

for accounts — 20m - 25,0208%₀₀, 8,0004%₀₀
California — 0m - 27,7085%₀₀, 7,8910%₀₀

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month 03			Year 2004			Ship RICKER			Cruise ID 2004-06						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Botes	Watch keepers	Trans. cleaned	Comments
							Latitude	Longitude							
04	Departure Bay	0101	BE	CTD		0001	49 12.20	-123 57.61	33	30					
		0103	BO				49 12.20	-123 57.61							
		0105	EN				49 12.20	-123 57.61							
04	Cape Mudge	1434	BE	CTD		0002	50 00.63	-125 02.63	148	143					
		1439	BO				50 00.60	-125 02.72							
		1442	EN				50 00.60	-125 02.75							
04	Somerset in the middle of the hole in the reef in the north (SITSMOTH INT)	1405	BE	CTD		0003	49 50.36	-124 52.43	349	338					Salinity sample at 336m
		1411	BO				49 50.30	-124 53.06							
		1420	EN				49 50.26	-124 53.21							
04	Right in the middle of the hole (RITMOND)	2156	BE	CTD		0004	49 45.92	-124 43.48	330	324					Salinity sample
		2203	BO				49 45.64	-124 43.55							
		22	EN				49 45.55	-124 43.67							
05	McKays	0247	BE	CTD		0005	49 35.71	-124 12.50	249	245					
		0254	BO				49 35.70	-124 12.80							
		0258	EN				49 35.72	-124 12.77							

Cast type:
BOT = bottle cast, no CTD
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ROS = Rosette plus CTD

USW = sea water loop
MOR = mooring
NET = net haul
DIR = drifter

bottle firing method:
US = up / no stop
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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Buoys	Watch keepers	Trans. dated	Comments
05	Malapena	0310	BO	NET		0006	49 39.72	-124 12.77	250	235					Buoy VHT
	March														
05	TES/HATHAN	0512	BE	CTD		0007	49 48.54	124 2.54	850?	500					
		0512	BO				49 48.65	124 2.66							
		0530	EN				49 48.75	124 2.55							
05	TE4	0616	BE	CTD		0008	49 49.59	-123 54.25	050?	501					Salinity taken at 495m
		0629	BO				49 49.62	-123 54.38							
		0644	ED				49 49.68	-123 54.47							
05	TES	0722	BE	CTD		0009	49 54.28	-123 55.44		500					
		0732	BO				49 54.22	-123 55.61							
		0740	EN				49 54.23	-123 55.70							
05	TE6	1438	BE	CTD		0010	49 59.15	-123 59.30	546	500					
		1446	BO				49 59.15	-123 59.30		503					
		1455	EN				49 59.23	-123 59.33							

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Month			Year			Ship			Cruise ID						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Boats	Watch keepers	Trans. cleared	Comments
							Latitude	Longitude							
05				NET		0012	49 51.13	124 00.17	0	0					See live for HNH
05		1205		NET											
05		1253		NET		0013	49 48.54	124 2.54	859	250					Bands VNH
05	MASTBAY	0210	BC	CTD		0014	49 28.04	124 483	389						Salinity @ 37m
	South	0216	BO				49 27.94	124 486	385	376					
		0226	EN				49 27.82	124 491	390						
06	Mast Bay	0648	BE	CTD		0015	49 38.12	124 29.52	355	327					Salinity @ 32m
		0655	BO				49 38.07	124 29.49							
		0703	EN				49 38.10	124 29.49							
06	CPF2	2252	BE	CTD		0016	49 28.01	124 30.01	324	318					
		2259	BO				49 28.13	124 29.96							
		2305	EN				49 28.15	124 29.98							
06	CPF2	2320	BO	NET		0017	49 28.15	124 29.98	324	250					Bands VNH

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Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month			03			Year			2004			Ship			R/V Clark			Cruise ID					2004-006				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bats	Watch keepers	Trans. cleared	Comments												
							Latitude	Longitude																			
07	-	1437	BE	CTD		0018	48 58.25	123 12.74	174																		
			80				48 58.26	123 12.51	174	168																	
			EN				48 58.24	123 12.42	174																		
08	-	1441	BE	CTD		0019	49 07.42	123 32.80	31	23.5																	
		1443	BE				49 07.42	123 32.80																			
		1444	EN				49 07.42	123 32.80																			
08	-	1651	DE	CTD		0020	49 10.21	123 25.82	242																		
		1655	80				49 10.25	123 25.85	241	237																	
		1700	EN				49 10.27	123 25.84	240																		
08	-	2034	BE	CTD		0021	49 19.95	123 27.54	206	200																	
		2035	80				49 19.95	123 27.50																			
		2042	EN				49 19.96	123 27.45																			
08	DF01	2318	DE	CTD		0022	49 16.31	123 44.51	404							Salinity @ 378 m											
		2324	80				49 16.23	123 44.45	404	400																	
		2337	EN				49 16.27	123 44.68	404																		

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Month 03			Year 2004			Ship R/V CLAREN			Cruise ID 2004-006						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keepers	Trans. cleared	Comments
08	0701	2351	BO	NET		0023	45	16.25	-123 41.80	404	350				Bongo VNH
09		0423	BE	CTD		0024	49	23.19	-123 58.00	375					
		0430	BO				49	23.28	-123 57.97	398	395				
		0441	EN				49	23.33	-123 57.96	398					
09		0526	BO	NET		0025	49	23.33	123 57.96	398	750				Bongo VNH
09		0559	BE	CTD		0026	49	17.42	-123 50.70	280					
		0605	BO				49	17.41	123 50.73		325				
		0611	EN				49	19.41	123 50.60	382					
09		0636	BO	NET		0027	49	19.41	123 50.60	382	250				Bongo VNH
09		1456	BE	CTD		0028	49	25.97	123 43.80	99	100				
		1458	BO				49	25.96	123 43.85	106					
		1459	EN				49	25.95	123 43.84	110					

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Ocean Sciences and Productivity Division

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Month 03			Year 2004			Ship W.E. RICKER			Cruise ID 2004-006					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Filing Method	Event Number	Position	Bottom Depth	Max Depth	Sample Numbers	# of Boats	Watch keepers	Trans. cleared	Comments
09	-	2350	BL	CTD		0029	49 24.52	123 52.34	90.0	86.0				Fluorescence - 4.5 d-14
		2353	BL				49 24.49	123 52.36	95.0					
		2356	EN				49 24.43	123 52.38	114.5					
10	-	1829	DE	CTD		0030	49 25.58	124 20.95	345					
		1835	BO				49 25.59	124 21.03	345	340				
		1841	EN				49 25.56	124 21.00	345					
10	CPE 1	2001	BE	CTD		0031	49 22.02	124 04.83	242	230				
		2006	BO				49 21.97	124 04.88						
		2010	EN				49 21.94	124 04.87						
10	CPE 1	2023	BO	NET		0032	49 21.94	124 04.87	230	220				8.000 VNH
		2220	BL	CTD		0033	49 20.27	123 39.74	243					
		2225	BO				49 20.24	123 39.75	243	234				
			EN				49 20.24	123 39.71	238					
10	HL1.0A	2254	BL	NET		0034	49 20.24	123 39.81	238	220				8.000 VNH

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USV = sea water loop
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Regional Operations Centre
Canadian Coast Guard – Pacific

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PACIFIC REGION CCG VESSEL CRUISE PLAN

DEPARTMENTS: DFO – STAD/OSAP

SCIENCE CRUISE NUMBER: 2004-06

SHIP'S PATROL NUMBER:

NAME OF SHIP/PLATFORM: W.E. RICKER

SURVEY AREA/AREA OF OPERATION:

Strait of Georgia and mainland inlets; Queen Charlotte Sound, Hecate Strait

CRUISE OBJECTIVE[S]:

Leg 1:

1. Examine the distribution and abundance of Pacific hake and plankton in the Strait of Georgia and mainland inlets using acoustics.
2. Conduct midwater trawls and bongo tows to identify acoustic sign and provide biological samples of hake, incidental catch, and plankton.
3. Collect synoptic oceanographic data (CTD and ADCP) to relate to distribution of hake and zooplankton.

DATE: FROM: March 2

TO: March 13

Leg 2:

1. Conduct bottom trawling for catch and release tagging operations of large skate in Hecate Strait and Queen Charlotte Sound to examine stock discrimination of species in the study area.
2. Conduct biological sampling of skate and incidental catch.

DATE: FROM: March 13

TO: March 30

SENIOR SCIENTIST[S]/CONTACT TEL. #'S:

Ken Cooke (250) 756-7125 (Leg 1)

Sandy McFarlane (250) 756-7052 (Leg 2)

SCIENTIFIC PERSONNEL:

BERTHS REQUIRED: 10

MALE [NAMES] Leg1

Ken Cooke (Mar 2-13) SIC Leg 1

John Holmes (Mar 3-8)

Matt Thompson (Mar 3-13)

Dennis Sodeberg (Mar 10-13) (possible)

Andreas Winters (Mar 8-13)

Brian Kriska (Mar 3-13)

Bill Andrews (Mar 3-13)

Steve Romaine (Mar 3-13)

Tom Therriault (Mar 3-8)

Brian West (Mar 8-13) CG (possible)

Laurier Fleet (Mar 8-10) (possible)

FEMALE [NAMES] Leg 1

Kristen Daniel (Mar 3-13)

IOS CTD Tech (Mar 3-13)

Vanessa Hodes (Mar 3-13)

MALE [NAMES] Leg2

Sandy McFarlane (Mar 13-30) SIC Leg 2

FEMALE [NAMES] Leg 2

Jackie King (Mar 13-30)

PBS Bio tech (Mar 13-30)



Regional Operations Centre
Canadian Coast Guard – Pacific

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SHIP EQUIPMENT REQUIRED:

Fishing sounders and plotters
Scientific freezers
EK500 and associated transducers
Simrad ITI trawl mensuration sensors
Simrad FS20/25 and Wesmar TCS770 trawl sonars

DECK MACHINERY REQUIRED: [ATTACH DECK PLAN AT END OF DOCUMENT]

Midship oceanographic winch and stern HIAB for bongo
Starboard hydrographic winch for CTD
Main trawl winches , net drums, fish hopper conveyor belts and fish disposal system.

FISHING GEAR REQUIRED: [INDICATE NET TYPE/TYPES]

- 1- midwater trawl (Groundfish)
- 2- bottom trawl (Groundfish)

OTHER EQUIPMENT TO BE LOADED:

- 1- Bongo

SPECIAL REQUIREMENTS:

[INCLUDE LAUNCH/SMALL BOAT
REQUIREMENTS AND SPECIAL POWER REQUIREMENTS]

DANGEROUS CHEMICALS: [INCLUDING MSDS/WHMIS LABELS]

GAS CYLINDERS:

ACIDS:

TOXIC:

FLAMMABLES: 10 gal. formaldehyde

RADIOISOTOPES: [INCLUDING CERTIFICATES]

ANTICIPATED LOADING TIME: ½ day

LOGISTICS:

COMMENCE LOADING [DATE/TIME]: March 2 0730

SAILING [DATE/TIME]: March 3 1400

EXPECTED OPERATIONS PROFILE: [24 HR./12 HR/OTHER]
12 hr acoustics/fishing (day) 6 hr CTD/Bongo (night)

RETURNING [DATE/TIME]: PBS March 13 1600; departing 1630 for QCS

OFFLOADING: [DATE/TIME]: PBS March 30 0800-1200

SCIENTIFIC CREW CHANGES: [DATES/TIMES/LOCATIONS]

March 8 2000 drop-off; return to survey ops (Departure Bay)

March 13 1600 change Leg 1/Leg 2; dockside PBS; 2000 return survey ops



Regional Operations Centre **Canadian Coast Guard – Pacific**

PROPOSED CRUISE

ITINERARY: **N.B.:** ALSO ATTACH LIST OF STATIONS, MOORING OPERATIONS, OR SURVEY LINES IDENTIFYING EXACT POSITIONS. THIS LIST CAN BE ATTACHED TO END OF DOCUMENT.

DATE	OPERATION/EVENT
March 2	Load at PBS. systems/gear check.
March 3-12	Depart PBS in afternoon for system calibration, Departure Bay; after completion begin survey ops in Strait of Georgia and mainland inlets. Possible night ops for CTD and plankton sampling.
March 8	Science crew transfer at anchor Departure Bay.
March 13-14	End Leg 1, start Leg 2; Science crew change 1600 at PBS; Depart 2000 for skate study area (QCSound and Hecate Strait)
March 15-28	Conduct bottom trawl/tagging survey ops QCS and Hecate Strait
March 29-30	In transit to PBS; arrive PBS 0800 March 30
March 30	Offload PBS 0800-1200

Fig1. Proposed Leg 1 Survey Area; Strait of Georgia; Jervis Inlet

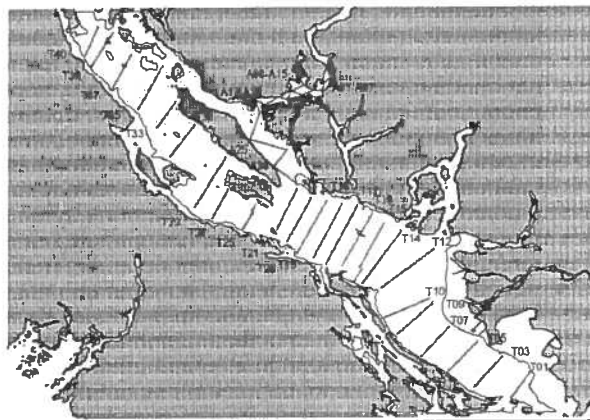


Fig2. Leg 2 Survey Area (shaded region); Queen Charlotte Sound, Hecate Strait

NOTE: cruise track shown not applicable to this survey

