuna search programme. Southern Pelagic Project Special Report No. 1 (Mimeogr.) (CSIRO : Cronulla.)

HAMON, B.V. (1956).—A portable temperature-chlorinity bridge for estuarine investigations and seawater analysis. J. scient. Instrum. 33, 329-33.

KESTEVEN, G.L., and WILLIAMS, G.R. (1962).—Fishermen and scientists work together. Aust. Fish. Leafl. No. 8.

VAUX, D. (1961).—Measurement of sea-water temperature by fishermen. Aust. Fish. Leafl. No. 6.

III. ACKNOWLEDGMENTS

Thanks are due to the skippers, owners, and crew of the vessels from which the observations listed in this volume were made.

IV. DATA

The data were subjected to various quality control checks before listing by C.D.C. 3600 Computer. Speeds between successive positions were calculated, and finding of impossible values led to the amendment or rejection of the suspect data. An explanation of the headings used is given at the beginning of the listing.

A.D. Crooks wrote the computer programmes, and D. Vaux had the overall responsibility for the collection, processing, and compilation of the observations.

EXPLANATION OF HEADINGS

VESSEL

A code number is given for each vessel:

17	Estelle Star	T9	Cape Byron
82	C. & J. Crouch	U4	Southern Bluefin
95	Northwest Trader	W4	Imlay
A1	Saori	Y4	Halcyon
R1	Alpema	Y8	Rosalind Star
T2	Degei	Y9	Espirito Santo
T4	Robyn Julie	SG	Spencer Gulf Survey
T8	Catriona B		

CRUISE STATION NUMBER

Generally assigned only when a member of CSIRO staff accompanied the cruise

TIME

Given in Zone Time. In eastern Australian waters, Zone Time is Eastern Australian Standard Time, GMT +10 hr, Code K; in South Australian waters Zone Time is Central Australian Time, GMT +9½ hr, Code J

LATITUDE LONGITUDE

Given in degrees and minutes

TEMP.

Sea surface temperatures recorded in °C

SALINITY

Given in parts per thousand

WIND DIR. AMT.

Wind direction and amount are coded using Tables 8 and 9 in U.S. Navy Hydrogr. Office (1955)

SEA DIR. AMT.

Sea direction and amount are coded using Tables 5 and 8 in U.S. Navy Hydrogr. Office (1955)

SWELL DIR. AMT.

Sea swell direction and amount are coded using Tables 6 and 8 in U.S. Navy Hydrogr. Office (1955)

WEA.

Weather is coded using Table 1 in U.S. Navy Hydrogr. Office (1955)

VIS.

Visibility is coded using Table 4 in U.S. Navy Hydrogr. Office (1955)

BAROM.

Atmospheric pressure given in millibars

SAMPLING METHOD

1 Surface temperature and salinity were taken from seawater sampled in a plastic bucket

G Surface temperature by thermograph

A blank indicates no data available

DATA

TEMPERATURES AND SALINITIES

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
17	13	66	3	14	0900	J 35	39 S	135 9 E	19.8	35.77										1
17	13	66	3	14	1000	J 35	51 S	135 9 E	19.6											1
17	13	66	3	14	1200	J 35	45 S	135 3 E	19.6	35.59										1
17	13	66	3	14	1300	J 35	45 S	134 45 E	19.6											1
17	13	66	3	14	1400	J 35	51 S	134 39 E	19.4											1
17	13	66	3	14	1500	J 35	45 S	134 33 E	19.8	35.66										1
17	13	66	3	14	1600	J 35	39 S	134 45 E	19.7											1
17	13	66	3	14	1700	J 35	39 S	134 45 E	19.7											1
17	13	66	3	14	1800	J 35	33 S	134 57 E	19.7	35.66										1
17	13	66	3	14	1845	J 35	33 S	134 57 E	19.6											1
17	15	66	3	17	0800	J 35	33 S	135 51 E	19.5											1
17	15	66	3	17	0900	J 35	39 S	135 45 E	19.5	35.77										1
17	15	66	3	17	1000	J 35	51 S	135 45 E	19.6											1
17	15	66	3	17	1100	J 35	57 S	135 39 E	19.6											1
17	15	66	3	17	1200	J 36	3 S	135 27 E	19.2	35.55										1
17	15	66	3	17	1300	J 36	3 S	135 15 E	19.4											1
17	15	66	3	17	1400	J 36	3 S	135 3 E	19.5											1
17	15	66	3	17	1500	J 36	3 S	134 57 E	19.3	35.55										1
17	15	66	3	17	1600	J 36	3 S	134 45 E	19.5											1
17	15	66	3	17	1700	J 36	3 S	134 39 E	19.5											1
17	15	66	3	17	1800	J 36	3 S	134 27 E	19.4	35.55										1
17	15	66	3	18	0700	J 35	57 S	134 39 E	19.2	35.55										1
17	15	66	3	18	0800	J 35	51 S	134 33 E	19.2											1
17	15	66	3	18	0900	J 35	51 S	134 27 E	19.3	35.61										1
17	15	66	3	18	1000	J 35	45 S	134 27 E	19.3											1
17	15	66	3	18	1100	J 35	39 S	134 27 E	19.3											1
17	15	66	3	18	1200	J 35	39 S	134 33 E	19.4	35.66										1
17	15	66	3	18	1300	J 35	45 S	134 45 E	19.5											1
17	15	66	3	18	1400	J 35	45 S	134 51 E	19.8											1
17	15	66	3	18	1500	J 35	51 S	134 57 E	20.0	35.61										1
17	15	66	3	18	1600	J 35	51 S	135 3 E	19.7											1
17	15	66	3	18	1700	J 35	57 S	135 3 E	19.8											1
17	15	66	3	18	1800	J 35	51 S	135 3 E	19.6	35.57										1
17	15	66	3	18	1900	J 35	51 S	135 9 E	19.4											1
17	15	66	3	19	0600	J 35	51 S	134 45 E	19.3	35.57										1
17	15	66	3	19	0800	J 35	27 S	134 27 E	19.3											1
17	15	66	3	19	0900	J 35	45 S	134 33 E	19.0	35.57										1
17	15	66	3	19	1000	J 35	51 S	134 39 E	19.3											1
17	15	66	3	19	1030	J 35	51 S	134 45 E	19.4											1
17	15	66	3	19	1100	J 35	57 S	134 51 E	19.5											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
17	15		66	3	19	1200	J 35 51 S	134 57 E	19.6	35.59										1
17	15		66	3	19	1300	J 35 27 S	135 9 E	20.3											1
17	15		66	3	19	1400	J 35 21 S	135 21 E	20.6											1
17	15		66	3	19	1500	J 35 15 S	135 27 E	20.1	35.84										1
17	15		66	3	19	1600	J 35 15 S	135 33 E	20.1											1
17	15		66	3	19	1700	J 35 9 S	135 51 E	19.8											1
17	15		66	3	19	1800	J 35 9 S	135 57 E	19.4	35.79										1
17	23		66	4	24	1700	J 34 45 S	136 3 E	17.5											1
17	23		66	4	24	1800	J 34 57 S	136 3 E	17.9	35.88										1
17	23		66	4	25	0800	J 35 27 S	136 9 E	18.2	35.90										1
17	23		66	4	25	0900	J 35 21 S	135 57 E	18.1	35.90										1
17	23		66	4	25	1000	J 35 9 S	135 57 E	17.3	35.81										1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
82	1	1	66	10	31	1145	J 33 06 S	137 52 E	19.2	41.69	22	2	22	1	00	0		7	1007.5	1
82	1	2	66	10	31	1245	J 33 11 S	137 45 E	18.2		26	4	26	2	00	0		7	1007.1	1
82	1	3	66	10	31	1345	J 33 17 S	137 37 E	17.7		26	4	26	2	00	0		7	1006.4	1
82	1	4	66	10	31	1445	J 33 24 S	137 31 E	17.2	39.45	26	4	26	2	00	0		7	1006.1	1
82	1	5	66	10	31	1545	J 33 29 S	137 26 E	17.0		26	5	26	2	00	0		7	1006.1	1
82	1	6	66	10	31	1645	J 33 34 S	137 21 E	17.9		25	6	25	3	00	0		6	1006.4	1
82	1	7	66	10	31	1745	J 33 40 S	137 17 E	18.5	36.96	25	6	25	3	00	0		6	1006.8	1
82	1	8	66	10	31	1900	J 33 44 S	137 10 E	17.0		24	5	24	2	23	1		6	1008.1	1
82	1	9	66	10	31	2000	J 33 47 S	137 04 E	16.4		24	5	24	2	23	1		6	1008.8	1
82	1	10	66	10	31	2100	J 33 50 S	136 56 E	16.2	36.51	24	5	24	2	23	1			1009.0	1
82	1	11	66	10	31	2200	J 33 52 S	136 49 E	16.2		19	4	19	2	23	1			1009.8	1
82	1	12	66	10	31	2300	J 33 55 S	136 40 E	16.2		19	4	19	2	23	1			1009.8	1
82	1	13	66	10	31	2400	J 33 59 S	136 35 E	16.2	36.14	23	4	23	2	23	1			1009.8	1
82	1	14	66	11	1	0100	J 34 04 S	136 28 E	16.0		23	4	23	2	00	0			1009.8	1
82	1	15	66	11	1	0200	J 34 10 S	136 24 E	16.0		23	5	23	2	00	0			1009.1	1
82	1	16	66	11	1	0300	J 34 16 S	136 19 E	16.0		23	4	23	2	00	0			1009.1	1
82	1	17	66	11	1	0400	J 34 23 S	136 14 E	16.0		23	3	23	2	00	0		7	1009.1	1
82	1	18	66	11	1	0600	J 34 34 S	136 04 E	16.0	36.11	23	3	23	2	00	0		7	1009.8	1
82	1	19	66	11	1	0700	J 34 40 S	135 56 E	16.5		23	3	23	2	00	0		7	1009.8	1
82	1	20	66	11	1	1030	J 34 41 S	135 55 E	16.1	36.06	23	4	23	2	00	0		7	1010.8	1
82	1	21	66	11	1	1130	J 34 34 S	136 03 E	16.1		23	4	23	2	00	0		7	1012.9	1
82	1	22	66	11	1	1230	J 34 29 S	136 13 E	16.1		23	4	23	2	00	0		7	1013.2	1
82	1	23	66	11	1	1330	J 34 22 S	136 22 E	16.0	36.17	23	4	23	2	00	0		7	1013.2	1
82	1	24	66	11	1	1430	J 34 16 S	136 30 E	15.8		23	3	23	2	00	0		7	1013.2	1
82	1	25	66	11	1	1530	J 34 11 S	136 38 E	15.8		23	4	23	2	18	1		7	1013.2	1
82	1	26	66	11	1	1630	J 34 05 S	136 46 E	15.9	36.34	23	4	23	2	18	1		7	1013.2	1
82	1	27	66	11	1	1730	J 33 59 S	136 54 E	16.0		23	4	23	2	18	1		7	1013.2	1
82	1	28	66	11	1	1830	J 33 53 S	137 02 E	16.4		23	4	23	2	18	1		7	1013.5	1
82	1	29	66	11	1	1930	J 33 47 S	137 10 E	16.7		23	4	23	2	18	1		7	1014.2	1
82	1	30	66	11	1	2030	J 33 41 S	137 18 E	17.3	36.61	23	3	23	2	00	0			1014.9	1
82	1	31	66	11	1	2130	J 33 35 S	137 26 E	17.0		23	4	23	2	00	0			1015.2	1
82	1	32	66	11	1	2230	J 33 27 S	137 32 E	16.7	38.85	23	4	23	2	00	0			1015.2	1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
95	1	1	66	10	14	1200	J 33 34	S 137 52	E 17,0	39,95	32	2	32	1	00	0		7	1016.3	1
95	1	2	66	10	14	1300	J 33 36	S 137 43	E 15,8	39,71	32	2	32	1	00	0		7	1015.6	1
95	1	3	66	10	14	1345	J 33 37	S 137 37	E 15,5	39,05	05	1	05	1	00	0		7	1013.9	1
95	1	4	66	10	14	1445	J 33 39	S 137 29	E 15,2	38,83	05	2	05	1	00	0		7	1013.2	1
95	1	5	66	10	14	1600	J 33 40	S 137 21	E 15,6	36,96	05	2	05	1	00	0		7	1011.9	1
95	1	6	66	10	14	1700	J 33 42	S 137 14	E 17,4	36,74	05	2	05	1	00	0		7	1011.5	1
95	1	7	66	10	14	1800	J 33 43	S 137 09	E 17,6	36,79	05	1	00	0	00	0		7	1011.9	1
95	1	8	66	10	16	0800	J 33 43	S 137 09	E 16,4		32	2	32	1	00	0		7	1023.0	1
95	1	9	66	10	16	1100	J 33 43	S 137 05	E 16,6		18	1	32	1	00	0		7	1022.7	1
95	1	10	66	10	16	1730	J 33 44	S 137 02	E 16,2		14	2	14	1	14	1		7		1
95	1	11	66	10	16	1830	J 33 44	S 137 02	E 16,1	36,66	14	2	14	1	14	1		7		1
95	1	12	66	10	17	0800	J 33 43	S 137 05	E 16,7	36,98	02	2	02	1	00	0		8	1013.3	1
95	1	13	66	10	17	1200	J 33 43	S 137 05	E 17,0		09	4	02	2	00	0		8	1019.9	1
95	1	14	66	10	17	1700	J 33 43	S 137 05	E 18,0		05	5	05	3	00	0		8	1019.9	1
95	1	15	66	10	17	1900	J 33 44	S 137 02	E 16,0		23	5	23	3	00	0		8		1
95	1	16	66	10	18	0800	J 33 43	S 137 05	E 17,2	37,11	36	2	36	1	00	0		7	1016.6	1
95	1	17	66	10	18	1200	J 33 43	S 137 05	E 17,6		32	3	32	1	00	0		8	1014.9	1
95	1	18	66	10	18	1600	J 33 43	S 137 05	E 19,1		25	4	25	2	00	0		7	1012.5	1
95	1	19	66	10	18	1815	J 33 42	S 137 14	E 16,4	36,79	25	4	25	2	00	0		6	1013.9	1
95	1	20	66	10	19	0320	J 33 37	S 137 30	E 15,4	37,85	02	2	02	1	00	0			1015.6	1
95	1	21	66	10	19	0600	J 33 34	S 137 52	E 17,0	39,99	34	3	34	2	00	0			1015.9	1
95	2		66	10	22	1905	J 33 43	S 137 06	E 17,8	37,27										1
95	2		66	10	26	0955	J 33 42	S 137 25	E 16,7	37,50										1
95	2		66	10	26	1045	J 33 42	S 137 28	E 17,2											1
95	2		66	11	6	1815	J 33 43	S 137 06	E 18,6											1
95	2		66	11	7	0900	J 33 53	S 137 19	E 16,7	38,12										1
95	2		66	11	7	0930	J 33 55	S 137 22	E 17,2											1
95	2		66	11	7	1030	J 33 58	S 137 25	E 17,8	38,69										1
95	2		66	11	7	1115	J 34 03	S 137 32	E 17,2	37,57										1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
A1	1	1	66	8	6	1810	J 35 37 S	138 05 E	12,2		18	2	18	2	00	0	03	6	1003.3	1
A1	1	2	66	8	6	2120	J 35 56 S	138 15 E	13,9		17	2	17	2	22	3	03	5	1003.3	1
A1	1	3	66	8	7	0030	J 36 17 S	138 26 E	14,2		17	2	17	2	22	3	03	6	1003.2	1
A1	1	4	66	8	7	0350	J 36 40 S	138 38 E	14,4		22	1	18	2	23	3	03	7	1003.1	1
A1	1	5	66	8	7	0710	J 37 06 S	138 53 E	15,0		18	1	99	2	23	3	03	8	1003.1	1
A1	1	6	66	8	7	1020	J 37 26 S	139 15 E	15,3		15	2	99	2	23	3	03	8	1003.4	1
A1	1	7	66	8	7	1315	J 37 39 S	139 35 E	14,7		15	2	99	2	23	2	03	7	1003.0	1
A1	1	8	66	8	7	1600	J 37 52 S	139 53 E	14,4		00	0	99	2	23	2	03	7	1003.2	1
A1	1	9	66	8	7	1900	K 38 03 S	140 16 E	14,4		00	0	99	2	23	2	03	7	1003.2	1
A1	1	10	66	8	7	2205	K 38 18 S	140 33 E	14,7		14	2	99	2	23	2	03	7	1003.2	1
A1	1	11	66	8	8	0448	K 38 38 S	141 24 E	13,9		05	2	99	2	23	2	03	7	1003.0	1
A1	1	12	66	8	8	0833	K 38 54 S	141 53 E	14,4		33	3	33	3	21	2		8	1002.9	1
A1	1	13	66	8	8	1110	K 38 58 S	142 23 E	13,9		33	3	33	2	22	2		8	1003.0	1
A1	1	14	66	8	8	1310	K 39 12 S	142 33 E	12,5		33	2	33	2	23	2		8	1002.8	1
A1	1	15	66	8	8	1608	K 39 02 S	142 59 E	13,6		33	2	33	2	23	2		8	1002.7	1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
R1	1	1	66	10	25	0745	J 34 03 S	137 33 E	17.2	37.63										1
R1	1	2	66	10	25	0840	J 34 03 S	137 29 E	16.7	37.11										1
R1	1	3	66	10	25	1000	J 34 04 S	137 24 E	16.7	37.32										1
R1	1	4	66	10	25	1300	J 34 09 S	137 36 E	16.7	37.26										1
R1	1	5	66	10	28	0825	J 34 08 S	137 27 E	17.2	37.90										1
R1	1	6	66	10	28	0915	J 34 15 S	137 23 E	16.9	37.23										1
R1	1	7	66	10	28	1150	J 34 19 S	137 23 E	17.8	37.09										1
R1	1	8	66	10	28	1645	J 34 06 S	137 30 E	17.8	37.25										1
R1	1	9	66	10	28	1710	J 34 04 S	137 33 E	18.3	37.23										1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN. AMT.	SEA DN. AMT.	SWELL DN. AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
SG	1	1	66	10	22	0945	J 32 26	S 137 45	E 16,7								1
SG	1	2	66	10	22	1000	J 32 27	S 137 46	E 18,2	48,11							1
SG	1	3	66	10	22	1015	J 32 28	S 137 46	E 16,2	48,05							1
SG	1	4	66	10	22	1030	J 32 30	S 137 45	E 18,4	47,78							1
SG	1	5	66	10	22	1045	J 32 31	S 137 46	E 19,1								1
SG	1	6	66	10	22	1100	J 32 33	S 137 46	E 21,3	47,69							1
SG	1	7	66	10	22	1105	J 32 33	S 137 46	E 22,5								1
SG	1	8	66	10	22	1115	J 32 35	S 137 48	E 18,2								1
SG	1	9	66	10	23	1045	J 32 42	S 137 47	E 18,6	42,72							1
SG	1	10	66	10	23	1130	J 32 44	S 137 49	E 19,4	42,70							1
SG	1	11	66	10	23	1145	J 32 46	S 137 50	E 18,4	42,24							1
SG	1	12	66	10	23	1155	J 32 48	S 137 50	E 18,7	42,27							1
SG	1	13	66	10	23	1210	J 32 50	S 137 49	E 17,9	41,55							1
SG	1	14	66	10	23	1220	J 32 52	S 137 50	E 18,0	41,62							1
SG	1	15	66	10	23	1245	J 32 53	S 137 49	E 18,2	41,41							1
SG	1	16	66	10	23	1300	J 32 55	S 137 48	E 18,4	41,32							1
SG	1	17	66	10	23	1310	J 32 57	S 137 48	E 18,2	40,75							1
SG	1	18	66	10	23	1320	J 32 59	S 137 47	E 18,4	40,84							1
SG	1	19	66	10	23	1340	J 33 01	S 137 46	E 18,1	40,42							1
SG	1	20	66	10	23	1625	J 32 40	S 137 46	E 20,0								1
SG	1	21	66	10	23	1635	J 32 38	S 137 46	E 19,9	43,75							1
SG	1	22	66	10	23	1642	J 32 36	S 137 46	E 19,7	43,84							1
SG	2	23	66	10	25	0815	J 33 04	S 137 37	E 17,4	39,64							1
SG	2	24	66	10	25	0900	J 33 06	S 137 41	E 17,1	39,10							1
SG	2	25	66	10	25	0930	J 33 06	S 137 38	E 17,5	39,10							1
SG	2	26	66	10	25	1000	J 33 06	S 137 35	E 17,9	39,52							1
SG	2	27	66	10	25	1040	J 33 09	S 137 36	E 17,8	38,85							1
SG	2	28	66	10	25	1115	J 33 11	S 137 37	E 18,2	39,04							1
SG	3	29	66	10	27	0735	J 33 44	S 137 02	E 16,1	36,46							1
SG	3	30	66	10	27	0830	J 33 44	S 137 02	E 16,1								1
SG	3	31	66	10	27	0930	J 33 45	S 137 04	E 16,8								1
SG	3	32	66	10	27	1030	J 33 45	S 137 04	E 16,8								1
SG	3	33	66	10	27	1130	J 33 44	S 137 01	E 16,9								1
SG	3	34	66	10	27	1230	J 33 44	S 137 01	E 16,8								1
SG	3	35	66	10	27	1330	J 33 44	S 137 00	E 17,1								1
SG	3	36	66	10	27	1400	J 33 42	S 136 57	E 18,1	36,90							1
SG	4	37	66	10	28	1115	J 34 23	S 136 08	E 17,1	36,28							1
SG	4	38	66	10	28	1125	J 34 24	S 136 10	E 16,6	36,20							1
SG	4	39	66	10	28	1140	J 34 26	S 136 13	E 16,5	36,12							1
SG	4	40	66	10	28	1150	J 34 28	S 136 15	E 16,5	36,16							1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
SG	4	41	66	10	28	1205	J 34 29 S	136 18 E	16,4	36,20										1
SG	4	42	66	10	28	1215	J 34 31 S	136 21 E	16,4	36,18										1
SG	4	43	66	10	28	1235	J 34 32 S	136 23 E	16,3	36,20										1
SG	4	44	66	10	28	1245	J 34 34 S	136 26 E	16,3	36,20										1
SG	4	45	66	10	28	1335	J 34 36 S	136 30 E	16,1	36,22										1
SG	4	46	66	10	28	1405	J 34 32 S	136 28 E	16,3	36,23										1
SG	4	47	66	10	28	1420	J 34 28 S	136 26 E	16,5	36,29										1
SG	4	48	66	10	28	1435	J 34 25 S	136 24 E	16,6	36,20										1
SG	4	49	66	10	28	1455	J 34 20 S	136 23 E	16,6											1
SG	4	50	66	10	28	1512	J 34 21 S	136 18 E	16,7											1
SG	4	51	66	10	28	1530	J 34 23 S	136 13 E	16,8											1
SG	4	52	66	10	28	1547	J 34 23 S	136 08 E	17,5											1
SG	4	53	66	10	28	1552	J 34 24 S	136 06 E	18,3											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN. AMT.	SEA DN. AMT.	SWELL DN. AMT.	WEA.	VIS.	BAROM.	SALIN. METHOD
T2	30		66	1	5	0630	K 37 51	S 149 39	E 18,1	35,57							1
T2	30		66	1	5	0700	K 37 51	S 149 39	E 18,1								1
T2	30		66	1	5	0800	K 38 3	S 149 33	E 17,9								1
T2	30		66	1	5	0815	K 38 3	S 149 33	E 18,4								1
T2	30		66	1	5	0900	K 38 9	S 149 27	E 19,1	35,66							1
T2	30		66	1	5	1000	K 38 21	S 149 21	E 19,5								1
T2	30		66	1	5	1100	K 38 21	S 149 15	E 19,3	35,71							1
T2	30		66	1	5	1400	K 38 15	S 149 21	E 19,4								1
T2	30		66	1	5	1500	K 38 15	S 149 33	E 19,2	35,68							1
T2	30		66	1	5	1600	K 38 9	S 149 27	E 19,2								1
T2	30		66	1	5	1700	K 37 57	S 149 21	E 19,1								1
T2	30		66	1	6	0700	K 37 45	S 149 21	E 18,5								1
T2	30		66	1	6	0800	K 37 57	S 149 21	E 18,8								1
T2	30		66	1	6	0900	K 38 3	S 149 21	E 19,2	35,64							1
T2	30		66	1	6	1000	K 38 9	S 149 27	E 19,3								1
T2	30		66	1	6	1100	K 38 9	S 149 15	E 19,5								1
T2	30		66	1	6	1200	K 38 3	S 149 3	E 19,6	35,64							1
T2	30		66	1	6	1300	K 38 3	S 149 15	E 19,3								1
T2	30		66	1	7	0800	K 37 45	S 149 21	E 17,6								1
T2	30		66	1	7	0900	K 37 57	S 149 15	E 18,6	35,50							1
T2	30		66	1	7	1000	K 38 3	S 149 9	E 18,7								1
T2	30		66	1	7	1205	K 38 21	S 149 15	E 20,3	35,75							1
T2	30		66	1	7	1235	K 38 21	S 149 15	E 20,3	35,66							1
T2	30		66	1	7	1400	K 38 21	S 149 3	E 19,6								1
T2	30		66	1	7	1500	K 38 9	S 149 9	E 19,2								1
T2	7		66	2	17	0600	J 35 33	S 135 21	E 20,0	35,71							1
T2	7		66	2	17	0700	J 35 33	S 135 15	E 19,3								1
T2	7		66	2	17	0800	J 35 39	S 135 3	E 19,4								1
T2	7		66	2	17	0915	J 35 39	S 135 3	E 19,4	35,62							1
T2	7		66	2	17	0930	J 35 39	S 135 3	E 19,4								1
T2	7		66	2	17	1000	J 35 33	S 134 57	E 19,4								1
T2	7		66	2	17	1100	J 35 33	S 134 57	E 19,5								1
T2	7		66	2	17	1135	J 35 33	S 134 57	E 19,5								1
T2	7		66	2	17	1200	J 35 39	S 135 3	E 19,4	35,66							1
T2	7		66	2	17	1215	J 35 33	S 134 57	E 19,4								1
T2	7		66	2	17	1235	J 35 33	S 134 57	E 19,4								1
T2	7		66	2	17	1250	J 35 33	S 134 57	E 19,4								1
T2	7		66	2	17	1310	J 35 33	S 134 57	E 19,4								1
T2	7		66	2	17	1430	J 35 33	S 134 57	E 19,7	35,70							1
T2	7		66	2	17	1500	J 35 27	S 134 51	E 19,7	35,71							1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T2	7		66	2	17	1545	J 35 27	S 134 51	E 19,7											1
T2	7		66	2	17	1600	J 35 21	S 134 45	E 19,7											1
T2	7		66	2	17	1715	J 35 21	S 134 45	E 19,6											1
T2	7		66	2	17	1800	J 35 21	S 134 45	E 19,6	35,62										1
T2	7		66	2	18	0700	J 35 27	S 134 33	E 19,1											1
T2	7		66	2	18	0900	J 35 33	S 134 45	E 19,4	35,62										1
T2	7		66	2	18	1000	J 35 39	S 134 57	E 19,4											1
T2	7		66	2	18	1330	J 35 45	S 134 51	E 19,6	35,64										1
T2	7		66	2	18	1420	J 35 45	S 134 51	E 19,5											1
T2	7		66	2	18	1500	J 35 45	S 134 51	E 19,6	35,64										1
T2	7		66	2	18	1550	J 35 39	S 134 57	E 19,6											1
T2	7		66	2	18	1600	J 35 39	S 134 57	E 19,5											1
T2	7		66	2	18	1700	J 35 33	S 134 57	E 19,6											1
T2	7		66	2	18	1800	J 35 33	S 134 57	E 19,6	35,70										1
T2	7		66	2	18	1850	J 35 33	S 134 57	E 19,6											1
T2	7		66	2	19	0800	J 35 51	S 134 57	E 19,4											1
T2	7		66	2	19	0950	J 35 51	S 134 51	E 19,3											1
T2	7		66	2	19	1030	J 35 51	S 134 51	E 19,3	35,71										1
T2	7		66	2	19	1200	J 35 51	S 134 51	E 19,3	35,66										1
T2	7		66	2	19	1300	J 35 45	S 134 51	E 19,4											1
T2	7		66	2	19	1400	J 35 39	S 134 51	E 19,3											1
T2	7		66	2	19	1500	J 35 39	S 134 51	E 19,4	35,64										1
T2	7		66	2	19	1540	J 35 39	S 134 51	E 19,3											1
T2	7		66	2	19	1600	J 35 33	S 134 45	E 19,3											1
T2	7		66	2	19	1700	J 35 33	S 134 45	E 19,1											1
T2	7		66	2	19	1900	J 35 33	S 134 39	E 19,1											1
T2	7		66	2	20	0700	J 35 33	S 134 15	E 19,2											1
T2	7		66	2	20	0900	J 35 33	S 134 21	E 18,9	35,52										1
T2	7		66	2	20	0940	J 35 33	S 134 27	E 19,2											1
T2	7		66	2	20	1100	J 35 33	S 134 27	E 19,4											1
T2	7		66	2	20	1200	J 35 33	S 134 39	E 19,7	35,62										1
T2	7		66	2	20	1235	J 35 33	S 134 39	E 19,6											1
T2	7		66	2	20	1320	J 35 33	S 134 39	E 19,8											1
T2	7		66	2	20	1400	J 35 27	S 134 39	E 19,9											1
T2	7		66	2	20	1500	J 35 27	S 134 39	E 20,0	35,62										1
T2	7		66	2	20	1600	J 35 27	S 134 39	E 20,3											1
T2	7		66	2	20	1700	J 35 21	S 134 27	E 20,3											1
T2	7		66	2	20	1800	J 35 15	S 134 33	E 20,7	35,64										1
T2	7		66	2	21	0855	J 35 39	S 135 9	E 19,4											1
T2	7		66	2	21	1000	J 35 45	S 135 15	E 19,4	35,70										1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T2	7		66	2	21	1100 J	35 45 S	135 21 E	19,9											1
T2	7		66	2	21	1200 J	35 45 S	135 27 E	19,7	35,79										1
T2	7		66	2	21	1300 J	35 51 S	135 21 E	19,9											1
T2	7		66	2	21	1400 J	35 45 S	135 21 E	20,0											1
T2	7		66	2	21	1500 J	35 45 S	135 21 E	20,1											1
T2	7		66	2	21	1600 J	35 39 S	135 27 E	20,1											1
T2	7		66	2	21	1700 J	35 39 S	135 27 E	20,0											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
Y4	1	1	66	1	19	2100	K 42 34 S	148 03 E	15,2											1
Y4	1	2	66	1	19	2143	K 42 34 S	148 01 E	15,8	35,21										1
Y4	1	3	66	1	19	2215	K 42 33 S	147 58 E	15,8	35,34										1
Y4	1	4	66	1	20	0722	K 42 35 S	148 04 E	14,9	35,28										1
Y4	1	5	66	1	20	0745	K 42 35 S	148 03 E	14,9											1
Y4	1	6	66	1	20	0937	K 42 35 S	148 02 E	15,3	35,25										1
Y4	1	7	66	1	20	1012	K 42 36 S	148 00 E	15,8	35,25										1
Y4	1	8	66	1	20	1040	K 42 36 S	147 58 E	16,0	35,25										1
Y4	1	9	66	1	20	1103	K 42 36 S	147 56 E	16,1	35,30										1
Y4	1	10	66	1	20	1128	K 42 36 S	147 56 E	16,0	35,28										1
Y4	2	11	66	2	8	2102	K 42 34 S	148 03 E	16,6	35,39										1
Y4	2	12	66	2	8	2138	K 42 34 S	148 01 E	16,4	35,34										1
Y4	2	13	66	2	8	2208	K 42 33 S	147 58 E	16,3	35,30										1
Y4	2	14	66	2	9	0731	K 42 36 S	147 56 E	16,6	35,34										1
Y4	2	15	66	2	9	0755	K 42 36 S	147 56 E	16,6	35,37										1
Y4	2	16	66	2	9	0940	K 42 36 S	147 58 E	16,8	35,34										1
Y4	2	17	66	2	9	1010	K 42 36 S	148 00 E	16,7	35,32										1
Y4	2	18	66	2	9	1045	K 42 35 S	148 02 E	17,1	35,30										1
Y4	2	19	66	2	9	1105	K 42 35 S	148 03 E	17,2	35,41										1
Y4	2	20	66	2	9	1128	K 42 35 S	148 04 E	17,4	35,43										1
Y4	3	21	66	3	8	2010	K 42 34 S	148 03 E	17,8	35,52										1
Y4	3	22	66	3	8	2051	K 42 34 S	148 01 E	17,8	35,43										1
Y4	3	23	66	3	8	2122	K 42 33 S	147 58 E	17,9	35,46										1
Y4	3	24	66	3	9	0722	K 42 35 S	148 04 E	17,5	35,50										1
Y4	3	25	66	3	9	0748	K 42 35 S	148 03 E	17,5	35,52										1
Y4	3	26	66	3	9	1000	K 42 35 S	148 02 E	17,9	35,46										1
Y4	3	27	66	3	9	1033	K 42 36 S	148 00 E	17,8	35,46										1
Y4	3	28	66	3	9	1110	K 42 36 S	147 58 E	18,2	35,46										1
Y4	3	29	66	3	9	1135	K 42 36 S	147 56 E	18,2	35,50										1
Y4	3	30	66	3	9	1200	K 42 36 S	147 56 E	18,1	35,52										1
Y4	4	41	66	4	21	2040	K 42 34 S	148 03 E	14,7	35,43										1
Y4	4	42	66	4	21	2119	K 42 34 S	148 01 E	14,7	35,52										1
Y4	4	43	66	4	21	2145	K 42 33 S	147 58 E	14,8	35,53										1
Y4	4	44	66	4	22	0910	K 42 35 S	148 04 E	14,7	35,46										1
Y4	4	45	66	4	22	0940	K 42 35 S	148 03 E	14,7	35,46										1
Y4	4	46	66	4	22	1125	K 42 35 S	148 02 E	14,7	35,34										1
Y4	4	47	66	4	22	1157	K 42 36 S	148 00 E	14,7	35,52										1
Y4	4	48	66	4	22	1225	K 42 36 S	147 58 E	14,6	35,32										1
Y4	4	49	66	4	22	1250	K 42 36 S	147 56 E	14,3	35,48										1
Y4	4	50	66	4	22	1312	K 42 36 S	147 56 E	14,2											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN. AMT.	SEA DN. AMT.	SWELL DN. AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
Y4	5	51	66	5	25	0845	K 42 36	S 147 56	E 12.1	35.17							1
Y4	5	52	66	5	25	0920	K 42 36	S 147 56	E 12.2	35.16							1
Y4	5	53	66	5	25	1108	K 42 36	S 147 57	E 12.7	35.14							1
Y4	5	54	66	5	25	1135	K 42 35	S 148 00	E 12.7	35.14							1
Y4	5	55	66	5	25	1208	K 42 35	S 148 02	E 12.7	35.17							1
Y4	5	56	66	5	25	1510	K 42 35	S 148 03	E 12.9	35.16							1
Y4	5	57	66	5	25	1533	K 42 35	S 148 04	E 12.9	35.16							1
Y4	5	58	66	5	25	1810	K 42 34	S 148 03	E 12.9	35.17							1
Y4	5	59	66	5	25	1847	K 42 34	S 148 01	E 12.2	35.19							1
Y4	5	60	66	5	25	1920	K 42 34	S 147 58	E 12.3	35.16							1
Y4		61	66	6	21	0910	K 42 36	S 147 56	E 11.4	35.10							1
Y4		62	66	6	21	0932	K 42 36	S 147 56	E 11.8	35.17							1
Y4		63	66	6	21	1155	K 42 35	S 148 03	E 11.9	35.12							1
Y4		64	66	6	21	1225	K 42 35	S 148 00	E 12.0	35.12							1
Y4		65	66	6	21	1300	K 42 35	S 147 57	E 12.3	35.12							1
Y4		66	66	6	21	1320	K 42 35	S 148 03	E 12.3	35.23							1
Y4		67	66	6	21	1605	K 42 34	S 148 04	E 12.2	35.30							1
Y4		68	66	6	21	1755	K 42 34	S 148 03	E 12.2	35.10							1
Y4		69	66	6	21	1828	K 42 34	S 148 00	E 12.1	35.10							1
Y4		70	66	6	21	1900	K 42 33	S 147 57	E 11.7	35.10							1
Y4		71	66	7	26	1446	K 42 35	S 147 57	E 11.0	34.94							1
Y4		72	66	7	26	1516	K 42 35	S 148 00	E 10.6								1
Y4		73	66	7	26	1548	K 42 35	S 148 02	E 11.2	35.16							1
Y4		74	66	7	26	1612	K 42 35	S 148 03	E 11.4	35.17							1
Y4		75	66	7	26	1808	K 42 34	S 148 03	E 11.4	35.37							1
Y4		76	66	7	26	1845	K 42 34	S 148 00	E 10.8	35.05							1
Y4		77	66	7	26	1924	K 42 33	S 147 57	E 10.6	34.92							1
Y4		78	66	7	27	1032	K 42 34	S 148 04	E 11.1	35.21							1
Y4		79	66	7	27	1419	K 42 36	S 147 56	E 10.6	35.03							1
Y4		80	66	7	27	1438	K 42 36	S 147 56	E 10.6	35.03							1
Y4		81	66	8	18	0955	K 42 36	S 147 56	E 11.1	35.17							1
Y4		82	66	8	18	1017	K 42 36	S 147 56	E 11.1	35.17							1
Y4		83	66	8	18	1228	K 42 35	S 147 57	E 11.0	35.17							1
Y4		84	66	8	18	1257	K 42 35	S 148 00	E 11.0	35.17							1
Y4		85	66	8	18	1330	K 42 35	S 148 02	E 11.6	35.34							1
Y4		86	66	8	18	1358	K 42 39	S 148 03	E 11.4	35.17							1
Y4		87	66	8	18	1522	K 42 34	S 148 04	E 11.4	35.30							1
Y4		88	66	8	18	1829	K 42 34	S 148 03	E 11.4	35.17							1
Y4		89	66	8	18	1904	K 42 34	S 148 00	E 11.4	35.17							1
Y4		90	66	8	18	1935	K 42 33	S 147 57	E 11.1	35.12							1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
Y4		91	66	9	15	1110	K 42 36 S	147 56 E	12,1	34,58										1
Y4		92	66	9	15	1130	K 42 36 S	147 56 E	11,7	34,60										1
Y4		93	66	9	15	1155	K 42 35 S	147 57 E	12,2	34,63										1
Y4		94	66	9	15	1222	K 42 35 S	148 00 E	12,2	34,45										1
Y4		95	66	9	15	1255	K 42 35 S	148 02 E	12,2	34,14										1
Y4		96	66	9	15	1425	K 42 35 S	148 03 E	12,6	34,76										1
Y4		97	66	9	15	1448	K 42 34 S	148 04 E	12,5	34,79										1
Y4		98	66	9	15	1904	K 42 34 S	148 03 E	11,8	34,90										1
Y4		99	66	9	15	1945	K 42 34 S	148 00 E	11,9	34,56										1
Y4		100	66	9	15	2018	K 42 33 S	147 57 E	11,7	34,49										1
Y4		102	66	9	27	1935	K 42 34 S	148 03 E	12,3	35,03										1
Y4		104	66	9	27	2055	K 42 34 S	148 00 E	11,9	35,01										1
Y4		105	66	9	27	2128	K 42 33 S	147 57 E	11,9	34,99										1
Y4		106	66	9	27	2205	K 42 32 S	147 57 E	11,7	34,90										1
Y4		107	66	9	28	1018	K 42 34 S	148 03 E	12,2	35,08										1
Y4		109	66	9	28	1153	K 42 34 S	148 00 E	12,6	35,01										1
Y4		111	66	9	28	1253	K 42 33 S	147 57 E	12,8	34,97										1
Y4		112	66	10	7	1050	K 42 35 S	148 03 E	12,5	35,19										1
Y4		114	66	10	7	1155	K 42 35 S	148 00 E	12,6	35,10										1
Y4		116	66	10	7	1240	K 42 35 S	147 57 E	12,6	35,05										1
Y4		117	66	10	7	1303	K 42 35 S	147 56 E	12,6	33,82										1
Y4		118	66	10	12	1125	K 42 35 S	148 03 E	12,9	34,94										1
Y4		120	66	10	12	1232	K 42 35 S	148 00 E	13,2	34,85										1
Y4		122	66	10	12	1339	K 42 35 S	147 57 E	13,2	34,88										1
Y4		123	66	10	12	1410	K 42 35 S	147 56 E	12,9	34,85										1
Y4		124	66	10	12	1931	K 42 34 S	148 03 E	12,4	35,03										1
Y4		126	66	10	12	2107	K 42 34 S	148 00 E	12,4	34,94										1
Y4		127	66	10	12	2140	K 42 33 S	147 57 E	12,4	34,97										1
Y4		134	66	10	19	0833	K 42 35 S	148 03 E	13,3	35,04										1
Y4		136	66	10	19	0952	K 42 35 S	148 00 E	13,4	35,05										1
Y4		138	66	10	19	1148	K 42 35 S	147 57 E	13,4	35,03										1
Y4		139	66	10	19	1210	K 42 35 S	147 56 E	13,2	35,01										1
Y4		140	66	10	25	1150	K 42 35 S	148 03 E	13,2	34,60										1
Y4		142	66	10	25	1300	K 42 35 S	148 00 E	13,0	34,72										1
Y4		144	66	10	25	1409	K 42 35 S	147 57 E	13,2	34,92										1
Y4		145	66	10	25	1430	K 42 35 S	147 56 E	13,0	34,79										1
Y4		156	66	11	1	0932	K 42 35 S	148 03 E	12,8	34,92										1
Y4		158	66	11	1	1053	K 42 35 S	148 00 E	13,4	34,93										1
Y4		160	66	11	1	1155	K 42 35 S	147 57 E	13,5	34,83										1
Y4		161	66	11	1	1228	K 42 35 S	147 56 E	13,5	34,89										1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLE METHOD
Y4		162	66	11	10	0955	K 42	34 S 148	03 E 13,3	34,99										1
Y4		164	66	11	10	1100	K 42	34 S 148	01 E 12,9	35,03										1
Y4		166	66	11	10	1202	K 42	33 S 147	57 E 13,7	34,92										1
Y4		167	66	11	10	1225	K 42	33 S 147	57 E 13,2	34,80										1
Y4		173	66	11	16	0925	K 42	34 S 148	03 E 12,8	35,03										1
Y4		175	66	11	16	1030	K 42	34 S 148	01 E 13,1	35,02										1
Y4		177	66	11	16	1128	K 42	33 S 147	57 E 13,6	34,35										1
Y4		178	66	11	16	1200	K 42	32 S 147	57 E 13,8	34,54										1
Y4		184	66	11	21	0934	K 42	34 S 148	03 E 14,0	35,04										1
Y4		186	66	11	21	1030	K 42	34 S 148	01 E 14,4	34,92										1
Y4		188	66	11	21	1122	K 42	33 S 147	57 E 14,6	34,88										1
Y4		189	66	11	21	1205	K 42	33 S 147	57 E	34,74										1
Y4		200	66	11	30	0915	K 42	34 S 148	03 E 14,0	35,13										1
Y4		202	66	11	30	1014	K 42	34 S 148	00 E 14,2	35,07										1
Y4		204	66	11	30	1109	K 42	33 S 147	57 E 14,4	35,08										1
Y4		205	66	11	30	1130	K 42	32 S 147	57 E 14,4	35,07										1
Y4		206	66	12	5	0925	K 42	34 S 148	03 E 14,2	35,21										1
Y4		208	66	12	5	1022	K 42	34 S 148	01 E 14,2	35,21										1
Y4		210	66	12	5	1120	K 42	33 S 147	57 E 14,4	35,17										1
Y4		211	66	12	5	1146	K 42	32 S 147	57 E 14,4	35,17										1
Y4		217	66	12	12	0925	K 42	34 S 148	03 E 14,4	35,20										1
Y4		219	66	12	12	1024	K 42	34 S 148	01 E 14,7	35,20										1
Y4		221	66	12	12	1117	K 42	33 S 147	57 E 15,0	35,17										1
Y4		222	66	12	12	1150	K 42	33 S 147	57 E 15,4	35,25										1
Y4		230	66	12	19	1010	K 42	34 S 148	03 E 15,2	35,23										1
Y4		231	66	12	19	1038	K 42	34 S 148	01 E 14,8	35,22										1
Y4		232	66	12	19	1109	K 42	33 S 147	57 E 15,2	35,17										1
Y4		233	66	12	19	1131	K 42	33 S 147	57 E 15,2	35,17										1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
YB	1	1	66	7	30	0800	K 32 31 S	152 31 E	17.7	35.62	23	5	23	2	23	4		7		1
YB	1	2	66	7	30	1100	K 32 05 S	152 49 E	19.2	35.75	23	6	23	3	23	4		7		1
YB	1	3	66	7	30	1400	K 31 37 S	152 59 E	19.0	35.82	23	6	23	3	18	4		7		1
YB	1	4	66	7	30	1700	K 31 07 S	153 06 E	18.9	35.79	23	6	23	3	18	4		7		1
YB	1	5	66	7	30	2000	K 30 31 S	153 10 E	17.8	35.81	23	5	23	2	18	4		7		1
YB	1	6	66	7	31	1230	K 30 11 S	153 20 E	19.4	35.75	18	5	18	2	14	4		6		1
YB	1	7	66	7	31	1500	K 29 53 S	153 31 E	19.3	35.73	18	5	18	2	14	4		6		1
YB	1	8	66	7	31	1805	K 29 21 S	153 39 E	19.7	35.70	16	4	16	2	14	4				1
YB	1	9	66	7	31	2100	K 28 50 S	153 46 E	19.7	35.57	14	3	14	1	14	1				1
YB	1	10	66	8	1	0100	K 28 11 S	153 46 E	18.7	35.75	23	6	23	3	14	1				1
YB	1	11	66	8	1	0600	K 27 20 S	153 46 E	20.2	35.73	18	5	99	2	14	4		6		1
YB	1	12	66	8	1	0900	K 27 01 S	153 39 E	21.2	35.70	14	5	99	2	14	4		7		1
YB	1	13	66	8	1	1200	K 26 35 S	153 35 E	21.2	35.71	09	4	09	2	09	1		7		1
YB	1	14	66	8	1	1500	K 26 05 S	153 33 E	20.8	35.71	09	3	09	2	09	1		7		1
YB	1	15	66	8	1	1800	K 25 37 S	153 32 E	20.2	35.97	09	2	99	1	99	1		7		1
YB	1	16	66	8	1	2100	K 25 10 S	153 30 E	20.7	35.70	09	3	99	2	99	1		7		1
YB	1	17	66	8	2	0330	K 24 15 S	153 07 E	21.0	35.62	14	2	99	1	09	1		7		1
YB	1	18	66	8	2	0700	K 24 02 S	152 28 E	20.8	35.71	18	3	99	2	99	1		7		1
YB	1	19	66	8	2	1100	K 23 49 S	151 50 E	19.4	35.82	18	3	18	2	00	0		7		1
YB	1	20	66	8	2	1400	K 23 37 S	151 20 E	18.6	35.90	18	3	18	2	00	0		7		1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
YG	1	1	66	11	15	1200	K 34 42 S	151 02 E	19.4	35.59	14	1	14	1					1014.9	1
YG	1	2	66	11	17	0600	K 35 17 S	150 48 E	18.6	34.92	99	1	99	1	17	3			1022.4	1
YG	1	3	66	11	17	0900	K 35 29 S	150 33 E	19.7	35.59	99	1	99	1	17	3			1023.0	1
YG	1	4	66	11	17	1245	K 35 40 S	150 38 E	18.9		99	1	99	1	17	3			1019.6	1
YG	1	5	66	11	17	1800	K 35 52 S	150 31 E	19.7	35.46	12	2	12	1	16	1			1020.0	1
YG	1	6	66	11	18	0900	K 35 56 S	150 29 E	19.0	35.28	18	3	18	1	16	1			1022.0	1
YG	1	7	66	11	18	1000	K 36 04 S	150 25 E	17.0	35.50	18	4	18	1	16	1			1023.7	1
YG	1	8	66	11	18	1100	K 36 00 S	150 28 E	18.9	35.23	18	4	18	1	16	1			1023.7	1
YG	1	9	66	11	18	1200	K 35 49 S	150 34 E	18.8	34.87	18	3	18	1	16	1			1024.7	1
YG	1	10	66	11	18	1500	K 35 38 S	150 40 E	19.2	35.28	18	1	18	1	16	1			1024.7	1
YG	1	11	66	11	18	1600	K 35 26 S	150 45 E	18.6	34.96	18	1	18	1	16	1			1024.7	1
YG	1	12	66	11	18	1800	K 35 16 S	150 47 E	18.6	34.51	99	1	99	1	16	1			1024.7	1
YG	1	13	66	11	19	0730	K 35 17 S	150 56 E	19.2	35.59	27	1	27	1	16	1			1024.4	1
YG	1	14	66	11	19	0900	K 35 28 S	150 49 E	20.0	35.59	30	1	30	1	16	1			1024.0	1
YG	1	15	66	11	19	1030	K 35 30 S	150 45 E	19.6	35.32	02	2	02	1	16	1			1023.0	1
YG	1	16	66	11	19	1200	K 35 40 S	150 40 E	17.9	35.03	04	2	04	1	16	1			1022.0	1
YG	1	17	66	11	19	1330	K 35 53 S	150 32 E	19.4	35.35	64	3	04	1	16	1			1022.0	1
YG	1	18	66	11	19	1500	K 36 07 S	150 21 E	17.6	34.70	04	1	04	1	16	1			1020.0	1
YG	1	19	66	11	20	0730	K 36 13 S	150 30 E	19.0	35.14	31	1	31	1	99	1			1020.3	1
YG	1	20	66	11	20	0900	K 36 10 S	150 45 E	19.4	35.32	31	1	31	1	99	1			1020.3	1
YG	1	21	66	11	20	1030	K 36 14 S	150 31 E	19.6	34.99	31	1	31	1	99	1			1019.3	1
YG	1	22	66	11	20	1200	K 36 12 S	150 33 E	20.0	35.07	36	1	36	1	99	1			1018.6	1
YG	1	23	66	11	20	1500	K 36 16 S	150 32 E	20.4	34.92	10	2	10	1	99	1			1018.3	1
YG	1	24	66	11	20	1800	K 36 23 S	150 20 E	19.9	35.21	13	2	13	1	99	1			1019.6	1
YG	1	25	66	11	21	0730	K 36 22 S	150 28 E	19.4	35.16	17	3	17	1	99	1			1020.0	1
YG	1	26	66	11	21	0900	K 36 15 S	150 27 E	19.1	34.92	31	1	31	1	99	1			1020.3	1
YG	1	27	66	11	21	1030	K 36 24 S	150 36 E	19.0	34.87	31	1	31	1	99	1			1020.3	1
YG	1	28	66	11	21	1200	K 36 28 S	150 19 E	19.8	35.34	36	1	36	1	99	1			1018.6	1
YG	1	29	66	11	21	1330	K 36 16 S	150 19 E	19.8	35.28	14	2	14	1	99	1			1018.3	1
YG	1	30	66	11	21	1500	K 36 21 S	150 12 E	19.5	35.08	14	1	14	1	99	1			1018.6	1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T4	34		66	1	2	0500 K	37 51 S	149 27 E	17.7	35.55										1
T4	34		66	1	2	0530 K	37 51 S	149 27 E	17.8											1
T4	34		66	1	2	0600 K	37 57 S	149 21 E	18.6	35.61										1
T4	34		66	1	2	0630 K	38 3 S	149 21 E	18.7											1
T4	34		66	1	2	0700 K	38 9 S	149 15 E	19.2	35.68										1
T4	34		66	1	2	0730 K	38 15 S	149 15 E	19.3											1
T4	34		66	1	2	0800 K	38 15 S	149 15 E	19.6	35.68										1
T4	34		66	1	2	0830 K	38 9 S	149 21 E	19.7											1
T4	34		66	1	2	0900 K	38 9 S	149 21 E	19.6	35.68										1
T4	34		66	1	2	0930 K	38 9 S	149 27 E	19.6											1
T4	34		66	1	2	1000 K	38 3 S	149 15 E	19.7											1
T4	34		66	1	2	1100 K	38 15 S	149 9 E	19.7											1
T4	34		66	1	2	1200 K	38 15 S	149 15 E	20.4											1
T4	34		66	1	2	1225 K	38 9 S	149 21 E	20.6											1
T4	34		66	1	2	1400 K	38 21 S	149 27 E	20.2											1
T4	34		66	1	2	1430 K	38 21 S	149 33 E	20.3											1
T4	34		66	1	2	1500 K	38 21 S	149 33 E	19.7	35.71										1
T4	34		66	1	2	1845 K	38 21 S	149 33 E	19.7											1
T4	33		66	1	5	0600 K	37 57 S	149 33 E	18.3	35.64										1
T4	33		66	1	5	0700 K	37 57 S	149 27 E	17.7											1
T4	33		66	1	5	0730 K	37 57 S	149 27 E	18.5											1
T4	33		66	1	5	0800 K	38 3 S	149 27 E	18.9											1
T4	33		66	1	5	0830 K	38 3 S	149 21 E	19.1											1
T4	33		66	1	5	0900 K	38 3 S	149 21 E	19.2	35.70										1
T4	33		66	1	5	1000 K	38 3 S	149 15 E	18.8											1
T4	33		66	1	5	1100 K	37 57 S	149 15 E	18.5											1
T4	33		66	1	5	1125 K	37 57 S	149 3 E	18.6	35.62										1
T4	33		66	1	5	1132 K	37 57 S	149 3 E	18.6	35.64										1
T4	33		66	1	5	1230 K	37 57 S	148 51 E	18.9	35.59										1
T4	33		66	1	5	1300 K	37 57 S	148 51 E	18.9											1
T4	33		66	1	5	1400 K	37 57 S	148 51 E	18.9											1
T4	33		66	1	5	1500 K	37 51 S	148 45 E	18.5											1
T4	33		66	1	6	0610 K	37 51 S	148 45 E	18.6	35.59										1
T4	33		66	1	6	0700 K	37 57 S	148 45 E	18.4											1
T4	33		66	1	6	0740 K	38 3 S	148 39 E	18.9	35.61										1
T4	33		66	1	6	0745 K	38 3 S	148 39 E	18.9	35.66										1
T4	33		66	1	6	0800 K	38 3 S	148 39 E	19.2											1
T4	33		66	1	6	0900 K	38 9 S	148 33 E	20.0	35.68										1
T4	33		66	1	6	0920 K	38 9 S	148 33 E	20.1	35.68										1
T4	33		66	1	6	1000 K	38 15 S	148 33 E	20.1											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T4	33	66	1	6	1030	K 38 21	S 148 33	E	19.9											1
T4	33	66	1	6	1100	K 38 27	S 148 33	E	19.7											1
T4	33	66	1	6	1130	K 38 21	S 148 39	E	19.7											1
T4	33	66	1	6	1200	K 38 15	S 148 39	E	20.0	35.79										1
T4	33	66	1	6	1300	K 38 9	S 148 27	E	19.3											1
T4	33	66	1	6	1400	K 38 9	S 148 21	E	18.9											1
T4	33	66	1	6	1500	K 37 57	S 148 9	E	18.7	35.57										1
T4	33	66	1	6	1600	K 37 51	S 148 3	E	18.3											1
T4	33	66	1	7	0700	K 37 51	S 148 3	E	18.6											1
T4	33	66	1	7	0800	K 37 57	S 148 9	E	18.3											1
T4	33	66	1	7	0900	K 38 9	S 148 15	E	18.5	35.53										1
T4	33	66	1	7	1000	K 38 9	S 148 27	E	18.9											1
T4	33	66	1	7	1100	K 38 15	S 148 33	E	19.7											1
T4	33	66	1	7	1200	K 38 15	S 148 45	E	19.9	35.71										1
T4	33	66	1	7	1300	K 38 15	S 149 3	E	19.4											1
T4	33	66	1	7	1400	K 38 15	S 149 15	E	19.8											1
T4	33	66	1	7	1500	K 38 9	S 149 3	E	19.7	35.84										1
T4	33	66	1	7	1600	K 38 9	S 148 51	E	19.6											1
T4	33	66	1	7	1700	K 38 3	S 148 39	E	19.7											1
T4	33	66	1	7	1800	K 38 3	S 148 27	E	19.3	35.62										1
T4	33	66	1	7	1900	K 37 57	S 148 15	E	19.1											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	1		66	1	27	0700	J 34 51 S	134 45 E	18.4											1
T9	1		66	1	27	0730	J 34 51 S	134 45 E	18.7											1
T9	1		66	1	27	0746	J 34 51 S	134 45 E	18.4											1
T9	1		66	1	27	0800	J 34 51 S	134 45 E	18.2											1
T9	1		66	1	27	0900	J 34 51 S	134 39 E	18.5	36.00										1
T9	1		66	1	27	0911	J 34 51 S	134 39 E	18.5											1
T9	1		66	1	27	0925	J 34 51 S	134 39 E	18.6											1
T9	1		66	1	27	1000	J 34 51 S	134 39 E	18.6											1
T9	1		66	1	27	1100	J 34 51 S	134 39 E	18.5											1
T9	1		66	1	27	1145	J 34 51 S	134 39 E	18.6											1
T9	1		66	1	27	1146	J 34 51 S	134 39 E	18.8	36.04										1
T9	1		66	1	27	1150	J 34 51 S	134 39 E	18.8	36.06										1
T9	1		66	1	27	1202	J 34 51 S	134 39 E	18.7											1
T9	1		66	1	27	1245	J 34 51 S	134 39 E	18.7											1
T9	1		66	1	27	1305	J 34 51 S	134 39 E	18.9											1
T9	1		66	1	27	1315	J 34 51 S	134 39 E	19.1											1
T9	1		66	1	27	1400	J 34 51 S	134 39 E	18.9											1
T9	1		66	1	27	1445	J 34 51 S	134 39 E	19.1											1
T9	1		66	1	27	1500	J 34 51 S	134 39 E	19.1	35.95										1
T9	1		66	1	27	1600	J 34 51 S	134 39 E	18.7											1
T9	1		66	1	27	1700	J 34 51 S	134 39 E	18.6											1
T9	1		66	1	27	1800	J 34 51 S	134 39 E	18.7											1
T9	3		66	2	2	0645	J 34 51 S	134 39 E	18.8											1
T9	3		66	2	2	0659	J 34 51 S	134 39 E	18.6											1
T9	3		66	2	2	0725	J 34 51 S	134 39 E	18.6											1
T9	3		66	2	2	0800	J 34 51 S	134 39 E	18.6											1
T9	3		66	2	2	0846	J 34 51 S	134 39 E	18.6											1
T9	3		66	2	2	0900	J 34 51 S	134 39 E	18.7	36.00										1
T9	3		66	2	2	0940	J 34 51 S	134 39 E	18.6											1
T9	3		66	2	2	1000	J 34 51 S	134 39 E	18.7											1
T9	3		66	2	2	1100	J 34 57 S	134 27 E	19.2											1
T9	3		66	2	2	1200	J 35 3 S	134 21 E	19.2	35.71										1
T9	3		66	2	2	1300	J 35 9 S	134 9 E	19.3											1
T9	3		66	2	2	1400	J 35 9 S	134 3 E	19.7											1
T9	3		66	2	2	1432	J 35 9 S	134 3 E	19.8											1
T9	3		66	2	2	1447	J 35 9 S	134 3 E	19.6											1
T9	3		66	2	2	1455	J 35 9 S	134 3 E	19.9	35.73										1
T9	3		66	2	2	1510	J 35 9 S	134 3 E	20.0	35.77										1
T9	3		66	2	2	1532	J 35 9 S	134 3 E	20.1											1
T9	3		66	2	2	1600	J 35 9 S	134 3 E	19.7											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN. AMT.	SEA DN. AMT.	SWELL DN. AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	3		66	2	2	1615 J 35	9 S 134	3 E	19.7								1
T9	3		66	2	2	1627 J 35	9 S 134	3 E	19.5								1
T9	3		66	2	2	1630 J 35	9 S 134	3 E	19.5								1
T9	3		66	2	2	1650 J 35	9 S 134	3 E	19.3								1
T9	3		66	2	2	1720 J 35	9 S 134	3 E	19.9	35.77							1
T9	3		66	2	2	1800 J 35	3 S 134	9 E	19.6	35.73							1
T9	3		66	2	3	0600 J 35	9 S 133	57 E	18.8	35.82							1
T9	3		66	2	3	0630 J 35	9 S 133	57 E	18.8								1
T9	3		66	2	3	0655 J 35	9 S 133	57 E	18.9								1
T9	3		66	2	3	0730 J 35	9 S 133	57 E	19.0								1
T9	3		66	2	3	0745 J 35	9 S 133	57 E	19.0								1
T9	3		66	2	3	0800 J 35	9 S 133	57 E	19.0								1
T9	3		66	2	3	0830 J 35	9 S 133	57 E	19.0								1
T9	3		66	2	3	0855 J 35	9 S 133	57 E	18.9								1
T9	3		66	2	3	0900 J 35	9 S 133	57 E	18.7	39.61							1
T9	3		66	2	3	0926 J 35	9 S 133	51 E	18.6								1
T9	3		66	2	3	0940 J 35	9 S 133	51 E	18.5								1
T9	3		66	2	3	1000 J 35	9 S 133	51 E	18.9								1
T9	3		66	2	3	1015 J 35	9 S 133	51 E	19.1								1
T9	3		66	2	3	1045 J 35	9 S 133	51 E	18.9								1
T9	3		66	2	3	1100 J 35	9 S 133	51 E	19.1								1
T9	3		66	2	3	1120 J 35	9 S 133	51 E	18.9								1
T9	3		66	2	3	1130 J 35	9 S 133	51 E	18.9								1
T9	3		66	2	3	1200 J 35	9 S 133	51 E	18.7	35.62							1
T9	3		66	2	3	1230 J 35	3 S 133	57 E	18.9								1
T9	3		66	2	3	1252 J 35	3 S 133	57 E	18.9								1
T9	3		66	2	3	1300 J 35	3 S 133	57 E	19.2								1
T9	3		66	2	3	1330 J 35	3 S 133	57 E	19.2								1
T9	3		66	2	3	1350 J 35	3 S 133	57 E	19.2								1
T9	3		66	2	3	1415 J 35	3 S 133	57 E	19.0								1
T9	3		66	2	3	1430 J 35	3 S 133	57 E	19.2								1
T9	3		66	2	3	1500 J 35	3 S 133	51 E	18.9	35.62							1
T9	3		66	2	3	1511 J 35	3 S 133	51 E	19.0								1
T9	3		66	2	3	1515 J 35	3 S 133	51 E	19.0								1
T9	3		66	2	3	1600 J 35	3 S 133	51 E	18.9								1
T9	3		66	2	3	1630 J 35	9 S 133	57 E	18.8								1
T9	3		66	2	3	1710 J 35	9 S 133	57 E	18.7								1
T9	3		66	2	3	1722 J 35	9 S 133	57 E	18.8								1
T9	3		66	2	3	1725 J 35	9 S 133	57 E	18.8								1
T9	3		66	2	3	1800 J 35	9 S 134	9 E	18.7	35.55							1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	5		66	2	7	0700	J 35 33	S 135 9	E 18,6											1
T9	5		66	2	7	0800	J 35 39	S 135 3	E 18,4											1
T9	5		66	2	7	0900	J 35 39	S 134 57	E 18,6	35,66										1
T9	5		66	2	7	1000	J 35 33	S 134 51	E 18,6											1
T9	5		66	2	7	1035	J 35 33	S 134 51	E 18,7											1
T9	5		66	2	7	1050	J 35 33	S 134 51	E 18,7											1
T9	5		66	2	7	1100	J 35 33	S 134 45	E 18,8											1
T9	5		66	2	7	1150	J 35 27	S 134 39	E 19,0											1
T9	5		66	2	7	1230	J 35 27	S 134 39	E 19,2	35,73										1
T9	5		66	2	7	1245	J 35 27	S 134 39	E 19,2											1
T9	5		66	2	7	1250	J 35 27	S 134 39	E 19,2											1
T9	5		66	2	7	1300	J 35 27	S 134 39	E 19,3											1
T9	5		66	2	7	1325	J 35 27	S 134 33	E 19,3											1
T9	5		66	2	7	1440	J 35 27	S 134 33	E 19,2											1
T9	5		66	2	7	1500	J 35 27	S 134 27	E 19,6	35,70										1
T9	5		66	2	7	1600	J 35 27	S 134 33	E 19,3											1
T9	5		66	2	7	1610	J 35 27	S 134 33	E 19,3											1
T9	5		66	2	7	1635	J 35 27	S 134 33	E 19,3											1
T9	5		66	2	7	1645	J 35 27	S 134 33	E 19,3											1
T9	5		66	2	7	1700	J 35 21	S 134 33	E 19,4											1
T9	5		66	2	7	1710	J 35 21	S 134 33	E 19,4											1
T9	5		66	2	7	1735	J 35 21	S 134 33	E 19,3											1
T9	5		66	2	7	1800	J 35 21	S 134 33	E 19,2	35,68										1
T9	5		66	2	7	1855	J 35 21	S 134 33	E 19,2											1
T9	5		66	2	8	0600	J 35 21	S 134 33	E 18,7	35,81										1
T9	5		66	2	8	0700	J 35 27	S 134 33	E 18,7											1
T9	5		66	2	8	0750	J 35 27	S 134 33	E 18,8											1
T9	5		66	2	8	0800	J 35 33	S 134 39	E 18,9											1
T9	5		66	2	8	0900	J 35 33	S 134 39	E 19,0	35,70										1
T9	5		66	2	8	1000	J 35 33	S 134 45	E 19,1											1
T9	5		66	2	8	1100	J 35 27	S 134 45	E 19,7											1
T9	5		66	2	8	1200	J 35 27	S 134 45	E 19,7	35,73										1
T9	5		66	2	8	1245	J 35 27	S 134 45	E 19,6											1
T9	5		66	2	8	1310	J 35 33	S 134 39	E 20,2											1
T9	5		66	2	8	1320	J 35 33	S 134 39	E 20,0											1
T9	5		66	2	8	1345	J 35 33	S 134 39	E 20,3											1
T9	5		66	2	8	1400	J 35 27	S 134 33	E 20,4											1
T9	5		66	2	8	1430	J 35 27	S 134 33	E 20,6											1
T9	5		66	2	8	1450	J 35 27	S 134 33	E 20,2											1
T9	5		66	2	8	1515	J 35 27	S 134 33	E 20,2	35,75										1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	5		66	2	8	1700	J 35 27	S 134 33	E 20,3											
T9	5		66	2	8	1740	J 35 27	S 134 39	E 20,2											1
T9	5		66	2	8	1800	J 35 33	S 134 45	E 19,9	35,66										1
T9	5		66	2	8	1900	J 35 33	S 134 51	E 19,9											1
T9	5		66	2	9	0700	J 35 33	S 134 51	E 18,8											1
T9	5		66	2	9	0800	J 35 39	S 135 3	E 18,7											1
T9	5		66	2	9	0820	J 35 39	S 135 3	E 18,6											1
T9	5		66	2	9	0835	J 35 45	S 135 3	E 18,6											1
T9	5		66	2	9	0900	J 35 45	S 135 9	E 18,6	35,39										1
T9	5		66	2	9	0905	J 35 45	S 135 9	E 18,6											1
T9	5		66	2	9	0925	J 35 45	S 135 9	E 18,4											1
T9	5		66	2	9	0945	J 35 45	S 135 9	E 18,7											1
T9	5		66	2	9	1050	J 35 45	S 135 15	E 18,6											1
T9	5		66	2	9	1100	J 35 45	S 135 15	E 18,6											1
T9	5		66	2	9	1130	J 35 45	S 135 15	E 18,8											1
T9	5		66	2	9	1200	J 35 45	S 135 15	E 18,7	35,39										1
T9	5		66	2	9	1205	J 35 45	S 135 15	E 18,6											1
T9	5		66	2	9	1300	J 35 39	S 135 15	E 19,1	35,68										1
T9	5		66	2	9	1300	J 35 45	S 135 15	E 18,6											1
T9	5		66	2	9	1800	J 35 21	S 135 33	E 18,7	35,93										1
T9	6		66	2	12	0800	J 35 27	S 135 15	E 18,5											1
T9	6		66	2	12	0900	J 35 33	S 135 9	E 18,8	35,66										1
T9	6		66	2	12	1000	J 35 39	S 135 3	E 18,2											1
T9	6		66	2	12	1010	J 35 39	S 135 3	E 18,4											1
T9	6		66	2	12	1100	J 35 45	S 134 51	E 18,7											1
T9	6		66	2	12	1120	J 35 45	S 134 57	E 18,6											1
T9	6		66	2	12	1210	J 35 45	S 134 57	E 18,7											1
T9	6		66	2	12	1213	J 35 45	S 134 57	E 18,6	35,64										1
T9	6		66	2	12	1225	J 35 51	S 134 57	E 18,7											1
T9	6		66	2	12	1300	J 35 51	S 135 3	E 18,6											1
T9	6		66	2	12	1405	J 35 45	S 134 57	E 18,8											1
T9	6		66	2	12	1445	J 35 45	S 134 57	E 18,7											1
T9	6		66	2	12	1500	J 35 45	S 134 51	E 18,6	35,43										1
T9	6		66	2	12	1600	J 35 39	S 134 51	E 19,0											1
T9	6		66	2	12	1700	J 35 45	S 134 57	E 18,6											1
T9	6		66	2	12	1800	J 35 51	S 135 3	E 18,5	35,50										1
T9	6		66	2	13	0800	J 35 45	S 135 9	E 18,3											1
T9	6		66	2	13	0900	J 35 45	S 135 15	E 18,5	35,46										1
T9	6		66	2	13	1000	J 35 51	S 135 21	E 18,6											1
T9	6		66	2	13	1100	J 35 39	S 135 21	E 18,9											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	6		66	2	13	1200 J 35	39 S	135 9 E	18,5	35,44										1
T9	6		66	2	13	1300 J 35	33 S	135 3 E	18,6											1
T9	6		66	2	13	1400 J 35	33 S	134 51 E	18,9											1
T9	6		66	2	13	1500 J 35	33 S	134 51 E	19,4	35,71										1
T9	6		66	2	13	1600 J 35	27 S	134 51 E	19,5											1
T9	6		66	2	13	1700 J 35	27 S	134 57 E	19,6											1
T9	6		66	2	13	1800 J 35	21 S	135 3 E	19,5	35,73										1
T9	9		66	2	26	0800 J 35	33 S	135 39 E	18,9											1
T9	9		66	2	26	0900 J 35	39 S	135 33 E	19,2	35,73										1
T9	9		66	2	26	1000 J 35	51 S	135 27 E	19,3											1
T9	9		66	2	26	1035 J 35	57 S	135 27 E	19,6											1
T9	9		66	2	26	1100 J 35	57 S	135 27 E	19,7											1
T9	9		66	2	26	1110 J 35	57 S	135 27 E	19,6											1
T9	9		66	2	26	1130 J 35	57 S	135 27 E	19,6											1
T9	9		66	2	26	1145 J 35	57 S	135 21 E	19,6											1
T9	9		66	2	26	1200 J 35	57 S	135 21 E	19,6	35,75										1
T9	9		66	2	26	1230 J 35	51 S	135 15 E	19,6											1
T9	9		66	2	26	1300 J 35	51 S	135 15 E	19,6											1
T9	9		66	2	26	1310 J 35	51 S	135 15 E	19,6											1
T9	9		66	2	26	1320 J 35	51 S	135 15 E	19,7											1
T9	9		66	2	26	1335 J 35	51 S	135 9 E	19,7											1
T9	9		66	2	26	1340 J 35	51 S	135 9 E	19,6											1
T9	9		66	2	26	1400 J 35	51 S	135 9 E	19,6											1
T9	9		66	2	26	1500 J 35	57 S	135 21 E	19,5	35,77										1
T9	9		66	2	26	1530 J 35	57 S	135 15 E	19,6											1
T9	9		66	2	26	1545 J 35	57 S	135 15 E	19,6											1
T9	9		66	2	26	1600 J 35	51 S	135 9 E	19,5											1
T9	9		66	2	26	1650 J 35	51 S	134 57 E	19,6											1
T9	9		66	2	26	1730 J 35	51 S	134 57 E	19,6											1
T9	9		66	2	26	1800 J 35	51 S	134 51 E	19,6	35,81										1
T9	9		66	2	27	0800 J 35	51 S	134 57 E	19,3											1
T9	9		66	2	27	0900 J 35	45 S	135 3 E	19,4	35,75										1
T9	9		66	2	27	1000 J 35	39 S	134 57 E	19,4											1
T9	9		66	2	27	1100 J 35	39 S	134 57 E	19,6											1
T9	9		66	2	27	1150 J 35	39 S	135 3 E	19,7	35,77										1
T9	9		66	2	27	1210 J 35	39 S	135 3 E	19,6											1
T9	9		66	2	27	1300 J 35	45 S	135 9 E	19,6											1
T9	9		66	2	27	1400 J 35	45 S	135 15 E	19,6											1
T9	9		66	2	27	1430 J 35	45 S	135 15 E	20,1											1
T9	9		66	2	27	1450 J 35	45 S	135 15 E	20,0											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN. AMT.	SEA DN. AMT.	SWELL DN. AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	9		66	2	27	1500 J	35 45 S	135 21 E	19,9	35,84							1
T9	9		66	2	27	1530 J	35 45 S	135 21 E	19,9								1
T9	9		66	2	27	1550 J	35 45 S	135 21 E	19,9								1
T9	9		66	2	27	1600 J	35 45 S	135 21 E	19,9								1
T9	9		66	2	27	1700 J	35 51 S	135 21 E	19,9								1
T9	9		66	2	27	1710 J	35 51 S	135 21 E	20,0								1
T9	9		66	2	27	1735 J	35 51 S	135 21 E	20,0								1
T9	9		66	2	27	1740 J	35 51 S	135 21 E	20,0								1
T9	9		66	2	27	1800 J	35 51 S	135 21 E	19,8	35,79							1
T9	10		66	3	4	0800 J	34 57 S	136 3 E	18,2								1
T9	10		66	3	4	0900 J	35 3 S	135 51 E	18,7	36,26							1
T9	10		66	3	4	1000 J	35 9 S	135 45 E	19,3								1
T9	10		66	3	4	1100 J	35 15 S	135 39 E	19,4								1
T9	10		66	3	4	1200 J	35 21 S	135 27 E	19,7	35,73							1
T9	10		66	3	4	1300 J	35 27 S	135 21 E	20,0								1
T9	10		66	3	4	1400 J	35 33 S	135 9 E	20,2								1
T9	10		66	3	4	1500 J	35 33 S	134 57 E	20,4	35,77							1
T9	10		66	3	4	1520 J	35 33 S	134 57 E	20,4								1
T9	10		66	3	4	1600 J	35 39 S	134 57 E	20,4								1
T9	10		66	3	4	1700 J	35 39 S	135 9 E	20,4								1
T9	10		66	3	4	1730 J	35 45 S	135 15 E	20,4								1
T9	10		66	3	4	1800 J	35 45 S	135 15 E	20,4	35,73							1
T9	10		66	3	4	1845 J	35 45 S	135 15 E	20,3								1
T9	10		66	3	5	0700 J	35 51 S	135 21 E	19,8								1
T9	10		66	3	5	0800 J	35 57 S	135 9 E	19,7								1
T9	10		66	3	5	0900 J	35 57 S	135 3 E	19,6	35,61							1
T9	10		66	3	5	1000 J	35 51 S	135 9 E	19,6								1
T9	10		66	3	5	1045 J	35 45 S	135 15 E	20,0								1
T9	10		66	3	5	1115 J	35 45 S	135 15 E	20,2								1
T9	10		66	3	5	1145 J	35 45 S	135 15 E	20,2								1
T9	10		66	3	5	1200 J	35 45 S	135 15 E	20,2	35,73							1
T9	10		66	3	5	1215 J	35 45 S	135 21 E	20,1								1
T9	10		66	3	5	1230 J	35 45 S	135 21 E	20,1								1
T9	10		66	3	5	1300 J	35 39 S	135 15 E	20,3								1
T9	10		66	3	5	1320 J	35 39 S	135 15 E	20,3								1
T9	10		66	3	5	1400 J	35 39 S	135 15 E	20,3								1
T9	10		66	3	5	1440 J	35 39 S	135 9 E	20,3								1
T9	10		66	3	5	1450 J	35 39 S	135 9 E	20,2								1
T9	10		66	3	5	1500 J	35 39 S	135 9 E	20,3	35,75							1
T9	10		66	3	5	1510 J	35 39 S	135 9 E	20,3								1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	10		66	3	5	1600	J 35 45 S	135 15 E	20.2											1
T9	10		66	3	5	1700	J 35 33 S	135 27 E	19.9											1
T9	10		66	3	5	1800	J 35 33 S	135 33 E	19.7	35.81										1
T9	10		66	3	6	0700	J 35 3 S	136 3 E	19.3											1
T9	11		66	3	10	0800	J 35 33 S	135 9 E	19.7											1
T9	11		66	3	10	0900	J 35 39 S	135 3 E	20.1	35.84										1
T9	11		66	3	10	0920	J 35 39 S	135 3 E	20.1											1
T9	11		66	3	10	1000	J 35 39 S	134 57 E	19.7											1
T9	11		66	3	10	1100	J 35 45 S	134 57 E	19.7											1
T9	11		66	3	10	1200	J 35 51 S	135 3 E	19.9	35.68										1
T9	11		66	3	10	1230	J 35 51 S	135 3 E	19.9											1
T9	11		66	3	10	1300	J 35 57 S	135 3 E	19.9											1
T9	11		66	3	10	1400	J 35 57 S	134 57 E	19.8											1
T9	11		66	3	10	1500	J 36 3 S	134 57 E	19.4	35.55										1
T9	11		66	3	10	1600	J 36 3 S	135 3 E	19.8											1
T9	11		66	3	10	1615	J 35 57 S	135 9 E	19.6											1
T9	11		66	3	10	1645	J 35 57 S	135 9 E	19.6											1
T9	11		66	3	10	1700	J 35 57 S	135 9 E	19.7											1
T9	11		66	3	10	1800	J 35 57 S	135 21 E	19.7	35.75										1
T9	11		66	3	10	1830	J 35 57 S	135 21 E	19.7											1
T9	11		66	3	11	0800	J 35 51 S	135 27 E	19.9											1
T9	11		66	3	11	0815	J 35 51 S	135 27 E	19.9											1
T9	11		66	3	11	0900	J 35 51 S	135 21 E	19.9	35.75										1
T9	11		66	3	11	0915	J 35 51 S	135 27 E	19.8											1
T9	11		66	3	11	0925	J 35 51 S	135 27 E	19.8											1
T9	11		66	3	11	1000	J 35 57 S	135 21 E	19.8											1
T9	11		66	3	11	1030	J 35 57 S	135 15 E	19.8											1
T9	11		66	3	11	1100	J 35 57 S	135 15 E	19.8											1
T9	11		66	3	11	1150	J 35 57 S	135 21 E	19.8											1
T9	11		66	3	11	1200	J 35 57 S	135 21 E	19.9	35.70										1
T9	11		66	3	11	1230	J 35 51 S	135 21 E	19.9											1
T9	11		66	3	11	1300	J 35 51 S	135 21 E	19.8											1
T9	11		66	3	11	1400	J 35 51 S	135 21 E	19.8											1
T9	11		66	3	11	1410	J 35 51 S	135 21 E	19.8											1
T9	18		66	3	23	0900	J 36 15 S	135 51 E	19.1	35.90										1
T9	18		66	3	23	0920	J 36 15 S	135 51 E	19.3											1
T9	18		66	3	23	0930	J 36 15 S	135 51 E	19.3											1
T9	18		66	3	23	0950	J 36 9 S	135 45 E	19.6											1
T9	18		66	3	23	1000	J 36 9 S	135 45 E	19.4											1
T9	18		66	3	23	1030	J 36 3 S	135 45 E	19.4											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	18	66	3	23	1100	J 36	3 S	135 45 E	19.4											1
T9	18	66	3	23	1115	J 36	3 S	135 39 E	19.2											1
T9	18	66	3	23	1200	J 35	57 S	135 33 E	19.3	35.90										1
T9	18	66	3	23	1300	J 35	45 S	135 27 E	19.5											1
T9	18	66	3	23	1400	J 35	45 S	135 27 E	19.4											1
T9	18	66	3	23	1405	J 35	45 S	135 27 E	19.4											1
T9	18	66	3	23	1500	J 35	39 S	135 21 E	19.5											1
T9	18	66	3	23	1600	J 35	33 S	135 21 E	19.6											1
T9	18	66	3	23	1700	J 35	39 S	135 15 E	19.1											1
T9	18	66	3	23	1750	J 35	45 S	135 9 E	19.2											1
T9	18	66	3	23	1800	J 35	45 S	135 9 E	19.0	35.66										1
T9	18	66	3	25	0800	J 35	27 S	134 39 E	19.0											1
T9	18	66	3	25	0900	J 35	27 S	134 39 E	19.0	35.64										1
T9	18	66	3	25	0910	J 35	27 S	134 39 E	19.0											1
T9	18	66	3	25	0915	J 35	27 S	134 39 E	19.0											1
T9	18	66	3	25	0930	J 35	27 S	134 39 E	19.0											1
T9	18	66	3	25	0935	J 35	27 S	134 39 E	19.1											1
T9	18	66	3	25	0940	J 35	27 S	134 39 E	19.1											1
T9	18	66	3	25	0945	J 35	27 S	134 39 E	19.1											1
T9	18	66	3	25	1000	J 35	33 S	134 33 E	19.1											1
T9	18	66	3	25	1045	J 35	39 S	134 33 E	19.1											1
T9	18	66	3	25	1050	J 35	39 S	134 33 E	19.1											1
T9	18	66	3	25	1100	J 35	39 S	134 33 E	19.1											1
T9	18	66	3	25	1145	J 35	39 S	134 33 E	19.1											1
T9	18	66	3	25	1205	J 35	39 S	134 33 E	19.0	35.64										1
T9	18	66	3	25	1210	J 35	39 S	134 33 E	19.0											1
T9	18	66	3	25	1215	J 35	39 S	134 33 E	19.0											1
T9	18	66	3	25	1240	J 35	45 S	134 33 E	19.2											1
T9	18	66	3	25	1300	J 35	45 S	134 33 E	19.2											1
T9	18	66	3	25	1310	J 35	45 S	134 33 E	19.2											1
T9	18	66	3	25	1340	J 35	45 S	134 33 E	19.2											1
T9	18	66	3	25	1345	J 35	45 S	134 33 E	19.2											1
T9	18	66	3	25	1400	J 35	45 S	134 33 E	19.2											1
T9	18	66	3	25	1415	J 35	45 S	134 33 E	19.2											1
T9	18	66	3	25	1420	J 35	45 S	134 33 E	19.2											1
T9	18	66	3	25	1500	J 35	51 S	134 33 E	19.2	35.61										1
T9	18	66	3	25	1600	J 35	57 S	134 33 E	19.1											1
T9	18	66	3	25	1700	J 35	57 S	134 27 E	19.2											1
T9	18	66	3	25	1800	J 35	51 S	134 27 E	19.2											1
T9	18	66	3	26	0800	J 35	39 S	134 27 E	18.9											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	18		66	3	26	0900	J 35 33	S 134 27	E 19,2	35,66										1
T9	18		66	3	26	0910	J 35 33	S 134 27	E 19,2											1
T9	18		66	3	26	0930	J 35 33	S 134 27	E 18,9											1
T9	18		66	3	26	1000	J 35 33	S 134 27	E 19,1											1
T9	18		66	3	26	1100	J 35 27	S 134 27	E 19,1											1
T9	18		66	3	26	1200	J 35 27	S 134 27	E 19,2	35,68										1
T9	18		66	3	26	1300	J 35 27	S 134 33	E 19,2											1
T9	18		66	3	26	1330	J 35 27	S 134 33	E 19,2											1
T9	18		66	3	26	1400	J 35 33	S 134 33	E 19,4											1
T9	18		66	3	26	1405	J 35 33	S 134 33	E 19,4											1
T9	18		66	3	26	1500	J 35 33	S 134 27	E 19,5	35,68										1
T9	18		66	3	26	1530	J 35 33	S 134 39	E 19,5											1
T9	18		66	3	26	1545	J 35 33	S 134 39	E 19,5											1
T9	18		66	3	26	1600	J 35 33	S 134 45	E 19,4											1
T9	18		66	3	26	1700	J 35 33	S 134 45	E 19,6											1
T9	18		66	3	26	1730	J 35 33	S 134 45	E 19,6											1
T9	18		66	3	26	1800	J 35 33	S 134 51	E 19,5	35,62										1
T9	20		66	4	10	0800	J 35 57	S 135 57	E 19,1											1
T9	20		66	4	10	0900	J 36 3	S 135 57	E 19,3	35,93										1
T9	20		66	4	10	1000	J 36 9	S 135 51	E 19,3											1
T9	20		66	4	10	1100	J 36 15	S 135 57	E 19,1											1
T9	20		66	4	10	1200	J 36 9	S 136 9	E 19,0	35,90										1
T9	20		66	4	10	1300	J 36 3	S 136 9	E 19,1											1
T9	20		66	4	10	1400	J 35 57	S 136 3	E 19,1											1
T9	20		66	4	10	1500	J 35 51	S 136 3	E 19,1	35,82										1
T9	20		66	4	10	1600	J 35 45	S 136 15	E 18,8											1
T9	20		66	4	10	1700	J 35 39	S 136 15	E 18,7	35,84										1
T9	20		66	4	10	1800	J 35 27	S 136 15	E 18,9	35,84										1
T9	20		66	4	11	0900	J 35 9	S 135 39	E 18,6	35,88										1
T9	20		66	4	11	1000	J 35 3	S 135 39	E 18,7											1
T9	20		66	4	11	1100	J 34 57	S 135 45	E 18,8											1
T9	20		66	4	11	1200	J 35 3	S 135 51	E 18,9	35,88										1
T9	21		66	4	15	1000	J 34 51	S 135 21	E 18,9											1
T9	21		66	4	15	1100	J 34 57	S 135 33	E 18,6											1
T9	21		66	4	15	1200	J 34 57	S 135 45	E 18,4	35,90										1
T9	21		66	4	15	1210	J 34 57	S 135 45	E 18,4											1
T9	21		66	4	15	1300	J 35 3	S 135 45	E 18,3											1
T9	21		66	4	15	1400	J 34 57	S 135 51	E 18,4											1
T9	21		66	4	15	1500	J 35 3	S 135 57	E 18,5	35,90										1
T9	22		66	4	17	0800	J 34 51	S 134 45	E 18,7											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
T9	22	66	4	17	0900 J	34 45 S	134 45 E	19,0	35,99											1
T9	22	66	4	17	1000 J	34 39 S	134 51 E	18,4												1
T9	22	66	4	17	1100 J	34 27 S	134 45 E	18,4												1
T9	22	66	4	17	1200 J	34 21 S	134 57 E	17,5	35,66											1
T9	22	66	4	17	1300 J	34 9 S	135 9 E	17,9												1
T9	22	66	4	17	1400 J	34 9 S	135 9 E	18,2												1
T9	22	66	4	17	1500 J	34 9 S	135 9 E	18,2	35,71											1
T9	22	66	4	17	1600 J	34 21 S	135 9 E	17,9												1
T9	22	66	4	18	0800 J	34 51 S	134 39 E	19,0												1
T9	22	66	4	18	0900 J	34 51 S	134 39 E	18,9	35,93											1
T9	22	66	4	18	1200 J	34 51 S	134 39 E	19,3	35,93											1
T9	22	66	4	18	1330 J	34 51 S	134 39 E	19,3												1
T9	22	66	4	19	0700 J	34 51 S	134 39 E	19,3												1
T9	22	66	4	19	0900 J	34 51 S	134 39 E	19,3	35,99											1
T9	22	66	4	19	1400 J	34 51 S	134 51 E	19,0												1
T9	22	66	4	19	1500 J	34 51 S	135 3 E	18,7	35,88											1
T9	22	66	4	19	1600 J	34 51 S	135 9 E	19,0												1
T9	22	66	4	19	1700 J	34 57 S	135 21 E	19,0												1
T9	22	66	4	19	1800 J	34 57 S	135 33 E	18,8	35,90											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
04	2		66	2	2	0900	J 35	15 S 134	33 E	18,6										1
04	2		66	2	2	1000	J 35	21 S 134	33 E	18,7										1
04	2		66	2	2	1030	J 35	21 S 134	33 E	18,7										1
04	2		66	2	2	1100	J 35	21 S 134	33 E	18,7										1
04	2		66	2	2	1200	J 35	21 S 134	39 E	18,8										1
04	2		66	2	2	1208	J 35	21 S 134	39 E	19,1										1
04	2		66	2	2	1300	J 35	27 S 134	45 E	19,2										1
04	2		66	2	2	1400	J 35	27 S 134	51 E	19,4										1
04	2		66	2	2	1420	J 35	27 S 134	51 E	19,6										1
04	2		66	2	2	1445	J 35	27 S 134	51 E	19,6										1
04	2		66	2	2	1450	J 35	27 S 134	51 E	19,6										1
04	2		66	2	2	1510	J 35	27 S 134	51 E	19,7										1
04	2		66	2	2	1530	J 35	27 S 134	51 E	19,6										1
04	2		66	2	2	1545	J 35	27 S 134	51 E	19,6										1
04	2		66	2	2	1645	J 35	27 S 134	51 E	19,7										1
04	2		66	2	2	1700	J 35	33 S 134	51 E	19,6										1
04	2		66	2	2	1800	J 35	33 S 135	3 E	19,3										1
04	2		66	2	2	1900	J 35	27 S 135	9 E	18,8										1
04	4		66	2	7	0600	J 35	9 S 135	45 E	18,2										1
04	4		66	2	7	0700	J 35	9 S 135	33 E	18,2	35,91									1
04	4		66	2	7	0800	J 35	15 S 135	21 E	18,3										1
04	4		66	2	7	0900	J 35	21 S 135	9 E	18,3										1
04	4		66	2	7	1000	J 35	27 S 135	3 E	18,4										1
04	4		66	2	7	1100	J 35	27 S 134	57 E	18,7										1
04	4		66	2	7	1200	J 35	33 S 134	51 E	18,8	35,71									1
04	4		66	2	7	1300	J 35	33 S 134	39 E	19,0										1
04	4		66	2	7	1345	J 35	33 S 134	33 E	19,1	35,71									1
04	4		66	2	7	1455	J 35	33 S 134	33 E	19,2	35,73									1
04	4		66	2	7	1520	J 35	33 S 134	33 E	19,3	35,70									1
04	4		66	2	7	1600	J 35	33 S 134	27 E	19,3										1
04	4		66	2	7	1610	J 35	33 S 134	27 E	19,3	35,66									1
04	4		66	2	7	1700	J 35	33 S 134	33 E	19,0										1
04	4		66	2	7	1733	J 35	39 S 134	33 E	19,2	35,48									1
04	4		66	2	7	1745	J 35	39 S 134	33 E	19,1	35,44									1
04	4		66	2	7	1800	J 35	39 S 134	33 E	19,1	35,55									1
04	4		66	2	7	1900	J 35	39 S 134	33 E	19,3										1
04	4		66	2	8	0628	J 35	33 S 134	33 E	18,9										1
04	4		66	2	8	0700	J 35	39 S 134	33 E	18,4										1
04	4		66	2	8	0800	J 35	39 S 134	45 E	18,4										1
04	4		66	2	8	0900	J 35	39 S 134	45 E	18,5	35,41									1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
04	4		66	2	8	1000	J 35 33	S 134 45	E 18.8											1
04	4		66	2	8	1100	J 35 33	S 134 45	E 19.0											1
04	4		66	2	8	1142	J 35 33	S 134 39	E 19.2	35.53										1
04	4		66	2	8	1230	J 35 33	S 134 39	E 19.3	35.48										1
04	4		66	2	8	1242	J 35 33	S 134 39	E 19.3											1
04	4		66	2	8	1400	J 35 39	S 134 45	E 19.9											1
04	4		66	2	8	1440	J 35 39	S 134 45	E 20.1	35.48										1
04	4		66	2	8	1455	J 35 39	S 134 45	E 19.9	35.50										1
04	4		66	2	8	1530	J 35 39	S 134 45	E 19.9											1
04	4		66	2	8	1625	J 35 39	S 134 45	E 20.0	35.59										1
04	4		66	2	8	1700	J 35 39	S 134 45	E 19.8	35.52										1
04	4		66	2	8	1810	J 35 39	S 134 45	E 19.7	35.59										1
04	4		66	2	8	1850	J 35 39	S 134 45	E 19.7	35.50										1
04	8		66	2	25	0900	J 34 51	S 136 3	E 17.8											1
04	8		66	2	25	1000	J 34 57	S 136 3	E 17.8											1
04	8		66	2	25	1100	J 35 3	S 135 57	E 18.0											1
04	8		66	2	25	1200	J 35 3	S 135 51	E 18.3	36.08										1
04	8		66	2	25	1300	J 35 9	S 135 45	E 18.9											1
04	8		66	2	25	1400	J 35 15	S 135 39	E 18.9											1
04	8		66	2	25	1500	J 35 15	S 135 39	E 18.9	35.73										1
04	8		66	2	25	1600	J 35 21	S 135 45	E 18.8											1
04	8		66	2	25	1700	J 35 21	S 135 51	E 18.8											1
04	8		66	2	25	1800	J 35 21	S 136 3	E 18.8	36.09										1
04	8		66	2	25	1900	J 35 21	S 136 9	E 18.6											1
04	8		66	2	26	0600	J 35 45	S 136 3	E 18.7	35.68										1
04	8		66	2	26	0700	J 35 51	S 135 57	E 18.7											1
04	8		66	2	26	0800	J 35 57	S 135 51	E 18.8											1
04	8		66	2	26	0900	J 36 3	S 135 45	E 19.2	35.68										1
04	8		66	2	26	1000	J 36 3	S 135 39	E 19.3											1
04	8		66	2	26	1100	J 36 3	S 135 39	E 19.3											1
04	8		66	2	26	1155	J 35 57	S 135 33	E 19.3	35.73										1
04	8		66	2	26	1300	J 35 57	S 135 33	E 19.3											1
04	8		66	2	26	1400	J 35 51	S 135 27	E 18.9											1
04	8		66	2	26	1500	J 35 51	S 135 15	E 19.2											1
04	8		66	2	26	1600	J 35 51	S 135 9	E 19.3											1
04	8		66	2	26	1645	J 35 45	S 135 9	E 19.4											1
04	8		66	2	26	1700	J 35 45	S 135 9	E 19.5	35.68										1
04	8		66	2	26	1730	J 35 45	S 134 57	E 19.4											1
04	8		66	2	26	1745	J 35 45	S 134 57	E 19.4											1
04	8		66	2	26	1755	J 35 45	S 134 57	E 19.4											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
U4	8		66	2	26	1820 J	35 45 S	134 57 E	19,4											1
U4	8		66	2	26	1835 J	35 39 S	134 51 E	19,4											1
U4	8		66	2	26	1900 J	35 39 S	134 51 E	19,4											1
U4	8		66	2	26	1930 J	35 39 S	134 51 E	19,4											1
U4	8		66	2	27	0700 J	35 33 S	134 45 E	19,3											1
U4	8		66	2	27	0745 J	35 39 S	134 51 E	19,3	35,79										1
U4	8		66	2	27	0800 J	35 39 S	134 51 E	19,3											1
U4	8		66	2	27	0900 J	35 45 S	134 45 E	18,9	35,50										1
U4	8		66	2	27	1000 J	35 45 S	134 57 E	19,3											1
U4	8		66	2	27	1040 J	35 39 S	134 51 E	19,4											1
U4	8		66	2	27	1100 J	35 39 S	134 51 E	19,4											1
U4	8		66	2	27	1200 J	35 39 S	134 57 E	19,5	35,64										1
U4	8		66	2	27	1300 J	35 33 S	135 15 E	19,5											1
U4	8		66	2	27	1400 J	35 27 S	135 21 E	19,4											1
U4	8		66	2	27	1500 J	35 21 S	135 33 E	19,6	35,73										1
U4	8		66	2	27	1600 J	35 21 S	135 39 E	19,4											1
U4	8		66	2	27	1640 J	35 15 S	135 39 E	19,3											1
U4	8		66	2	27	1700 J	35 15 S	135 39 E	19,2											1
U4	8		66	2	27	1800 J	35 9 S	135 45 E	19,3											1
U4	8		66	2	27	1900 J	35 3 S	135 57 E	19,3											1
U4	8		66	3	1	0700 J	35 45 S	135 33 E	19,3											1
U4	8		66	3	1	0720 J	35 51 S	135 27 E	19,3											1
U4	8		66	3	1	0800 J	35 51 S	135 21 E	19,3											1
U4	8		66	3	1	0900 J	35 45 S	135 9 E	19,3	35,68										1
U4	8		66	3	1	1000 J	35 45 S	134 57 E	19,4											1
U4	8		66	3	1	1100 J	35 39 S	134 51 E	19,4											1
U4	8		66	3	1	1200 J	35 33 S	134 51 E	19,5	35,68										1
U4	8		66	3	1	1300 J	35 33 S	134 45 E	19,4											1
U4	8		66	3	1	1400 J	35 33 S	134 39 E	19,4											1
U4	8		66	3	1	1450 J	35 33 S	134 39 E	19,4	35,55										1
U4	8		66	3	1	1600 J	35 33 S	134 39 E	19,5											1
U4	8		66	3	1	1625 J	35 33 S	134 39 E	19,4	35,55										1
U4	8		66	3	1	1700 J	35 33 S	134 39 E	19,6											1
U4	8		66	3	1	1715 J	35 33 S	134 39 E	19,6	35,68										1
U4	8		66	3	1	1730 J	35 33 S	134 39 E	19,5	35,62										1
U4	8		66	3	1	1800 J	35 33 S	134 39 E	19,4											1
U4	8		66	3	1	1840 J	35 33 S	134 39 E	19,4											1
U4	8		66	3	1	1900 J	35 33 S	134 39 E	19,4											1
U4	8		66	3	1	1955 J	35 33 S	134 33 E	19,3	35,57										1
U4	8		66	3	2	0700 J	35 33 S	134 39 E	19,4											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
U4	8		66	3	2	0730 J 35	33 S	134 39 E	19.4	35.70										1
U4	8		66	3	2	0805 J 35	33 S	134 39 E	19.4											1
U4	8		66	3	2	0900 J 35	39 S	134 51 E	19.4	35.66										1
U4	8		66	3	2	1000 J 35	39 S	134 57 E	19.2											1
U4	8		66	3	2	1200 J 35	45 S	134 57 E	19.1											1
U4	8		66	3	2	1215 J 35	45 S	134 57 E	19.1	35.92										1
U4	8		66	3	2	1500 J 35	57 S	135 9 E	18.3											1
U4	8		66	3	2	1810 J 35	51 S	135 33 E	19.3											1
U4	12		66	3	5	0800 J 35	45 S	135 39 E	19.3											1
U4	12		66	3	5	0900 J 35	51 S	135 39 E	19.5	35.75										1
U4	12		66	3	5	1000 J 35	57 S	135 33 E	19.5											1
U4	12		66	3	5	1030 J 35	57 S	135 33 E	19.6	35.75										1
U4	12		66	3	5	1100 J 35	57 S	135 27 E	19.6											1
U4	12		66	3	5	1200 J 35	51 S	135 27 E	19.6	35.55										1
U4	12		66	3	5	1300 J 35	51 S	135 21 E	19.6											1
U4	12		66	3	5	1400 J 35	51 S	135 15 E	19.7											1
U4	12		66	3	5	1445 J 35	45 S	135 15 E	19.8	35.48										1
U4	12		66	3	5	1600 J 35	45 S	135 21 E	20.2											1
U4	12		66	3	5	1630 J 35	45 S	135 21 E	20.0	35.71										1
U4	12		66	3	5	1700 J 35	45 S	135 21 E	20.0											1
U4	12		66	3	5	1800 J 35	45 S	135 21 E	19.9											1
U4	12		66	3	5	1900 J 35	45 S	135 21 E	19.9											1
U4	12		66	3	5	1930 J 35	45 S	135 21 E	19.9	35.66										1
U4	14		66	3	14	0800 J 35	33 S	135 21 E	19.4											1
U4	14		66	3	14	0900 J 35	39 S	135 15 E	19.9											1
U4	14		66	3	14	1000 J 35	39 S	135 3 E	19.4											1
U4	14		66	3	14	1047 J 35	39 S	134 51 E	19.3	35.61										1
U4	14		66	3	14	1200 J 35	39 S	134 51 E	19.4											1
U4	14		66	3	14	1300 J 35	39 S	134 51 E	19.5											1
U4	14		66	3	14	1335 J 35	39 S	134 51 E	19.6	35.62										1
U4	14		66	3	14	1400 J 35	39 S	134 45 E	19.6											1
U4	14		66	3	14	1500 J 35	39 S	134 45 E	19.6	35.61										1
U4	14		66	3	14	1545 J 35	39 S	134 45 E	19.6	35.62										1
U4	14		66	3	14	1700 J 35	39 S	134 51 E	19.6											1
U4	14		66	3	14	1800 J 35	39 S	134 51 E	19.7	35.70										1
U4	14		66	3	14	1900 J 35	45 S	134 57 E	19.5											1
U4	16		66	3	18	0800 J 35	51 S	135 45 E	19.6											1
U4	16		66	3	18	0900 J 36	3 S	135 39 E	19.3	35.73										1
U4	16		66	3	18	1000 J 36	15 S	135 39 E	19.2											1
U4	16		66	3	18	1100 J 36	9 S	135 33 E	19.3	35.59										1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
04	16		66	3	18	1107	J 36 9 S	135 33 E	19.3											1
04	16		66	3	18	1200	J 36 3 S	135 27 E	19.4	35.83										1
04	16		66	3	18	1300	J 35 57 S	135 21 E	19.4											1
04	16		66	3	18	1400	J 35 51 S	135 15 E	19.3											1
04	16		66	3	18	1500	J 35 45 S	135 21 E	19.4											1
04	16		66	3	18	1600	J 35 45 S	135 21 E	19.5											1
04	16		66	3	18	1700	J 35 51 S	135 21 E	19.6											1
04	16		66	3	18	1800	J 35 51 S	135 21 E	19.6											1
04	16		66	3	18	1900	J 35 51 S	135 27 E	19.5											1
04	16		66	3	19	0700	J 35 51 S	135 27 E	19.3											1
04	16		66	3	19	0800	J 35 45 S	135 21 E	19.3											1
04	16		66	3	19	0900	J 35 51 S	135 15 E	19.4	35.90										1
04	16		66	3	19	1000	J 35 45 S	135 9 E	19.3											1
04	16		66	3	19	1015	J 35 45 S	135 9 E	19.4	35.90										1
04	16		66	3	19	1100	J 35 39 S	135 3 E	19.5											1
04	16		66	3	19	1200	J 35 45 S	134 57 E	19.6											1
04	16		66	3	19	1215	J 35 45 S	134 57 E	19.8	35.95										1
04	16		66	3	19	1225	J 35 45 S	134 51 E	19.6											1
04	16		66	3	19	1309	J 35 45 S	134 51 E	19.6	35.71										1
04	16		66	3	19	1400	J 35 39 S	134 51 E	19.6											1
04	16		66	3	19	1450	J 35 39 S	134 51 E	19.6	35.82										1
04	16		66	3	19	1500	J 35 39 S	134 51 E	19.6											1
04	16		66	3	19	1600	J 35 33 S	134 51 E	19.5											1
04	16		66	3	19	1700	J 35 33 S	134 57 E	19.7											1
04	17		66	3	23	1100	J 35 9 S	135 51 E	18.4											1
04	17		66	3	23	1200	J 35 15 S	135 39 E	18.6	35.86										1
04	17		66	3	23	1300	J 35 21 S	135 27 E	18.8											1
04	17		66	3	23	1400	J 35 27 S	135 15 E	18.9											1
04	17		66	3	23	1500	J 35 33 S	135 9 E	19.2	35.88										1
04	17		66	3	23	1600	J 35 33 S	134 57 E	19.3											1
04	17		66	3	23	1650	J 35 39 S	134 51 E	19.2	35.79										1
04	17		66	3	23	1700	J 35 39 S	134 51 E	19.2											1
04	17		66	3	23	1800	J 35 39 S	134 51 E	19.3											1
04	17		66	3	23	1830	J 35 39 S	134 51 E	19.2	35.59										1
04	17		66	3	23	1900	J 35 39 S	134 51 E	19.2	35.59										1
04	17		66	3	24	0700	J 35 39 S	134 51 E	18.7											1
04	17		66	3	24	0745	J 35 39 S	134 51 E	18.7	35.59										1
04	17		66	3	24	0805	J 35 39 S	134 51 E	18.7											1
04	17		66	3	24	0850	J 35 39 S	134 45 E	18.7	35.59										1
04	17		66	3	24	1000	J 35 39 S	134 39 E	18.7											1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN. AMT.	SEA DN. AMT.	SWELL DN. AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
54	17		66	3	24	1011	J 35 39	S 134 39	E 18,7								1
54	17		66	3	24	1100	J 35 33	S 134 39	E 19,3								1
54	17		66	3	24	1120	J 35 33	S 134 39	E 19,2	35,79							1
54	17		66	3	24	1140	J 35 39	S 134 39	E 18,9								1
54	17		66	3	24	1150	J 35 39	S 134 39	E 18,9								1
54	17		66	3	24	1153	J 35 39	S 134 39	E 18,9								1
54	17		66	3	24	1157	J 35 39	S 134 39	E 18,8	35,99							1
54	17		66	3	24	1210	J 35 39	S 134 39	E 18,8								1
54	17		66	3	24	1218	J 35 39	S 134 39	E 18,9								1
54	17		66	3	24	1300	J 35 33	S 134 39	E 19,1								1
54	17		66	3	24	1400	J 35 39	S 134 39	E 18,9								1
54	17		66	3	24	1500	J 35 33	S 134 39	E 19,3	35,79							1
54	17		66	3	24	1600	J 35 33	S 134 39	E 19,0								1
54	17		66	3	24	1700	J 35 27	S 134 51	E 18,9								1
54	17		66	3	24	1800	J 35 27	S 134 45	E 19,1								1
54	17		66	3	25	0800	J 35 33	S 134 45	E 18,7								1
54	17		66	3	25	0845	J 35 33	S 134 45	E 18,7	35,95							1
54	17		66	3	25	0855	J 35 33	S 134 45	E 18,7								1
54	17		66	3	25	0920	J 35 33	S 134 45	E 18,8								1
54	17		66	3	25	1000	J 35 27	S 134 39	E 18,8								1
54	17		66	3	25	1010	J 35 27	S 134 39	E 18,7								1
54	17		66	3	25	1100	J 35 27	S 134 39	E 18,8								1
54	17		66	3	25	1140	J 35 21	S 134 33	E 18,8								1
54	17		66	3	25	1203	J 35 21	S 134 33	E 18,8	35,52							1
54	17		66	3	25	1300	J 35 21	S 134 33	E 18,7								1
54	17		66	3	25	1400	J 35 21	S 134 33	E 18,8								1
54	17		66	3	25	1500	J 35 21	S 134 33	E 18,9	35,62							1
54	17		66	3	25	1600	J 35 21	S 134 33	E 18,9								1
54	17		66	3	25	1700	J 35 21	S 134 33	E 18,9								1
54	17		66	3	25	1800	J 35 27	S 134 39	E 18,8								1
54	17		66	3	25	1900	J 35 27	S 134 45	E 18,8								1
54	17		66	3	26	0800	J 35 27	S 134 45	E 18,8								1
54	17		66	3	26	0845	J 35 21	S 134 45	E 18,6								1
54	17		66	3	26	0900	J 35 21	S 134 45	E 18,6								1
54	17		66	3	26	1000	J 35 21	S 134 39	E 18,7								1
54	17		66	3	26	1100	J 35 21	S 134 27	E 19,1								1
54	17		66	3	26	1200	J 35 19	S 134 27	E 19,7	35,86							1
54	17		66	3	26	1300	J 35 9	S 134 33	E 19,7								1
54	17		66	3	26	1400	J 34 57	S 134 39	E 19,6								1
54	17		66	3	26	1500	J 34 51	S 134 39	E 20,0	35,86							1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN. AMT.	SEA DN. AMT.	SWELL DN. AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
U4	17		66	3	26	1600 J	34 51 S	134 39 E	20.0								1
U4	17		66	3	26	1700 J	34 51 S	134 45 E	20.0								1
U4	17		66	3	26	1800 J	34 45 S	134 51 E	20.0								1
U4	17		66	3	26	1900 J	34 39 S	134 57 E	20.1								1
U4	17		66	3	27	0700 J	34 51 S	134 45 E	19.3								1
U4	17		66	3	27	0800 J	34 45 S	134 39 E	19.3								1
U4	17		66	3	27	0900 J	34 51 S	134 39 E	19.3								1
U4	17		66	3	27	1000 J	34 51 S	134 45 E	19.3								1
U4	17		66	3	27	1100 J	34 51 S	134 45 E	19.3								1
U4	17		66	3	27	1200 J	34 51 S	134 51 E	19.3								1
U4	17		66	3	27	1300 J	34 51 S	135 3 E	19.2								1
U4	17		66	3	27	1400 J	34 51 S	135 9 E	19.1								1
U4	17		66	3	27	1500 J	34 57 S	135 21 E	19.1								1
U4	17		66	3	27	1520 J	34 57 S	135 21 E	19.1								1
U4	17		66	3	27	1600 J	34 57 S	135 21 E	19.1								1
U4	17		66	3	27	1700 J	34 57 S	135 27 E	19.1								1
U4	19		66	3	31	0700 J	35 45 S	135 15 E	18.7								1
U4	19		66	3	31	0800 J	35 45 S	135 9 E	19.2								1
U4	19		66	3	31	0840 J	35 39 S	135 3 E	19.1								1
U4	19		66	3	31	0850 J	35 39 S	135 3 E	19.1								1
U4	19		66	3	31	0900 J	35 39 S	135 3 E	19.1								1
U4	19		66	3	31	1000 J	35 39 S	135 3 E	19.1								1
U4	19		66	3	31	1100 J	35 39 S	135 3 E	19.1								1
U4	19		66	3	31	1200 J	35 39 S	135 3 E	19.1	35,62							1
U4	19		66	3	31	1300 J	35 39 S	135 3 E	19.1								1
U4	19		66	3	31	1400 J	35 39 S	135 3 E	19.1								1
U4	19		66	3	31	1415 J	35 39 S	135 3 E	19.1	35,62							1
U4	19		66	3	31	1445 J	35 39 S	135 3 E	19.1	35,64							1
U4	19		66	3	31	1600 J	35 39 S	135 9 E	19.3								1
U4	19		66	3	31	1635 J	35 39 S	135 9 E	19.5	35,77							1
U4	19		66	3	31	1700 J	35 33 S	135 21 E	19.3								1
U4	19		66	4	1	0800 J	35 3 S	136 3 E	18.3								1

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN. AMT.	SEA DN. AMT.	SWELL DN. AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
W4			66	1	2	0800	K 37 9 S	150 9 E	19.3								G
W4			66	1	2	1000	K 37 15 S	150 21 E	20.0								G
W4			66	1	2	1200	K 37 27 S	150 21 E	20.0								G
W4			66	1	2	1400	K 37 33 S	150 15 E	20.0								G
W4			66	1	2	1600	K 38 3 S	149 45 E	19.1								G
W4			66	1	2	1710	K 38 9 S	149 33 E	20.2								G
W4			66	1	2	1805	K 38 9 S	149 27 E	19.8								G
W4			66	1	2	1920	K 38 9 S	149 27 E	19.4								G
W4			66	1	2	1945	K 38 3 S	149 27 E	19.2								G
W4			66	1	3	0900	K 37 57 S	149 21 E	19.3								G
W4			66	1	3	1100	K 38 9 S	149 27 E	19.6								G
W4			66	1	3	1225	K 38 9 S	149 33 E	20.3								G
W4			66	1	3	1235	K 38 9 S	149 33 E	20.6								G
W4			66	1	3	1500	K 38 3 S	149 21 E	20.9								G
W4			66	1	3	1700	K 38 15 S	149 27 E	20.3								G
W4			66	1	3	1900	K 38 15 S	149 15 E	20.2								G
W4			66	1	5	0730	K 38 3 S	149 39 E	18.8								G
W4			66	1	5	1000	K 38 15 S	149 15 E	19.4								G
W4			66	1	5	1200	K 38 15 S	148 57 E	19.8								G
W4			66	1	5	1400	K 38 15 S	149 15 E	19.7								G
W4			66	1	5	1600	K 38 9 S	149 15 E	19.4								G
W4			66	1	5	1800	K 37 57 S	149 15 E	18.6								G
W4			66	1	6	0800	K 37 57 S	149 21 E	18.6								G
W4			66	1	6	1000	K 38 9 S	149 21 E	19.3								G
W4			66	1	6	1200	K 38 9 S	149 9 E	19.8								G
W4			66	1	6	1400	K 37 57 S	149 9 E	18.7								G
W4			66	1	7	0715	K 37 57 S	149 15 E	17.8								G
W4			66	1	7	0930	K 37 51 S	149 39 E	17.6								G
W4			66	1	7	1100	K 37 39 S	149 51 E	18.9								G
W4			66	1	7	1300	K 37 27 S	149 57 E	18.2								G
W4			66	1	7	1500	K 37 15 S	150 3 E	19.8								G
W4			66	2	18	0900	J 35 33 S	135 33 E	19.4								G
W4			66	2	18	1200	J 35 33 S	135 15 E	20.6								G
W4			66	2	18	1405	J 35 39 S	134 45 E	20.3								G
W4			66	2	18	1712	J 35 39 S	134 45 E	19.4								G
W4			66	2	19	0600	J 35 27 S	134 27 E	19.4								G
W4			66	2	19	0800	J 35 27 S	134 51 E	19.4								G
W4			66	2	19	1000	J 35 3 S	134 51 E	19.3								G
W4			66	2	19	1200	J 34 39 S	134 51 E	19.4								G
W4			66	2	20	0900	J 35 27 S	134 51 E	19.4								G

VESSEL	CRUISE	STATION NUMBER	YR.	MTH.	DAY	TIME	LATITUDE	LONGITUDE	TEMP.	SALINITY	WIND DN.	WIND AMT.	SEA DN.	SEA AMT.	SWELL DN.	SWELL AMT.	WEA.	VIS.	BAROM.	SAMPLING METHOD
W4			66	2	20	1057	J 35 45	S 134 51	E 20,0											G
W4			66	2	20	1425	J 35 45	S 134 57	E 21,1											G
W4			66	2	20	1630	J 35 39	S 134 57	E 21,1											G
W4			66	2	20	1800	J 35 27	S 134 33	E 21,2											G
W4			66	2	20	2000	J 35 33	S 135 3	E 20,0											G
W4			66	2	20	2300	J 35 51	S 135 33	E 20,3											G
W4			66	2	21	0715	J 35 45	S 135 21	E 19,3											G
W4			66	2	21	0905	J 35 51	S 135 27	E 19,6											G
W4			66	2	21	1000	J 35 57	S 135 33	E 19,7											G
W4			66	2	21	1400	J 36 21	S 135 39	E 19,9											G
W4			66	2	21	1600	J 36 15	S 135 33	E 20,0											G
W4			66	2	21	1630	J 36 15	S 135 33	E 20,1											G
W4			66	2	21	1807	J 36 15	S 135 33	E 19,9											G
W4			66	2	22	0800	J 36 15	S 135 33	E 19,0											G
W4			66	2	22	1000	J 36 9	S 135 33	E 19,4											G
W4			66	2	22	1200	J 35 51	S 135 33	E 19,1											G
W4			66	2	22	1300	J 35 51	S 135 33	E 18,9											G
W4			66	2	22	1500	J 35 39	S 135 39	E 19,2											G
W4			66	2	22	1900	J 35 03	S 136 03	E 18,9											G

OCEANOGRAPHICAL STATION LISTS

1. Hydrological and planktological observations by F.R.V. *Warreen* in south-eastern Australian waters, 1938–39
2. Hydrological and planktological observations by F.R.V. *Warreen* in south-eastern Australian waters, 1940–42
3. Hydrological and planktological observations by F.R.V. *Warreen* in south-western Australian waters, 1947–50
4. Onshore hydrological investigations in eastern Australia, 1942–50
5. Estuarine hydrological investigations in eastern Australia, 1940–50. Queensland: Nerang and Coomera Rivers, Moreton Bay and Brisbane River, Logan River, Dunwich Oyster Lease; New South Wales: Richmond River, Clarence River, Macleay River, Hastings River, Manning River, Port Stephens, Tilligerry Creek, Hawkesbury River
6. Estuarine hydrological investigations in eastern Australia, 1940–50. New South Wales: Middle Harbour and Port Jackson, Georges River–Botany Bay
7. Estuarine hydrological investigations in eastern Australia, 1940–50. New South Wales: Port Hacking, Lake Illawarra, Shoalhaven River, Jervis Bay, Clyde River, Moruya River, Tuross River, Wagonga Inlet; Victoria: Port Phillip; Tasmania: Tamar River, Derwent River, Huon River, D'Entrecasteaux Channel, Pittwater, Lake Dobson (freshwater), Penna Dam (freshwater)
8. Hydrological investigations in south-western Australia, 1944–50
9. Records of twenty-four hourly hydrological observations at selected stations in eastern Australian estuarine systems, 1942–50. Queensland: Logan River; New South Wales: Richmond River, Clarence River, Macleay River, Hastings River, Manning River, Port Stephens, *Hawkesbury River, Georges River, Port Hacking, Clyde River, Tuross River; Tasmania:* Tamar River, Derwent River
10. Records of twenty-four hourly hydrological observations at Shell Point, Georges River, New South Wales, 1942–50
11. Analyses of bottom deposits in eastern Australia, 1946–50
12. Estuarine hydrological investigations in eastern and south-western Australia, 1951
13. Analysis of bottom deposits in eastern and south-western Australia, 1951 and records of twenty-four hourly hydrological observations at selected stations in eastern Australian estuarine systems, 1951
14. Onshore hydrological investigations in eastern and south-western Australia, 1951
15. Estuarine hydrological investigations in eastern and south-western Australia, 1952
16. Analysis of bottom deposits in eastern and south-western Australia, 1952 and records of twenty-four hourly hydrological observations at selected stations in eastern Australian estuarine systems, 1952
17. Onshore hydrological investigations in eastern and south-western Australia, 1952
18. Onshore hydrological investigations in eastern and south-western Australia, 1953
19. Onshore planktological investigations in eastern Australia, 1945–54
20. Surface sampling in the Tasman Sea, 1953
21. Estuarine hydrological investigations in eastern and south-western Australia, 1953
22. Further onshore planktological investigations in eastern Australia, 1945–54
23. Planktological investigations made by F.R.V. *Derwent Hunter* in eastern Australian waters, 1952–54
24. Onshore hydrological investigations in eastern and south-western Australia, 1954
25. Surface sampling in the Tasman Sea, 1954
26. Estuarine hydrological investigations in eastern and south-western Australia, 1954
27. Onshore and oceanic hydrological investigations in eastern and south-western Australia, 1955
28. Surface sampling in the Tasman and Coral Seas, 1955
29. Estuarine hydrological investigations in eastern and south-western Australia, 1955
30. Onshore and oceanic hydrological investigations in eastern and south-western Australia, 1956
31. Surface sampling in the Tasman and Coral Seas and the south-eastern Indian Ocean, 1956
32. Estuarine hydrological investigations in eastern and south-western Australia, 1956
33. Coastal hydrological investigations in eastern and south-western Australia, 1957
34. Coastal hydrological investigations at Port Hacking, New South Wales, 1957
35. Coastal hydrological investigations at Eden, New South Wales, 1957

OCEANOGRAPHICAL STATION LISTS

(Continued)

36. Surface sampling in the Tasman and Coral Seas, 1957
37. Hydrological investigations from F.R.V. *Derwent Hunter*, 1957
38. Coastal hydrological investigations in the New South Wales tuna fishing area, 1958
39. Surface sampling in the Coral and Tasman Seas, 1958
40. Coastal hydrological investigations in south-eastern Australia, 1958
41. Oceanic investigations in eastern Australian waters, F.R.V. *Derwent Hunter*, 1958
42. Coastal investigations at Port Hacking, New South Wales, 1958
43. Oceanic investigations in eastern Australia, H.M.A. Ships *Queenborough*, *Quickmatch*, and *Warrego*, 1958
44. Oceanic observations in Antarctic waters, M.V. *Magga Dan*, 1959
45. Coastal hydrological investigations in eastern Australia, 1959
46. Coastal hydrological investigations in the New South Wales tuna fishing area, 1959
47. Coastal investigations at Port Hacking, New South Wales, 1959
48. Oceanic investigations in eastern Australian waters, F.R.V. *Derwent Hunter*, 1959
49. Coastal hydrological sampling Rottnest Island, W.A., and Port Moresby, Papua, during the I.G.Y. (1957–58), and surface sampling in the Tasman and Coral Seas, 1959
50. Surface sampling in the Coral and Tasman Seas, 1960
51. Coastal hydrological investigations in eastern Australia, 1960
52. Coastal investigations at Port Hacking, New South Wales, 1960
53. Coastal hydrological investigations in the New South Wales tuna fishing area, 1960
54. Investigations by F.R.V. *Derwent Hunter* on the eastern Australian tuna grounds in 1961
55. Investigations by F.R.V. *Weerutta* on the South Australian tuna grounds in 1961
56. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1961
57. Investigations by F.V. *Estelle Star* in Western Australian waters in 1961
58. Temperature observations from Australian tuna fishing vessels in 1961
59. Investigations by F.R.V. *Derwent Hunter* on the eastern Australian tuna grounds in 1962
60. Investigations by F.R.V. *Investigator* on the South Australian tuna grounds in 1962
61. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1962
62. Investigations by F.V. *Estelle Star* in Western Australian waters in 1962
63. Temperature and salinity observations from Australian tuna fishing vessels in 1962
64. Investigations by F.R.V. *Investigator* on the South Australian tuna grounds in 1963
65. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1963
66. Temperature and salinity observations from Australian tuna fishing vessels in 1963
67. Investigations by F.R.V. *Investigator* on the South Australian tuna grounds in 1964
68. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1964
69. Temperature and salinity observations from Australian tuna fishing vessels in 1964
70. Investigations by F.R.V. *Investigator* on the South Australian tuna grounds in 1965
71. Investigations by F.V. *Estelle Star* in South Australian and New South Wales waters in 1965
72. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1965
73. Investigations by F.V. *Degei* in Queensland waters in 1965
74. Temperature and salinity observations from Australian tuna fishing vessels in 1965
75. Investigations by F.V. *Degei* in New South Wales, South, and Western Australian waters in 1966
76. Investigations by F.V. *Estelle Star* in South and Western Australian waters in 1966
77. Temperature and salinity observations from Australian tuna fishing vessels in 1966
78. Drift bottle releases and recoveries in Bass Strait and adjacent waters, 1958–1962
79. Drift bottle releases and recoveries in Western Australia, 1956–1957
80. Investigations by F.R.V. *Lancelin* in Western Australian waters in 1963