

MP01

7 Mar 1993

4

TULLY

ETD
Consecutive
Number # 4

[illegible]

CRUISE NO:
STATION NO:

9303

MP04

UTC DATE:
HYDRO No.:

7 MAR 93

9

VESSEL: Tully

NISKIN No.	SAMPLE No.	OXY. No.	OXY. TEMP	WIRE OUT m..db	LEFT THERMOMETER			MIDDLE THERMOMETER			RIGHT THERMOMETER		
					TIME SERIAL	TEMP AUX	SAL MAIN	SERIAL	AUX	MAIN	SERIAL	AUX	MAIN
18	6	1030	8.8	10	✓ 2211	8.425	32.436		.	.	.	.	.
				12.1					.	.	.	.	.
17	7	✓ 1029	8.8	50	✓ 2209	8.609	32.486		.	.	.	.	.
				50.5					.	.	.	.	.
16	8	✓ 1028	8.8	100	✓ 2206	8.386	33.220		.	.	.	.	.
				(101)		8.386	33.223		.	.	.	.	.
15	9	✓ 1027	8.4	150	✓ 2203	7.967	33.701		.	.	.	.	.
14	10	✓ 1027	—	200	✓ 2200	7.303	33.853	Bottle not BROKE			.	.	.
				202.1					.	.	.	.	.
13	11	✓ 1026	7.0	300	✓ 2156	6.254	33.940	Bottle BROKE - no sample			.	.	.
12	12	✓ 1025	6.6	400	✓ 2152	5.570	34.004		.	.	.	.	.
11	13	✓ 1022	6.0	600	✓ 2146	4.460	34.146		.	.	.	.	.
10	14	✓ 1020	5.2	800	✓ 2141	3.965	34.301		.	.	.	.	.
9	15	✓ 1016	5.0	1000	✓ 2136	3.725	34.425		.	.	.	.	.
8	16	✓ 1014	—	1000	✓	.	.	#8 did not close properly			.	.	.
				(1001)					.	.	.	.	.
7	17	✓ 1011	5.42	1200	✓	.	.		.	.	.	.	.
6	18	✓ 1010	4.8	1300	✓	.	.		.	.	.	.	.

ENTERED BY:
CHECKED BY:Bottom Depth: 1349
Cast No: 9
Wire Angle: 0LOC UTC
START: 2102 2102
DOWN:
MESS:
IN: 2219 2219START POSITION
LAT: 48 38.99
LONG: 126 39.49MESS. POSITION
LAT:
LONG:END POSITION
LAT: 48 34.02 N
LONG: 126 39.99 W

(GPS) LOR: SAT:

COMMENTS
Net tow?:
Rosette cast?:
Trace Metal

CRUISE NO: 9303
STATION NO: MP12

UTC DATE: 9-10 March '93
HYDRO No.: 19

VESSEL: J. P. Tully

NISKIN No.	SAMPLE No.	OXY. No.	OXY. TEMP	WIRE OUT m..db	LEFT THERMOMETER			TIME SERIAL	MIDDLE THERMOMETER			sal	RIGHT THERMOMETER		
					DEPTH SERIAL	AUX	MAIN		AUX	MAIN	SERIAL		AUX	MAIN	
21	19	✓1003	7.2	10	10.1	.	.	7.596	0137	.	.	32.427	.	.	.
20	20	✓1004	7.2	50	50.2	.	.	7.593	0135	.	.	32.427	.	.	.
19	21	✓1005	7.0	100	98.7	.	.	7.128	0134	.	.	32.680	.	.	.
18	22	✓1008	6.6	150	148.3	.	.	6.436	0132	.	.	33.616	.	.	.
17	23	✓1009	6.2	200	198.8	.	.	6.032	0130	.	.	33.821	.	.	.
16	24	X1010	5.6	300	299.7	.	.	5.128	0128	.	.	33.930	.	.	.
15	25	✓1011	5.2	400	397.6	.	.	4.710	0125	.	.	34.023	.	.	.
14	26	✓1014	4.6	600	596.6	.	.	4.062	0123	.	.	34.150	.	.	.
13	27	✓1016	4.4	800	799.8	.	.	3.513	0118	.	.	34.277	.	.	.
12	28	✓1020	4.0	1000	1002.2	.	.	3.130	0114	.	.	34.373	.	.	.
11	29	X1022	3.8	1200	1205	.	.	2.748	0108	.	.	34.451	.	.	.
10	30	X1025	3.6	1400	1393.1	.	.	2.464	0059	.	.	34.501	.	.	.
9	31	✓1026	3.4	1600	1591.2	.	.	2.251	0055	.	.	34.544	.	.	.
8	32	X1027	3.4	1800	1800.7	.	.	2.085	0049	.	.	34.575	.	.	.
7	33	✓1028	3.2	2000	1998.4	.	.	1.920	0042	.	.	34.603	.	.	.
6	34	1029	3.0	2000	1999.8	.	.	1.915	0042	.	.	34.605	.	.	.
5	35	✓1030	2.8	2200	2199.9	.	.	1.840	0036	.	.	34.619	.	.	.
4	36	✓1031	2.8	2400	2397	.	.	1.768	0030	.	.	34.634	.	.	.
3	37	1032	3.0	2600	2603	.	.	1.701	0022	.	.	34.646	.	.	.
2	38	✓1033	2.8	2800	2802	.	.	1.655	0015	.	.	34.655	.	.	.
1	39	✓1034	2.8	2800	2804	.	.	1.656	0014	.	.	34.655	.	.	.
						.	.	.		.	.	.	.	.	.

ENTERED BY: MARIE

CHECKED BY:

Bottom Depth:

Cast No:

Wire Angle:

LOC	UTC
START:	23 07
DOWN:	00:14
MESS:	01:39
IN:	

START POSITION
LAT: 48 58.275
LONG: 130 40.022

DOWN
MESS. POSITION
LAT: 48 58.234
LONG: 130 40.253

END POSITION
LAT: 48 58.665
LONG: 130 40.843

GPS: LOR: SAT:

COMMENTS

Net tow?:

Rosette cast?:

Cons. # 19

431	446
1.654	1.655

✓ = good and present
X = bad

CRUISE NO:
STATION NO:

9303

MP 16

UTC DATE:

11/03/93

HYDRO No.:

23

VESSEL: Tully

ENTERED BY: MARIE

CHECKED BY:

22 bottles

NISKIN No.	SAMPLE No.	OXY. No.	OXY. TEMP	WIRE OUT m..db	LEFT THERMOMETER			MIDDLE THERMOMETER			RIGHT THERMOMETER		
					DEPTH SERIAL	AUX	MAIN	TIME SERIAL	AUX	MAIN	SERIAL	AUX	MAIN
22	40	1003	7.8	10	8.5		8.153	0243		32.515			8.181
21	41	1004	7.8	50	47.5	15.77	8.153	0241		32.515			8.103
20	42	1005	7.6	100	98.1			0239		33.530			7.966
Dup. {	19	43	1008	150	147.8			0238		33.398			6.360
	18	44	1009		147.9			0238		33.392			6.372
	17	45	1010	200	195.9			0236		33.715			5.844
	16	46	1011	300	297.5			0234		33.857			4.946
	15	47	1014	400	396.3			0232		33.948			4.426
	14	48	1016	600	598.7			0229		34.147			4.109
Dup. {	13	49	1020	800	799.3			0225		34.280			3.610
	12	50	1022		798.9			0225		34.280			3.611
	11	51	1025	1000	998.4			0222		34.380			3.143
	10	52	1026	1200	1196.8			0218		34.447			2.753
	9	53	1027	1400	1394			0215		34.491			2.518
	8	54	1028	1600	1599			0212		34.535			2.288
	7	55	1029	1800	1800.5			0207		34.574			2.087
	6	56	1030	2000	2000.1			0202		34.603			1.936
	5	57	1031	2200	2201			0156		34.622			1.849
	4	58	1032	2400	2400			0151		34.636			1.767
42	3	59	1033	2600	2598			0144		34.645			1.711
41	2	60	1036	2800	2801		1.650	0138		34.654			1.653
40	1	61	1035	3000	3000	T4.31		0135	T4.46	34.652			1.620

Bottom Depth: 3000'

Cast No:

Wire Angle:

LOC	UTC
START:	10029
DOWN:	
MESS:	
IN:	10243

START POSITION
LAT: 49 17.107
LONG: 134 39.828

Bottom 0130

MESS. POSITION
LAT: 49 17 198
LONG: 134 39 821

END POSITION
LAT: 49 17.074
LONG: 134 39.489

GPS: LOR: SAT:

COMMENTS
Net tow?:
Rosette cast?:

Cons num. 23

CRUISE NO:
STATION NO:9303
P20UTC DATE:
HYDRO No.:11/3/93
27

VESSEL: TULLY

ENTERED BY: MARIE

CHECKED BY:

NISKIN No.	SAMPLE No.	OXY. No.	OXY. TEMP	WIRE OUT m..db	LEFT THERMOMETER			MIDDLE THERMOMETER			RIGHT THERMOMETER		
					SERIAL	AUX	MAIN	SERIAL	AUX	TEMP MAIN	SERIAL	AUX	MAIN
23	62	1047	7.42	10	9.8	.	.	32.413	.	.	7.117	0130	.
22	62	1087	7.2		50.1	.	.	32.426	577	7.06	7.026	0128	647 7.021
21	63	1048	7.2	50	50.2	.	.	32.425	.	.	7.021	0128	.
20	64	1051	7.4	100	99.2	.	.	32.519	.	.	7.090	0126	.
19	65	1052	6.42	150	149.5	.	.	33.594	.	.	5.918	0124	.
18	66	1054	6.0	200	200.4	.	.	33.785	.	.	5.449	0123	.
17	67	1056	5.8	300	300.2	.	.	33.921	.	.	4.902	0120	.
16	68	1057	5.82	400	401.9	.	.	33.988	.	.	4.345	0117	.
15	69	1058	5.2		398.1	.	.	33.984	.	.	4.358	0116	.
14	70	1060	5.0	600	599.7	.	.	34.156	.	.	3.789	0112	.
13	71	1061	5.0	800	800.3	.	.	34.273	.	.	3.418	0107	.
12	72	1062	4.0	1000	1001.2	.	.	34.362	.	.	3.036	0102	.
11	73	1063	4.0	1200	1199.0	.	.	34.432	.	.	2.730	0056	.
10	74	1064	4.2		1199.4	.	.	34.432	.	.	2.729	0055	.
9	75	1065	3.8	1400	1400	0	.	34.482	.	.	2.479	0049	.
8	76	1067	3.6	1600	1597.2	.	.	34.526	.	.	2.279	0043	.
7	77	1068	3.4	1800	1800.8	.	.	34.564	.	.	2.104	0034	.
6	78	1069	3.42	2000	2000	1	.	34.592	.	.	1.958	0028	.
5	79	1072	3.2	2200	2200.6	.	.	34.611	.	.	1.863	0020	.
4	80	1079	2.8	2400	2398.8	.	.	34.625	.	.	1.793	0015	.
3	81	1080	3.0	2600	2600	7	.	34.640	.	.	1.719	0009	.
2	82	1084	3.0	2800	2801.5	.	.	34.652	431	1.649	1.652	0002	446 165.0
1	83	1086	3.02	3000	3004	.	.	34.662	.	.	1.609	2355	.

Bottom Depth: 3989

Cast No:

Wire Angle:

LOC	UTC
START:	12304
DOWN:	12354
MESS:	
IN:	10132

START POSITION
LAT: 493391
LONG: 13840.18

MESS. POSITION
LAT: 493393
LONG: 13840.35

END POSITION
LAT: 4933.474
LONG: 13841.058

GPS: LOR: SAT:

COMMENTS

Net tow?:

Rosette cast?:

Cons # 27

CRUISE NO:
STATION NO:

9303

P26

UTC DATE:

MAR 13 1993

HYDRO No.:

35 P26-1

VESSEL:

ENTERED BY: J Love

CHECKED BY:

NISKIN No.	SAMPLE No.	OXY. No.	OXY. TEMP	WIRE OUT m..db	LEFT			TIME	MIDDLE			RIGHT			
					DEPTH SERIAL	THERMOMETER AUX	TEMP MAIN		THERMOMETER AUX	TEMP MAIN	SERIAL	THERMOMETER AUX	TEMP MAIN		
23	84	1047	6.0	10	9.8			5.720	1902				32561		
22	85	1048	5.8	50	49.8			5.720	1900	T.577	5.693		32562		
21	86	1051	5.6	100	99			5.583	1859	T.647	5.708		32624		
20	87	1052	5.4	150	149.7			5.146	1852				33610		
19	88	1054	4.8	200	198			4.384	1851				3741		
18	89	1056	4.86	300	298			3.877	1858				33853		
17	90	1057	4.6	400	400			3.834	1852				33996		
16	91	1058	4.6	600	599			3.579	1848				34191		
15	92	1060	4.64	800	800			3.235	1844				34308		
14	93	1061	4.4	1000	999			2.942	1841				34379		
13	94	1062	4.4	1200				2.662	1836				34443		
12	95	1063	3.8	1200				2.664	1835				34443		
11	96	1064	3.8	1400	1400			2.434	1831				34492		
10	97	1065	3.6	1600	1600			2.243	1827				34532		
9	98	1067	3.6	1600	1600			2.242	1826				34532		
8	99	1068	3.2	1800	1800			2.073	1822	(1/2 Trips to line)			34568		
7	100	1069	3.2	2000	1999			1.946	1817				34590		
6	101	1072	3.0	2200	2198			1.858	1815				34608		
5	102	1079	2.8	2400	2400			1.764	1811				34624		
4	103	1080	2.6	2600	2600			1.677	1805				34602		
3	104	1084	2.6	2800	2804			1.620	?						
2	105	1086	2.6	3000	3003			1.566	?	T.431	1.564		34663		
										T.446	1.566				

Bottom Depth: 4276

Cast No: 1

Wire Angle:

LOC		UTC
START:		1703
DOWN:		1757
MESS:		
IN:		

START POSITION	
LAT:	50 00
LONG:	

MESS. POSITION	
LAT:	50 00 171
LONG:	144 59 48

END POSITION	
LAT:	50 00 020
LONG:	144 59 900

GPS: LOR: SAT:

COMMENTS	
Net tow?:	
Rosette cast?:	✓

VESSEL:

ENTERED BY: _____
CHECKED BY: _____

Bottom Depth:	4270
Cast No:	2
Wire Angle:	15°

	LOC	UTC
START:	1430	2230
DOWN:	1551	2351
MESS:	1551	
IN:	1625	

START POSITION
LAT: 49 59.97
LONG: 144 59.36

MESS. POSITION
LAT: 49 59 77
LONG: 144 59 80

END POSITION
LAT:
LONG:

GPS: LOR: SAT:

COMMENTS
Net tow?:
Rosette cast?:

[illegible]

WOCE LOG 1992

P26

p26-2

(36) POC Cast - Rosette

VESSEL: TALLY

RIGHT REV. THE

ENTERED BY: RP

CHECKED BY:

OUT
m..db

THERMOMETER

MAIN

Bottom Depth:	4250
Cast No:	36
Wire Angle:	

	LOC	UTC
START:		1640
DOWN:		1704
MESS:		
IN:		1745

START POSITION
LAT: 49 59.99
LONG: 145 00.00

MESS. POSITION
LAT:
LONG:

END POSITION
LAT: 49 59.99
LONG: 145 00.00

GPS: LOR: SAT:

COMMENTS	
Net tow?:	
Rosette cast?:	✓

Two rev.
thermometers
tripped on
deployment.

CRUISE NO:
STATION NO:9303
P26UTC DATE: March 15th 93
HYDRO No.: P26-3 37

VESSEL: TULLY

ENTERED BY: MARIE
CHECKED BY:NISKIN SAMPLE OXY. OXY.
No. No. No. TEMPWIRE
OUT
m..dbLEFT
THERMOMETER
DEPTH SERIAL AUX MAINMIDDLE
THERMOMETER
TIME SERIAL AUX MAINRIGHT
THERMOMETER
SERIAL AUX MAIN

23	112	1047	48	10	✓	10.3	1.219	5.720	1053	.	.	32.560	.	.	.	.
122	113	1048	48	50	✓	48.8	1.219	5.722	1051	.	.	32.563	.	.	.	.
21	114	1051	48	100	✓	99.4	1.219	5.556	1049	.	.	32.601	.	.	.	.
20	115	1052	4.6	150	✓	149.8	.777	5.157	1047	.	.	33.621	.	.	.	.
19	116	1054	4.2	200	✓	199.8	.698	4.345	1045	.	.	33.753	.	.	.	.
DUP { 18	117	1056	3.8	300	✓	297.9	.392	3.883	1043	.	.	33.840	.	.	.	.
17	118	1057	3.8	400	✓	298.6	.381	3.882	1042	.	.	33.842	.	.	.	.
16	119	1058	3.8	400	✓	398.7	.217	3.837	1040	.	.	33.973	did not seal	.	.	.
15	120	1060	3.6	600	✓	598.9	.114	3.578	1034	.	.	34.181	.	.	.	.
14	121	1061	3.4	800	✓	800.2	.100	3.244	1028	.	.	34.303	.	.	.	.
13	122	1062	3.2	1000	✓	997.3	.092	2.911	1022	.	.	34.381	.	.	.	.
12	123	1063	3.0	1200	X	1199.0	.074	2.628	1016	.	.	34.447	bubbles in O ₂	.	.	.
11	124	1064	2.8	1400	X	1398.7	.090	2.420	1010	.	.	34.492	.	.	.	.
10	125	1065	2.8	1600	✓	1600.6	.126	2.232	1004	.	.	34.530	.	.	.	.
9	126	1067	2.6	1800	✓	1799.9	.180	2.069	0958	.	.	34.564	.	.	.	.
8	127	1068	2.86	2000	✓	2001.1	.223	1.954	0944	.	.	34.587	.	.	.	.
DUP { 7	128	1069	2.6	2200	✓	2197.4	.263	1.867	0937	.	.	34.604	.	.	.	.
6	129	1072	2.6	2400	✓	2199.4	.265	1.866	0937	.	.	34.605	.	.	.	.
5	130	1079	2.2	2400	X	2396.7	.373	1.775	0932	.	.	34.623	an bubbles	.	.	.
4	131	1080	2.86	2600	✓	2600.4	.351	1.688	0926	.	.	34.638	.	.	.	.
3	132	1084	2.6	2800	✓	2796.4	.398	1.628	0919	.	.	34.649	.	.	.	.
2	133	1086	2.6	3000	✓	2994.7	.443	1.579	0913	.	.	34.660	.	.	.	.

Bottom Depth: 3000
Cast No:
Wire Angle:LOC UTC
START: 108.25
DOWN: 109.12
MESS:
IN: 1055START POSITION
LAT: 4959.857
LONG: 14459.808BOTTOM
MESS. POSITION
LAT: 4959.808
LONG: 14500.067END POSITION
LAT: 4959.284
LONG: 14500.492

GPS: LOR: SAT:

COMMENTS

Net tow?:
Rosette cast?:

Cons # 37

Cast P26-3

CRUISE NO: 9303
STATION NO: CALI

UTC DATE: 16 MAR 93
HYDRO No.:

VESSEL:

ENTERED BY:
CHECKED BY:

Bottom Depth: 3840
Cast No: 1
Wire Angle:

LOC UTC
START: 1640
DOWN:
MESS:
IN:

START POSITION
LAT: 49 15 44.2
LONG: 135 39 22.6

MESS. POSITION
LAT: 49 15 39.9
LONG: 135 39 68.8

END POSITION
LAT: <
LONG:

GPS: LOR: SAT:

COMMENTS
Net tow?:
Rosette cast?:

NISKIN No.	SAMPLE No.	OXY. No.	OXY. TEMP	WIRE OUT m..db	LEFT THERMOMETER			O ₂ SERIAL	MIDDLE THERMOMETER			RIGHT THERMOMETER			
					SERIAL	AUX	MAIN		AUX	MAIN	SERIAL	AUX	MAIN		
1	134	1047	1226	4.0	✓	No SAMPLE.			402	.	.	34.500	1705.5	.	.
23	135	1048	1225	4.0	✓	.	.	.	1063	.	.	34.500		.	.
22	136	1051	1223	4.0	✓	.	.	.	1066	.	.	34.500		.	.
21	137	1052	1224	3.8	✓	.	.	.	1063	.	.	34.499		.	.
20	138	1054	1224	4.0	✓	.	.	.	1063	.	.	34.499		.	.
19	139	1056	1223	4.08	✓	.	.	.	1067	.	.	34.499		.	.
18	140	1057	1223	3.8	✓	.	.	.	1065	.	.	34.498		.	.
17	141	1058	1224	3.8	✓	.	.	.	1065	.	.	34.499		.	.
16	142	1060	1221	3.8	✓	.	.	.	1061	.	.	34.498		.	.
15	143	1061	1221	3.8	✓	.	.	.	1064	.	.	34.499		.	.
14	144	1062	1220	3.6	✓	.	.	.	1066	.	.	34.497	1702	.	.
13	145	1063	1220	3.8	✓	.	.	.	1061	.	.	34.498		.	.
12	146	1064	1219	3.8	✓	.	.	.	1062	.	.	34.496		.	.
11	147	1065	1218		✓	.	.	.	1063	.	.	34.497		.	.
10	148	1067	1218	3.48	✓	.	.	.	1064	.	.	34.498	1700	.	.
9	149	1068	1216	3.8	✓	metal chip in sample			1063	.	.	34.497		.	.
8	150	1069	1215		✓	.	.	.	1062	.	.	34.497	1659	.	.
7	151	1072	1214	4.0	✓	.	.	.	1065	.	.	34.497		.	.
6	152	1077	1201	3.8	✓	.	.	.	1062	.	.	34.511		.	.
5	153	1080	1209	3.8	✓	x poor plot			1060	.	.	34.513		.	.
4	154	1084	1208	3.8	✓	.	.	.	1064	.	.	34.494	1657	.	.
3	155	1086		3.8	✓	.	.	.	1065	.	.	34.502	1657	.	.
2	156	1087		4.0	✓	2.	.	.	1067	.	.	34.506	1657	.	.