

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2012-13

DATE:

From:	Aug 1 9 / 2012	to:	30 AUG. 2012
J.P. Tully			
OSP			

VESSEL:

PROJECT(S):

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

WaterProperties.ca

Captain:	VICTOR GRONMYR	First Officer:	JODI HESKE
Second Officer:	COLIN MILBURN	Third Officer:	RYAN GURE
Fishing Master:			

Mission Participants / Agencies: DFO-IOS, UBC, UVic, U. BC ~~HEALTH~~

Scientific Personnel:	Chief Scientist:	Watch	Cabin
Name	Name	Watch	Cabin
NINA NEMCEK	DAVE JANSSEN	18-24	H
MOIRA GALBRAITH	ERNESTO MARTINEZ	00-06	H
DEBIRÉE DILLMAN	MICHAEL ARYCHUK	08-10	4
AMY CAIN	SCOTT ROSE	00-12	3
CHRISTINA SCHALLER			
NINA SCHUBACK			
JENNIFER FORSCUTT			
ANNIE COX			
GLENN COOPER			
JAY CULLIN			

[illegible]

Data logging computer: #3
Data acquisition program: SEASAVE
CTD deck unit make: SBE model: 11+ serial number: 0471

Primary CTD

Make: SBE model: 9+ serial number: ~~0550~~ 0550

Primary temperature serial number: 2374

Primary conductivity serial number: 3396

Secondary temperature serial number: 2668

Secondary conductivity serial number: 2754

Transmissometer: WETLABS Model: C-STAR s/n: 1398 DR

Fluorometer: Model SEAPANT Cable gain: 3X s/n: 2228 P S or NO pump?

Oxygen sensor: SBE Model: 43 s/n: 1119 P S or NO pump?

PAR sensor: BIO SPHERICAL Model: s/n: 4661

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?

Secondary CTD

Make: <u>SBE</u>	model: <u>9+</u>	serial number: <u>506</u>
Primary temperature	serial number: <u>2374</u>	
Primary conductivity	serial number: <u>3396</u>	
Secondary temperature	serial number: <u>2668</u>	
Secondary conductivity	serial number: <u>2754</u>	
Transmissometer: <u>WETLABS</u>	Model: <u>C-Star</u>	s/n: <u>1398DR</u>
Fluorometer: Model <u>SEAPOINT</u>	Cable gain: <u>3X</u>	s/n: <u>2228</u> <u>P, S</u> or NO pump?
Oxygen sensor: <u>SBE</u>	Model: <u>43</u>	s/n: <u>1119</u> <u>P, S</u> or NO pump?
PAR sensor: <u>B10-sphere</u>	Model: <u>200AL</u>	s/n: <u>4601</u>
Other sensors:		s/n: <u></u> <u>P, S</u> or NO pump?
Other sensors:		s/n: <u></u> <u>P, S</u> or NO pump?
Other sensors:		s/n: <u></u> <u>P, S</u> or NO pump?
Other sensors:		s/n: <u></u> <u>P, S</u> or NO pump?

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

Rosette Setup:

Number of bottles: 24
Manufacturer: IOS
Volume of bottles (litres): 10L

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):

Salinometer:

Make: _____ Model: _____ Serial Number: _____
Comments on performance during cruise (comments should also be reflected in the post-cruise report):

Oxygen Kit(s):

Make: IOS Model: Posimat 865 + 665 Kit Number: 2
Make: _____ Model: _____ Kit Number: _____

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

Thermosalinograph System (SBE21):

Program: SEASAVE Version: _____
Sampling interval (seconds): 30S
Fluorometer sensor serial number: WS35-713P

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

ADCP Setup:

Computer time zone: _____ User Exits: Name: _____ Exit points: _____
Sampling interval (sec): _____ Name: _____ Exit points: _____
Bin Length: (2^x): _____ Name: _____ Exit points: _____
Pulse Length: _____ Work File: _____
Buffer (bytes): _____
Gyro Offset: _____

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

CTD pressure reading on deck (db), before cast: -0.15 after cast: 0.5 @ PZO

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:

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Page 1 of 16

Month Aug				Year 2012			Ship Tully				Cruise ID 2012-13				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
15	SI	2137	BE	ROS		1	48 35.61	123 29.97	226		1-11		SR	✓	PAR is on!
		2153	BO				35.59	29.98		220					Channel 8 + 5 info →
		2210	EN				35.59	29.97							
16	JF1	0324	BE	USW			48 16.60	123 31.06	145	4.5					NORTH OF JF1 2 HPLC 2 CHL 1 SAL INVT
16	JF2	0522	BE	USW			48 17.87	123 59.15	186	4.5					2 HPLC 2 CHL 1 SAL INVT
16	JF3	0721	BE	USW			48 26.66	124 29.96		4.5					" " " "
16	JF4	0923	BE	USW			48 32.40	125 2.87		4.5					" " " "
16	P1	1223	BE	ROS		2	48 34.52	125 30.14	127				SR	✓	
		1226	BO				34.51	30.16		118					
		1231	EN				34.51	30.22							
16	P2	1454	BE	ROS	US	3	48° 36.02	125 59.99	115		14-21		SR	✓	Trans corfile has
		1458	BO				36.03	59.99		110	(JEB-C added)				been corrected.
		1508	EN				36.06	59.96							
16	P2	1541	BE	NET		4	48 35.99	125 59.98	116				SR		WINCH WIRE DUMPING OFF
		1551	BO				35.99	59.99		105					METER BLOCK DEPTH EST
		1557	EN				35.98	59.98							
16	P2	1640	BE	ROS		5	48 36.01	126 0.04	116		22-35		SR	✓	
		1643					35.99	0.01			(JEB-C added)				
		1658					35.97	0.01							

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USW = Sea Water Loop

MOR = Mooring
NET = Plankton Net Haul
DRF = Drifter

Bottle Firing Method:

US = Up / Stop
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Transmissometer to be cleaned before each cast, do not use Ammonia products

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Jim Bishop has two C-STAR Transmissometer like instruments on channel 0+5. He is only looking at the raw voltage, no XML file was provided or even an instrument description to put in the con file.

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Page 2 of 16

Month <u>August</u>				Year <u>2012</u>			Ship <u>Tully</u>				Cruise ID <u>2012-13</u>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned		Comments
							Latitude	Longitude								
16	P3	1842	BE	ROS	US	6	48 37.49	126 19.95	815	806	36-37	2	SR	✓		
		1856	BO				48 37.49	126 19.94								
		1914	EN				48 37.49	126 19.95								
	P3	1937	BE	TMR	UN	7	48 37.52	126 19.96	813							
		1952	BO							400	—	Ø				
	P4	2132	BE	ROS	US	8	48 38.98	126 39.98								DMS
		2138	BO				48 38.99	126 39.98		300	38-52	22	MG	✓		
		2200	EN				48 38.95	126 39.96								
	P4	2208	BE	TMR		9	48 38.97	126 39.96	1324							
		2238	BO				48 39.11	126 40.17	1321	1305	60-66	7		N/A		
		2305	EN				48 38.99	126 40.01	1321							
17	P4	0109	BE	ROS	US	10	48 38.98	126 39.96	1320					✓		PAR OFF DEEP CAST
		0130	BO				48 38.96	126 39.99		1310	67-88	22				
		0213	EN				48 38.97	126 39.99								
	P4	0324	BE	NET		11	48 38.97	126 39.98	1319							
		0334	BO				48 38.97	126 39.95		250						
		0340	EN				48 38.96	126 39.96								
	P4	0350	BE	NET		12	48 38.98	126 39.93	1316							
		0430	BO				48 38.98	126 39.93		1200						

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DAILY SCIENCE LOG

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Page 3 of 16

Month <u>AUG</u>				Year <u>2012</u>			Ship <u>TULLY</u>				Cruise ID				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
17	P4	0452	EN	NET		12	48 38.94	126 39.97	1321	1200		12	MG		
		0531	BE	ROS	US	13	48 38.98	126 39.97	1323		89-100	12		✓	UBC CAST
		0555	BO				48 38.99	126 40.06		1300					
			GN				48 38.99	126 39.99							
	P4	1300	BE	TMR		14	48 38.98	126 40.00	1319		101-112		Jc	N/A	
							48 38.94	126 39.94	1325						
		1354					48 38.94	126 40.00	1354						
17	P4	1524	BE	ROS	US	15	48 38.97	126 40.15			113-124	12	SR	✓	PAR ON
		1526	BO				38.97	126 40.15							Springer piston
		1538	EN				48 39.02	126 40.13							incorrectly. DO
17	P5	1752	BE	ROS		16	48 41.44	127 10.13			125-126	2	SR	✓	was full of water
		1823	BO				41.45	10.01							for about 10 hrs
		1855	EN				41.46	10.02							PAR didn't come
	P6	2138	BE	ROS	US	17	48 44.60	127 39.83	2130		127-129	3	MG	✓	off.
		2210	BO				48 44.55	127 40.11		2005					PAR OFF
		2241	EN				48 44.46	127 40.21							TSG Note →
17	P6	2250	BE	TMR		18	48 44.46	127 40.12	2546		N/A	0	Jc	N/A	Pis to clean water bottles
		2257	BO				48 44.47	127 40.08		62					
		2258	EN				48 44.49	127 40.06							

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Notes:

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✓
This page is for any notes or observations

TURNED OFF flow to the TSG @ ~ 1920 UTC on Aug 17th to clean filter + adjust the flow meter + pumping system. SR

DAILY SCIENCE LOG

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Page 4 of 16

Month <u>AUG</u>				Year <u>2012</u>			Ship <u>TULLY</u>				Cruise ID <u>2012-13</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
17	P7	0115	BE	ROS	US	19	48 46.59	128 09.95	2506		131-132	2	MG	✓	
		0146	BO				46.57	9.94		2005					
		0226	EN				46.56	9.93							
18	P8	0507	BE	ROS	US	20	48 48.98	128 40.05	2519		132-154	23	MG		
		0539	BO				48.99	39.92		2005					
		0640	EN				48.96	39.93							
18	P8	0705	BE	NET		21	48 48.97	128 39.91	2520				MG		
		0715	BO				48.96	39.92		250					
		0721	EN				48.94	39.95							
18	P8	0730	BE	NET		22	48 48.99	128 40.02	2518				MG		WIRE KINKED → RETIE WIRE
		0810	BO				48.91	40.05		1200					IN DAYLIGHT
		0840	EN				48.88	39.95							
18	P9	1038	BE	ROS	US	23	48 51.51	129 9.98					SR	✓	
		1123	BO				51.44	9.92	2342	2005	155-156	2			
		1155	EN				51.48	9.94							
18	P10	1401	BE	ROS	US	24	48 53.57	129 39.91	2643						
		1433	BO				48 53.47	129 39.79		2016	157-158	2	SR	✓	
		1507	EN				53.52	39.77							

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 Version: 16 April 2010

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 5 of 16

Month <u>August</u>				Year <u>2012</u>			Ship <u>Tully</u>			Cruise ID <u>2012-13</u>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
18	P11	1716	BE	ROS	US	25	48 55.99	130 9.93	2753		159-160	2	SR	✓	bottles 3+4 fired
		1750	BO				55.97	9.97		2005					for Nina's water
		1824	EN				48 56.029	130 9.866							requirements
18	P12	2141	BE	ROS	US	26	48 58.120	130 40.130	3229		161-181	21	N ² /MG	✓	TSG note →
		2147	BO				48 58.100	130 40.150		300					DMS
		2208	EN				48 58.020	130 40.19							
18	P12	2216	BE	Pump	UN	27	48 58.014	130 40.22	3229		182-185				wrong depth for
		2225	BO				48 58.122	130 40.19		35					the sampling
		2336	EN				48 58.077	130 40.08							
18	P12	2348	BE	TMR	UN	28	48 58.01	130 40.09	2998						
19		0025	BO				48 57.95	130 40.15		2087					
		0123	EN				48 57.95	130 40.18							
	P12	0211	BE	ROS	US	29	48 58.20	130 40.05	3231				MG	✓	
		0308	BO				48 58.21	130 40.08		3261					
		0427	EN				48 58.24	130 40.09							
	P12	0441	BE	NET		30	48 58.22	130 40.08	3225						
		0451	BO				48 58.22	130 40.09		250					
		0458	EN				48 58.2	130 40.0							

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Bishop caps, syringes, and deck chains not put on after P11

I emptied the TSG + Flooded it immediately at Scan 551 in file 2012-13-0003.

DAILY SCIENCE LOG

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Page 6 of 16

Month <i>Aug</i>				Year <i>2012</i>			Ship <i>TULLY</i>			Cruise ID <i>2012-13</i>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
19	P12	0510	BE	NET		30	48 58.23	130 40.08	3230						
		0544	BO				48 58.23	130 40.08		1200					
		0610	EN				48 58.23	130 40.06							
19	P12	0711	BE	ROS	US	32	48 58.11	130 39.81	3230		222-233	12	SR	✓	DEEP CAST
		0804	BO				58.18	40.00		3279					
		0908	EN				58.23	39.83							
19	P12	1517	BE	TMR	UN	33	48 58.18	130 39.99	3227		234-245	12			
		1546	BO				48 58.14	130 40.04		1851					
		1624	EN				48 58.11	130 40.00							
19	P12	1649	BE	ROS	US	34	48 58.14	130 40.07	3229		246-257	12	SR		Stopped @ 200 m
		1658	BO				58.16	40.03		200			PAR ON		For 7 min to get
		1710	EN				48 58.32	130 40.01					NIGHT CAST		depth figured out.
19	P13	2111	BE	ROS	US	35	49 2.60	131 40.16	3011				PAR OFF	✓	more info →
		2144	BO				49 2.63	131 40.18		2005					
		2217	EN				49 2.58	131 40.21							
20	P14	0252	BE	ROS	US	36	49 7.36	132 39.96	3310						
		0326	BO				49 7.31	132 39.95		2005					
		0405	EN				49 7.31	132 39.94							

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Notes:

I strapped a Wetlabs Wetstar fluorometer S/N W835-713P (the TSG Fluorometer) onto the rosette for event # 34 to try and get better TSG Fluorometer readings. PAR Also was put on for this cast and removed right after. SR

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 7 of 16

Month				Year			Ship			Cruise ID					
AUG				2012			TOLLY			2012-13					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
20	P15	0819	BE	ROS	US	37	49 11.93	133 39.97	3400		262-264	3	SR	✓	Syringes on wrong side DO sensor
		0851	BO				11.93	39.88		2005					glared full of water
			EN				11.98	40.02							
20	P16	1332	BE	ROS	US	38	49 17.00	134 40.02	3622		265-269	5	SR	✓	for 3 1/2 hrs
		1420	BO				49 17.18	134 40.05		2000					
		1508	EN				17.30	40.09							
20	P16	1604	BE	TMR	UN	39	49 16.95	134 39.72	3622						*TS6 note →
		1634	BO				49 17.07	134 40.01		2100					
		1724	EN				49 17.25	13 39.83							
20	P16	1751	BE	ROS	US	40	49 17.04	134 39.92	3622		282-293	12	SR	✓	4PAR ON.
		1759	BO				17.05	39.92		206					LIGHT CAST
		1809	EN				17.04	39.96							
20	P16	1841	BE	ROS	US	41	49 16.98	134 39.80	3623		294-317	24	MD	✓	Deep Cast 41 mib
		1943	BO				49 16.91	134 39.71		3660			MS		
		2109	EN				49 16.81	134 39.66							
20	P16	2216	BE	ROS	US	42	49 16.96	134 39.96	3624		318-335	18	MS	✓	PAR ON ☺ DMS
		2222	BO				16.95	39.96		300					
		2243	EN				16.93	39.99							

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The Nut for bot 2 was taken from bot 3 which was also @ 5 m. I neglected to take it before N² drained bot to for a carboy. SR

Stopped the TS 6 @ 1623 on Aug 20th UTC for cleaning. Trying to stop the Salinity from spiking.

File 41 is P16 deep cast down to 400 dbar
File 41b is the rest of the cast. CONFIG file changed.
PAR ON FOR DEEP CAST

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 8 of 16

Month				Year			Ship				Cruise ID				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
20	P16	2256	BE	NET		43	49 16.96	134 39.88	3624						
		2304	BO				49 16.95	134 39.89		250					
		2308	EN				16.93	39.87							
20	P16	2319	BE	NET		44	49 16.92	134 39.84	3624						
		2358	BO				16.90	39.93		1200					
21		0018	EN				16.90	39.93							
	P16	0110	BE	TUMP	UN	45	49 17.00	134 40.05	3623	35					
		0116	BO				49 17.02	134 40.05		150					
		0251	EN												
21	P16	0330	BE	TMR	UN	46	49 17.10	134 40.0	3620		340-351				46 A →
		0358	BO				49 16.99	134 40.06		1820					
		0437	EN				49 17.05	134 40.22							
21	P17	0847	BE	ROS	US	47	49 20.98	135 39.68	3450		352-353	2	SR		PAR OFF
		0919	BO				49 21.17	135 39.53		2005					
		0955	EN				49 21.17	135 39.53							
21	P18	1353	BE	ROS	US	48	49 26.08	136 39.84	3818		354-355	2	SR	✓	
		1422	BO				49 26.18	136 39.95		2005					
		1458	EN				26.24	39.95							

Cast Type:

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 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

Notes:

Time Code:

BE = Beginning Time of Cast
 BO = Bottom Time of Cast
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Transmissometer to be cleaned before each cast, do not use Ammonia products

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EVENT 46 A

Deploy Met Ocean Drifter SBD9602C

S/N D03VWT

300234011241370

0605 21 AUG 2012 UTC

49° 18.44 N 135° 00.01 W

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 9 of 16

Month <u>AUG</u>				Year <u>2012</u>			Ship <u>TULLY</u>				Cruise ID <u>2012-13</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
21	P19	1916	BE	ROS	US	49	49 29.96	137 38.83	3909		256-257	2	MG	✓	LOGGED TSG 2101 →
		1943	BO				29.96	38.82		2005					
		2018	EN				29.98	39.83							
21		2317	BE	ZODIAC		50	49 32.87	138 24.54	39						Altimeter is active
		2343	EN				33.00	29.74		0					
22	P20	0058	BE	TMR	UN	51	49 33.97	138 39.92	3948		358-369	12	JC		CAST 1
		0134	BO				49 34.01	138 39.92		2098					
		0213	EN				49 33.99	138 39.87							TSG Note →
22	P20	0301	BE	ROS	US	52	49 34.01	138 39.83	3947		370-393	24	MG	✓	DEEP CAST
		0411	BO				34.00	39.87		4025	PRESSURE				
		0547	EN				33.90	39.74							
22	P20	0622	BE	NET		53	49 33.89	138 39.79							
		0631	BO				49 33.91	138 39.76							
		0635	EN				49 33.92	138 39.75							
22	P20	0649	BE	NET		54	49 33.97	138 39.89	3946						
		0737	BO				49 34.05	138 39.94		1200					
		0803	EN				49 34.09	138 40.05							

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FILTER CLOGGED WITH PLANKTON & GREASE WILL TALK WITH ENGINEER ABOUT SOURCE
TURNED OFF FLOW TO CLEAN

using the Altimeter confile.

SHOT DOWN TSG LOOP PUMP - GREASE IN FILTERS CHANGE PUMPS? @ $\approx$ 1730 Local time^{or} 0030 UTC
Turned back on @ 0125 UTC Aug 21/12.

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 10 of 16

Month <i>Aug</i>				Year <i>2012</i>			Ship <i>TULLY</i>				Cruise ID <i>2012-13</i>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
22	P20	0634	BE	ROS	US	55	49 34.06	138 39.82	3947	58	394-399	6	SR	✓	
		0923	BO				34.08	39.66		3000					
			EN												
22	P20	1554	BE	PUMP		56	49 34.08	138 39.93	3946						
		1608	BO				49 34.06	138 39.94		30	400-403	4	SR		
		1746	EN				49 33.92	138 39.96							
22	P20	1753	BE	ROS	US	57	49 33.93	138 39.94	3946		404-417	14	SR	✓	PAR ON NIGHT CAST
		1757	BO				33.93	39.93		200					
		1809	EN				33.94	39.92							
22	P20	1830	BE	ROS	US	58	49 33.94	138 39.94	3946		430-446	17	SR	✓	DMS
		1836	BO				33.91	39.95		300					
		1857	EN				33.93	39.98							
22	P20	1922	BE	TMR	UN	59	49 33.94	138 40.02	3946		418-429	12		N/A	PAR OFF →
		1948	BO				49 33.97	138 40.02		1815					
		2025	EN				49 33.97	138 40.03							
23	P21	0056	BE	ROS		60	49 37.94	139 39.86	3940		447-448	2	MG	✓	
		0130	BO				37.92	39.91		2005					
		0207	EN				37.90	39.92							

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Notes:

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

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PAR off and altimeter and Jim Bishop's sensor plugged back in, but PAR con file may have been used up to and including event # 61. I swapped it over to the altimeter con file before heading to bed @ noon though. SR

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 11 of 16

Month <u>August</u>				Year <u>2012</u>			Ship <u>Tully</u>				Cruise ID <u>2012-13</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
23	P22	0744	BE	ROS	US	61	49 41.95	140 40.04	3920		449-452	4	SR	✓	
		0819	BO				42.07	39.82		2005					
			EN				42.17								
23	P23	1316	BE	ROS	US	62	49 45.93	141 39.83	4031		453-454		SR	✓X	I sprayed the trans. but forgot to wipe it. →
		1348	BO				45.88	39.78		2005					
		1419	EN				45.86	39.79							
23	P24	1853	BE	ROS	US	63	49 50.12	142 40.06	3967		455-466	12	SR	✓	PAR on, PAR con file used
		1859	BO				50.11	40.04		200					
		1910	EN				50.08	40.05							LIGHT CAST
23	P24	1934	BE	ROS	US	64	49 50.05	142 40.17	3967		467-468	2	MG	✓	PAR OFF
		2014	BO				50.12	40.30		2005					2 FOR SEALS
		2052	EN				50.03	40.12							
24	P25	0156	BE	ROS	US	65	50 0.05	143 36.13	4122		469-492	24		✓	CALIBRATION CAST
		0232	BO				49.5993	36.04		2005					
		0311	EN				59.80	35.91							
24	P26	1250	BE	ROS	US	66	50 0.22	144 52.29	4200		507-530	24	SR	✓	Deep Cast
		1406	BO				0.15	52.25		4190					
		1541	EN				0.09	52.57							

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Notes:

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Con file change from "SSO Line P Aug 2012 with PAR" to "SSO Line P Aug 2012 with 14 meter"

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 12 of 16

Month <u>AUG</u>				Year <u>2012</u>			Ship <u>Tully</u>			Cruise ID <u>2012-13</u>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
		1557		ZODIAC		67									
		1622													
24	P26	1707	BE	TMR	UN	68	50 00.00	144 59.96	4226		495-506				
		1742	BO				50 00.01	144 59.9		2105					
		1823	EN				50 00.01	145 00.04							PAR ON
24	P26	1855	BE	ROS	US	69	50 0.15	145 0.20	4226		544-556	12	SR	✓	LIGHT CAST
		1900	BO				0.14	0.19		200					
		1915	EN				0.15	0.20							
24	P26	1934	BE	ROS	US	70	50 0.15	145 0.15	4225		557-580	24	MG	✓	DMS + ONAR4
		1940	BO				0.16	0.17		306					OUT OF ORDER
		2002	EN				0.18	0.22							
24	PA-006	2109	BE	ROS	US	71	50 0.22	144 52.44	4202		581-582	2		✓	CAST 2 AT MOORING
		2111	BO				0.23	52.44		5					
		2113	EN				0.21	52.43							
24	PA-006	2147	BE	ROS	US	72	50 0.31	144 52.43	4202		583-596	14			CAST 1 AT MOORING
		2156	BO				0.30	52.46		500					
		2219	EN				0.29	52.47							

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 DRF = Drifter
 =

Bottle Firing Method:

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Notes:

Time Code:

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

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DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 13 of 16

Month				Year			Ship			Cruise ID					
Aug				2012			TULLY			2012-13					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
24	P26	03:30	BE	GO-FLO BOT		73	49° 60.00	144° 59.70	4225	4000		4			
25		00:43	BO				49° 60.00	144° 59.70	4225						
		00:43	EN				49° 59.99	144° 59.70	4225						
25	P26	03:29	BE	NET		74	49° 59.93	144° 59.83							
		03:42	BO				49° 59.93	144° 59.84	4227	250					
		03:46	EN				49° 59.93	144° 59.84	4227						
25	P26	03:54	BE	NET		75	49° 59.93	144° 59.84	4226						
		04:39	BO				49° 59.93	144° 59.84		1200					
		04:59	EN				49° 59.93	144° 59.84	4227						
25	P26	05:38	BE	ROS	US	76	49° 59.93	144° 59.84	4227		60-618	18	Mej	✓	ONAR3 CAST + SILICATE
		06:57	BO				59.93	59.84		4300db					
		08:22	EN				59.93	59.84							
25	P26	10:47	BE	ROS		77	49° 59.89	144° 59.95	4227		619-635	18	SR		ONAR-1 cast
		11:20	BO				59.89	59.95		2000					
		12:16	EN				59.90	59.93							
25	P26	14:53	BE	TMR	UN	78	50.00.00	145° 0.00	4226						
		15:20	BO				50.00.00	145° 0.00		1813					
		15:55	EN				50.00.02	144° 59.09							TS6 note →

Cast Type:

ROS = Sea Water Loop

Bottle Firing Method:

Time Code:

Cast Type:

BOT = Bottle cast, no CTD
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 ROS = Rosette plus CTD
 SET = Fish Set

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 NET = Plankton Net Haul
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Bottle Firing Method:

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Notes:

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The altimeter + Jim Bishop's sensor plugged in for this cast. The old

I stopped the TSG flow to clean the filter as the flow rate had dropped off, done at about scan 6819 in file 2012-13, 0012, hex.

DAILY SCIENCE LOG

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Page 14 of 16

Month				Year			Ship			Cruise ID					
AUG				2012			TOLLY			201213					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
25	P26	1611	BE	ROS	US	79	49 59.99	144 59.99	4226		640-647		SGZ	✓	
		1704	BO				50 0.00	59.98		3400					
		1815	EN				50 0.04	59.79							
25	P26	19:30	BE	PUMP		80	49 59.95	144 59.94	4030						
		21:30	EN				49 59.95	144 59.97		35					
25	P26	2201	DE	DRF		81	49° 57.95	144° 56.62	4212						Deploy APL float
25	P26	2356	BE	TMR		82	49 59.93	144 59.95	4225		648-659				
26		0016	BO				50 00.01	144 59.99		1417					
		0043	EN				50 00.02	144 59.99							
26	P26	0122	DE	DRF		83	50 00.1662	144 57.9236							Deploy Met Ocean →
26	P35	0406	BE	ROS	US	84	50 0.01	144 18.44	4127				MG	✓	
		0459	BO				50 0.02	144 18.39		3000					PROGRAM CRASH @ 3000
		0558	EN			85	49 59.89	144 18.81							
26	LOOP 1	1901	BE	USW			49 44.80	140 59.66	3943	5			MG		SAL CHL NUT NPAL
		1905	EN				49 44.30	140 56.76							" " " "
27	LOOP 2	0116	BE	USW			49 37.24	139 24.49							

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Notes:

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MET OCEAN # 300234011246370

DAILY SCIENCE LOG

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Page 15 of 16

Month <u>AUG</u>				Year <u>2012</u>			Ship <u>Tully</u>				Cruise ID <u>2012-13</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
27	Loop 3	1358	BE	USW			49 20.57	136 19.42	3200	5m			ER		
27	P16	2029	BE	TMR	UN	86	49 16.99	134 40.06	3623						
		2051	BO				49 17.03	134 40.02		1615					
		2120	EN				49 17.10	134 40.06			660-664				
28	Loop 4	0110	BE	USW			49 12.55	133 45.13	3067				MB		SAL CMC NOT FILE
		0115	EN				12.50	44.72		5					
28	Loop 5	1658	BE	USW			48 45.90	129 23.19	2810						Stopped @ a SAR
		1703	EN				45.88	23.18		5					
26	PH	0507	BE	ROS		87	48 38.99	126 40.28	1328				MB	✓	SECOND VISIT
		0531	BO				38.99	40.27		1318					CTD note →
		0612	EN				39.06	40.25							OUT OF ORDER
29	P4	0630	BE	PUMP		88	48 39.01	126 40.19	1322						
		0720	BO				48 39.00	126 40.18		30					
		0751	BE				48 38.81	126 40.25							
29	VPS	1019	BE	ROS	US	89	48 26.54	126 9.42	314				ER	✓	
		1025	BO				26.51	9.44		307					
		1030	EN				26.50	9.50							

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CTD 506 put in for 550, but I took all sensors off 550 and put them on 506.
Now running com file 506 Line P Aug 2012 back up fish.com

