

Cast No	Day	Time (GMT)	Ship Position Lat. (S)	Ship Position Long. (E)	Water Depth	BRIDGET			USBL Navigation			Instrument		Comments Comments
						Wire Out	Depth	Altimeter	X	Y	Z	Lat. (S)	Long. (E)	
Transit	148	14:00												Left Mauritius
CTDS 01	151	21:15	23°52.67	69°35.89	3242									On station: Edmond site CTD 001
CTDS 01	151	22:28	23°52.67	69°35.89										SAPS on
CTDS 01	151	22:43	23°52.63	69°35.94	3214.5									CTD in water
CTDS 01	151	23:30	23°52.72	69°36.11	3262									
CTDS 01	152	00:15	23°52.72	69°36.04	3241	3250								CTD on bottom
CTDS 01	152	00:28	23°52.70	69°36.00	3241	2918								Pumps on, 1st 10L Niskin fired
CTDS 01	152	00:58	23°52.63	69°35.96	3226	2918								
CTDS 01	152	01:28	23°52.54	69°35.91	3203	2924								1st 30L fired; 2nd 10L fired
CTDS 01	152	01:58	23°52.56	69°35.86	3202	2922								
CTDS 01	152	02:28	23°52.54	69°35.84	3201	2925								3rd 10L fired
CTDS 01	152	02:38	23°52.53	69°35.83	3205	3201	60m off							Back at bottom
CTDS 01	152	03:00	23°52.58	69°35.83	3205	2725								
CTDS 01	152	04:15												CTD On Deck
CTDS 01	152	06:33	23°51.50	69°37.91										Underway to BGT 01
BGT 01	152	07:40	23°55.92	67°37.00	2759									BGT in water
BGT 01	152	08:00	23°55.67	67°37.66	2859	500								Poor BGT comms. & no USBL
BGT 01	152	08:06	23°55.57	67°37.59	2832	500								Commence recovery
BGT 01	152	08:35	23°55.16	69°37.26	3027									BGT on deck
RMT 01-03	152	10:50												Nets in the water
RMT 01-03	152	13:40						4913	2880	3980				Net failed to open:start hauling
RMT 01-03	152	ca16:00												Net inboard: operated successfully at 500mwo
CTD(S) 02	153	04:45	25°19.34	070°02.55	2361									SAPS activated
CTD(S) 02	153	04:51	25°19.34	070°02.55	2361									Rosette in water
CTD(S) 02	153	05:53	25°19.41	070°02.47	2401									
CTD(S) 02	153	05:58	25°19.42	070°02.48	2392									CTD on bottom
CTD(S) 02	153	06:15	25°19.50	070°02.59		2275								Stop
CTD(S) 02	153	06:28	25°19.54	070°02.69	2364	2275								
CTD(S) 02	153	06:43	25°19.63	070°02.80	2366	2275								SAPS on, fired 10L bottle
CTD(S) 02	153	07:15	25°19.78	070°02.89	2397	2275								
CTD(S) 02	153	07:26	25°19.77	070°02.94	2375	2225								Searching for plume
CTD(S) 02	153	07:45	25°19.79	070°02.99	2390	2267								2nd 10L bottle fired
CTD(S) 02	153	08:15	25°19.81	070°02.97	2387	2268								3rd 10L bottle and 30L Bottle fired
CTD(S) 02	153	08:26	25°19.85	070°02.77	2457	2284								
CTD(S) 02	153	08:45	25°19.83	070°02.69	2487	2265								N4 fired +30L
CTD(S) 02	153	08:58	25°19.82	070°02.64										
CTD(S) 02	153	09:09				2512								CTD on bottom
CTD(S) 02	153	09:12				2498								CTD at deepest bottle depth
CTD(S) 02	153	09:15	25°19.80	070°02.54	2592	2250								
CTD(S) 02	153	10:21	25°19.69	070°02.68	2420									CTD on deck
									65520	3015.3	3783.3			
									65024.7	371.3	2777.1			
CTD(T) 03	153	TEST DIP OF NEW TITANIUM ROSETTE: ALL BOTTLES FIRED AT 1500m DEPTH (Details from P.Taylor/P.Statham!!!)											Titanium CTD cast (1500m) fill bottles	
							Wire Out	Depth	Range					
RMT 04-06	153	18:13	25.14.3S	069.57.4E			Alt. stn no.	0						Nets in the water
RMT 04-06	153	19:11	25.16.3S	069.59.2E	3130m		1811	1000	1510					

RMT 04-06	153	20:25	25.18.76S	070.01.5E	2578	55601	4200	2070	3654					Net 1 open	
RMT 04-06	153	22:39	25.23.8S	070.06.0E	3119		4600	2070	4108					Monitor trace lost; closing frequency fired and haul in	
RMT 04-06	154	03:00						0						RMTs on Deck	
BGT 02	154	06:41	25°13.54 S	69°57.79 E	3733									Bridget in water	
BGT 02	154	07:00	25°13.76 S	69°57.77 E	3861	468			1202445	7191465	481	25°13.73 S	69°57.79 E		
BGT 02	154	07:15	25°13.93 S	69°57.84 E	3733	923	>902		1202496	7191197	931	25°13.87 S	69°57.82 E		
BGT 02	154	07:30	25°14.07 S	69°57.92 E	3688	1359			1202585	7191007	1361	25°13.97 S	69°57.88 E		
BGT 02	154	07:45	25°14.20 S	69°57.99 E	3712	1795	1796		1202657	7190808	1795	25°14.07 S	69°57.93 E		
BGT 02	154	08:00	25°14.33 S	69°58.08 E	3661	2000	1974		1202739	7190616	1974	25°14.18 S	69°57.99 E		
BGT 02	154	08:15	25°14.46 S	69°58.21 E	3600	1999	1948		1202880	7190374	1948	25°14.30 S	69°58.08 E	Started hauling back in	
BGT 02	154	08:30	25°14.61 S	69°58.30 E	3547	1560	1522		1203063	7190051	1522	25°14.47 S	69°58.19 E		
BGT 02	154	09:00	25°14.94 S	69°58.48 E	3532	598									
BGT 02	154	09:25	25°15.14 S	69°58.75 E	3520									Bridget on deck	
			work on cable....												
CTD(S) 04	155	03:35	25°18.59 S	70°01.92 E	2409	5								CTD in water	
CTD(S) 04	155	03:36				10								USBL on 5mup wire	
CTD(S) 04	155	03:45	25°18.55 S	70°02.06 E	2410	264			1209177	7182131	261	25°18.56 S	70°02.06		
CTD(S) 04	155	04:00	25°18.68 S	70°02.14 E	2400	858			1209247	7181975	841	25°18.64 S	70°02.10		
CTD(S) 04	155	04:15	25°18.75 S	70°02.09 E	2407	1445			1209245	7181817	1428	25°18.72 S	70°02.11		
CTD(S) 04	155	04:30	25°18.75 S	70°02.02 E	2435	2036			1209160	7181798	2030	25°18.74 S	70°02.06		
CTD(S) 04	155	04:45	25°18.73 S	70°02.01 E	2420	2400			1209120	7181800	2375	25°18.74 S	70°02.03	CTD on bottom	
CTD(S) 04	155	05:00	25°18.77 S	70°02.03 E		2196			1209121	7181799	2168	25°18.75 S	70°02.03		
CTD(S) 04	155	05:15	25°18.79 S	70°02.09 E	2441	1810			1209183	7181756	1777	25°18.76 S	70°02.07		
CTD(S) 04	155	06:10	25°18.93 S	70°02.65 E	2324	7								USBL in-board	
CTD(S) 04	155	06:13	25°18.94 S	70°02.65 E	2324	0								CTD on-deck	
			work on cable....												
CTD(S) 05	155	14:42	25°19.27 S	70°02.25 E	2499										
CTD(S) 05	155	14:58	25°19.34 S	70°02.43 E	2416	0									
CTD(S) 05	155	15:00				10									
CTD(S) 05	155	15:15	25°19.33 S	70°02.57 E	2522	341			1209976	7180626	348	25°19.34 S	70°02.58		
CTD(S) 05	155	15:30	25°19.29 S	70°02.63 E	2342	810			1210078	7180720	803	25°19.29 S	70°02.63		
CTD(S) 05	155	15:45	25°19.38 S	70°02.54 E	2355	1328			1209956	7180619	1326	25°19.35 S	70°02.56		
CTD(S) 05	155	16:00	25°19.42 S	70°02.47 E	2415	1857			1209864	7180562	1850	25°19.38 S	70°02.51		
CTD(S) 05	155	16:22	25°19.23 S	70°02.54 E	2440	2459			1209876	7180644	2425	25°19.34 S	70°02.52	CTD @ 15m off-bottom	
CTD(S) 05	155	16:30	25°19.28 S	70°02.56 E	2336	2370			1209921	7180724	2339	25°19.29 S	70°02.54		
CTD(S) 05	155	16:45	25°19.28 S	70°02.56 E	2339	2289			1209984	7180744	2263	25°19.28 S	70°02.58	>100mV from here, upwards	
CTD(S) 05	155	17:00	25°19.27 S	70°02.42 E	2368	2173			1209885	7180806	2140	25°19.25 S	70°02.52		
CTD(S) 05	155	17:10	25°19.23 S	70°02.49 E	2345	2060			1209812	7180807	2022	25°19.25 S	70°02.47	Out of Plume	
CTD(S) 05	155	18:05	25°19.46 S	70°02.85 E	2350									USBL In-board	
CTD(S) 05	155	18:10	25°19.46 S	70°02.91 E	2324									CTD On-deck	
RMT 07-09						Alt.stn no.	Wire Out	Depth	Range						
RMT 07-09	155	21:14	25.11.20	69.54.84			0		0					Nets in the water	
RMT 07-09	155	22:17	25.13.52	69.56.75			2107	1005	1852						
RMT 07-09	155	23:34	25.16.38	69.59.24	3351	55602*1	4598	2175	4051					NET 1 OPEN	
RMT 07-09	156	00:59	25.19.49	70.02.04		55602*2	4979	2140	4496					NET 1 CLOSED; NET 2 OPEN	
RMT 07-09	156	02:00			2703				0						
RMT 07-09	156	02:59	25.23.80	70.05.98	3117	55602*3	5143	2300	4600					NET 2 CLOSED; NET 3 OPEN	

RMT 07-09	156	04:00	25.26.04	70.08.59	2840	55602*3	5143	2270	4615										
RMT 07-09	156	04:30	25.27.03	70.09.06	2536	55602*3	5143	2306	4597										
RMT 07-09	156	04:59	25.28.12	70.10.05	2510	55602*3	5143	2346	4577										NET 3 CLOSED
RMT 07-09	156	07:33					0	0											All inboard
CTD(S) 06	156	11:20	25°18.43	70°01.82	2891														On station
CTD(S) 06	156	11:26	25°18.44	70°01.82	2561	5													CTD in water
CTD(S) 06	156	11:29	25°18.44	70°01.82	2502	11													USBL on
CTD(S) 06	156	11:45	25°18.45	70°01.83	2452	430		1208807	7182364	417	25°18.44	70°01.83							
CTD(S) 06	156	12:00	25°18.44	70°01.82	2418	920		1208754	7182304	899	25°18.48	70°01.80							
CTD(S) 06	156	12:15	25°18.45	70°01.75	2415	1510		1208664	7182317	1500	25°18.47	70°01.75							
CTD(S) 06	156	12:30	25°18.40	70°01.72	2418	2111		1208621	7182372		25°18.44	70°01.72							
CTD(S) 06	156	12:45	25°18.42	70°01.71		2370		1208599	7182421	2339	25°18.42	70°01.71							on bottom
CTD(S) 06	156	13:00	25°18.38	70°01.70		2187		1208590	7182449	2155	25°18.40	70°01.70							
CTD(S) 06	156	13:15	25°18.39	70°01.70	2419	1714		1208549	7182487	1690	25°18.38	70°01.67							
CTD(S) 06	156	13:30	25°18.53	70°01.87	2418	1139		1208688	7182304	1062	25°18.48	70°01.76							
CTD(S) 06	156	13:45	25°18.58	70°02.02	2427	414		1209083	7182070	373	25°18.59	70°02.00							
CTD(S) 06	156	13:53	25°18.62	70°02.12	2432	8													USBL in board
CTD(S) 06	156	13:56	25°18.68	70°02.10	2427	0													CTD on deck
BGT 03	156	16:33	25°10.02	69°54.01	3065	0													
BGT 03	156	16:40	25°10.16	69°54.18	3058	200													
BGT 03	156	17:00	25°10.46	69°54.45	3118	0													
RMT 10-12	156	19:00	25.10.17	69.54.15			Wire Out	Depth	Range										Nets in the water
RMT 10-12	156	20:00	25.12.09	69.55.81			1730	1076	1355										
RMT 10-12	156	20:56	25.13.80	69.57.36	3937	55603*1	3877	2295	3125										NET 1 OPEN
RMT 10-12	156	22:00	25.15.98	69.59.22		55603*1	4377	2160	3807										
RMT 10-12	156	22:58	25.17.78	70.00.78	2690	55603*2	4597	2285	3989										NET 2 OPEN
RMT 10-12	157	00:00	25.20.12	70.02.83	2161	55603*2	4765	2161	4247										
RMT 10-12	157	00:56	25.22.26	70.04.70	3007	55603*3	4950	2144	4462										NET 3 OPEN
RMT 10-12	157	02:00	25.25.02	70.07.13		55603*3	5380	2160	4927										
RMT 10-12	157	02:56	25.27.09	70.09.33	2493	55603*3	5380	2165	4925										NET 3 CLOSED
	157	05:10							0										All in
BGT 04	157	09:00	BRIDGET TESTED TO 200m ON FIXED SWIVEL: COMMS. ON CABLE BETTER BUT STILL NOT GOOD ENOUGH																
CTD(S) 07	157	11:47																	SAPS Started
CTD(S) 07	157	11:50	25°19.33	70°02.50	2353	0													CTD in water
CTD(S) 07	157	11:55	25°19.32	70°02.50	2354	10													USBL in water
CTD(S) 07	157	12:00	25°19.35	70°02.52	2345	134		1209903	7180674	189	25°19.32	70°02.53							
CTD(S) 07	157	12:15	25°19.31	70°02.51	2357	598		1209871	7180605	603	25°19.36	70°02.51							
CTD(S) 07	157	12:30	25°19.32	70°02.54	2344	1061		1209901	7180637	1046	25°19.34	70°02.53							
CTD(S) 07	157	12:45	25°19.33	70°02.53	2344	1638		1209886	7180668	1637	25°19.32	70°02.52							
CTD(S) 07	157	13:00	25°19.32	70°02.56	2237	2200		1209895	7180640	2176	25°19.34	70°02.53							
CTD(S) 07	157	13:10	25°19.29	70°02.55															
CTD(S) 07	157	13:15	25°19.30	70°02.53				1209910	7180674	2342	25°19.32	70°02.54							
CTD(S) 07	157	13:30	25°19.26	70°02.51				1209876	7186700	2340	25°19.31	70°02.51							
CTD(S) 07	157	13:45	25°19.24	70°02.47	2347	2367		1209833	7180791	2341	25°19.26	70°02.49							
CTD(S) 07	157	14:00	25°19.24	70°02.48	2346	2366		1209822	7180802	2341	25°19.25	70°02.48							
CTD(S) 07	157	14:15	25°19.23	70°02.51				1209862	7180810	2314	25°19.25	70°02.50							
CTD(S) 07	157	14:30	25°19.23	70°02.51	2345	2346		1209876	7180824	2316	25°19.24	70°02.51							
CTD(S) 07	157	14:45	25°19.22	70°02.47	2351	2340		1209847	7180782	2313	25°19.26	70°02.50							Hauling in @100m
CTD(S) 07	157	14:55	25°19.27	70°02.45	2354	2296		1209802	7180802	2273	25°19.25	70°02.47							Stopped @ 2305 db

CTD(S) 07	157	15:00	25°19.27	70°02.44	2367	2296				1209783	7180785	2272	25°19.26	70°02.46			
CTD(S) 07	157	15:15	25°19.28	70°02.42	2374	2285				1209750	7180754	2262	25°19.28	70°02.44	Up 10m		
CTD(S) 07	157	15:30	25°19.26	70°02.43	2359	2286				1209756	7180775	2262	25°19.27	70°02.44			
CTD(S) 07	157	15:45	25°19.26	70°02.42	2363	2287				1209742	7180790	2261	25°19.26	70°02.43	SAPS Off		
CTD(S) 07	157	15:53	25°19.26	70°02.43	2358	2287				1209750	7180784	2277	25°19.27	70°02.44	Start Down		
CTD(S) 07	157	16:04	25°19.26	70°02.43	2365	2434				1209731	7180769	2408	25°19.27	70°02.43	CTD on bottom		
CTD(S) 07	157	16:45	25°19.32	70°02.32	2396	1600				1209636	7180758	1566	25°19.28	70°02.37			
CTD(S) 07	157	17:31	25°19.38	70°02.86		10									usbl		
CTD(S) 07	157	17:33	25°19.38	70°02.90		0									on deck		
CTD(S) 07	157	17:45													Fe sensor turn off		
RMT 13-15							Alt.stn.no.	Wire Out	Depth	Range							
RMT 13-15	157	20:17	25.10.23	69.54.24	2717			0	0	0					Nets in the water		
RMT 13-15	157	22:04	25.13.28	69.57.15	3861	55604*1		3852	2350	3052					NET 1 OPEN		
RMT 13-15		23:55	20.16.85	70.00.35				4296	2215	3681							
RMT 13-15	158	00:04	25.17.02	70.00.60	2900	55604*2		4296	2210	3684					NET 2 OPEN		
RMT 13-15	158	01:00	25.18.79	70.02.34	2364			4296	2284	3639							
RMT 13-15	158	02:00	25.20.85	70.04.27	2593			4762	2210	4218							
RMT 13-15	158	02:24	25.21.78	70.05.12	2847	55604*3		4762	2180	4234					NET 3 OPEN		
RMT 13-15	158	03:30	25.24.11	70.07.31	2457			4762	2125	4262							
RMT 13-15	158	04:00	25.25.40	70.08.61	2674			4762	2090	4279					NET 3 CLOSED		
RMT 13-15	158	06:15													All in		
CTD(S) 08	158	09:15	25°19.26	70°02.54	2342										On station		
CTD(S) 08	158	09:35													Sensor power on		
CTD(S) 08	158	09:40	25°19.28	70°02.49	0										CTD in water		
CTD(S) 08	158	09:45	25°19.29	70°02.48	10										USBL on		
CTD(S) 08	158	10:00	25°19.26	70°02.48	520												
CTD(S) 08	158	10:30	25°19.30	70°02.42	1666												
CTD(S) 08	158	10:55	25°19.26	70°02.51	2420	2393?				1209807	7180739	2340	25°19.29	70°02.47	CTD at bottom		
CTD(S) 08	158	11:00	25°19.25	70°02.50	2410	2191				1209821	7180772	2143	25°19.27	70°02.48	on way up		
CTD(S) 08	158	11:30	25°19.27	70°02.48	2350	2140				1209813	7180791	2143	25°19.26	70°02.47	going down		
CTD(S) 08	158	12:00	25°19.30	70°02.47	2364	2234				1209796	7180685	2239	25°19.32	70°02.47			
CTD(S) 08	158	12:30	25°19.26	70°02.47	2351	2146				1209747	7180752	2103	25°19.28	70°02.44			
CTD(S) 08	158	13:00	25°19.24	70°02.45	2352	2053				1209755	7180802	2031	25°19.26	70°02.44			
CTD(S) 08	158	13:30	25°19.29	70°02.49	2553	2235				1209764	7180714	2237	25°19.30	70°02.45			
CTD(S) 08	158	14:00	25°19.25	70°02.50	2344	2283				1209818	7180765	2245	25°19.27	70°02.48			
CTD(S) 08	158	14:30	25°19.26	70°02.48	2349	2378				1209827	7180762	2143	25°19.28	70°02.48			
CTD(S) 08	158	15:00	25°19.26	70°02.49	2347	2231				1209827	7180777	2225	25°19.27	70°02.48			
CTD(S) 08	158	15:30	25°19.25	70°02.48	2348	2221				1209808	7180773	2206	25°19.27	70°02.47			
CTD(S) 08	158	16:00	25°19.25	70°02.45	2354	2306				1209775	7180773	2279	25°19.27	70°02.45			
CTD(S) 08	158	16:30	25°19.26	70°02.44	2357	2038				1209742	7180767	2019	25°19.27	70°02.43			
CTD(S) 08	158	17:01	25°19.27	70°02.45	2404	2223				1209756	7180774	2209	25°19.28	70°02.45			
CTD(S) 08	158	17:30	25°19.27	70°02.43	2360	2343				1209740	7180757	2315	25°19.28	70°02.43			
CTD(S) 08	158	18:00	25°19.26	70°02.43	2361	2293				1209733	7180785	2272	25°19.27	70°02.43			
CTD(S) 08	158	18:30	25°19.28	70°02.40	2367	2064				1209731	7180805	2052	25°19.25	70°02.43			
CTD(S) 08	158	19:00	25°19.28	70°02.41	2374	2235				1209716	7180759	2223	25°19.28	70°02.42			
CTD(S) 08	158	19:30	25°19.27	70°02.41	2380	2276				1209751	7180794	2250	25°19.26	70°02.44			
CTD(S) 08	158	20:00	25°19.26	70°02.40	2365	2034				1209685	7180804	2019	25°19.26	70°02.40			
CTD(S) 08	158	20:30	25°19.24	70°02.46	2357	2401				1209752	7180816	2392	25°19.25	70°02.44			
CTD(S) 08	158	21:00	25°19.25	70°02.43	2358	2032				1209793	7180849	2016	25°19.23	70°02.46			
CTD(S) 08	158	21:30	25°19.26	70°02.42	2375	2264				1209737	7180844	2240	25°19.23	70°02.43			
CTD(S) 08	158	22:00	25°19.26	70°02.42	2378	2113				1209722	7180799	2105	25°19.26	70°02.42			

CTD(S) 08	158	22:30	25°19.26	70°02.44	2357	2216				1209762	7180794	2209	25°19.26	70°02.44		
CTD(S) 08	158	22:45	25°19.28	70°02.45	2359	2105				1209791	7180781	2079	25°19.27	70°02.46		
CTD(S) 08	158	23:31	25°19.23	70°02.64	2529											CTD On Deck
CTD(S) 08	158	23:31														Sensors Off
							Alt.stn.no.	Wire Out	Depth	Range						
RMT 16-18	158	23:48	25.20.17	70.02.35				0	0	0						Nets in the water
RMT 16-18	159	00:50	25.22.83	70.02.36		55605*1		2113	1200	1739						NET 1 OPEN
RMT 16-18	159	02:00	25.25.75	70.02.45	3777			2040	1100	1718						
RMT 16-18	159	02:50	25.28.10	70.02.45	3849	55605*2		2060	1000	1801						NET 2 OPEN
RMT 16-18	159	04:10	25.31.63	70.02.64	4200					0						
RMT 16-18	159	04:55	25.33.63	70.02.83	4028	55605*3		1568	800	1349						NET 3 OPEN
RMT 16-18	159	06:50	25.38.82	70.03.02				1245	610	1085						NET 3 CLOSED
										0						
										0						
CTD(S) 09	159	11:54	25°18.70	70°02.24	2370											Mn sensor on
CTD(S) 09	159	11:58	25°18.77	70°02.23	2374											
CTD(S) 09	159	12:00	25°18.78	70°02.23	2365											
CTD(S) 09	159	12:30	25°18.74	70°02.23	2370	988				1209454	7181788	1108	25°18.73	70°02.23		OK for SAPs?
CTD(S) 09	159	13:00	25°18.75	70°02.19	2379	2041				1209370	7181786	2019	25°18.79	70°02.18		(But of CTD 04)
CTD(S) 09	159	13:30	25°18.69	70°02.22	2387	2242				1209365	7181796	2229	25°18.73	70°02.18		
CTD(S) 09	159	14:00	25°18.71	70°02.25	2150	2150				1209404	7181793	2112	25°18.73	70°02.20		
CTD(S) 09	159	14:30	25°18.70	70°02.20	2388	2135				1209374	7181817	2106	25°18.72	70°02.18		
CTD(S) 09	159	15:00	25°18.67	70°02.18	2399	2293				1209328	7181811	2288	25°18.73	70°02.16		
CTD(S) 09	159	15:30	25°18.69	70°02.22	2382	2252				1209411	7181863	2256	25°18.69	70°02.20		
CTD(S) 09	159	16:00	25°18.68	70°02.28	2452	2198				1209463	7181874	2179	25°18.69	70°02.23		
CTD(S) 09	159	16:30	25°18.70	70°02.29	2368	2037				1209543	7181792	2019	25°18.73	70°02.28		
CTD(S) 09	159	17:00	25°18.69	70°02.26	2383	2160				1209491	7181866	2154	25°18.69	70°02.25		
CTD(S) 09	159	17:30	25°18.77	70°02.22	2373	2225				1209460	7181701	2188	25°18.78	70°02.24		
CTD(S) 09	159	17:58														LSS Problems?
CTD(S) 09	159	18:00	25°18.86	70°02.29	2350	2096				1209492	7181549	2070	25°18.86	70°02.26		
CTD(S) 09	159	18:30	25°18.94	70°02.46	2328	2347				1209639	7181519	2319	25°18.87	70°02.35		
CTD(S) 09	159	19:00	25°19.18	70°02.73	2309	2247				1210060	7181236	2211	25°19.01	70°02.61		
CTD(S) 09	159	19:10														Hold for decision
CTD(S) 09	159	19:15														Recover CTD
CTD(S) 10	159	21:07														Mn Sensor on
CTD(S) 10	159	21:11	25°17.77	70°00.68	2892											
CTD(S) 10	159	21:15	25°17.78	70°00.70		20										
CTD(S) 10	159	21:30	25°18.00	70°00.92	2850	500				1207236	7183312	482	25°17.98	70°00.87		
CTD(S) 10	159	22:00	25°18.36	70°01.34	2500	1480				1207689	7182860	1382	25°18.21	70°01.15		
CTD(S) 10	159	22:30	25°18.52	70°01.70	2410	2504				1208146	7182582	2426	25°18.34	70°01.43		2450dB
CTD(S) 10	159	22:39	25°18.62	70°01.79	2402	2266				1208339	7182408	2163	25°18.43	70°01.55		ottles 1&4; GOOD SAPS: 40mV @ 2250db
CTD(S) 10	159	23:00	25°18.81	70°01.98	2418	2345				1208625	7182096	2299	25°18.59	70°01.73		
CTD(S) 10	159	23:30	25°19.08	70°02.22	2395	2122				1209083	7181534	2014	25°18.88	70°02.02		
CTD(S) 10	159	23:40	25°19.23	70°02.41	2357	2332				1209266	7181289	2249	25°19.01	70°02.14		80mV @ 2350
CTD(S) 10	160	00:00	25°19.36	70°02.49	2363	2349				1209460	7181074	2241	25°19.12	70°02.26		
CTD(S) 10	160	00:30	25°19.75	70°02.77	2393	2260				1209921	7180384	2128	25°19.48	70°02.55		
CTD(S) 10	160	00:50	25°19.93	70°02.93	2437	2520				1210100	7180047	2380	25°19.65	70°02.67		CTD Off-bottom
CTD(S) 10	160	01:00	25°20.00	70°03.00	2477	2442				1210227	7179864	2308	25°19.75	70°02.75		
CTD(S) 10	160	01:30	25°20.25	70°03.25	2460	1466				1210787	7178990	1361	25°20.20	70°03.11		
CTD(S) 10	160	02:11	25°20.80	70°03.55	2674	20				1211401	7178324	528	25°20.54	70°03.49		USBL in board
CTD(S) 10	160	02:14	25°20.82	70°03.58	2564	0										CTD on-deck, sensor off.

						Alt.stn.no.	Wire Out	Depth	Range						
RMT 19-21	160	03:36	25°22.15	70°04.15			0	0	0						Nets in the water
RMT 19-21	160	04:15	25°25.49	70°03.03		55606*1	893	605	657		0				NET 1 OPEN
RMT 19-21	160	05:00	25°27.07	70°02.75	3625		1049	555	890						
RMT 19-21	160	06:15	25°28.08	70°01.36	3737	55606*2	814	415	700						NET 2 OPEN
RMT 19-21	160	07:00	25°29.99	70°00.63	4109		648	310	569						
RMT 19-21	160	08:13	25°32.55	69°59.33	3760	55606*3	353	185	301						NET 3 OPEN
RMT 19-21	160	09:14					60	50	33						NET 3 CLOSED
RMT 19-21		09:26	25°35.5	69°57.9			0								All inboard
RMT 19-21															
CTD(S) 11	160	13:16	25°17.26	70°59.74	3091	0									
CTD(S) 11	160	13:23	25°17.33	69°59.74	3177	23									
CTD(S) 11	160	13:31	25°17.39	69°59.81	3136	260									
CTD(S) 11	160	13:40				458			1205594	7184461	419	25°17.41	69°59.86		
CTD(S) 11	160	13:45	25°17.46	69°59.95	3043	640			1205675	7184384	623	25°17.44	69°59.91		
CTD(S) 11	160	14:00	25°17.52	70°00.13	3045	1214			1205829	7184277	1175	25°17.50	70°00.01		
CTD(S) 11	160	14:15	25°17.60	70°00.24	2962	1818			1205972	7184169	1781	25°17.55	70°00.10		
CTD(S) 11	160	14:30	25°17.68	70°00.33	2953	2310			1206106	7184040	2273	25°17.62	70°00.18		
CTD(S) 11	160	14:35	25°17.71	70°00.40	2989	2510			1206188	7183996	2440	25°17.64	70°00.23		on bottom
CTD(S) 11	160	14:45	25°17.81	70°00.49	2862	2136			1206324	7183646	2060	25°17.82	70°00.32		pumps on
CTD(S) 11	160	15:00	25°17.97	70°00.66	2921	2452			1206514	7183677	2347	25°17.80	70°00.43		
CTD(S) 11	160	15:13													stopped winch at 2400m
CTD(S) 11	160	15:15	25°18.06	70°00.75	2640	2443			1206709	7183463	2367	25°17.91	70°00.56		
CTD(S) 11	160	15:30	25°18.19	70°00.77	2624	2415			1206861	7183215	2354	25°18.04	70°00.65		
CTD(S) 11	160	15:45	25°18.35	70°00.80	2624	2419			1206992	7182968	2355	25°18.17	70°00.74		
CTD(S) 11	160	16:00	25°18.49	70°00.91	2621	2426			1207084	7182687	2358	25°18.32	70°00.80		
CTD(S) 11	160	16:15	25°18.59	70°00.89	2646	2404			1207203	7182430	2354	25°18.45	70°00.88		
CTD(S) 11	160	16:30	25°18.67	70°00.88	2659	2399			1207165	7182010	2357	25°18.68	70°00.87		
CTD(S) 11	160	16:45	25°18.75	70°00.91	2701	2391			1207203	7181987	2352	25°18.88	70°00.89		start raising CTD
CTD(S) 11	160	17:00	25°18.87	70°00.93	2647	2075			1207200	7181642	2026	25°18.70	70°00.90		bottle firing complete
CTD(S) 11	160	18:07	25°19.88	70°01.01	2715	20									USBL in
CTD(S) 11	160	18:10	25°19.23	70°01.04											CTD on deck
CTD(T) 12	162	07:31	23°12.89	73°23.91	3876										
CTD(T) 12	162	08:01	23°12.80	73°23.95	3874										
CTD(T) 12	162	08:27	23°12.70	73°23.76	3865	2296									
CTD(T) 12	162	09:00	23°12.62	73°23.66	3872	3767									
CTD(T) 12	162	09:29	23°12.45	73°23.62	3907	3500									
CTD(T) 12	162	10:00	23°12.29	73°23.72	3851	2666									
CTD(T) 12	162	10:30	23°12.19	73°23.54	3877	1546									
CTD(T) 12	162	11:00	23°12.08	73°23.18	3896	804									
CTD(T) 12	162	11:47	23°12.03	73°22.94	3926	0									
CTD(S)13	162	12:42	23°12.20	73°22.69	3893										
CTD(S)13	162	13:30	23°12.42	73°22.58	3839										
CTD(S)13	162	14:24	23°12.56	73°22.37	3825										CTD @ 3600m
CTD(S)13	162	14:36	23°12.59	73°22.37	3821	3181									
CTD(S)13	162	15:19	23°12.68	73°22.24	3840	1775									
CTD(S)13	162	15:31	23°12.67	73°22.26	3825	1348									
CTD(S)13	162	16:00	23°12.72	73°22.23	3817	197									
CTD(T) 14	162	17:07	23°13.21	73°21.92	3899										CTD in water
CTD(T) 14	162	17:21	23°13.24	73°21.89											CTD @ 500m

CTD(T) 14	162	17:36																Back at surface for visual inspection
CTD(T) 14	162	17:50	23°13.25	73°21.82														Back @ 500m, 24 bottles fired
CTD(T) 14	162	18:06	23°13.26	73°21.75														CTD on deck
CTD(T)15	163	02:13	23°12.52	73°22.52	3825	0												CTD in water
CTD(T)15	163	03:48	23°12.70	73°22.28	3833	3557			PJS CTD cast with titanium frame									
CTD(T)15	163	04:00	23°12.70	73°22.30	3823	3779												CTD on bottom
CTD(T)15	163	04:30	23°12.76	73°22.28	3847	3157												
CTD(T)15	163	05:00	23°12.88	73°22.33	3829	2531												
CTD(T)15	163	05:30	23°12.87	73°22.31	3834	1584												
CTD(T)15	163	06:00	23°12.85	73°22.24	3876	605												
CTD(T)15	163	06:00	23°12.00	73°22.20	3835	0												CTD on deck
CTD(S) 16	164	00:00	24°41.08	71°07.83	3157	0												On Station
CTD(S) 16	164	00:10	24°41.08	71°07.99	3153	0												CTD in water
CTD(S) 16	164	01:41	24°41.57	71°07.89	3143	3138			Pressure (db)	Sigma-2								
CTD(S) 16	164	01:58	24°41.67	71°07.81	3165				2500	37.0079								Bottles #20 & #21 fired: PHIL!!!!!!
CTD(S) 16	164	02:04	24°41.71	71°07.82	3161				2400	36.9962								Bottle #22
CTD(S) 16	164	02:07	24°41.72	71°07.83	3160				2300	36.9881								Bottle #23
CTD(S) 16	164	02:10	24°41.74	71°07.82	3153				2200	36.9747								Bottle #24
CTD(S) 16	164	02:14	24°41.76	71°07.81	3165				2100	36.9532								Bottle #1 not fired: Phil 2!!!!!!
CTD(S) 16	164	02:19	24°41.79	71°07.80	3162				2000	36.9141								Bottle #6
CTD(S) 16	164	02:23	24°41.83	71°07.78	3165				2100	36.954								Bottle #7
CTD(S) 16	164	03:00	24°42.01	71°07.78	3152	354												CTD on deck
CTD(S) 16	164	03:10	24°42.01	71°07.78	0				CTD ON DECK									
RMT 22-24	164	12:15							Alt.stn.no.	Wire Out	Depth	Range						Nets in the water
RMT 22-24	164	14:03	25°16.24	70°02.93	2643	<b>55607*1</b>			3794	2000	3224							NET 1 OPEN
RMT 22-24	164	15:00	25°18.24	70°01.47	3265				3735	1870	3233							
RMT 22-24	164	16:05	25°20.30	69°59.87	3236	<b>55607*2</b>			3099	1710	2585							NET 2 OPEN
RMT 22-24	164	17:07	25°22.26	69°58.31	3542				2873		2873							
RMT 22-24	164	18:05	25°24.25	69°56.88	3182	<b>55607*3</b>			2675	1395	2282							NET 3 OPEN
RMT 22-24	164	19:03	25°26.31	69°55.31							0							
RMT 22-24	164	20:05	25°28.36	69°53.71	2692				2279	1200	1937							NET 3 CLOSED
RMT 22-24	164	21:30																All inboard
CTD(S) 17	165	00:23																SAPS Live (2h delay)
CTD(S) 17	165	00:28	25°19.30	70°02.59	2549	0												CTD in water
CTD(S) 17	165	00:31	25°19.30	70°02.58		15												USBL on wire
CTD(S) 17	165	00:45	25°19.28	70°02.60	2507	350					1210030	7180755	336					
CTD(S) 17	165	01:00	25°19.25	70°02.60	2350	818					1210028	7180797	801	25°19.25	70°02.60			
CTD(S) 17	165	01:15	25°19.28	70°02.58	2346	1394					1210998	7180760	1391	25°19.25	70°02.60			
CTD(S) 17	165	01:30	25°19.27	70°02.58	2350	1984					1209989	7180752	1964	25°19.28	70°02.58			
CTD(S) 17	165	01:42	25°19.27	70°02.59	2349	2351												stopped @2360
CTD(S) 17	165	01:46	25°19.26	70°02.60	2313	2308					1209998	7180774		25°19.26	70°02.58			stopped @2320db. 35-37mV
CTD(S) 17	165	02:00	25°19.25	70°02.58	2322	2309					1209995	7180799	2279	25°19.25	70°02.58			40mV
CTD(S) 17	165	02:15	25°19.25	70°02.58	2189	2309					1209995	7180807	2279	25°19.25	70°02.58			
CTD(S) 17	165	02:23	25°19.27	70°02.60	2155	2309					1210006	7180800	2279	25°19.25	70°02.59			Pumps on
CTD(S) 17	165	02:46	25°19.25	70°02.60	2048	2310					1209994	7180792	2279	25°19.25	70°02.58			
CTD(S) 17	165	03:15	25°19.25	70°02.60	2673	2309					1209999	7180774	2276	25°19.26	70°02.59			
CTD(S) 17	165	03:23	25°19.24	70°02.60		2313					1210007	7180808	2280	25°19.25	70°02.59			half way
CTD(S) 17	165	03:46	25°19.28	70°02.56		2314					1209961	7180773	2280	25°19.27	70°02.56			
CTD(S) 17	165	03:53	25°19.27	70°02.56		2314					1209949	7180767	2280	25°19.27	70°02.56			90 minutes in
CTD(S) 17	165	04:23	25°19.27	70°02.57		2314					1209945	7180779	2280	25°19.26	70°02.55			Pumps off

CTD(S) 17	165	04:27	25°19.26	70°02.56		2360			1209944	7180789	2320	25°19.26	70°02.55	Start up		
CTD(S) 17	165	05:29	25°19.27	70°02.86										USBL Off		
CTD(S) 17	165	05:33	25°19.27	70°02.90										CTD on deck		
CTD(S) 18	165	07:07	25°19.10	70°02.10										TARGET LAT/LONG. SAPs live		
CTD(S) 18	165	07:23	25°19.13	70°02.22	2410	0								In water		
CTD(S) 18	165	07:25	25°19.13	70°02.22	2410	20								USBL on		
CTD(S) 18	165	07:30	25°19.13	70°02.18	2414	170	165		1209331	7181065	151	25°19.13	70°02.18			
CTD(S) 18	165	07:45	25°19.10	70°02.14	2434	608	603		1209265	7181112	580	25°19.10	70°02.14			
CTD(S) 18	165	08:00	25°19.09	70°02.14	2453	1045			1209215	7181103	1012	25°19.11	70°02.11			
CTD(S) 18	165	08:15	25°19.10	70°02.13	2442	1513			1209237	7181139	1491	25°19.09	70°02.12			
CTD(S) 18	165	08:30	25°19.06	70°02.14	2440	2079			1209252	7181197	2016	25°19.06	70°02.13			
CTD(S) 18	165	08:46	25°19.10	70°02.12	2449	2437			1209246	7181116	2379	25°19.10	70°02.13	40m off bottom		
CTD(S) 18	165	08:49	25°19.08	70°02.14	2455									Stopped at 2375db, LSS > 37mV		
CTD(S) 18	165	09:07	25°19.07	70°02.10	2429	2366	2374		1209266	7181146	2328	25°19.08	70°02.14	SAPs on		
CTD(S) 18	165	09:37	25°19.08	70°02.10	2420	2367			1209218	7181122	2329	25°19.10	70°02.11			
CTD(S) 18	165	09:43												Up 5 dbar		
CTD(S) 18	165	10:07	25°19.08	70°02.14	2425	2362			1209250	7181078	2324	25°19.12	70°02.13	Up 10 dbar to 2360		
CTD(S) 18	165	10:37	25°19.09	70°02.10	2468	2344			1209193	7181133	2306	25°19.09	70°02.10	Up 10 dbar to 2350		
CTD(S) 18	165	11:07	25°19.10	70°02.09	2441	2344			1209177	7181132	2306	25°19.09	70°02.09	Pumps Off		
CTD(S) 18	165	11:11	25°19.10	70°02.11	2452	2441			1209170	7181119	2403	25°19.10	70°02.08	Back at bottom (50m off)		
CTD(S) 18	165	11:30	25°19.09	70°02.10	2469	2095			1209205	7181132	2050	25°19.09	70°02.10			
CTD(S) 18	165	11:45	25°19.05	70°02.11	2420	1471			1209190	7181184	1418	25°19.07	70°02.09			
CTD(S) 18	165	12:00	25°19.10	70°02.14	2450	876			1209254	7181123	833	25°19.10	70°02.13			
CTD(S) 18	165	12:26												CTD On deck		
CTD(S) 18	165	12:32	25°19.08	70°02.10	2438									End of Cast		
SHR 01	165	13:58	25°19.10	70°02.30	2350				1209829.3	71809721.1		7180961.72	1209864.79	SHR into water		
SHR 01	165	14:08	25°19.24	70°02.49	2366	246			1209838	7180816.5	254.1	7180500.8	1210375.67			
SHR 01	165	14:18	25°19.23	70°02.49	2351	500			1209845.4	7180823.2	495.2	7180531.71	1210377.31			
SHR 01	165	14:28	25°19.25	70°02.47	2366	769			1209812.1	7180807.6	774.2	7180472.86	1210317.86			
SHR 01	165	14:38	25°19.26	70°02.49	2361	1046			1209847.5	7180773.4	1051.5	7180438.98	1210372.41			
SHR 01	165	14:48	25°19.24	70°02.49	2358	1328			1209843.2	7180787.1	1332.3	7180500.8	1210375.67			
SHR 01	165	14:58	25°19.23	70°02.47	2352	1584			1209815.5	7180808.5	1590.4	7180534.68	1210321.12			
SHR 01	165	15:08	25°19.25	70°02.52	2360	1835			1209835.6	7180792.1	1842.7	7180465.43	1210458.32			
SHR 01	165	15:18	25°19.22	70°02.47	2352	2077			1209836.7	7180819.8	2084.7	7180565.58	1210322.76			
SHR 01	165	15:28	25°19.23	70°02.45	2358	2300			1209793.8	7180848.6	2305	7180537.65	1210264.94			
SHR 01	165	15:38	25°19.21	70°02.46	2346	2368			1209772.7	7180854.3	2371.9	7180597.98	1210296.3			
SHR 01	165	15:48	25°19.24	70°02.46	2367	2414			1209784.6	7180842.7	2417.3	7180505.25	1210291.4			
SHR 01	165	15:55	25°19.26	70°02.41	2367	2435			1209768.5	7180834.7	2436.1	7180450.86	1210147.67	5m off Cmaera on		
SHR 01	165	15:58	25°19.26	70°02.43	2379	2435			1209755.7	7180822.1	2437.8	7180447.89	1210203.86			
SHR 01	165	16:08	25°19.26	70°02.47	2355	2445			1209751.8	7180784.2	2447.3	7180441.95	1210316.22			
SHR 01	165	16:11	25°19.24	70°02.44	2373	2452			1209770.2	7180777.3	2453.7	7180508.22	1210235.21	first large signals lasting for several minutes		
SHR 01	165	16:18	25°19.24	70°02.43	2370	2446			1209760.8	7180788.3	2449.2	7180509.71	1210207.12			
SHR 01	165	16:28	25°19.26	70°02.43	2579	2443			1209745.3	7180803.3	2445.4	7180447.89	1210203.86			
SHR 01	165	16:38	25°19.22	70°02.45	2355	2452			1209759.8	7180778.9	2450.9	7180568.55	1210266.57			
SHR 01	165	16:48	25°19.24	70°02.44	2377	2441			1209745.1	7180802.8	2443.1	7180508.22	1210235.21			
SHR 01	165	16:58	25°19.25	70°02.42	2372	2445			1209724.3	7180794	2447.4	7180480.29	1210177.4			
SHR 01	165	17:08	25°19.23	70°02.47	2350	2453			1209730.5	7180777.4	2453.7	7180534.68	1210321.12			
SHR 01	165	17:18	25°19.20	70°02.46	2348	2435			1209770.5	7180825.5	2436.3	7180628.89	1210297.94			
SHR 01	165	17:25	25°19.23	70°02.45	2353	2429			1209761.4	7180833.3	2431.3	7180537.65	1210264.94	Change tapes		
SHR 01	165	17:28	25°19.23	70°02.44	2359	2429			1209766.3	7180826.9	2431	7180539.13	1210236.85			
SHR 01	165	17:38	25°19.24	70°02.43	2362	2439			1209740.9	7180799.6	2440	7180509.71	1210207.12			
SHR 01	165	17:48	25°19.24	70°02.44	2368	2442			1209723.9	7180800.3	2443.5	7180508.22	1210235.21			



SHR 01	165	17:58	25°19.25	70°02.45	2358	2454			1209725.1	7180779.1	2456.4	7180475.83	1210261.67		
SHR 01	165	18:08	25°19.24	70°02.47	2361	2452			1209742.2	7180788	2453.3	7180503.77	1210319.49		
SHR 01	165	18:18	25°19.24	70°02.44	2358	2449			1209744.2	7180780.1	2451.4	7180508.22	1210235.21		
SHR 01	165	18:28	25°19.24	70°02.45	2354	2450			1209740.6	7180778.7	2453	7180506.74	1210263.31		
SHR 01	165	18:38	25°19.25	70°02.45	2358	2445			1209743.9	7180795.3	2448.4	7180475.83	1210261.67		
SHR 01	165	18:48	25°19.23	70°02.45	2354	2445			1209740	7180795.1	2446.7	7180537.65	1210264.94		
SHR 01	165	18:58	25°19.24	70°02.43	2361	2440			1209736	7180806.2	2443.3	7180509.71	1210207.12		
SHR 01	165	19:05													Start hauling up SHR
SHR 01	165	20:28													SHR back on deck
						Alt.stn.no.	Wire Out	Depth	Range						
RMT 25	165	21:55	25°14.15	69°57.71					0						Nets in the water
RMT 25	165	22:30	25°15.20	69°58.77			850	629	572						
RMT 25	165	23:00	25°16.17	69°59.56											
RMT 25	165	23:30	25°17.07	70°00.51			2673	1590	2149						
RMT 25	166	00:00	25°18.04	70°01.44					0						
RMT 25	166	00:37	25°19.34	70°02.71	2320	55608*1	4300	2280	3646						NET OPEN
RMT 25	166	01:00	25°20.26	70°03.54	2440		4757	2195	4220						
RMT 25	166	02:00	25°22.47	70°05.55	2975		5238								
RMT 25	166	02:44	25°23.85	70°06.82			4759	2515	4040						NET CLOSED
RMT 25	166	10:03													All in
CTD(S) 019	166	07:43	25°18.77	70°01.89	2785										SAPs on
CTD(S) 019	166	08:00	25°18.77	70°01.98	2639										CTD in water
CTD(S) 019	166	08:03	25°18.77	70°02.00	20										USBL on
CTD(S) 019	166	08:15	25°18.75	70°01.96	2438	300									computer crash - CTD up to 20
CTD(S) 019	166	08:24	25°18.72	70°01.99	2460	100		1209033	7181828	94.4	25°18.72	70°01.98			restart
CTD(S) 019	166	08:43	25°18.74	70°01.96	2440	674		1208987	7181829	649	25°18.73	70°01.95			
CTD(S) 019	166	08:58	25°18.70	70°01.95	2432	1235		1208993	7181817	1187	25°18.73	70°01.96			
CTD(S) 019	166	09:13	25°18.76	70°01.87	2442	1860		1208887	7181823	1834	25°18.73	70°01.89			
CTD(S) 019	166	09:31	25°18.78	70°01.89	2452	2428		1208833	7181744	2385					50 m off. Up to 2350
CTD(S) 019	166	09:36													at 2350 dbar (40 mV)
CTD(S) 019	166	09:43	25°18.78	70°01.99	2439	2342		1208902	7181734	2300	25°18.78	70°01.91			pumps on, 6
CTD(S) 019	166	10:13	25°18.76	70°02.08	2428	2343		1209096	7181709	2304	25°18.79	70°02.02			
CTD(S) 019	166	10:43	25°18.72	70°02.10	2412	2344		1209221	7181817	2306	25°18.73	70°02.09			
CTD(S) 019	166	10:46													
CTD(S) 019	166	11:13	25°18.79	70°02.10	2421	2322		1209290	7181740	2276	25°18.76	70°02.14			
CTD(S) 019	166	11:43	25°18.82	70°01.97	2450	2317		1209114	7181629	2275	25°18.83	70°02.03			bottle 8, pump off
CTD(S) 019	166	11:45													start down
CTD(S) 019	166	11:49	25°18.81	70°01.95	2456	2415		1209063	7181638	2372	25°18.83	70°02.00			at bottom (45m up)
CTD(S) 019	166	12:00	25°18.86	70°01.92	2455	2000		1208969	7181626	1940	25°18.83	70°01.95			clear of plume
CTD(S) 019	166	12:50	25°18.94	70°01.64	2616	23									
CTD(S) 019	166	12:53	25°18.93	70°01.63	2604										
CTD(S) 020	166	14:50	25°19.29	70°02.46	2361										SAPs live
CTD(S) 020	166	14:54	25°19.29	70°02.47	2359										CTD in water
CTD(S) 020	166	14:56	25°19.29	70°02.47	2357	20									usbl on
CTD(S) 020	166	15:00	25°19.28	70°02.46	2358	160		1209790	7180733	144	25°19.29	70°02.46			
CTD(S) 020	166	15:11	lost computer readout, then got it back - coming back to 50m wire out & will restart												
CTD(S) 020	166	15:23	25°19.26	70°02.40	2404	50									heading back down
CTD(S) 020	166	15:50	25°19.22	70°02.39	2363	883		1209706	7180842	882	25°19.24	70°02.41			
CTD(S) 020	166	16:20	25°19.24	70°02.47	2359	2017		1209776	7180861	1998	25°19.22	70°02.45			
CTD(S) 020	166	16:25	25°19.24	70°02.46	2356	2187									ctd alarm on deck unit, no data, stopped winch
CTD(S) 020	166	16:30	25°19.24	70°02.47	2367	2109		1209780	7180850	2060	25°19.23	70°02.45			placed fuse in CTD, start data file C128_20B
CTD(S) 020	166	16:41	25°19.25	70°02.45	2361	2388		1209762	7180833	2348	25°19.24	70°02.44			50m off , coming up to 2300db



CTD(S) 21	167	06:18	25°19.25	70°02.44	2359	2389			1209735	7180866	2353	25°19.22	70°02.43	46 m off bottom		
CTD(S) 21	167	06:51	25°19.19	70°02.40	2365	2314			1209674	7180928	2279	25°19.19	70°02.39	pped @ 2325 after yo-yos to 2100 & 2300		
CTD(S) 21	167	07:03	25°19.19	70°02.39	2361	2313			1209671	7180913	2280	25°19.20	70°02.39	Pumps on, Btl#6 @ >120mV		
CTD(S) 21	167	07:33	25°19.20	70°02.40	2362	2313			1209694	7180908	2279	25°19.20	70°02.40	78mV		
CTD(S) 21	167	07:35												Down to 2350db, >100mV		
CTD(S) 21	167	07:42												down to 2375		
CTD(S) 21	167	07:47												up to 2335, ca 90mV		
CTD(S) 21	167	08:03	25°19.20	70°02.37	2366	2321			1209648	7180900	2288	25°19.21	70°02.37	Up to 2300db, >90mV, Btl#7		
CTD(S) 21	167	08:28												Up to 2250, 2200; >110mV		
CTD(S) 21	167	08:33	25°19.19	70°02.38	2514	2188			1209650	7180905	2156	25°19.20	70°02.37			
CTD(S) 21	167	08:47												Up to 2175 then down to 2225dbar		
CTD(S) 21	167	09:04	25°19.20	70°02.38	2362	2212			1209652	7180905	2178	25°19.20	70°02.38	Pumps Off, Btl#8		
CTD(S) 21	167	09:10	25°19.20	70°02.39	2362	2100			1209653	7180910	2084	25°19.20	70°02.38	Up to 2100dbar		
CTD(S) 21	167	09:21	25°19.20	70°02.37	2363	2412			1209654	7180899	2376	25°19.21	70°02.38	Down to 46m off		
CTD(S) 21	167	10:00	25°19.21	70°02.36	2372	1331			1209634	7180884	1291	25°19.22	70°02.37			
CTD(S) 21	167	10:32	25°19.22	70°02.41	2367	20								USBL on deck		
CTD(S) 21	167	10:35	25°19.21	70°02.43	2383	0								CTD on deck		
CTD(S) 21	167	10:38												Mn sensor off		
CTD(S) 22	167	12:33	25°25.97	70°03.03	3800									CTD in water		
CTD(S) 22	167	13:00	25°25.98	70°03.01	3838											
CTD(S) 22	167	13:30	25°26.00	70°03.05	3830	1898										
CTD(S) 22	167	14:00	25°25.97	70°03.03	3770	2982								CTD @ 3000 dbar		
CTD(S) 22	167	14:52	25°25.97	70°03.03	3804	1998										
CTD(S) 22	167	15:24	25°26.03	70°03.07	3822	0								CTD on deck		
<b>END OF WORK AT KAIREI VENT-SITE</b>					<b>YIPPEE</b>											
SHR 03	168	03:17	23°52.87	69°35.99								7343193.07	1172897.93	SHR in water		
SHR 03	168	03:32	23°52.88	69°35.01	3284	455			1172961.3	7343153.5	457.7	734172.94	1172931.15			
SHR 03	168	03:47	23°52.82	69°35.95	3285	881			1172867.4	7343260.9	877.6	7343288.94	1172834.1			
SHR 03	168	04:02	23°52.75	69°35.88	3271	1328			1172781.2	7343367.2	1324.7	7343424.28	1172720.86			
SHR 03	168	04:15	23°52.71	69°35.85	3252	1680			1172721.1	7343470	1673	7343500.81	1172673.2	Aborted		
SHR 03	168	05:11	23°52.23	69°35.85										SHR on deck		
<b>END OF SHRIMP</b>					<b>DOH !!!</b>											
CTD(S) 23	168	08:38	23°52.66	69°35.93	3221									SAPs activated		
CTD(S) 23	168	08:45	23°52.72	69°35.82	3267											
CTD(S) 23	168	09:08	23°52.68	69°35.88	3240	700										
CTD(S) 23	168	09:38	23°52.65	69°35.86	3472	1637										
CTD(S) 23	168	10:08	23°52.74	69°35.86	3284	2795			1172680	7343438	2766	23°52.74	69°35.86	Big plume >60mV on way down		
CTD(S) 23	168	10:21	23°52.65	69°35.92	3239	3285	3300db		1172685	7343425	3231	23°52.75	69°35.86	CTD @ 50m off		
CTD(S) 23	168	10:26												Blown Fuse		
CTD(S) 23	168	10:29				3000	3015db							CTD backlive (C128_23A)		
CTD(S) 23	168	10:38	23°52.74	69°35.80	3287	2706			1172695	7343480	2649	23°52.72	69°35.86	Pumps on (but no plume)		
CTD(S) 23	168	10:43	23°52.76	69°35.76	3310	2808			1172675	7343463	2762	23°52.73	69°35.85	Stopped @ 2819db; >70mV; Btl#6		
CTD(S) 23	168	11:08	23°52.76	69°35.91	3280	2807			1172610	7343368	2763	23°52.78	69°35.82	<50mV		
CTD(S) 23	168	11:13	23°52.78	69°35.87	3290	2833	2850db		1172653	7343361	2793			To 2850db, >60mV		
CTD(S) 23	168	11:38	23°52.77	69°35.89	3280	2840			1172670	7343357	2799	23°52.79	69°35.85	1 hour in; Bottle 7		
CTD(S) 23	168	12:08	23°52.75	69°35.90	3261	2860			1172732	7343376	2818	23°52.78	69°35.89	1.5 h; tweaking depth		
CTD(S) 23	168	12:38	23°52.68	69°35.88	3264	2860			1172712	7343459	2816	23°52.73	69°35.87	Pumps off		

CTD(S) 23	168	12:54	23°52.69	69°35.91	3238	3181			1172738	7343500	3134	23°52.71	69°35.89	at 3200 dbar
CTD(S) 23	168	13:42	23°52.65	69°35.90	3230	2431								coming up to surface
CTD(S) 23	168	14:41	23°52.60	69°35.99	3207	20								USBL off
CTD(S) 23	168	14:44	23°52.59	69°36.00	3197									CTD on deck
						Alt.stn.no.	Wire Out	Depth	Range					
RMT 26-28	168	16:30	24°04.03	69°41.39					0					Nets in the water
RMT 26-28	168	17:30	24°02.90	69°41.39	2535		1650	1415	849					
RMT 26-28	168	19:00	24°00.94	69°40.20	3314	55609*1	3604	2830	2232					NET 1 OPEN
RMT 26-28	168	20:00	23°59.50	69°39.45			3799	2800	2568					
RMT 26-28	168	21:00	23°58.04	69°38.42	2810	55609*2	3799	2780	2589					NET 2 OPEN
RMT 26-28	168	22:00	23°56.53	69°37.90	2780		3793	2590	2771					
RMT 26-28	168	23:00	23°54.94	69°37.03	3117		4080	2740	3023					
RMT 26-28	168	23:15	23°54.57	69°36.81	3214	55609*3	4080	2770	2996					NET 3 OPEN
RMT 26-28	169	00:00	23°53.51	69°36.25	3328		4080	2695	3063					
RMT 26-28	169	01:00	23°52.01	69°35.40	3161				0					
RMT 26-28	169	01:45	23°51.01	69°34.80	3334		3941	2825	2748					NET 3 CLOSED
RMT 26-28	169	04:00												
SAPS(W) 01	169	05:46	23°52.73	69°35.90	3288	0								SAPS Live!
SAPS(W) 01	169	05:58												COSAP 04 @ +50m
SAPS(W) 01	169	06:08												SAP 003 @ +100m
SAPS(W) 01	169	06:15												COSAP 02 @ +150m
SAPS(W) 01	169	06:25												SAP 002 @ +200m
SAPS(W) 01	169	06:45												SAP 001 @ +400m
SAPS(W) 01	169	06:52												USBL @ +450m
SAPS(W) 01	169	07:09												Core-warp on @ +530m
SAPS(W) 01	169	07:11	23°52.72	69°35.82		52								
SAPS(W) 01	169	07:46	23°52.65	69°35.81	3200	1117				1172651	7343514	1238	23°52.70	69°35.84
SAPS(W) 01	169	08:16	23°52.69	69°35.82	3255	2250				1172646	7343514	2380	23°52.70	69°35.83
SAPS(W) 01	169	08:22				2400						2509		2400m wire out, USBL @ 2510 - down 40m
SAPS(W) 01	169	08:25	23°52.69	69°35.83	3344	2440				1172630	7343518	2549	23°52.70	69°35.82
SAPS(W) 01	169	08:46	23°52.69	69°35.84	3279	2440				1172651	7343498	2549	23°52.71	69°35.84
SAPS(W) 01	169	09:16	23°52.68	69°35.84	3249	2440				1172648	7343522	2548	23°52.70	69°35.83
SAPS(W) 01	169	09:46	23°52.69	69°35.86	3274	2440				1172665	7343466	2548	23°52.73	69°35.85
SAPS(W) 01	169	10:16	23°52.69	69°35.85	3244	2440				1172683	7343478	2549	23°52.72	69°35.86
SAPS(W) 01	169	10:46	23°52.68	69°35.83	3287	2440				1172668	7343479	2549	23°52.72	69°35.85
SAPS(W) 01	169	11:16	23°52.67	69°35.82	3273	2440				1172672	7343526	2548	23°52.70	69°35.85
SAPS(W) 01	169	11:19	23°52.70	69°35.85	3251									Start hauling
SAPS(W) 01	169	12:30												At plastic wire
SAPS(W) 01	169	13:00												USBL off
SAPS(W) 01	169	13:09												1st Pump off
SAPS(W) 01	169	13:45												Last pump off
SAPS(W) 01	169	13:56												Pinger and weight on board
						Alt.stn.no.	Wire Out	Depth	Range					
RMT 29-31	169	15:52							0					Nets in the water
RMT 29-31	169	18:00	23°46.49	69°32.57	3064		3593	2370	2701					
RMT 29-31	169	18:42	23°47.74	69°33.23	3125	55610*1	4276	2730	3291					NET 1 OPEN
RMT 29-31	169	20:00	23°50.76	69°34.73	3364		5212	2605	4514					
RMT 29-31	169	20:50			3290		5672	2730	4972					Net failed to close. Haul in
RMT 29-31	169	21:20	23°54.00	69°36.53	3168		5204	2440	4597					
RMT 29-31	169	22:49	23°58.40	69°38.61	3013	55610*2	3801	1480	3501					NET 2 OPEN
RMT 29-31	169	23:49	24°01.55	69°40.05	3126	55610*3	3765	1420	3487					NET 3 OPEN
RMT 29-31	169	23:54							0					Net 3 closed quickly

