

CRUISE
NUMBER

9524

DAILY LOG
INSTITUTE OF OCEAN SCIENCES
OCEAN PHYSICS

DATE

4-25 Aug 1995

VESSEL

CCGS NARWHAL

PROJECT

North Coast Currents
(PERD)

2nd CTD make: Guildline model: 8715 serial no.: 50254
Temperature sensor model: serial no.:
coefficients: slope: 1.0005 offset: 0.0010309
Conductivity sensor model: serial no.:
coefficients: slope: 1.0014 offset: -0.001002
Pressure sensor range: psi serial no.:
coefficients: FSP: 6000 dB offset: 2
Transmissometer model: N/A serial no.:
coefficients: slope: offset:

Winches:

1. make: Harrison & Robbing model: 351 serial no.: 256 use: CTD
2. make: model: serial no.: use:
3. make: model: serial no.: use:
4. make: model: serial no.: use:
5. make: model: serial no.: use:
6. make: model: serial no.: use:
7. make: model: serial no.: use:

Salinometer: make: N/A model: serial no.:

SAIL System:

Program version: N/A Time zone:
Sampling interval: sec
CTF module no.: serial no.:

Remote temperature model: serial no.:

Flow sensor model: serial no.:

Other sensors: (special for this cruise)

Name: module ID: serial no.:

Name: module ID: serial no.:

Name: module ID: serial no.:

Comments:

ADCP Setup:

Program version: N/A number of depth bins:

Time zone: bin length (2x):

Sampling interval: sec pulse length:

Blank beyond transmit: pings per ensemble:

Pulse cycle time:

% pings good threshold:

Comments:

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE							
1995		August		CCGS Narwhal		95-24		1 OF 12							
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
5	NEWS	CTD	1038	BE	001	49-7.13	125-55.01	GPS	15	11	—	—	(310)	below keel Add 4 m to water depth	
						clock reset to UTC								3 m offset (too shallow) Test cast → All times PDT	
6	C018	CTD	1314	BE	002	50° 57.24	128° 41.03	GPS	81m	75	—	—	(310)	seems to be problem with C	
6	C015	CTD	1415	BE	003	51° 04.96	128° 46.34	GPS	66m	60	—	—	(310)	cleaned cell	
6	C012	CTD	1511	BE	004	51° 12.54	128° 50.31	GPS	132	127	—	—	(310)	still problem with C-shift	
6	C012	CTD	1513	BE	005	51° 12.53	128° 50.29	GPS	132m	127 (re-use)	—	—	(310)	seawater cast going up	
6	C009	CTD	1612	BE	006	51° 21.08	128° 54.46	GPS	239	236	—	—	(310)	change probe - now 50254	
6	C009	cal	1618	BE	007	51° 21.21	128° 54.06	GPS	239	215	1,2	1	(310)	messenger away 1619	
6	C005	CTD	1712	BE	008	51° 21.95	128° 54.55	GPS	105	101	—	—	(310)	video problem after cast done	
6	MC02	CTD	1908	BE	009	51 35.25	129 10.07	GPS	45	44	—	—	(310)	video working again	
6	MC05	CTD	2054	BE	010	51-44.23	129-28.33	GPS	9389	82	—	—	(310)	wind 325° 30 kt / Note depth logged was wrong	
6	MC06	CTD	2148	BE	011	51-46.05	129-30.05	GPS	204	191	—	—	(310)	Depth decreased to 194 m wind NW 25 kt / Note depth corr	
6	MC07	CTD	2221	BE	012	51-47.89	129-32.31	GPS	251	243	—	—	(310)	Wind NW ~ 25 kt	
6	MC08	CTD	2258	BE	013	51-50.37	129-35.09	GPS	275	267	—	—		Wind NW ~ 25 kt	
6	MC09	CTD	2337	BE	014	51° 52.99	129° 38.46	GPS	244	241	—	—	(310)	wind NW 25-30 kt	
7	MC10	CTD	0027	BE	015	51° 55.35	129° 42.53	GPS	187	39m	—	—		wind NW 30 kt, probe died	
7	MC10	CTD	0031	BE	016	51° 55.32	129° 42.49	GPS	187	97m	—	—		2nd try at MC10. probe died ~ 100m	
7	MC11	CTD	0330	BE	017	51° 57.38	129° 46.03	GPS	129	124m	—	—	(310)	Re-terminate connector at plug & need to use extension cable	
CAST TYPE -		BOT -	bottle cast	ROS -	rosette	USW -	sea water loop	TIME CODE -	BE -	beginning time of cast	DE -	deployment time	POSITION CODE -	RAD -	RADAR
		CTD -	ctd	NET -	net haul				BO -	bottom time of cast	MR -	messenger release	GPS -		GLOBAL
		MOR -	mooring	DRF -	drifter				EN -	end of cast	RE -	recover mooring	LOR -		GLOBAL LORAN

CAST TYPE -
CTD -
MOR -

BOT -
CTD -
MOR -

bottle cast
ctd
mooring

ROS -
NET -
DRF -

rosette
net haul
drifter

USW - sea water loop

TIME CODE -

BE -
BO -
EN -

beginning time of cast
bottom time of cast
end of cast

DE -
MR -
RE -

deployment time
messenger release
recover mooring

POSITION CODE -

RAD -
GPS -
LOR -

RADAR
GLOBAL
LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1995		August		CCGS Narwhal		95-24		2		12				
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE N	LONGITUDE W	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
7	GN01	CTD	0602	BE	018	52° 03.52	129° 42.17	GPS	178	174	—	—	PRD	(Add 4m to keel depth) Probe still intermittent, open CTD Probe seated CONN. - OK?
7	GN02	CTD	0729	BE	019	52° 09.87	129° 37.66	GPS	224	215	—	—	PRD	Wire against ship's side; spikes Wind to 40kt, Sea 2-3 m
7	GN03	CTD	0945	BE	020	52° 15.78	129° 33.42	GPS	not available	196	—	—	PRD	Wind 40kt, sea 2-3m
7	GN04	CTD	1210	BE	021	52° 21.83	129° 29.09	GPS	111	107	—	—	PRD	Wind NW 40
7	GN05	CTD	1316	BE	022	52° 27.58	129° 25.38	GPS	35	31	—	—	PRD	Wind NW 40
8	NEWS	CTD	1513	BE	023	52° 21.48	129° 20.26	GPS	94	91	—	—	PRD	between mooring HP14 & 14S
8	GM10	CTD	1732	BE	024	52° 11.59	129° 16.00	GPS	178	173	—	—	PRD	low swell.
8	GM12	CTD	1829	BE	025	52° 04.01	129° 14.56	GPS	174	171	—	—	PRD	
8	GM14	CTD	2000	BE	026	51° 56.33	128° 56.49	GPS	99	92	—	—	PRD	low swell
8	GM12	CTD	2119	BE	027	51° 45.86	128° 54.79	GPS	69	60	—	—	PRD	low swell, light S wind
8	NEWS	CTD	2257	BE	028	51° 50.43	128° 33.21	GPS	134	127	—	—	PRD	between moorings Q11 & Q11S
9	GI08	CTD	0112	BE	029	51° 45.28	128° 16.31	GPS	142	140	—	—	PRD	out of water at start.
9	GI07	CTD	0138	BE	030	51° 44.69	128° 20.14	GPS	146	140	—	—	PRD	
9	GI06	CTD	0206	BE	031	51° 43.81	128° 24.60	GPS	148	140	—	—	PRD	Wind picking up from S
9	GI05	CTD	0239	BE	032	51° 42.23	128° 28.42	GPS	149	145	—	—	PRD	
9	GI04	CTD	0313	BE	033	51° 41.07	128° 34.19	GPS	126	120	—	—	PRD	
9	GI03	CTD	0335	BE	034	51° 40.39	128° 36.47	GPS	38	33	—	—	PRD	
9	GI02	CTD	0403	BE	035	51° 39.17	128° 40.41	GPS	40	35	—	—	PRD	

CAST TYPE -

BOT -

bottle cast

ROS -

rosette

USW -

sea water loop

TIME CODE

BE

bottom

CAST TYPE -

BOT -

bottle cast

ROS -

rosette

USW -

sea water loop

TIME CODE -

BE -

beginning time of cast

DE -

deployment time

POSITION CODE -

RAD -

RADAR

CTD -

ctd

NET -

net haul

BO -

bottom time of cast

MR -

messenger release

GPS -

GLOBAL

MOR -

mooring

DRF -

drifter

EN -

end of cast

RE -

recover mooring

LOR -

LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1995		August		CCGS NARWHAL		95-24		3		12				
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
9	GI01	CTD	0440	BE	036	51°37.38	128°46.48	GPS	39	36	—	—	End	Add 4m to depth below keel
9	C000	CTD	0718	BE	037	51-35.31	128-54.47	GPS	51	42	—	—	End	light wind
10	NEWS	CTD	1455	BE	038	51°23.57	128°03.47	GPS	74	71	—	—	Huber	
10	GG09	CTD	1632	BE	039	51°20.22	128 03.41	GPS	182	180	—	—	Huber	gelly high on temperature probe on recovery.
10	GG08	CTD	1843	BE	040	51°14.49	127°54.63	GPS	138	136	—	—	End	
11	NEWS	CTD	0007	BE	041	50°47.45	127°30.98	GPS	362	218	—	—	Huber	test off Port Hardy
11	GG01	CTD	0219	BE	042	5053.83	127°20.42	GPS	144	140	—	—	Huber	
11	GG02	CTD	0255	BE	043	50°47.91	127°16.10	GPS	177	172	—	—		
11	GG03	CTD	0332	BE	044	50°51.39	127°12.28	GPS	129	125	—	—	End	cleaned sand cell
11	GG07	CTD	0624	BE	045	51°08.24	127°48.27	GPS	72	67	—	—	End	
11	GG06	CTD	0722	BE	046	51-03.98	127-54.71	GPS	159	150	—	—	Huber	light air
11	GG05	CTD	0812	BE	047	50-59.60	128-00.56	GPS	90	80	—	—	Huber	
11	GG04	CTD	0855	BE	048	50-54.96	128-07.15	GPS	31	22	—	—	Huber	
11	GG14	CTD	0945	BE	049	50-51.61	128-17.49	GPS	46	37	—	—	Huber	
11	C023	CTD	1042	BE	050	50-48.04	128-27.36	GPS	50	42	—	—	Huber	
11	JS15	CTD	1105	BE	051	50°46.59	128°31.18	GPS	68	64	—	—	Huber	Close to mooring SPO4.
11	JS14	CTD	1224	BE	052	50°47.28	128°47.84	GPS	114	110	—	—	Huber	Close to mooring SPO6
11	LQ02	CTD	1304	BE	053	50°43.52	128°54.65	GPS	157	150	—	—	Huber	

CAST TYPE -

BOT - bottle cast
CTD - ctd
MOR - mooringROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE -

BE - beginning time of cast
BO - bottom time of cast
EN - end of castDE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE -

RAD - RADAR
GPS - GLOBAL
LOR - LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH				SHIP				CRUISE				PAGE	
1995		August				Narwhal				9524				4 OF 12	
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD-HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
11	LQ03	CTD	1419	BE	054	50°39.73	129°01.82	GPS	?	753				Add 4m to depth below keel	
11	LQ04	CTD	1526	BE	055	50°35.97	129°09.38	GPS	?	751	354	1	CWD	Bottle sample taken @ 750m	
11	JS13	CTD	1726	BE	056	50°49.72	128°58.23	GPS	110	102	—	—	CWD	CTD Probe stopped @ 100m laid on bottom - no damage	
11	JS12	CTD	1834	BE	057	50°53.07	129°08.32	GPS	61	58	—	—	CWD		
11	JS11	CTD	2008	BE	058	51-00.01	129-20.87	GPS	188	181	—	—	CWD		
11	JS10	CTD	2126	BE	059	51-07.97	129-34.93	GPS	269	261	—	—	CWD	Had to wait for cruise ship to clear	
11	JS09	CTD	2251	BE	060	51-16.15	129-49.55	GPS	264	264	—	—	CWD	Touched bottom	
11	GL04	CTD	2345	BE	061	51°21.24	129°56.53	GPS	256	252	—	—	CWD		
12	JS08	CTD	0034	BE	062	51°24.27	130°03.95	GPS	?	650	—	—	CWD		
12	JS07	CTD	0218	BE	063	51°32.46	130°18.87	GPS	?	752	—	—	CWD	Rain squall	
12	JS06	CTD	0350	BE	64	51°39.69	130°31.85	GPS	?	750	556	1	CWD		
12	JS06	CTD	0409	BE	065	51°39.93	130°31.65	GPS	?	375	656	1	CWD	CTD calibration @ 375m	
12	JS05	CTD	0501	BE	066	51°44.08	130°39.35	GPS	?	730	—	—	CWD		
12	JS04	CTD	0610	BE	067	51°48.07	130°46.47	GPS	254	245	—	—	CWD	Bottom shallowing	
12	JS03	CTD	0658	BE	068	51-50.49	130-51.50	GPS	191	184	—	—	CWD		
12	JS02	CTD	0758	BE	069	51-53.25	130-56.01	GPS	96	87	—	—	CWD		
12	JS01	CTD	0840	BE	070	51-54.94	130-59.57	GPS	78	67	—	—	CWD	Bottom coming up	
12	MC21	CTD	0907	BE	071	51-57.28	130-58.49	GPS	104	96	—	—	CWD		

CAST TYPE -	BOT -	bottle cast	ROS -	rosette	USW -	sea water loop	TIME CODE -	BE -	beginning time of cast	CS -	consec sample
-------------	-------	-------------	-------	---------	-------	----------------	-------------	------	------------------------	------	---------------

CAST TYPE -
BOT - bottle cast
CTD - ctd
MOR - mooring

ROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE -

BE - beginning time of cast
BO - bottom time of cast
EN - end of cast

DE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE -

RAD - RADAR
GPS - GLOBAL
LOR - LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1995		August		CCGS Narwhal		9524		5		12				
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
12	MC20	CTD	0933	BE	072	51-57.26	130-55.44	GPS	132	122	—	—	BE	Add 4m to depth below wind light
12	MC19	CTD	1004	BE	073	51-57.29	130-50.39	GPS	186	176	—	—	BE	
12	MC18	CTD	1030	BE	074	51-57.24	130-47.60	GPS	236	226	—	—	BE	wind light
12	M17A	CTD	1112	BE	075	51° 57.32	130° 41.35'	GPS	301	300	—	—	ABW	
12	MC17	CTD	1151	BE	076	51° 57.30	130° 35.10	GPS	353	347	—	—	ABW	touched bottom
12	MC16	CTD	1242	BE	077	51° 57.28	130° 27.09	GPS	?	402	—	—	ABW	
12	MC15	CTD	1336	BE	078	51° 57.24	130° 18.41	GPS	301	296	—	—	ABW	touched bottom
12	MC14	CTD	1424	BE	079	51° 57.36	130° 10.48	GPS	179	175	—	—	ABW	
12	MC13	CTD	1503	BE	080	51° 57.24	130° 02.41	GPS	143	142	—	—	ABW	touched bottom
12	MC12	CTD	1541	BE	081	51° 57.32	129° 54.33	GPS	129	125	—	—	ABW	
12	MC11	CTD	1619	BE	082	51° 57.28	129° 46.07	GPS	126	121	—	—	ABW	Depth of 126m not entered into CTD - remains @ 130m.
12	MC10	CTD	1644	BE	083	51° 55.31	129° 42.39	GPS	192	186	—	—	ABW	
12	MC09	CTD	1716	BE	084	51° 52.29	129° 38.48	GPS	242	236	—	—	ABW	
12	MC08	CTD	1751	BE	085	51° 50.37	129° 35.08	GPS	273	267	—	—	ABW	Delay on start logging as Maxon head not problems
12	MC07	CTD	1828	BE	086	51° 48.03	129° 32.17	GPS	251	246	—	—	ABW	
12	MC06	CTD	1901	BE	087	51-46.12	129-30.07	GPS	204	196	—	—	BE	
12	MC05	CTD	1936	BE	088	51-44.34	129-28.09	GPS	93	86	—	—	BE	
12	MC04	CTD	2022	BE	089	51-40.11	129-23.03	GPS	63	57	—	—	BE	

CAST TYPE -

BOT - bottle cast
CTD - ctd
MOR - mooringROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE -

BE - beginning time of cast
BO - bottom time of cast
EN - end of castDE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE -

RAD - RADAR
GPS - GLOBAL
LOR - LORANx'amed to
PC

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		OCEAN PHYSICS										INSTITUTE OF OCEAN SCIENCES			
1995		August		Narwhal		CRUISE 9524										PAGE 6 OF 12			
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS					
12	MC01	CTD	2147	BE	090	51-35.26	129-02.05	GPS	50	42	—	—	(30)	Add 4m to depth below keel					
13	MC02	CTD	0741	BE	091	51-35.31	129-10.06	GPS	49	42	—	—	(30)	+3 dbar Press offset increased @ this stn					
13	MC03	CTD	0822	BE	092	51-35.21	129-18.41	GPS	63	55	—	—	(30)	Press offset increased from 1 to -3					
13	GL01	CTD	0854	BE	093	51-36.28	129-25.05	GPS	63	56	—	—	(30)	Press offset changed again to 2					
13	GL02	CTD	1004	BE	094	51-30.29	129-37.60	GPS	149	141	—	—	(30)	wind rising, rain					
13	GL03	CTD	1113	BE	095	51° 24.26	129° 50.35	GPS	227	220	—	—	(30)						
13	GL04	CTD	1157	BE	096	51° 21.30	129° 56.61	GPS	258	250	—	—	(30)	wind S 27, rain					
13	GL05	CTD	1249	BE	097	51° 18.17	130° 02.97	GPS	349	341	—	—	(30)	wind S 24, rain					
13	GL06	CTD	1411	BE	098	51° 15.14	130° 09.16	GPS	?	755	—	—	(30)	wind S at 25 kn, rain					
13	JS10	CTD	1854	BE	099	51° 07.90	129° 34.88	GPS	266	261	—	—	(30)						
13	GH07	CTD	2025	BE	100	51-13.06	129-17.09	GPS	294	287	—	—	(30)						
13	GH07	CTD	2031	BE	101	51-13.12	129-17.20	GPS	294	244-230	#7, 8	—	(30)	wind SSE 30 kt					
13	GH06	CTD	2154	BE	102	51-18.49	129-00.01	GPS	252	244	—	—	(30)	wire angle ~30° cal. sample; mcgr 2031:50					
13	C009	CTD	2235	BE	103	51-21.09	128-54.40	GPS	239	230	—	—	(30)						
13	GH05	CTD	2338	BE	104	51° 24.00	128° 42.53	GPS	224	221	—	—	(30)						
14	GH04	CTD	0105	BE	105	51° 28.99	128° 26.56	GPS	194	189	—	—	(30)						
14	GG11	CTD	0214	BE	106	51° 32.95	128° 13.15	GPS	91	86	—	—	(30)						
14	GG12	CTD	0257	BE	107	51 38.26	128° 14.23	GPS	98	95	—	—	(30)						

CAST TYPE - BOT - bottle cast
CTD - ctd
MOR - mooring

ROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE - BE - beginning time of cast
BO - bottom time of cast
EN - end of cast

DE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE - RAD - GPS
GPS - GLOBAL
LOR - LORAN

RADAR GLOBAL LORAN

x'ford to
7:10 PM

CAST TYPE -

BOT - bottle cast
CTD - ctd
MOR - mooringROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE -

BE - beginning time of cast
BO - bottom time of cast
EN - end of castDE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE -

RAD - RADAR
GPS - GLOBAL
LOR - LORANx'lined to
BL PC

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1995		August		CCGS Narwhal		9524		7		12				
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
14	NEWS	CTD	2026	BE	108	51-44.99	129-10.05	GPS	104	96	—	—	FD	Add 4m to depth below keel At site of drifter #3, #30 + Argos deployment
14	C005	CTD	2314	BE	109	51-27.95	128-54.59	GPS	106	98	—	—	FD	Deploy #33, #40, Argos #21255 at sta.; Press reads ~2-3 high
15	MC11	CTD	0448	BE	110	51°57.30	129°46.12	GPS	126	121	—	—	FD	wind light
15	MC10	CTD	0519	BE	111	51°55.27	129°42.40	GPS	192	186	—	—	FD	
15	MC09	CTD	0553	BE	112	51°52.94	129°38.50	GPS	242	237	—	—	FD	
15	MC08	CTD	0628	BE	113	51°50.41	129°35.16	GPS	274	269	—	—	FD	
15	MC07	CTD	0704	BE	114	51-47.95	129-32.14	GPS	250	241	—	—	FD	wind light, press offset
15	MC06	CTD	0735	BE	115	51-46.15	129-30.05	GPS	203	196	—	—	FD	
15	MC05	CTD	0808	BE	116	51-44.29	129-28.07	GPS	92	83	—	—	FD	
15	MC04	CTD	0856	BE	117	51-40.17	129-23.21	GPS	63	57	—	—	FD	
15	MC03	CTD	0955	BE	118	51-35.27	129-18.40	GPS	64	56	—	—	FD	wind light
15	MC02	CTD	1043	BE	119	51-35.26	129-10.07	GPS	49	42	—	—	FD	
15	MC01	CTD	1115	BE	120	51°35.26	129°02.03	GPS	49	47	—	—	FD	
15	C000	CTD	1146	BE	121	51°35.22	128°54.36	GPS	50	45	—	—	FD	Time of messenger uncertain, caught on side of ship
15	C000	CTD	1147	BE	122	51°35.21	128°54.27	GPS	50	40	9,10	1	FD	- Calibration only
15	C003	CTD	1221	BE	123	51°31.04	129°54.45	GPS	48	45	—	—	FD	
15	C005	CTD	1250	BE	124	51°27.98	128°54.43	GPS	104	101	—	—	FD	
15	C007	CTD	1328	BE	125	51°24.42	128°54.50	GPS	207	200	—	—	FD	

CAST TYPE -

BOT - bottle cast
CTD - ctd
MOR - mooringROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE -

BE - beginning time of cast
BO - bottom time of cast
EN - end of castDE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE -

RAD - RADAR
GPS - GLOBAL
LOR - LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1995		August		Narwhal		95-24		8		12				
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
15	C009	CTD	1415	BE	126	51° 21.13	128° 54.46	GPS	238	235	—	—	MB	may have touched bottom.
15	C011	CTD	1515	BE	127	51° 15.36	128° 52.10	GPS	207	202	—	—	QuD.	
15	C012	CTD	1549	BE	128	51° 12.48	128° 50.32	GPS	129	123	—	—	QuD	
15	C013	CTD	1619	BE	129	51° 10.00	128° 49.10	GPS	114	110	—	—	QuD	
15	C015	CTD	1707	BE	130	51° 04.94	128° 46.41	GPS	66	61	—	—	QuD.	
15	C017	CTD	1753	BE	131	50° 59.51	128° 43.47	GPS	73	72	—	—	QuD.	Pressure has +3 m offset @ surface
15	C018	CTD	1823	BE	132	50° 57.33	128° 41.13	GPS	80	79	—	—	QuD.	
15	C019	CTD	1855	BE	133	50° 55.07	128° 37.58	GPS	65	59	—	—	QuD	Bottom 58 m reported from bridge during cast.
15	C021	CTD	1938	BE	134	50-51.25	128-32.13	GPS	52	43	—	—	312	
15	C023	CTD	2015	BE	135	50-48.11	128-27.41	GPS	50	44	—	—	312	
15	JS15	CTD	2044	BE	136	50-46.68	128-30.88	GPS	71	62	—	—	312	recover SP04 after cast
15	JS14	CTD	2251	BE	137	50-47.31	128-47.77	GPS	116	108	—	—	312	recover SP06 after cast
16	JS13	CTD	0006	BE	138	50° 49.67	128° 58.40	GPS	110	101	—	—	MB	slight pause at 10m
16	JS12	CTD	2016	BE	139	50-53.11	129-08.28	GPS	60	57	—	—	312	max sample depth ~ 52 5 db press. offset @ surface
16	NEWS	CTD	2101	BE	140	50-55.48	129-16.40	GPS	126	118	—	—	312	max sample depth ~ 113 offset mooring SP08, 5 dba press
16	JS11	CTD	2153	BE	141	51-00.02	129-20.84	GPS	188	181	—	—		~ 2 db press offset @ surface
16	JS10	CTD	2316	BE	142	51° 08.03	129° 34.82	GPS	266	261	—	—	MB	
17	JS09	CTD	0113	BE	143	51° 16.10	129° 49.51	GPS	264	261	—	—	MB	

CAST TYPE -
BOT -
CTD -
MOR -

bottle cast
ctd
mooring

ROS -
NET -
DRF -

rosette
net haul
drifter

USW - sea water loop

TIME CODE -

BE -
BO -
EN -

beginning time of cast
bottom time of cast
end of cast

DE -
MR -
RE -

deployment time
messenger release
recover mooring

POSITION CODE -

FAD -
GPS -
LOR -

GLOBAL
LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR			MONTH			SHIP			CRUISE			PAGE		OF	
1995			August			Narwhal			9524			9		12	
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
17	GLOG	CTD	0238	BE	144	51° 15.05	130° 09.24	GPS	?	875	—	—	WJL	Messenger away 0255Z	
17	GLOG	CTD	0301	BE	145	51° 14.82	130° 09.03	GPS	?	770 m	11,12	1	WJL	Calibration records only.	
17	GLOS	CTD	0356	BE	146	51° 18.17	130° 02.83	GPS	345	340	—	—	WJL		
17	NEWS	CTD	0447	BE	147	51° 22.36	130° 01.79	GPS	376	373	—	—	WJL	CTD ALONG SIDE DRIFTER NUMBER 22	
17	GLO4	CTD	0535	BE	148	51° 21.39	129° 56.72	GPS	254	249	—	—	WJL		
17	GLO3	CTD	0620	BE	149	51° 24.27	129° 50.41	GPS	226	220	—	—	WJL		
17	GLO2	CTD	0727	BE	150	51-30.30	129-37.63	GPS	147	140	—	—	WJL	No press. offset @ surf.	
17	GLO1	CTD	0831	BE	151	51-36.31	129-25.02	GPS	62	53	—	—	WJL		
17	MC03	CTD	0905	BE	152	51-35.32	129-18.40	GPS	61	54	—	—	WJL		
17	MC03	CTD	0909	BE	153	51-35.35	129-18.31	GPS	61	8	13,14	—	WJL	Surface cal sample 0912:07 messenger	
17	MC02	CTD	0946	BE	154	51-35.31	129-10.08	GPS	48	42	—	—	WJL		
17	MC01	CTD	1022	BE	155	51-35.28	129-02.04	GPS	48	43	—	—	WJL		
17	C000	CTD	1057	BE	156	51-35.28	128-54.50	GPS	49	43	—	—	WJL		
17	GI01	CTD	1135	BE	157	51° 37.27	128° 46.43	GPS	44	37	—	—	WJL		
17	GI02	CTD	1207	BE	158	51° 39.09	128° 40.45	GPS	40	40	—	—	WJL	touched bottom	
17	GI03	CTD	1232	BE	159	51° 40.29	128° 36.50	GPS	40	36	—	—	WJL		
17	GI04	CTD	1252	BE	160	51° 40.97	128° 34.07	GPS	127	126	—	—	WJL		
17	GI05	CTD	1323	BE	161	51° 42.19	128° 28.41	GPS	150	146	—	—	WJL		

CAST TYPE - BOT - bottle cast
CTD - ctd
MOR - mooring

ROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE - BE - beginning time of cast
BO - bottom time of cast
EN - end of cast

DE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE - RAD - RADAR
GPS - GLOBAL
LOR - LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1995		August		Narwhal		9524		10		12				
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
17	GI06	CTD	1539	BE	162	51° 43.81	128° 24.63	GPS	149	142	—	—	CWD	
17	GI07	CTD	1607	BE	163	51° 44.67	128° 20.15	GPS	146	140	—	—	CWD	
17	GI08	CTD	1634	BE	164	51° 45.86	128° 16.09	GPS	135	133	—	—	CWD	
17	GG12	CTD	1806	BE	165	51° 38.22	128° 14.49	GPS	98	95	—	—		
17	GG11	CTD	1920	BE	166	51-32.89	128-13.09	GPS	89	N/A	—	—	328	micro cast, keyboard probl.
17	GG11	CTD	1924	BE	167	51-32.89	128-13.06	GPS	89	82	—	—	328	
17	GH04	CTD	2022	BE	168	51-28.97	128-26.68	GPS	192	184	—	—	328	
17	GG10	CTD	2120	BE	169	51-25.17	128-14.31	GPS	147	140	—	—	328	
17	GG09	CTD	2215	BE	170	51-20.12	128-03.25	GPS	177	169	—	—	328	
17	GG08	CTD	2316	BE	171	51° 14.29	127° 54.72	GPS	134	131	—	—	MW	
18	GG07	CTD	0007	BE	172	51° 08.17	127° 48.21	GPS	74	71	—	—	MW	
18	GG06	CTD	0046	BE	173	51° 03.88	127° 54.75	GPS	158	152	—	—	MW	
18	GG05	CTD	0141	BE	174	50° 59.54	128° 00.62	GPS	87	85	—	—	MW	
18	GG04	CTD	0223	BE	175	50° 54.89	128° 02.33	GPS	32	30	—	—	MW	
18	GG14	CTD	0308	BE	176	50° 51.51	128° 17.51	GPS	44	40	—	—	CWD	
18	CO23	CTD	0351	BE	177	50° 47.86	128° 27.45	GPS	45	42	—	—	CWD	
18	GG13	CTD	0604	BE	178	51° 10.05	128° 22.78	GPS	191	187	—	—	CWD	
18	GH05	CTD	0758	BE	179	51-23.98	128-42.61	GPS	222	216	—	—	328	

CAST TYPE -
 CTD -
 MOR -

bottle cast
 ctd
 mooring

ROS -
 NET -
 DRF -

rosette
 net haul
 drifter

USW - sea water loop

TIME CODE -

BE -
 BO -
 EN -

beginning time of cast
 bottom time of cast
 end of cast

DE -
 MR -
 RE -

deployment time
 messenger release
 recover mooring

POSITION CODE -

RAD -
 GPS -
 LOR -

RADAR
 GLOBAL
 LORAN

▲ ≡ hdr file updated with stn id. ~~348~~

CTD Sys. clock slow by 53 s @ 2240Z 19 Aug 95

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR			MONTH			SHIP			CRUISE			PAGE		
1995			August			CCGS Narwhal			9524			11 OF 12		
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
														(Add 4m to depth below keel)
18	C009	CTD	0858	BE	180	51-21.09	128-54.54	GPS	238	232	—	—	348	
18	GH06	CTD	0937	BE	181	51-18.48	129-00.08	GPS	249	241	—	—	348	
18	GH07	CTD	1102	BE	182	51-12.94	129-17.14	GPS	294	290	—	—	348	
18	JS10	CTD	1237	BE	183	51°07.87	129°35.01	GPS	266	261	—	—	348	Messenger away 12:44:30
18	JS10	CTD	1244	BE	184	51°07.97	129°35.07	GPS	266	245	15,16	1	348	* Calibration data only
19	FHS1	CTD	1439	BE	185	51°30.66	127°50.16	GPS	154	151	—	—	348	
19	FHS2	CTD	1643	BE	186	51°46.05	127°57.17	GPS	392	387	—	—	348	
19	FHS2	CTD	1656	BE	187	51°46.11	127°57.27	GPS		350	17,18	1	348	Messenger away 16:53:00
19	NEWS	CTD	2034	BE	188	51-48.73	128-44.28	GPS	78	72	—	—	348	@ drifter #03
19	NEWS	CTD	2209	BE	189	51-44.73	129-05.00	GPS	102	94	—	—	348	@ drifter #34
19	NEWS	CTD	2215	BE	190	51-44.83	129-04.99	GPS	102	8	#19,20	1	348	CTD system msgt @ 2217Z → 2216 by 19
20	MC05 NEWS	CTD	0044	BE	191	51-44.32	129-28.01	GPS	93	83	—	—	348	should be CTD stn MC05 deploy drifter #22 after cast
20	MC06	CTD	0113	BE	192	51-46.08	129-30.15	GPS	212	206	—	—	348	deploy drifter #30 after cast
20	MC07	CTD	0153	BE	193	51-47.95	129-32.22	GPS	252	247	—	—	348	deploy drifter #40 after cast
20	GH14	CTD	1448	BE	194	52°00.02	129°30.03	GPS	207	201	—	—	348	deploy drifter 21257 after cast
20	GN04	CTD	1701	BE	195	52°21.91	129°28.99	GPS	104	97	laid on bottom	—	348	52°21.966 129°29.032 deploy drifter 21258 after cast
20	NEWS	CTD	2114	BE	196	51-57.14	128-52.20	GPS	81	77	—	—	348	alongside drifter #35 deploy #21259 after cast
21	GI04	CTD	1500	BE	197	51°40.99	128°34.01	GPS	126	121	—	—	348	51°41.059 128°34.153 deploy #21260/SN 10924 after cast

CAST TYPE -
BOT - ctd
MOR - mooring

ROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE -
BE - beginning time of cast
BO - bottom time of cast
EN - end of cast

DE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE -
RAD - RADAR
GPS - GLOBAL
LOR - LORAN

* CTD System clock reset @ 0400Z, clock was 1 min 14s slow *
22 Aug 95

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE						
1995		August		CCGS NARWHAL		9524		12 OF 12						
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
21	NEWS	CTD	1655	BE	198	51° 58.87	128° 47.48	GPS	177	170	—	—	CWD	along side drifter #3 @ recovery
21	NEWS	CTD	1801	BE	199	52° 04.59	128° 51.46	GPS	181	177	—	—	CWD	along side drifter #35 @ recovery
21	NEWS	CTD	1905	BE	200	52° 01.76	129° 02.20	GPS	165	161	—	—	CWD	along side drifter #34 @ recovery
21	NEWS	CTD	2049	BE	201	51° 47.29	128° 55.59	GPS	60	56	—	—	CWD	along side drifter #2 @ recovery
21	NEWS	CTD	2150	BE	202	51° 41.03	129° 06.86	GPS	53	53	—	—	CWD	along side drifter #37 @ recovery
21	COOS	CTD	2326	BE	203	51° 27.95	128° 54.55	GPS	103	100	—	—	(Mk)	deployment of legs SSD 212
22	NEWS	CTD	1449	BE	204	51° 16.75	130° 13.55	GPS	>500?	252	—	—	(Mk)	along side of drifter #39.
22	NEWS	CTD	1619	BE	205	51° 17.24	130° 30.69	GPS	>750?	249	—	—	CWD	along side drifter #21 @ recovery
22	NEWS	CTD	1912	BE	206	51° 42.12	130° 11.77	GPS	240	237	—	—	CWD	along side drifter #33 @ recovery
22	NEWS	CTD	2037	BE	207	51° 45.59	129° 54.95	GPS	324	323	—	—	CWD	along side drifter #40 @ recovery
22	NEWS	CTD	2212	BE	208	51° 40.47	129° 40.27	GPS	162	156	—	—	CWD	along side drifter #30 @ recovery
22	NEWS	CTD	2308	BE	209	51° 39.89	129° 29.95	GPS	95	95	—	—	CWD	along side drifter #22 @ recovery
END														

CAST TYPE - BOT - bottle cast
CTD - ctd
MOR - mooring

ROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE - BE - beginning time of cast
BO - bottom time of cast
EN - end of cast

DE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE - RAD - RADAR
GPS - GLOBAL
LOR - LORAN