DAILY SCIENCE LOG BOOK

MISSION NUMBER: Pac 2011-59

DATE: From: July 3 2011 to:

VESSEL: Charter

PROJECT(S): Discovery Islands Circulation CTD/UV Survey

Water Properties Group
Fisheries and Oceans Canada
Institute of Ocean Sciences
Ocean Sciences Division
North Saanich, BC, Canada

WaterProperties.ca

Captain: Greg Gibson First Officer: Ed Felbaum
Second Officer: _____ Third Officer: _____
Fishing Master: _____

Mission Participants / Agencies: Darren Tuele

Scientific Personnel: Chief Scientist: _____

Name	Watch	Cabin	Name	Watch	Cabin

Second leg of Mission: Chief Scientist: _____

Name	Watch	Cabin	Name	Watch	Cabin

Data logging computer: LG Netbook / Dell office laptop
Data acquisition program: _____
CTD deck unit make: _____ model: _____ serial number: _____

Primary CTD
Make: Seabird model: SBE19 serial number: 1294
Con file = 1294w-flu June 2011 .XML
Primary temperature serial number: _____
Primary conductivity serial number: _____
Secondary temperature serial number: _____
Secondary conductivity serial number: _____
Transmissometer: _____ Model: _____ s/n: _____
Fluorometer: Model Seapoint Cable gain: _____ s/n: SCF2356 **P, S** or **NO** pump?
Oxygen sensor: _____ Model: _____ s/n: _____ **P, S** or **NO** pump?
PAR sensor: _____ Model: _____ s/n: _____
Other sensors: UV Biospherical s/n: 1086 ~~**P, S or NO pump**~~?
Other sensors: _____ s/n: _____ **P, S** or **NO** pump?
Other sensors: UV Solar Light s/n: 15373 ~~**P, S or NO pump**~~?
Other sensors: _____ s/n: _____ **P, S** or **NO** pump?

Secondary CTD
Make: _____ model: _____ serial number: _____
Primary temperature serial number: _____
Primary conductivity serial number: _____
Secondary temperature serial number: _____
Secondary conductivity serial number: _____
Transmissometer: _____ Model: _____ s/n: _____
Fluorometer: Model _____ Cable gain: _____ s/n: _____ **P, S** or **NO** pump?
Oxygen sensor: _____ Model: _____ s/n: _____ **P, S** or **NO** pump?
PAR sensor: _____ Model: _____ s/n: _____
Other sensors: _____ s/n: _____ **P, S** or **NO** pump?
Other sensors: _____ s/n: _____ **P, S** or **NO** pump?
Other sensors: _____ s/n: _____ **P, S** or **NO** pump?
Other sensors: _____ s/n: _____ **P, S** or **NO** pump?

CTD calibration bottle location (height above CTD in metres): _____

WEDNESDAY
July 27 2011

This page is for any notes or observations

1120 local time @ Fredrick Arm 1 STN for CV 50 29 02 100m
125 15 76
* 1121 Biospherical & Solar light Sensors logging in air @ Stern Sun behind.
1122 Davis UV 5.7 index 851 w/m² Solar Light data file 5001
1124 CTD on & at Surface Bio 2" uw

1128 CTD @ Surface still Davis 5.8 uv 872 w/m2
1129 CTD pump pdled to surface. UV Sensors 90° from Sun on Side
1131 CTD back to Vedical Davis 5.9 uv 879 w/m² Bio Solar 2.158 w/m² ? maybe not set to w/m2
1132 CTD lowered to 1m 1133
1133 CTD @ 1m
1138 CTD @ 2m using Bio ducer Davis 6.2 / 896 w/m² Solar 2.285 w/m² - this is set w/m²
1143 CTD @ 3m Davis 6.4 / 907 1.23 Solar Light
1152 CTD @ 4m Davis 6.6 / 914 .48 Solar light Bio drops off
1159 CTD @ 5m
1200 CTD @ 4.9m Davis 6.7 921 SolarLt 0.25 w/m²
1206 CTD @ 6m
1207 CTD @ 6m Davis 6.8 925 SolarLt 0.08
1212 CTD @ 7m Davis 6.9 939 SolarLt 0.04
1218 CTD coming to Surface, first drop down to ends of Cable
1223 CTD @ Surface 50 29.56 125 15.76 54m Davis 7.1 946 SolLt 23 w/m²

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page _____ of _____

Month JULY **Year** 2011 **Ship** Blackie **Cruise ID** 2011-59

Day	Station Name	Time ~~(UTC)~~	Time Code	Cast Type	Firing Method	Event Number	Positional Information: Latitude	Positional Information: Longitude	Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
27	FreArm1		BE	CTD/UV		1	50 29 02	125 15 76	100m						
			EN							8m					
27	Farside		BE	CTD/UV		2	50 29 136	125 16.397	54m						
										8m					
ZR	PAZ		DE												
			EN												

Cast Type:
BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
SET = Fish Set
USW = Sea Water Loop
MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter
____ = _____

Bottle Firing Method:
US = Up / Stop
UN = Up / No stop
DN = Down / No stop

Time Code:
BE = Beginning Time of Cast
BO = Bottom Time of Cast
EN = End Time of Cast
DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 16 April 2010

Thursday
July 27 2011

This page is for any notes or observations

1229 - Bring CTD out of water Davis 7.2/951 SolarLt 41.2 w/m²
Bio File BS20110727_112148.CSV
1254 - At MHC Farm (Farside) 50 29.135 125 16 399 54m CTD on Port side facing Sun
1257 - Recording Sensors & CTD
1pm - ~~CTD~~ at Surface 7.4 uv 923 w/m² SolarLt. 26.7
1301 - Drop to 1m
1303 - 1m Davis 7.3/942 SolarLt 8.9-11.1 w/m²
1309 - boat tied up to us blocking light
1312 - Drop to 2m
1313 - Davis 7.4/918. SolarLt 2.75 w/m²
1319 - Drop to 3m
1320 - Davis 7.4/921 SolarLt 1.29 w/m²
1326 - Drop to 4m
1327 - Davis 7.5/147 SolLt 0.57
1330 - Drop to 5m
1337 - Droop down to 7 then to surface
1345 - Pulled CTD pump to 4" below surface - as before
1350 Out of water

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page _____ of _____

Month | **Year** | **Ship** | **Cruise ID**

Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information: Latitude	Positional Information: Longitude	Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
28	PAZ	1045	BE	CTD/UV		3	50 27 856	125 22 063	68						
			BO				5029 859	125 22 061		8m					
			EN				5029 921	125 22 059							
	PA1	1125	BE	CTD/UV		4	50 31 686	125 22 152	47						
			BO				5031 688	12522 154		8m					
			EN				50 31 691	125 22 163							
	PA	1215	BE	CTD/UV		5	50 28 361	125 21 833	131						
			BO				5028 371	125 21 840		8m					
			EN				50 28 378	125 21 848							
28	Chame Tr.	1241	BE	CTD		6	50 26 372	125 18 494	330			1			
		1252	BO				50 26 333	125 18 445	≈	100m	SalCal				SalCal
		1300	EN				50 26 294	125 18 392	≈	105					
	No 001	1307	BE	CTD		7	50 24 764	125 19 422	290						
		1318	BO				5024 792	125 19 385		105					
		1320	EN				50 24 803	125 19 377							
	No 002	1332	BE	CTD		8	50 21 727	125 22 302	260						
		1345	EN				50 21 785	125 22 368							

Cast Type:
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ROS = Rosette plus CTD
SET = Fish Set
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MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter
____ = _____

Bottle Firing Method:
US = Up / Stop
UN = Up / No stop
DN = Down / No stop

Time Code:
BE = Beginning Time of Cast
BO = Bottom Time of Cast
EN = End Time of Cast
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RE = Recover Mooring Time

Notes: _____

Transmissometer to be cleaned before each cast, do not use Ammonia products

Thursday
July 28 2011

This page is for any notes or observations

Phillips Arm UV 50 29.856 125 22.063 68m

Systems on 1045am - Davis on roof Solar LT logging Bio logging

AT Surface - BIO 1" under 1048
1049 Davis 2.9 uv / 466 w/m² Sol. LT 11.1 w/m² @ SURFACE CTD Logging
1052 Lower package to 1m Davis 3.1/483 Sol. Lt 1.92
1056 Lower package to 2m Davis 26/334 Sol. Lt 0.24 numbers dropping faster than FA
1059 Lower package to 3m Davis 2.9/417 Sol. LT 0.08
1102 Moving boat around to have sensors in clear view to sun / cloud
1103 Drop to 4m after move boat again. too much current, See fresh water Lense
1105 @ 4.1m Davis 1.8 239 Sol. Lt 0.01
1108 Drop to do Profile end of cast
1111 at Surface Davis 1.7 218 Sol. Lt 4.79
1112 Pull CTD pump to surface for surf. data
1115 All equip off.
1125 PAI at surf. CTD New data file for BIO 10728_112015.CSV 47m
50 31 686 125 22 152 - CTD pulled horizontal for Surface. Fresh Lense
1127 BIO @ Surface 1" below Davis 2.9 383 Sol. Lt 7.37
1131 @ Surface - forgot to turn off BIO - Grizz on beach
1216 PA @ Surface Davis 4.0 478 Sol. Lt 12.3
1218 - Turned on BIO - forgot to @ surface

This page is for any notes or observations

1220 - Profile & back - CTD not horizontal CTD Sent to 2m to Purge then to surface
1224 - @ Surface Davis 3.9 446 Sol. Lt 11.2
1226 - off to Nodals
1241 - Channe Island CTD Sal Cal 106m CTD only
1307 - Nodals 001 CTD 105m CTD only
1332 - Nodals 002 CTD 105m CTD only
1350 - Away Nodales to Browns Bay