

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2014-59

DATE:

From:

Sept 27 2014

To:

OCT 13 2014

VESSEL:

CCGS VECTOR.

PROJECT(S):

W-C - DC

MEAD / IDS

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

1/2

WaterProperties.ca

Captain: Bob First Officer: Shane

Second Officer: _____ Third Officer: _____

Fishing Master: _____ Chief Engineer: _____

Mission Participants / Agencies:

**** Chief Scientist to complete section below OR cut and tape from cruise plan ****

1st Leg Scientific Personnel: Chief Scientist: G Gillespie

Name	Watch	Cabin	Name	Watch	Cabin
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100					

James Peas PBS

Wolfgang Carlstedt PBS

Lab 1 PBS

lusa lako PBS

Nick Hall-Patch 105

Andy Wright 10S

Downloaded from <http://ajphaphysiol.org/> on September 11, 2012

100

2nd Leg Scientific Personnel: Chief Scientist:

Name	Watch	Cabin	Name	Watch	Cabin
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Name	Watch	Cabin	Name
	Watch	Cabin	

100

**** The following 3 pages are VERY IMPORTANT as they document equipment and settings used on board ****

These pages are to be completed by the CTD Technician setting up the equipment, the Watch Leader on board, and the Chief Scientist MUST verify that all relevant sections are completed prior to leaving the vessel. Any mid-cruise changes to be noted by watch leader in the notes.

Data logging computer: Vector CTD

Data acquisition program: Seasave

CTD deck unit make: N/A model: serial number:

Primary CTD

Make: SBE model: 25 serial number: 0404 + ECOSS

Primary temperature serial number: 4484

Primary conductivity serial number: 3184

Secondary temperature serial number:

Secondary conductivity serial number:

Transmissometer: Wetlabs Model: C-STAR s/n: 983DR

Transmissometer: Model: s/n:

Fluorometer: Model Wetlabs ECO Cable gain: 13 s/n: 2216 P, S or NO pump?

Fluorometer: Model Cable gain: s/n: P, S or NO pump?

Oxygen sensor: SBE Model: 43 s/n: 0047 P, S or NO pump?

PAR sensor: Model: s/n: Surface PAR? Y / 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?

+ Benthos pinger

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:

Transmissometer: Model: s/n:

Fluorometer: Model Cable gain: s/n: P, S or NO pump?

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: Surface PAR? Y / 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):

This also includes the bottle location above the CTD on non-rosette casts (e.g., W.E. Ricker)

Rosette Setup:

Number of bottles: 6
Manufacturer: N/A
Volume of bottles (litres): 15 L

Winches:

1. Make: _____ Model: _____ Serial #: _____ Used for: _____
2. Make: _____ Model: _____ Serial #: _____ Used for: _____
3. Make: _____ Model: _____ Serial #: _____ Used for: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

small work winch on small portside center post.

Salinometer:

Make: _____ Model: _____ Serial Number: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Oxygen Kit(s):

Make: _____ Model: _____ Kit Number: _____

Make: _____ Model: _____ Kit Number: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Thermosalinograph System (SBE21):

Program: _____ Version: _____

Sampling interval (seconds): _____

Fluorometer sensor serial number: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

ADCP Setup:

Computer time zone: _____

Sampling interval (sec): _____

Bin Length: (2^x): _____

Pulse Length: _____

Buffer (bytes): _____

Gyro Offset: _____

User Exits:

Name: _____

Name: _____

Name: _____

Work File: _____

Exit points: _____

Exit points: _____

Exit points: _____

Comments on performance during cruise (comments should also be reflected in the post-cruise report):

CTD Test Cast Information

Test Cast along side? Yes ☐ No ☒

Comments _____

Test Cast in Saanich Inlet or other location? Yes ☐ No ☒

Comments Beaded in Port Hardy

CTD pressure reading on deck (db), before cast: _____ after cast: _____

Pumps working? Yes ☐ (0011) No ☐ (0010)

Secondary Temp – Primary Temp: _____
(Average from the mixed region)

Secondary Salinity – Primary Salinity: _____
(Average from the mixed region)

Additional Comments:

Scientific Equipment Used During Cruise

This sheet allows you to enter all of the equipment used while on board. Please use the separate CTD sheet for entry for SBE 9/16/19/25.

Other CTD units:

RBR Serial Number: _____ Sensors: _____

Others: _____

19 plus + turbidity sensor for plankton study

Plankton Nets:

Bongo #1 Frame Size: _____ cm Mesh: _____ μ m Flowmeter: _____
Bongo #2 Frame Size: _____ cm Mesh: _____ μ m Flowmeter: _____
Frame Size: _____ cm Mesh: _____ μ m Flowmeter: _____
Frame Size: _____ cm Mesh: _____ μ m Flowmeter: _____

Multinet ☐

BIONESS ☐ Neuston ☐

Others:

SCOR 236 μ m

Trawl Gear:

Midwater Trawls: SOG ☐ Highseas ☐ Pelagic ☐ Other: _____

Bottom Trawls: Atlantic Western IIA ☐ Yankee 36 Hard & Soft Bottom ☐ Other: _____

American Shrimp Trawl ☐

Notes: _____

Trawl Doors: USA Jet ☐ Tyburon ☐ _____

Sounders : Wesmar 380 ☐ Others: _____

Acoustics:

Echosounder #1 _____ Frequencies (KHz): 12 ☐ 18 ☐ 38 ☐ 70 ☐ 120 ☐ 200 ☐

Others: _____

Echosounder #2 _____ Frequencies (KHz): 12 ☐ 18 ☐ 38 ☐ 70 ☐ 120 ☐ 200 ☐

Others: _____

Software & Notes: _____

Other Gear in Operation:

1. *Smith mac grab*
2. _____
3. _____
4. _____
5. _____

unloaded in Port Hardy - Graham needed to rendezvous in Campbell River - PBS forgot
hydroacoustic pole

- winch ship sent wrong pad for work winch they had this winch.
will go off the port side center pad directly across from A-frame (starboard)
- spent day setting up equipment, R/V, waiting

Sampling for Rosette; 0m, 10m, 25m, mid-depth, bot -5
See rosette sheets for stations collection breakdown.

NOTE

S.R. Computer PDT

ECO + 25 CTD are on local FST not UTC

Cruise log in UTC direct from ships feed

NB

Max depths listed are those from the (sl. Saunders).
CTD is (-5) $\pm$ 3 more m to actual bottom.
(Bot $\approx$ 8 sh)

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Book 1/2
Page 1 of 1

Month <u>Sept</u>				Year <u>2014</u>			Vessel <u>VECTOR</u>			Cruise ID <u>2014-59</u>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
01	SC61	30	05:49	BE	ROS	US	53° 11.001	129° 25.110	512		1-6	6	aw/NHP	☒ ☒	400 munc depth.
			05:59	BO			53° 12.004	129° 25.108		4169	-			☐ ☐	60 sec soak
			06:15	EN			53° 12.009	129° 25.139			-			☐ ☐	
02	SC61	30	06:34		Drifter		53° 12.011	129° 25.126			-			☐ ☐	
03	SC61	30	06:36	BE	NET	VH	53° 12.011	129° 25.104	512		-			☐ ☐	
			06:43	BO			53° 12.001	129° 25.114		250	-			☐ ☐	
			06:48	EN			53° 11.999	129° 25.132			-			☐ ☐	
04	SC61	30	07:10	BE	SBE19	N/A	53° 11.999	129° 25.152	512	Ø	-			☐ ☐	
05	OC66	30	08:15	BE	CTD	—	53° 11.989	129° 33.391	306		-			☐ ☐	
			08:20	BO			53° 11.998	129° 33.390		295	-			☒ ☒	
			08:25	EN			53° 12.011	129° 33.379			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
			:				°	°			-			☐ ☐	
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			:				°	°			-			☐ ☐	

CTD Transmissometer and Fluorometer to be cleaned before each cast -- do not use Ammonia products

Event Type:

BOT = Bottle cast (no CTD)
CTD = Standalone CTD
ROS = CTD in Rosette
SET = Fish Set

LOOP = Sea Water Loop

MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter

Bottle Firing Method:

US = Up / Stop (default)
UN = Up / No stop
DN = Down / No stop

Notes:

Time Code:

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RE = Recover Mooring Time

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 14 February 2013

only 469m on drum ¹¹ need to account in depth for trip logic
and all other deep casts

1001-1004. Rep

— the first cast didn't arm

→ did a redo of SC61 → kept at cast 01
having issues with trip logic carry over and reverting to old .psa.
files — initially wanted to do lapsed time as a carry over ?? why
it didn't do it in first cast is unknown
saved a new setup 2.psa so it should be ok

— DID NOT TRIP — no idea why — will not take samples here
will go on with others

— keep sample #s the same. 1-6

— all the grabs I want to do >469 — so to stay in the area go to 0066

0066 bottom is lumpy — stay conservative.

reminded Scott/Rose regarding the trip logic vs DC command report = big discrepancy

— 002:15 departed for top of Principe Channel — until trip logic is resolved can't do better
and most grab locations >469m

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Ocean Sciences Division, Institute of Ocean Sciences

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Month OCT				Year 2014			Vessel VECTOR			Cruise ID 2014-59					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
06	PC73	01	03:30	BE	CTD		53° 16.237	129° 43.025	179		N/A		aw/WH	☒ ☒	
			03:35	BO			53° 16.238	129° 43.023		170				☐ ☐	
			03:39	EN			53° 16.240	129° 42.998						☐ ☐	
07	ES72	01	04:55	BE	CTD		53° 05.670	129° 33.659	177					☒ ☒	
			04:59	BO			53° 05.676	129° 33.644		170				☐ ☐	
			05:02	EN			53° 05.657	129° 33.638						☐ ☐	
08	ES80	01	05:43	BE	CTD		53° 00.636	129° 28.842	121					☐ ☐	
			05:46	BO			53° 00.636	129° 28.846		115				☐ ☐	
			05:48	EN			53° 00.622	129° 28.838						☐ ☐	
09	CS84	01	06:38	BE	CTD		52° 53.99	129° 23.960	252					☒ ☒	
			06:43	BO			52° 53.989	129° 23.960		245				☐ ☐	
			06:48	EN			52° 53.991	129° 23.940						☐ ☐	
10	CS84		07:07	BE	NET		52° 54.027	129° 24.018	252					☐ ☐	
			07:15	BO			52° 54.009	129° 23.958		245				☐ ☐	
			07:20	EN			52° 53.987	129° 23.910						☐ ☐	
11	CS84	01	07:35		SBE19 Turb		52° 53.988	129° 23.908						☐ ☐	turbidity 3 bottles photo
12	SC74	01	08:50	BE	CTD		53° 00.657	129° 15.892	376					☒ ☒	
			08:57	BO			53° 00.691	129° 15.825		370				☐ ☐	
			09:04	EN			53° 00.747	129° 15.749						☐ ☐	

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PC73 station north of morning
so slightly north from 2014-15 station

we could only clean trans: Micro with DMQ since no
cleaning solution was supplied.

lots of schools of large cherring come to the lights at night

— from the bucket we also took a phyto sample - not assigned an I.D.#

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Ocean Sciences Division, Institute of Ocean Sciences

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Month <u>OCT</u>				Year <u>2014</u>		Vessel <u>VECTOR</u>				Cruise ID <u>2014-59</u>					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
<u>13</u>	<u>SC69</u>	<u>01</u>	<u>09:42</u>	<u>BE</u>	<u>CTD</u>		<u>53°04.810</u>	<u>129°19.575</u>	<u>692</u>		<u>-</u>		<u>WHP/KW</u>	☒ ☒	
			<u>09:51</u>	<u>BO</u>			<u>53°04.770</u>	<u>129°19.582</u>		<u>470</u>	<u>-</u>			☐ ☐	<u>wire limit</u>
			<u>09:59</u>	<u>EN</u>			<u>53°04.753</u>	<u>129°19.595</u>			<u>-</u>			☐ ☐	
<u>14</u>	<u>WHA3</u>	<u>02</u>	<u>03:38</u>	<u>BE</u>	<u>CTD</u>		<u>53°08.359</u>	<u>129°07.258</u>	<u>545</u>		<u>-</u>			☐ ☐	
			<u>03:49</u>	<u>BO</u>			<u>53°08.356</u>	<u>129°07.241</u>		<u>470</u>	<u>-</u>			☐ ☐	<u>W.L.</u>
			<u>03:57</u>	<u>EN</u>			<u>53°08.361</u>	<u>129°07.246</u>			<u>-</u>			☐ ☐	
<u>15</u>	<u>WC58</u>	<u>02</u>	<u>04:34</u>	<u>BE</u>	<u>CTD</u>		<u>53°13.346</u>	<u>129°07.249</u>	<u>496</u>		<u>-</u>			☒ ☒	
			<u>04:43</u>	<u>BO</u>			<u>53°13.348</u>	<u>129°07.248</u>		<u>470</u>	<u>-</u>			☐ ☐	<u>W.L.</u>
			<u>04:52</u>	<u>EN</u>			<u>53°13.339</u>	<u>129°07.271</u>			<u>-</u>			☐ ☐	
<u>16</u>	<u>WC58</u>	<u>02</u>	<u>05:01</u>	<u>BE</u>	<u>10 plus CTD</u>		<u>53°13.377</u>	<u>129°07.297</u>	<u>496</u>	<u>Ø</u>	<u>surface</u>			☐ ☐	<u>turbidity + 3L phyto</u>
<u>17</u>	<u>WC58</u>	<u>02</u>	<u>09:01</u>	<u>BE</u>	<u>NET</u>		<u>53°13.353</u>	<u>129°07.300</u>	<u>496</u>		<u>-</u>			☐ ☐	
			<u>09:10</u>	<u>BO</u>			<u>53°13.382</u>	<u>129°07.415</u>		<u>250</u>	<u>-</u>			☐ ☐	<u>VH</u>
			<u>09:14</u>	<u>EN</u>			<u>53°13.404</u>	<u>129°07.421</u>			<u>-</u>			☐ ☐	
<u>18</u>	<u>WHA9</u>	<u>02</u>	<u>10:13</u>	<u>BE</u>	<u>CTD</u>		<u>53°18.620</u>	<u>129°10.986</u>	<u>472</u>		<u>-</u>			☒ ☒	
			<u>10:22</u>	<u>BO</u>			<u>53°18.634</u>	<u>129°10.995</u>		<u>465</u>	<u>-</u>			☐ ☐	
			<u>10:30</u>	<u>EN</u>			<u>53°18.657</u>	<u>129°11.024</u>			<u>-</u>			☐ ☐	
<u>19</u>	<u>WHA9</u>	<u>02</u>	<u>10:43</u>		<u>Drifters</u>		<u>53°18.640</u>	<u>129°10.975</u>		<u>surface release</u>				☐ ☐	<u>(green)</u>
			<u>:</u>				<u>°</u>	<u>°</u>			<u>-</u>			☐ ☐	
			<u>:</u>				<u>°</u>	<u>°</u>			<u>-</u>			☐ ☐	

Event Type:

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Bottle Firing Method:

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Wed Oct 2

This page is for any notes or observations

Started at South Whale Channel

- weather has been good, clear, no rain, no wind.

@ 10:00 (PDT) will have to break for a couple of hours for generator/hydraulic overhaul. - back running @ 02:00 local. - lost 4 hours

phyto taken - no sample ID#

after dufter deployment; and a shallow cast to test ECO

1/5/5/40 + 3 bolts
statuary

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Month OCT				Year 2014		Vessel VECTOR			Cruise ID 2014-59						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
20	PBSG4	03	03:20	BO	Grab	✓	53°27.125	129°04.132	214	214	-		WHP	☐ ☐	
21	PBSG3	03	03:54	BO	Grab	-	53°25.374	129°06.616	322	322	-			☐ ☐	
22	PBSG2	03	04:30	BO	Grab		53°23.935	129°07.907	342	342	-			☐ ☐	
23	PBSG11	03	04:58	BO	Grab		53°23.106	129°08.705	377	377	-			☐ ☐	
24	WC43	03	07:43	BE	CTD		53°21.051	129°16.423	515		-			☒ ☒	
			07:52	BO			53°21.071	129°16.418		470	-			☐ ☐	W, L
			08:00	EN			53°21.097	129°16.427			-			☐ ☐	
25	DOUG45	03	08:45	BE	CTD		53°22.219	129°11.696	462		-			☒ ☒	
			08:53	BO			53°22.160	129°11.705		455	-			☐ ☐	
			09:00	EN			53°22.135	129°11.701			-			☐ ☐	
26	DOUG45	03	09:03	BE	19pctd turbid		53°22.086	129°11.643	462	surface	-			☐ ☐	turbidity + 3L + phyto
27	VP43	03	09:56	BE	CTD		53°24.874	129°06.874	316		-			☒ ☒	
			10:02	BO			53°24.873	129°06.935		311	-			☐ ☐	
			10:07	EN			53°24.883	129°06.987			-			☐ ☐	
28	VP39	03	11:13	BE	CTD		53°30.448	129°03.817	118		-			☒ ☒	
			11:16	BO			53°30.430	129°03.798		113	-			☐ ☐	
			11:18	EN			53°30.396	129°03.755			-			☐ ☐	
29	UC31	03	17:48		Dufflers		53°32.563	129°00.433	surface		-			☐ ☐	
			:				°	°			-			☐ ☐	

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Samples from grabs taken for 105: PBS - no sample 10 #5
grabs to support habitat classification to ground truth video and to
ground truth acoustics gets depths greater than ROV can go

- see grab description report appended

22:15

onto Squawley to pick SC58: WC48 then back to Verney

- weather: deluge! windy and lots of rain

- get to SC58 - too rough - status called off onto WC48

→ DOUG 45 - phyto sample taken from turbidity test buckets - no sample 10 #

stair long at night in stop time in harbor cant go more than 6 ft to

Case 11:00: Comp in the do time 2:00 to 3:00

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month OCT				Year 2014			Vessel VECTOR			Cruise ID 2014-59					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Information		Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
							Latitude	Longitude							
30	PBSG46	04	04:16	BO	Grab		53°41.816	128°48.550	300	300	NA		CW NHP	☐ ☐	
31	PBSG45	04	04:40	BO	Grab		53°39.301	128°50.271	210	210				☐ ☐	
32	VP46	04	05:45	BE	CTD	NA	53°32.802	128°53.273	209		-			☐ ☐	
			05:56	BO			53°32.809	128°53.263		204	-			☒ ☒	
			05:54	EN			53°32.808	128°53.248			-			☐ ☐	
33	DeC39	04	06:24	BE	CTD	NA	53°36.017	128°49.753	166		-			☒ ☒	
			06:28	BO			53°36.038	128°49.766		161	-			☐ ☐	
			06:31	EN			53°36.057	128°49.765			-			☐ ☐	
34	DeC32	04	07:04	BE	CTD	N/A	53°39.424	128°52.330	272		-			☒ ☒	
			07:10	BO			53°39.442	128°52.361		266	-			☐ ☐	
			07:14	EN			53°39.453	128°52.372			-			☐ ☐	
35	DeC32	04	07:18	BE	CTD/FP turb.		53°39.449	128°52.371	272	Ø surf	-			☐ ☐	turbidity + 3L
36	DeE24	04	07:54	BE	CTD		53°42.809	128°48.610	316		-			☒ ☒	
			08:00	BO			53°42.814	128°48.606		311	-			☐ ☐	
			08:05	EN			53°42.816	128°48.606			-			☐ ☐	
37	DeE17	04	08:41	BE	CTD		53°46.775	128°49.452	305		-			☒ ☒	
			08:47	BO			53°46.775	128°49.411		300	-			☐ ☐	
			08:52	EN			53°46.776	128°49.415			-			☐ ☐	
			:				°	°			-			☐ ☐	

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Produced by the Water Properties Group, IOS

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Version: 14 February 2013

-grabs for PBSun Support of ecosystem classification; see final appended report

* Conductivity threshold ↑ from 1000 → 2690 as per S.R./Seabird - not sure
whether much @ surface we might lose - or any?
→ also voltage configurations reset to original

Dec 39 just north of a shallow bank "Stanforth Bank"

Download 25 after Dec 17

-INIT LOGGING and do test cast; then proceed with final 2 grabs

└─ BUS - Again!

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

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Month <u>Oct</u>				Year <u>2014</u>			Vessel <u>VECTOR</u>			Cruise ID <u>2014-59</u>					
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							Latitude	Longitude							
38	PBSG8	04	10:54	BO	GRAB		53° 47.391	128° 50.531	360	360			NO NHP	☐ ☐	
39	PBSG7	04	11:25	BO	GRAB		53° 46.505	128° 50.254	353	353	-			☐ ☐	DONE FOR THE NIGHT
			:				.	.			-			☐ ☐	
40	DOUG4	05	02:20	BE	NET		53° 55.603	128° 42.263	220		-			☐ ☐	V. H
			02:26	BO			53° 55.600	128° 42.269		200	-			☐ ☐	
			02:31	EN			53° 55.591	128° 42.266			-			☐ ☐	
			:				.	.			-			☐ ☐	
41	DOUG4	05	03:49	BE	CTD		53° 55.632	128° 42.253	220		1 - 1			☒ ☒	Bucket @ surf
			03:54	BO			53° 55.632	128° 42.240		215	-			☐ ☐	
			03:58	EN			53° 55.634	128° 42.225			-			☐ ☐	
42	DOUG4	05	04:02	BE	apcto + turbid		53° 55.642	128° 42.219	200	ø surf				☐ ☐	
43	DOUG11	05	04:58	BE	CTD		53° 49.813	128° 49.857	326					☒ ☒	turbidity + 36
			05:05	BO			53° 49.806	128° 49.373		320	2 - 2			☐ ☐	bucket @ surf
			05:11	EN			53° 49.798	128° 49.377			-			☐ ☐	
44	DOUG16	05	05:45	BE	CTD		53° 46.470	128° 54.765	386		3 - 3			☒ ☒	bucket @ surf
			05:54	BO			53° 46.710	128° 54.790		381	-			☐ ☐	
			06:00	EN			53° 46.664	128° 54.793			-			☐ ☐	
45	DOUG16	05	06:14	BE	Drifters		53° 46.716	128° 54.781			-			☐ ☐	See side
			:	EN			.	.			-			☐ ☐	bar

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 Version: 14 February 2013

Sat Oct 4

-hydraulics are down this afternoon

after net - did some 25 test casts → not record as events or saved data.

DOUG4 = Super murky due to recent rains
= lots of organics on surface.

The ECO test & work on bucket bombs for water samples
can only sample for those parameters not sensitive.
-delO₂, nitr, chl, CDOM, salt, TAC

12 voltages 0, 1, 4, 5 configured
✓ 15m test soak for 2min
↓ good ctd back to normal !!

will have to do this
@ all stations - see w/ Brian
can get hydrowinch to use niskens
in the morning

DOUG4 - too turbid could not filter chl
By DOUG11 water is clear.

* NOTE DOUG11 DID NOT RECORD
SEE EVENT 61

DOUG16 - CTD @ surface @ 5:43 UTC

then brought up to check power - then put back
in @ 5:45 ← start of cast

1	1
CHLa	CHLa
DOUG4	DOUG4
surf	surf
2014-59	2014-59
Bot 1	Bot 1
B	A

(Reds)
unc 1 Dusters

06:14	DOUG16 #76B	53	46.723	128	54.762
06:21	Red 4 #75A	53	46.401	128	55.449
06:29	Red 3 #77B	53	45.800	128	56.761
06:36	Red 2 #73	53	45.324	128	57.766
06:47	Red 1 #74A	53	44.623	128	59.298

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Month OCT				Year 2014		Vessel VECTOR				Cruise ID 2014-59					
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
46	PBS12	05	07:24	BO	Grab		53°44.942	128°58.420	377	377	-		aw NHP	☐ ☐	
47	PBS11	05	07:52	BO	Grab		53°45.359	128°57.441	365	365	-			☐ ☐	
48	PBS10	05	08:34	BO	Grab		53°47.357	128°52.228	380	380	-			☐ ☐	
49	PBS9	05	09:10	BO	Grab		53°50.284	128°47.916	328	328	-			☐ ☐	
							.	.			-			☐ ☐	
50	DOUG20	06	03:09	BE	CTD		53°45.556	128°59.655	290		N/A			☒ ☒	
			03:15	BO			53°45.556	128°59.643		285	-			☐ ☐	
			03:20	EN			53°45.555	128°59.641			-			☐ ☐	
51	FOC1	06	03:45	BE	CTD		53°43.798	129°02.502	348		4 - 4			☐ ☐	+ bucket
			03:52	BO			53°43.799	129°02.499		343	-			☐ ☐	
			03:58	EN			53°43.800	129°02.498			-			☐ ☐	
52	FOC1	06	04:12	BE	NET		53°43.774	129°02.524	348					☐ ☐	
			04:21	BO			53°43.694	129°02.569		280	-			☐ ☐	280 - 0 V H.
			04:25	EN			53°43.669	129°02.535			-			☐ ☐	
53	FOC1	06	04:30	BE	19pturbed CTD		53°43.670	129°02.540			-			☐ ☐	+ turbidity + 3L
54	DOUG25	06	05:14	BE	CTD		53°40.884	129°05.051	276					☒ ☒	only - no CTD
			05:20	BO			53°40.880	129°05.065		270	-			☐ ☐	bucket +
			05:24	EN			53°40.878	129°05.080			-			☐ ☐	
							.	.			-			☐ ☐	

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Grabs in support of PBS habitat classification - see amended grab report

- Doug 11 from last night does not appear to have recorded anything in pickup & and

- Sample #4 @ FOC1

- phyto from turbidity bucket - no sample ID assigned

- FOC1 = station 15 S of mooring ~ 0.7 km south.

Doug 25 - new station of Grant PL.

to/from.

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Ocean Sciences Division, Institute of Ocean Sciences

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Month <u>OCT</u>				Year <u>2014</u>		Vessel <u>VECTOR</u>			Cruise ID <u>2014-59</u>						
Event Number	Station Name	Day	Time (UTC)	Time Code	Event Type	Firing Method	Positional Latitude	Information Longitude	Bottom Depth	Max Pressure	Sample Serial Numbers	# of Bottles	Watch Keepers	Trns/FI Cleaned	Comments
55	DOUG 26	06	05:41	BE	CTD		53°40.426	129°07.291	400		5 - 5		^{no} NTH	☒ ☒	Bucket
			05:49	BO			53°40.434	129°07.316		395	-			☐ ☐	
			05:56	EN			53°40.435	129°07.316			-			☐ ☐	
56	DOUG 31	06	06:34	BE	CTD		53°36.656	129°12.760	300		6 - 6			☒ ☒	Bucket
			06:41	BO			53°36.652	129°12.744		295	-			☐ ☐	
			06:46	EN			53°36.643	129°12.742			-			☐ ☐	(11.5V).
57	PBS 16	06	07:41	BO	Grab		53°40.689	129°05.892	370	370	-			☐ ☐	
58	PBS 15	06	08:15	BO	Grab		53°42.665	129°05.499	400	400	-			☐ ☐	
59	PBS 14	06	08:45	BO	Grab		53°43.642	129°03.022	348	348	-			☐ ☐	
60	PBS 13	06	09:20	BO	Grab		53°44.376	129°00.697	374	374	-			☐ ☐	
61	DOUG 11	06	10:23	BE	CTD		53°49.801	128°49.382	317		-			☐ ☐	Redo
			10:29	BO			53°49.815	128°49.404		312	-			☐ ☐	<u> </u>
			10:35	EN			53°49.844	128°49.374			-			☐ ☐	
			:				.	.			-			☐ ☐	
62	DOUG 31	07	03:51	BE	NET		53°36.205	129°12.589	300		-			☐ ☐	11.5
			04:00	BO			53°36.160	129°12.547		250	-			☐ ☐	
			04:05	EN			53°36.109	129°12.444			-			☐ ☐	
			:				.	.			-			☐ ☐	
			:				.	.			-		4	☐ ☐	ds=

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after Doug's check DS to check all casts turned on and collected. ✓ Yes good to go to work

Grab samples in support of POC - algal classification - see appendix 1

Previous CTD cast of Doug didn't record

OCT 7 02:00 UTC Start of Shift

- delayed - there seems to be an issue with a boat on the beach
so just going to check if there are any distress issues

NOTE: saltwater system not working spent ~0.5hrs with net @ surface after tow
→ hooked up free base which qualified the net and did a recast
- big aft wire clog towards the retrieval end of

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							Latitude	Longitude							
63	KSK1	07	04:55	BE	CTD		53°29.196	129°12.671	375		-			☒ ☒	
			05:04	BO			53°29.211	129°12.687		370	-			☐ ☐	
			05:10	EN			53°29.202	129°12.696			-			☐ ☐	
64	DOUG40	07	05:31	BE	CTD		53°26.739	129°12.518	398		7-7			☒ ☒	F Bucket + +
			05:40	BO			53°26.757	129°12.535		393	-			☐ ☐	play to
			05:47	EN			53°26.764	129°12.544			-			☐ ☐	
			:				.	.			-			☐ ☐	
65	DOUG45	07	06:22	BE	NETT		53°22.261	129°11.694	400		-			☐ ☐	
			06:32	BO			53°22.264	129°11.695		250	-			☐ ☐	
			06:38	EN			53°22.263	129°11.701			-			☐ ☐	
66	DOUG48	07	06:45	BE	Bucket		53°22.264	129°11.701			8-8			☐ ☐	only bucket
67	PBS21	07	07:37	BO	GRAB		53°29.190	129°12.671	381	381	-			☐ ☐	
68	PBS20	07	08:07	BO	GRAB		53°31.163	129°12.502	357	357	-			☐ ☐	
69	PBS19	07	08:33	BO	GRAB		53°32.624	129°13.552	306	306	-			☐ ☐	
70	PBS18	07	09:16	BO	GRAB		53°36.156	129°12.006	243	243	-			☐ ☐	2nd attempt
71	PBS17	07	09:47	BO	GRAB		53°38.882	129°11.104	381		-			☐ ☐	
			:				.	.			-			☐ ☐	
			:				.	.			-			☐ ☐	
			:				.	.			-			☐ ☐	

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Download last several casts; change batteries / log KSK1

KSK1 CTD just north of mooring location ~0.4 km.

#7 - only chl B = good
A = contaminated

CHLa
DOUG40
surf
2014-59
Bot 1

A

Grabs for PBS

1st grab attempt @ 18 failed to close grab as 4 x 4 rock in jaws
Do 2nd attempt - somewhat successful - jaws didn't fully close
but got enough material to classify

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72	WST1	08	03:35	BE	CTD		53°22.814	129°11.735	437		-			☐ ☐	
			03:44	BO			53°22.800	129°11.751	431		-			☐ ☐	
			03:51	EN			53°22.806	129°11.755			-			☐ ☐	
73	WST2	08	04:13	BE	CTD		53°21.44	129°11.746	435		-			☐ ☐	
			04:22	BO			53°21.463	129°11.738	430		-			☒ ☒	1/1 kt of current
			04:29	EN			53°21.457	129°11.714			-			☐ ☐	
74	WST3	08	04:43	BE	CTD		53°20.357	129°10.548	423		-			☒ ☒	
			04:52	BO			53°20.379	129°10.553	418		-			☐ ☐	
			05:00	EN			53°20.373	129°10.550			-			☐ ☐	
75	WST4	08	05:14	BE	CTD		53°20.640	129°12.094	460		-			☒ ☒	drifting shallower
			05:23	BO			53°20.650	129°12.065	455		-			☐ ☐	
			05:30	EN			53°20.658	129°12.050			-			☐ ☐	
76	WST5	08	05:45	BE	CTD		53°20.974	129°13.843	494		-			☒ ☒	
			05:55	BO			53°20.999	129°13.824	470		-			☐ ☐	wire limit!
			06:04	EN			53°21.020	129°13.826			-			☐ ☐	
77	WST6	08	06:20	BE	CTD		53°21.267	129°16.372	504		-			☐ ☐	
			06:31	BO			53°21.269	129°16.329	470		-			☐ ☐	w.L.
			06:42	EN			53°21.280	129°16.285			-			☐ ☐	
			:				.	.			-			☐ ☐	

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Oct 7

This page is for any notes or observations

- the beginning of Wright Sound grid
NOTE W51-18 - not using conventional ranging stations since the grid is not a standard set of stations

NOTE; W51 is just to the north of DOUG 45 - can include in grid but a few days apart

★ DOUG 40 needs to be downloaded again (lost?) - 15 min was out 3/5

→ sonar zoomed in on bottom to estimate additional depth
455 wire out = 10.3 m also bottom on sonar - so sonar is sometimes very close
↓
check against her file

- W51 W.L. check against her file.