

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-MERR-LTL Spring 2013		STATION NO. GAK 1						
CONSC CAST #		LATITUDE	LONGITUDE	TIME (GMT)	DRY BULB	WET BULB	PRESSURE					
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	
0	160	00	.43	N	1492	2.93	W	05	A P R 1 3 0	144	3.5	
SBE 9+					FLUOR S/N							
PRES S/N					SBE43-Oxy (prime)							
PRIM TEMP S/N					SBE43-Oxy (sec)							
SEC TEMP S/N					Transmissometer							
PRI COND S/N					PAR S/N							
SEC COND S/N					O2 Trip Sensor No.							
NIS	DEPTH	ROSETTE NOTES	HYDRO TEAM-PNEL	STROM	PHOTO	MICRO ZOOPS	ANA A-H	DEAN	COMMENTS	NIS		
NO.	DESIRED			SALT	NUT.BTU	O2-BTU.NO.	CHLOR-I	FORMALIN	GUT-PLASTIC	LUGOLS	FE	
1	131											
2	1											
3												
4												
5	50											
6												
7	40											
8	30											
9	20											
10	10											
11	0											
12												

SST= 45 SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERPL-TL Spring 2013		STATION NO. <i>Fe TEST</i>										
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		PRESSURE									
	DEG MIN	MIN	DEG MIN	DAY MO YR	HR MIN	(°C) (mb)	* SEA STATE (deg)	WIND DIRN. (kts)	WIND SPO. (mb)	CLOUD (amt)	WEATHER					
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(mb)	*	*	TYPE	BOTTOM DEPTH	STA. NAME/ID
00258	47.91	N	14230.23	W	05	APR	1	3	22	17	2.8	01	8	109	3000	
SBE 9+			FLUOR S/N													
PRESS SN			SBE43-Oxy (prime)													
PRI TEMP SN			SBE43-Oxy (sec)													
SEC TEMP SN			Transmissometer													
PRI COND SN			PAR S/N													
SEC COND SN			O2 Temp Sensor No.													
Hydro Team -PMEL				Strom	Phyto	Micro zoops	Ana A-1	Dean	Comments		Nis	No.				
NIS	DEPTH	Rosette Notes		SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE					
No.	DESIRED															
1	30			004			✓ L1					Molecular sample				
2	10			002			✓ L2					Mol Samp				
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
												MAX DEPTH =	m			
REMARKS																
This cast is to test the procedures for attaching the three vertical vanes.																
Feb 10, 2010 + 100m																

SST=

SSSal=

PROJECT & LEG										STATION NO.							
VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304										GOA-MERR-LTL Spring 2013					
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRE.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* * (deg)	(* * (kts))	(* * *)	(m)	
0 03 58 05.5 N			137 29.74 W		06 A P R 1 3			16 18	2.6	9.5		7220			1405	E M 20	
SBE 9+			FLUOR S/N													MAX. DEPTH = 137 m	
PRESS SN			SBE43-Dry (prime)														
PRI TEMP SN			SBE43-Dry (sec)														
SEC TEMP SN			Transmissometer														
PRI COND SN			PAR S/N														
SEC COND SN			O2 Temp Sensor No.														
NIS	DEPTH	Water Mass	Hydro Team-PWEL		Strom	Phyto		Micro zoopl.	Ara A-I	Dewari		Comments					
No.	DESIRED			SALT	Nut.BTU	O2-BUENO		Chloro-I	Formalin g	Gluet.-plastic	Lugols-	RE					
1	Bot			2	003											1	
2	100			004												2	
3	75			005												3	
4	50			006				L4								4	
5	40			007				L5								5	
6	30			008				L6								6	
7	20			009				L7								7	
8	10			010				L8	X							8	
9	10			011	293							prod				9	
10	0			011	293											10	
11																11	
12																12	

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERPL-TL Spring 2013		STATION NO. SEM 10											
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	BOTTOM	STA. NAME/ID			
	DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	*	DIRN.	SPD.	TYPE	WEATHER
0045810.06N			13713.53W		13	APR	1	3	13.7	13.7	96						
SBE 9+			FLUOR S/N														
PRESS SN			SBE43-Oxy (prime)														
PRI TEMP SN			SBE43-Oxy (sec)														
SEC TEMP SN			Transmissometer														
PRI COND SN			PAT S/N														
SEC COND SN			O2 Temp Sensor No.														
NIS	DEPTH	Rosette Notes:		Hydro Team-PWEL		Strom	Phyto	Micro zoops		Ana A-I	Dean	Comments		NIS			
No.	DESIRED			SALT	Nut.Btl	O2-BTL NO		Chloro-	Formalin	Glut.-plastic	Lugols-		PE				
1	130			3	12	292											1
2	100				13												2
3	75					14											3
4	50					15											4
5	40					16											5
6	30					17											6
7	20					18											7
8	10					19											8
9	0					20											9
10																	10
11																	11
12																	12

SST=

SSSal=

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VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA/ERP-LTL Spring 2013		STATION NO. SEM50												
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE											
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
									(deg)	(kts)	*	*	(deg)	*	*	*	(m)	SENS50
D	055.8	2.59	N	137.4	98	W	06	A P R 1 3	20	05	3.9	.	96	06	7	19	1295	SENS5
SBE 9+																		
PRESS SN																		
PRT TEMP SN																		
SEC TEMP SN																		
PRC COND SN																		
SEC COND SN																		
Nis	DEPTH	Rosette Notes	Hydro Team -PMEL			Strom	Phyto	Micro zoops	Ana-A-I	Dean	Comments		Nis					
No.	DESIRED		SALT	Nut.Btu	O2-Btu.No	Chloro-I	Formalain g	Glut.-plastic	Lugols-	FE			No.					
1	Bot		21										1					
2	100		22										2					
3	75		23										3					
4	50		24			54							4					
5	40		25			55							5					
6	30		26			56							6					
7	20												7					
8	20					57							8					
9	10					57	X						9					
10	0					58							10					
11	0					59							11					
12						59							12					

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013		STATION NO. SEMDO															
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID
											(^o C)	(^o C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
00	75° 15.00' N	136	56.	87	W	24	A	P	R	13	43	13	5.4	1	.	98	0	65	117	152	SEMDO
SBE 8+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
Nis	DEPTH	SALinity Notes		Hydro Team -PMEL		Strom	Phyto	Micr. Zoopl.	Ana A-I	Dean			Comments		Nis						
No.	DESIRED			SALT	Nut. BtI	O2-Btl No.	Chloro-I	Formalin g	Glut.-plastic	Lugols-					No.						
1	135			4	40										1						
2	125			4	41										2						
3	100			4	42										3						
4	75			4	43										4						
5	50			4	44		53								5						
6	40			4	45		54								6						
7	30			4	46		57								7						
8	20			4	47		58								8						
9	10			4	48		59								9						
10	0			4	49	289	510								10						
11															11						
12															12						

SST = 5.4

SSSal = 31.94

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013		STATION NO. SEM-2.5															
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID					
	DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	*	*	(deg)	(kts)	*	(m)					
0	0	58	16	25	2	34	59	.75	W	0	7	A P R 1	3	0	300	6.4	79	081	09	865	SEM-2.5
SBE 9+									FLUOR S/N												
PRESS SN									SBE43-Dry (prime)												
PRI TEMP SN									SBE43-Dry (sec)												
SEC TEMP SN									Transmissometer												
PRI COND SN									PAT S/N												
SEC COND SN									O2 Trip Sensor No.												
NIS	DEPTH	Rosette Notes:		Hydro Team-PTEL		Strom		Phyto		Micro zoopl		Ana A-I		Dean		Comments		NIS			
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No.		Chloro-	Formalining	Glucl.-plastic	Luggols-		FE					No.			
1	Bot			50		288												1			
2	50			51														2			
3	40			52														3			
4	30			53														4			
5	20			54														5			
6	10			55														6			
7	0			56														7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			

SST=

SSSal=

VESSEL
NOASHIP OSCAR DYSON

CRUISE ID TN263
DY1304

PROJECT & LEG

GOA-MERR-LTL Spring 2013

STATION NO.

X51

CONSC CAST #	LATITUDE			LONGITUDE			TIME (GMT)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
	DEG	MIN		DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	*	*	*	*	*	
0 0 45 8 0 6 . 57 N	1 3 2 3 2 . 4 6 W	07 A P R 1 3 0 3 / 4		6.2	.	01											3 1 0	X51
SBE 8+				FLUOR S/N														MAX. DEPTH =
PRESS S/N				SBE43-Oxy (prime)														m
PRIM TEMP S/N				SBE43-Oxy (sec)														
SEC TEMP S/N				Transmissometer														
PRICOND S/N				PAR S/N														
SEC COND S/N				O2 Temp Sensor No.														
Nis	DEPTH	GEOPH. NOTES		Hydro Team-PWEL			Strom	Phyto	Micro zoopl.	Ana-A-I	Dean							Nis
No.	DESIRED			SALT	Nut.BTU	O2-BUENO	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE							No.
1	101			57														1
2	250			58														2
3	200			59														3
4	150			60														4
5	120			61*														5
6	50			92														6
7	10			93														7
8	30			94														8
9	20			95	287													9
10	10			96	59													10
11	0			511	287													11
12																		12

SST= SSSal=

No Label Sheet found
for 61-90 - gap

~1341

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013		STATION NO. <i>X52</i>				
CONSC CAST #	LATITUDE	LONGITUDE	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE VISIBILITY			
DEG MIN	DEG MIN	DAY MO YR	HR MIN	(°C)	(°C)	(mb)	WIND DIRN. (deg)			
0 1 0 5 8 0 8 . 9 0 N	1 3 6 3 4 . 8 1 W	0 7 A P R 1 3	0 3 0 6	5 . 3	. 0 3	0 7 5 1 5	WIND SPO. (kts)			
SBE 9+			FLUOR S.N.	SBE43-Oxy (prime)						
PRESS SN				SBE43-Oxy (sec)						
PRI TEMP SN				Transmissometer						
SEC TEMP SN				PAR S.N.						
PRI COND SN				O2 Temp Sensor No.						
SEC COND SN										
NIS	DEPTH	ROSETTE NUMBER	Hydro Team-PME	Stron	Phyto	Micro zoops	Ana A-I	Dean	Comments	NIS
No.	DESIRED		SALT	Nut.Btl	O2-Btl.No	Chloro-a	Formalin g	Glut.-plastic	Lipids-	No.
1	<i>B7</i>									1
2	<i>250</i>									2
3	<i>200</i>									3
4	<i>150</i>									4
5	<i>100</i>									5
6	<i>50</i>									6
7	<i>40</i>									7
8	<i>30</i>									8
9	<i>20</i>									9
10	<i>10</i>									10
11	<i>5</i>									11
12										12

SST=

SSSal=

VESSEL
NOASHIP OSCAR DYSON

CRUISE ID TN263
DY1304

PROJECT & LEG
GOA-ERLP-LTL Spring 2013

STATION NO.
X53

CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE		WIND DIRN (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR				*	*	(deg)	(kts)	*	*		
Φ 1158	10.12	N	13637	.32	W	53	A P R 1 3	083	104.8	1005	72	19	132	11				
SBE 9+			FLUOR S/N															
PRESS S/N			SBE43-Oxy (prime)															
PRI TEMP S/N			SBE43-Oxy (sec)															
SEC TEMP S/N			Transmissometer															
PRI COND S/N			PUR S/N															
SEC COND S/N			02 Temp Sensor No.															
NIS DEPTH	bottom depth		Hydro Team-PH&L		Strom		Phyto		Micro zoopl		Ana A-I		Dean		Comments		NIS No.	
No. DESIRED			SALT	Nut,BuI	O2-BBLNO		Chloro-I	Formalin g	Gut-plastic	Lugols-		FE						
1	B0+				109												1	
2	100				114												2	
3	75				111												3	
4	50				112			S4									4	
5	40				113			S5									5	
6	30				114			S6									6	
7	20				115			S7									7	
8	10				116			S8									8	
9	0				117	285		S9									9	
10	-				118												10	
11	-				119												11	
12	-																12	

SST=

SSSal=

285

VESSEL
NOASHIP OSCAR DYSON

CRUISE ID TN20
DY1304

PROJECT & LEG

STATION NO
3 E 4

SST =

SSSal= 284

(NO NMEA)

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERR-LTL Spring 2013		STATION NO. X571	
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY MO YR	TIME (GMT) DRY BULB WET BULB PRESSURE (*C) (C) (mb)	* * (deg) (kts)	* * SEA STATE VISIBILITY WIND DIRN. WIND SPD.	* * CLOUD (amt) TYPE WEATHER BOTTOM DEPTH STA. NAME/ID
13	57 51 . 67 N	26 50 . 11 W	7 A P R 1 3	1648 6 . 1	10	133 / 8	173
SBE 3+				FLUOR S/N			
PRESS SN				SBE3-Oxy (prime)			
PRITEMP SN				SBE3-Oxy (sec)			
SEC TEMP SN				Transmissometer			
PRICOND SN				PAR SN			
SECOND SN				O2 Temp Sensor No.			
NIS No.	DEPTH Desired Noobs	Hydro Team-FNEL	Stron	Phyco	Microzoopl	Ana A-H	Dean
1	30		SALT	Nut.BI	O2-BI, No	Chloro-	Comments
2	150					Formalin g	No.
3	100					Glut.-plastic	
4	75					Lugols-	
5	50					RE	
6	40						
7	30						
8	20						
9	10						
10	0						
11							
12							

SST=

SSSal= 083

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013		STATION NO. X5T2									
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * (deg)	WIND DIRN. (kts)	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	WEATHER	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR MIN			*	*			
145752.71 N	13656.88 W	17 APR 13	1815	6.2	.	11	12615	430							
SBE 9+			FLUOR S/N												
PRESS SN			SBE43-Oxy (prime)												
PRIN TEMP SN			SBE43-Oxy (sec)												
SEC TEMP SN			Transmissometer												
PRICOND SN			PAR S/N												
SEC COND SN			02 Tmp Sensor No.												
NIS	DEPTH	ROSETTE NOTES	HYDRO TEAM - P-MEL		STROM	PHYTO	MICRO ZOOPL	ANIA-A-1	DEAN	COMMENTS	NIS No.				
No.	DESIRED		SALT	NUT.BTU	02-BTU.NO	Chlor-o-l	Formaline g	Glut.-plastic	Lugols-	FE					
1	130	434	7	287	282										
2	200		7	288											
3	150		7	289											
4	100		7	290											
5	75		7	291											
6	50		7	292		56									
7	40		7	293		57									
8	30		7	294		58									
9	20		7	295		59									
10	10		7	296		510	X								
11	0		7	297		511									
12	-		7	-		-									

SST=

SSSal=

ch
* will measure 5' below surface - may not be 135

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-MERL-TL Spring 2013		STATION NO. <i>XST 3</i>										
CONSC CAST #	LATITUDE MIN	LONGITUDE MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * VISIBILITY * DIRN. (deg)	WIND DIRN. (kts)	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	WEATHER	STA. NAME/ID
5 15 57	53.71	N 137.03.72 W	07 APR 13	2004	6.2	12	132	17	935	XST 3						

SBE 9+

FLUOR SN

SBE43-Oxy (prime)

SBE43-Oxy (sec)

Transmissometer

PAR SN

Sec Cond SN

SBE Temp Sensor No.

REMARKS

Sigmaria longicauda

MAX DEPTH =

m

NIS	DEPTH	POSITION NOTES	Hydro Team-PMEI	Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments	NIS
No.	DESIRED		SALT	Nut. Btl	O2-Btl No	Chloro-l	Formalin g	Glut.-plastic	Lugols-	No.
1	200	<i>B2</i>	299	281						1
2	300		300							2
3	300		301							3
4	150		302							4
5	100		303							5
6	50		304							6
7	40		305							7
8	30		306							8
9	20		307							9
10	10		308							10
11			309							11
12										12

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HERR-LTL Spring 2013		STATION NO. X574	
CONSC CAST #	LATITUDE	LONGITUDE	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY (deg)
DEG MIN	DEG MIN	DAY	MO	HR	MIN	DIRN.	WIND SPD. (kts)
41 16 57	57 55.25 N	137 12.13 W	APR 13 21 59	6.4	1.3	1015.5	MAX. DEPTH = m
SBE 8+			FLUOR S/N	SBE43-Oxy (prime)	SBE43-Oxy (sec)	Transmissometer	Subsurf Chl. Max 8-30 m
PRESS SN							
PRIM TEMP SN							
SEC TEMP SN							
PRI COND SN							
SEC COND SN							
NIS DEPTH	Bottom Water	Hydro Team-PAMEL	Stron-	Phyto-	Micro zoopl.	Ana A-I	Dean
No. No.			Salt	Nut. Btl	O2-Btl.No.	FE	Comments
1	Bot	X 8	3.18				
2	275		311				
3	200		312				
4	150		313				
5	100		314				
6	50		315				
7	40		316				
8	30		317				
9	20		318				
10	10		319				
11	0		320				
12			284				

SST=

SSSaline

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GCO-JERP-LTL Spring 2013		STATION NO. X575										
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE * (deg)	WIND DIRN.	WIND SPD.	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(m)	
0175756.64N	13720.	60W	07 APR 13	2330	6.7	.	14	143	16						168	X575
SBE 9+			FLUOR S/N													
PRESS SN			SBE43-Oxy (prime)													
PRI TEMP SN			SBE43-Oxy (sec)													
SEC TEMP SN			Transmissometer													
PRI COND SN			PAT S/N													
SEC COND SN			O2 Temp Sensor No.													
NIS	DEPTH	ROV/PILOT	Hydro Team-PMEL		Scrom	Phyto		Macro zooplankton		Ana A-I	Dean		Comments		NIS	
No.	DESIRED				SALT	Nat. Brt	O2-BTU No	Chloro-I	Formalin g	Gilt.-Plastic	Lugos-	PE			No.	
1	<u>125</u>				321	279									1	
2	<u>125</u>				322										2	
3	<u>160</u>				323										3	
4	<u>75</u>				324										4	
5	<u>50</u>				325										5	
6	<u>40</u>				326										6	
7	<u>30</u>				327										7	
8	<u>20</u>				328										8	
9	<u>10</u>				329										9	
10	<u>5</u>				330										10	
11															11	
12															12	

SST =

SSSal =

32.44

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013		STATION NO. 5EK20				
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)			
DEG	MIN	DEG	MIN	DAY	MO	HR	*			
					YR	MIN	*			
018	57	47.62 N	13711.41 W	08 APR 13	0154	6.0	13			
SBE 9+										
PRESS SN										
PRI TEMP SN										
SEC TEMP SN										
PRI COND SN										
SEC COND SN										
Nis	DEPTH	ROSETTE NOTES	Hydro Team-PH&EL	Strom	Phyto	Micro zoopl.	Ana A-1	Dean	Comments	Nis
No	DESIRED		SALT	Nut.Btl	O2-Btl.No	Chloro	Formalin g	Glut.-plastic	Lugols-	No.
1	50	180				X				1
2	150					X				2
3	180					X				3
4	120					X				4
5	180					X				5
6	150					X				6
7	140					X				7
8	130					X				8
9	120					X				9
10	110					X				10
11	100					X				11
12	90					X				12

SST=

SSSal=

140
90

VESSEL NOASHIP OSCAR DYSON		CRUISE ID 1N263 DY1304		PROJECT & LEG GOA-HERPA-TL Spring 2013		STATION NO. 5EK20										
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE (mb)	* SEA STATE DIRN.	WIND (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	*	(m)	
0 19 57	47.817 N	137 11.910 W	08 APR 13	03 23	55.9	.13	15816									
SBE 84																
PRESS SN																
PRI TEMP SN																
SEC TEMP SN																
PRI COND SN																
SEC COND SN																
Nis	DEPTH	Geopel. Values	Hydro Team-PMEI		Stron	Phyto	Micro zoopl		Ama A-I	Dean	Comments		Nis			
No.	DESIRED		SALT	NUT.BTU	O2-BTU, No	Chloro-I	Formalining	Glut.-plastic	Lugols-	FB				No.		
1	BOT				231 182									1		
2	180				232									2		
3	150				233									3		
4	160				234									4		
5	75				335									5		
6	50				336									6		
7	40				337									7		
8	30				338									8		
9	20				339									9		
10	10				340									10		
11	0				9									11		
12														12		

SST = ~6 SSSalt = ~32

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERBL-TL Spring 2013		STATION NO. SEK10									
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE VISIBILITY (deg)	WIND DIRN.	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(m)
0205752.45	N	13655.18	W	48	A P R	1	3	65	41	5.8	1.3	1059	12	95535410	
SBE 9+			FLUOR S/N												
PRESS SN			SBE3-Oxy (prime)												
PRITEMP SN			SBE3-Oxy (sec)												
SEC TEMP SN			Transmissometer												
PRICOND SN			pAR S/N												
SEC COND SN			O2 Temp Sensor No.												
NIS	DEPTH	ROSETTE NOTES	Hydro Team-PNEL		Strom	Phyto	Micro zoopl.	Ana A-I	Dean			Comments			NIS
No.	DESIRED		SALT	NUT.BTL	O2-BTL.No.	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE					No.
1	150		10	342	132										1
2	400				343										2
3	300				344										3
4	200				345										4
5	100				346										5
6	50				347										6
7	40				348										7
8	30				349										8
9	20				350										9
10	10				351										10
11	0				352										11
12					353										12

SST= 5.85 SSSat= 32.15

14975-5754.53 + 36 47.02

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IEPR-LTL Spring 2013		STATION NO. SEK 5			
CONIC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)		
DEG	MIN	DEG	MIN	DAY	MO	HR	SEA STATE VISIBILITY		
Φ 21 57 55.0	N	136 47.58	W	08 APR 13	0855	.	DIRN.		
SBE 9+		FLUOR S/N					WIND		
PRESS SN		SBE43-Dry (prime)					WIND		
PH TEMP SN							SPD		
SEC TEMP SN		SB43-Oxy (sec)					CLOUD (amt)		
PRICOND SN		Transmissometer					TYPE		
SEC COND SN		PAR S/N					WEATHER		
S2 Temp Sensor No.							BOTTOM		
NIS DEPTH	Desired NIS	Hydro Team-FNEL	Stron	Phyto	Micro zoopl	Ana A-I	Dean	Comments	NIS No.
No.	DESIRED	SALT	Nut.BTU	O2-BLU No	Chloro-I	Formalin	Glut.-plastic	Lugols-	FB
1	-	35.1	35.1	35.1					
2	-	35.1	35.1	35.1					1
3	-	35.1	35.1	35.1					2
4	-	35.1	35.1	35.1					3
5	-	35.1	35.1	35.1					4
6	-	35.1	35.1	35.1					5
7	-	35.1	35.1	35.1					6
8	-	35.1	35.1	35.1					7
9	-	35.1	35.1	35.1					8
10	-	35.1	35.1	35.1					9
11	-	35.1	35.1	35.1					10
12	-	35.1	35.1	35.1					11
									12

SST=

SSSal=

No numbers this cast

APR-14 111475

57 54.53 136 47.02

04/08 09:54

CRUISE ID TN263 NOASHIP OSCAR DYSON										PROJECT & LEG GOA-JERP-LTL Spring 2013		STATION NO. SEK5									
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE VISIBILITY		WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID					
DEG	MIN		DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* (deg)	* (kts)	* TYPE	(m)					
5 22 57	54.97	N	136 47.52	W	08 APR 13	09	12	5	.7	1.2	1.2	1013	13	21	74	154	SEK5				
SBE 9+			FLUOR S/N																		
PRESS SN			SBE43-Oxy (prime)																		
PRI TEMP SN			SBE43-Oxy (sec)																		
SEC TEMP SN			Transmissometer																		
PRI COND SN			PAR S/N																		
SEC COND SN			O2 Temp Sensor No.																		
Nis	DEPTH	ROSETTE NOTES	Hydro Team-PTEL		Strom	Phyto	Micro zoopl	Ana A-I	Dean	Comments											
No.	DESIRED				SALT	Nut.Btl	O2-Btl.No.	Chloro-I	Formalin g	Gulf.-plastic	Lugols-	FE									
1	b				351	351															1
2	100				355	352															2
3	75				356	353															3
4	50				357	354															4
5	40				358	355															5
6	30				359	356															6
7	20				360	357															7
8	10				361	358	X														8
9	D				362	369	1416														9
10																					10
11																					11
12																					12

SST=

SSSal=

These numbers are wrong per labels,

146

Event log in Ctd 21

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HERR-LTL Spring 2013		STATION NO. 36K0															
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amb	WEATHER	BOTTOM	STA. NAME/ID
		DEG	MIN	DEG	MIN						(C)	(C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
	23 57 57.30 N	13	b39	13	45	8	A P R	13	11	17	5.2	1.2	132	11	1004						
SBE 9+				FLUOR S/N																	
PRES S/N				SBE43-Dry (prime)																	
PRT TEMP S/N				SBE43-Dry (sec)																	
SEC TEMP S/N				Transmissometer																	
PRT COND S/N				PAR S/N																	
SEC COND S/N				O2 Temp Sensor No.																	
NIS DEPTH	Desired Notes	Hydro Team -PHEL		Strom	Phyto	Macro zoopl		Ana A-I		Dean	Comments		NIS								
No. DESIRED		SALT	NAT.BTU	O2-BTU-No	Chloro-I	Formalin g	Glut. plastic	Lugols-	Fog				No.								
1	b	11	363	252									1								
2	75		364										2								
3	50		365			S3			X				3								
4	40		366			S4			X				4								
5	30		367			S5			X				5								
6	20		368			S6			X				6								
7	10		369			S7	X	X					7								
8	0		370			S8							8								
9													9								
10													10								
11													11								
12													12								

SST=

SSSal=

253

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013										STATION NO. 5E10				
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID		
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
25	57	39	61	N	13	621	74	W	10	A P R 1 3	1650	1.0	.	13	20	907	84	
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
NIS	DEPTH	Desired No.	Hydro Team-PME															
No.	DESIRED			SALT	Nut. Btu	O2-Btu No.	Chloro-I	Formalini g	Glut.-plastic	Lugols-	FE							
1	77			321	279	X												
2	50			322		X											1	
3	40			383		X											2	
4	30			384		X											3	
5	20			385		X											4	
6	20																5	
7	10			386		X											6	
8	10																7	
9	0			387		X											8	
10																	9	
11																	10	
12																	11	
																	12	

SST=

SSSA=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IEPR-LTL Spring 2013		STATION NO. SE 620												
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)
0 2 6 5 7 1 2 . 4 4 N	1 3 6 3 5 . 5 9 W	1 1 A P R 1 3	0 2 7 2 2	1 1 . 3 .	1 9	2 3 7 1 4	1 6 6											
SBE 9+			FLUOR S/N															
PRESS SN			SBE43-Oxy (prime)															
PRI TEMP SN			SBE43-Oxy (sec)															
SEC TEMP SN			Transmissometer															
PRI COND SN			PAR S/N															
SEC COND SN			O2 Temp Sensor No.															
Nis	DEPTH	Rosette Notes	Hydro Team-PME		Strom	Phyto	Micro zoopl	Ara A-1	Dean	Comments								
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No.	Chloro-l	Formalining	Gilt.-plastic	Lugols-	FE							
1	- - -																1	
2	- - -																2	
3	- - -																3	
4	- - -																4	
5	- - -																5	
6	- - -																6	
7	- - -																7	
8	- - -																8	
9	- - -																9	
10	- - -																10	
11	- - -																11	
12	- - -																12	

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013		STATION NO. SEG-24												
CONSC CAST #	DEG MIN	LATITUDE	DEG MIN	LONGITUDE	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE (deg)	WIND DIRN.	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
8275712.01 N	13636.05 W	11 APR 13	0906	0.0	.	20	30615											
SBE 9+								FLUOR S/N										
PRESS S/N								SBE43-Oxy (prime)										
PRITTEMP S/N								SBE43-Oxy (sec)										
SEC TEMP S/N								Transmissometer										
PRI COND S/N								PAR S/N										
SEC COND S/N								O2 Temp Sensor No.										
NIS DEPTH	Cast Number	Hydro Team-PME	Strom	Fyto	Micro zoopl	Ana A-I	Dean	Comments	NIS No.									
No.	Desired	SALT	Nut. Btl	O2-Btl.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FIE									
1	12	322	12														1	
2	300	322	390														2	
3	200	322	391														3	
4	100	322	392														4	
5	75	322	393														5	
6	50	322	394														6	
7	40	322	395														7	
8	30	322	396														8	
9	20	322	397														9	
10	10	322	398														10	
11	D	322	399														11	
12		322	380														12	

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERPL-TL Spring 2013		STATION NO. 5E610														
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	BOTTOM	WEATHER	STA. NAME/ID					
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
285716.94 N	13620.42 W	11 APR 13	1120	0.7	21	2691	550													
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Nis	DEPTH	Rosette Notes:		Hydro Team-PMEL		Strom	Phyto	Micro zoops		Ana A-I	Dean	Comments		Nis						
No	DESIRED			SALT	Nut.Btl	O2-Btl No	Chloro-	Formalin	Glut.-plastic	Lugols-	FE				No					
1	-			25											1					
2	-			25											2					
3	-			25											3					
4	-			25											4					
5	-			25											5					
6	-			25											6					
7	-			25											7					
8	-			25											8					
9	-			25											9					
10	-			25											10					
11	-			25											11					
12	-			25											12					

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HERR-LTL Spring 2013		STATION NO. SC-610															
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID	
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
02	95°41'6.96N	136°20'9.2W	11APR13	1203	1.7	.	21	25512	509												
SBE 9+				FLUOR S/N																	
PRESS SN				SBE43 Oxy (prime)																	
PRI TEMP SN				SBE43 Oxy (sec)																	
SEC TEMP SN				Transmitter																	
PRI COND SN				PAT S/N																	
SEC COND SN				02 Temp Sensor No.																	
NIS	DEPTH	Desired Notes	Hydro Team-pH&EL	Strom	Physio					Micro zoopl.											
No.	DESIRED			SALT	NUT. B/L	O2-Bu. No.	Chloro-I	Formalin g	Gut-plastic	Lugols-	Fb										
1	300			401	281															1	
2	300			402																2	
3	210			403																3	
4	100			404																4	
5	75			405																5	
6	70			406																6	
7	40			407																7	
8	30			408																8	
9	20			409																9	
10	10			510																10	
11	6			511																11	
12																				12	

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERPL-TL Spring 2013		STATION NO. 3E650													
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	TYPE	BOTTOM DEPTH	STA. NAME/ID
305719.52 N	13612.43 W	11	A P R 1 3	1426	2.0				(C)	(C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
SBE 9+	FLUOR SN			SBE43 Oxy (prime)															
PRESS SN	SBE43-Oxy (sec)			Transmissometer															
PRI TEMP SN	PAR SN			O2 Temp Sensor No.															
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	Rosetta Notes	Hydro Team-PWEL			Strom	Phyto	Micro zoops		Ana A-1	Dean	Comments		NIS No.						
No.	DESIRED	SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formalin	Glut.-plastic	Lugols-	FE										
1																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12
										REMARKS									
										F2 Cast									
										No Samples									
										MAX DEPTH = 158 m									

SST=

SSSal=

62

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013		STATION NO. 3665														
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE DIRNL. TYPE	* VISIBILITY (deg)	WIND DIRNL. SPD. CLOUD (amt)	WIND DIRNL. SPD. WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
3	15 17 19.00	N	13 6 11.	92	W	1	A	P	R	1	3	15.8	1.8	1012	22	243	12	176		
SBE 9+				FLUR/S/N															MAX DEPTH = 160 m	
PRESS SN				SBE43-Oxy (prime)																
PRI TEMP SN				SBE43-Oxy (sec)																
SEC TEMP SN				Transmissometer																
PRI ODO SN				PAR SN																
SEC ODO SN				O2 Trip Sensor No.																
NIS No.	DEPTH	Water Temp		Hydro Team -PMEL		Strata		Phyto		Macro Zoopl		Ana A-I		Dean		Comments		NIS No.		
1	130			13	412	412		Formalin g	Glut.-plastic	Lugols-		FE						1		
2	130			413	413	413												2		
3	100			414	414	414												3		
4	75			415	415	415												4		
5	50			416	416	416												5		
6	40			417	417	417												6		
7	30			418	418	418												7		
8	20			419	419	419												8		
9	10			420	59	59	X											9		
10	0			421	722	722												10		
11																		11		
12																		12		

SST=

SSSal=

280

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-EREP-LTL Spring 2013		STATION NO. SEG D												
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
3257	22.01 N	136	41	4.45	W	11	A P R	1 3	1732	1.2	22	17016	162					
SSE 94+				FLUOR S/N														
PRESS SN				SBE43-Oxy (prime)														
PRI TEMP SN				SBE43-Oxy (sec)														
SEC TEMP SN				Transmissometer														
PRI COND SN				PAR S/N														
SEC COND SN				O2 Temp Sensor No.														
Nis	DEPTH	Rosette Notes		Hydro Team-PME		Strom	Phyto	Micro zoops		Ana A-I	Dean	Comments		Nis				
No.	DESIRED	SALT	Nut.Btl	O2-Btl No.	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE				No.					
1	b	422	423	(283)									1					
2	35				X								2					
3	50				X								3					
4	40				X								4					
5	30				X								5					
6	20				X								6					
7	20				X								7					
8	10				X								8					
9	10				X								9					
10	0				X								10					
11													11					
12													12					

SS1=

SS5a=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERI-P-LTL Spring 2013		STATION NO. SEC OA															
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	33 57 23.10 N	18 60 D	.15 W	11 A P R 1 3	170 D	1.8	.	22	20	110										54	
SBE 44				FLUOR S/N																	
PRESS SN				SBE43-Oxy (prime)																	
PRIMTEMP SN				SBE43-Diss (sec)																	
SECTEMP SN				Transmissometer																	
PRI CORD SN				PAR S/N																	
SEC CORD SN				O2 Temp Sensor No.																	
NIS	DEPTH	CO2/Temp Water		Hydro Team: PMEL		Stratm:		Phyto:		Micro zoopl:		Ara A-I		Dewar:		Comments					NIS
No.	DESIRED			SALT	Nut.Btl	O2-BTL NO.		Chloro-a	Formalining	GluC,-plastic	Lugols-	FIE									No.
1	50			430																	1
2	40			431																	2
3	30			432																	3
4	20			433																	4
5	10			434																	5
6	0			435		284															6
7																					7
8																					8
9																					9
10																					10
11																					11
12																					12

SST=

SSSA=

284

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERI-LTL Spring 2013		STATION NO. SED0										
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* * (deg)	(kts)	*	(m)
83	45	6.55	38	N	13	53	8	13	A P R 1 3	30	6.9	1006	18	99	57D0	
SBE 9+										FLUOR S/N						
PRESS SN										SBE43-Oxy (prime)						
PRI TEMP SN										SBE43-Oxy (sec)						
SEC TEMP SN										Transmissometer						
PRI COND SN										PAR/S/N						
SEC COND SN										O2 Temp Sensor No.						
Nis	DEPTH	Rosette Notes:		Hydro Team-PMEI		Strom	Phyto	Micro zoops	Ana A-1	Dean	Comments		Nis			
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-a	Formalin g	Gut.-plastic	Lugols-	FE		No.			
1	87			436	279								1			
2	75			437									2			
3	50			438			33						3			
4	45			439			34						4			
5	30			440			35						5			
6	20			441			36						6			
7	16			442			37						7			
8	8			443			38						8			
9													9			
10													10			
11													11			
12													12			

SST=

SSSal=

VESSEL NO/SHIP/OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013		STATION NO. SLP 50												
CONSC CAST #	LATITUDE	DEG MIN	LONGITUDE	DEG MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID
63 55 6.53 .09 N	135 46.14 W	13 A P R 1 3 0 5 0 4	6.4	.	07	272	13	130	56.5									
SBE 9+			FLUOR S/N															
PRESS S/N			SBE43-Oxy (prime)															
PRI TEMP S/N			SBE43-Oxy (sec)															
SEC TEMP S/N			Transmissometer															
PRI COND S/N			PAR S/N															
SEC COND S/N			O2 Reg Sensor No.															
NIS DEPTH	Desired Nores	Hydro Team-FNEL	Strata	Phyto	Macro zooplankton	Ano A-H	Dean											
No. DESIRED			SALT	Nut.BTU	O2-BRINO	Chloro-I	Formalin g	Glut.-plastic	Lugols-									
1	25		444	286														
2	105		445														1	
3	75		446														2	
4	50		447		34												3	
5	40		448		55												4	
6	30		449		52												5	
7	20		450		57												6	
8	15		451		58	X											7	
9	0		452		59												8	
10																	9	
11																	10	
12																	11	
																	12	

SST= 6.27 SSS= 32.03

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERPL-TL Spring 2013		STATION NO. SED 14													
CONSC CAST #		DEG LATITUDE	MIN	DEG LONGITUDE	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE * (deg)	WIND DIRN. (kts)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
036	56	50	.67	N	135	53	.48	W	13 APR 13	0651	57.5	.	09	32	47	7	174	550/C	
SSE 9+					FLUOR S/N													MAX. DEPTH =	
PRESS SN					SBE43-Oxy (prime)														
PRI TEMP SN					SBE43-Oxy (sec)														
SEC TEMP SN					Transmissometer														
PRI COND SN					PAR S/N														
SEC COND SN					O2 Tmp Sensor No.														
Nis	DEPTH	Rosette Notes...		Hydro Team-PME		Strom	Phyto	Micro zoops		Ama A-1	Dean	Comments		Nis					
No	DESIRED			SALT	Nut. Blt	O2-Btl No	Chloro-l	Formalin g	Glut.-plastic	Lugols-	F/E			No					
1	601					453	287								1				
2	150					454									2				
3	102					455									3				
4	75					456									4				
5	50					457	S5								5				
6	40					458									6				
7	30					459	57								7				
8	20					460	58								8				
9	10						59								9				
10	5					15	462		X 42						10				
11															11				
12															12				

SST= 6.1 SSSal= 32.00C

Do O₂ at ~100m

VESSEL NOASHIP OSCAR DYSON	CRUISE ID DY1304	PROJECT & LEG GOA-ERBL-LTL Spring 2013	STATION NO. 5ED20
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CONSC CAST #	DEPTH DEG	LATITUDE MIN	DEPTH DEG	LONGITUDE MIN	DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE (deg)	WIND DIRN.	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
D 37 56 41 5.18 N	136 8.95 W	13 A P R 1 3 0 9 2 0	15.4	11	33	12	15.10	SED20										
SBE 9+			FLUOR S/N															
PRESS SN			SBE43-OXY (prime)															
PRI TEMP SN			SBE43-OXY (sec)															
SEC TEMP SN			Transmissometer															
PRI COND SN			PAR S/N															
SEC COND SN			O2 Temp Sensor No.															

REMARKS

DO DO A CIAL 1

MAX. DEPTH = 1501 m

NIS DEPTH	Hydro Team-PMEI	Stron	Phyto-	Micro Zoot-	Ana A-1	Dean	Comments	NIS No.	
No.	DESIR ED	SALT	Nut. Btl	O2-Btl No	Chloro-I	Formalini g	Glut.-plastic	Ligols-	FE
1	Bot	16	164	288					1
2	100		465	289					2
3	250		466	890					3
4	500		467	891					4
5	100		468						5
6	500		469						6
7	412		470						7
8	30		471						8
9	20		472						9
10	10		473			X			10
11	0		474						11
12									12

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERPL-TTL Spring 2013		STATION NO. 5EE7,5											
CONSC CAST #	LATITUDE	DEG MIN	LONGITUDE	DEG MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
0385700.65 ^N	13558.70 ^W	13	APR 13	1652	5	.3	14	36412									
SBE 9+			FLUOR SN														MAX. DEPTH = 85 m
PRESS SN			SBE43-Oxy (prime)														
PRI TEMP SN			SBE43-Oxy (sec)														
SEC TEMP SN			Transmissometer														
PRI COND SN			PAT S/N														
SEC COND SN			O2 Temp Sensor No.														
NIS No.	DEPTH DESIRED	Rosette Notes	Hydro Team-PMEL			Strom	Phyto	Micro zoops	Ana A-1	Dean	Comments		NIS No.				
1	Bat		SALT	Nut.Btl	O2-Btl.No	Chloro	Formalin	Glut.-plastic	Lugols-	FE							
2	75		475	476													1
3	50		477			X											2
4	10		478			X											3
5	20		479			X											4
6	20		480														5
7	20		480														
8	10																
9	10					X											
10	0																
11	0																
12																	

but used water

SST= SSSal=

10 cm 13 m Surface

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013				STATION NO. SEA 20													
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY (deg)	WIND DIRN. (kts)	WIND SPD. (kt)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID					
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	*	*	*	*	*	*						
0	37	56	18	.60	N	135	42	.11	W	14	A	P	R	1	3	b130	4.0	19	33310	9845	KA20
SBE 9+																	MAX. DEPTH =	m			
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
NIS	DEPTH	ROD NO.	Hydro Team-PMEI		Strom	Phyto.	Macro zoopl.	Ana A-I	Dean	Comments		NIS									
No.	DESIRED		SALT	Nut. Blt	02-Btl No.	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE			No.								
1	---	---	---	---	---	---	---	---	---	---	---	---	1								
2	---	---	---	---	---	---	---	---	---	---	---	---	2								
3	---	---	---	---	---	---	---	---	---	---	---	---	3								
4	---	---	---	---	---	---	---	---	---	---	---	---	4								
5	---	---	---	---	---	---	---	---	---	---	---	---	5								
6	---	---	---	---	---	---	---	---	---	---	---	---	6								
7	---	---	---	---	---	---	---	---	---	---	---	---	7								
8	---	---	---	---	---	---	---	---	---	---	---	---	8								
9	---	---	---	---	---	---	---	---	---	---	---	---	9								
10	---	---	---	---	---	---	---	---	---	---	---	---	10								
11	---	---	---	---	---	---	---	---	---	---	---	---	11								
12	---	---	---	---	---	---	---	---	---	---	---	---	12								

SST=

SSSal=

482
532
50

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HERR-LTL Spring 2013		STATION NO. 5 EA 10 47														
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt deg)	* (kts)	* (*)	BOTTOM DEPTH	STA. NAME/ID
04	15° 6' 23.163 N	135° 26.90 W	14 APR 13	1456	4.3	1456	4.3	20	320	15	17456410									
SBE 9+				FLUOR S/N																
PRESS SN				SBE43-Oxy (prime)																
PRI TEMP SN				SBE43-Oxy (sec)																
SEC TEMP SN				Transmissometer																
PRI COND SN				PAR S/N																
SEC COND SN				O2 Temp Sensor No.																
NIS	DEPTH	DESIRED NO.	DESIRED NO.	Hydro Team-PNEL		Strom	Phyto	Micro scope	Ana-A-I	Dean	Comments	NIS No.								
				SALT	Nut. Blt	O2-BU.NO	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE									
1	Boat					495														
2	150					496														
3	100					497														
4	75					498														
5	50					499														
6	40					500														
7	30					501														
8	20					502														
9	10					503														
10	0					504														
11																				
12																				

SST=

SSSal=

VESSEL
NOASHIP OSCAR DYSON

CRUISE ID TN263
DY1304

PROJECT & LEG
GOA-JERPL-TL Spring 2013

STATION NO.

42
BB

CONSC CAST #	LATITUDE		LONGITUDE		DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * (deg)	VISIBILITY * (kts)	WIND DIRN. SPD.	WIND CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
	DEG	MIN	DEG	MIN														
42 56 26.46 N	135 19.95 W	14 APR 13	16 40 57.3	21	31 20 3	1622	56 A5											
SBE 9+			FLUOR SN															
PRESS SN			SBE43-Oxy (prime)															
PRI TEMP SN			SBE43-Oxy (sec)															
SEC TEMP SN			Transmissometer															
PRI COND SN			PAT SN															
SEC COND SN			O2 Temp Sensor No.															
Nis	DEPTH	ROSENBURG Notes	Hydro Team-PWEL	Strom	Phyto	Micro zooops	Ana A-1	Dean	Comments									Nis
No.	DESIRED		SALT	Nut. Btu	O2-Btu/No	Chloro-l	Formalin g	Glut.-plastic	Lugols-	FE								No.
1																		1
2																		2
3																		3
4																		4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013		STATION NO.									
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE VISIBILITY (deg)	WIND DIRN. (kts)	WIND SPD. (deg)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	*	*	*	SEAS
43 56.26 N	135 19.93 W		4 A P R 1 3		1740	4.9	.	21		35906					
SBE 9+															MAX. DEPTH = 118 m
PRESS SN															
PRITTEMP SN															
SECT TEMP SN															
PRI COND SN															
SEC COND SN															
NIS	DEPTH	HYDRO TEAM	Hydro Team-PMEI		Strom	Phyto	Microzoopl	Ana A-I	Dean						
No.	DESIRED				SALT	Nut. Btu	O2-Btu.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE			
1	10				18	505	132	X							No.
2	75					506									1
3	50					507		X							2
4	40					508		X							3
5	30					509		X							4
6	20					510		Y							5
7	10					511		X							6
8	10							X							7
9	10							+							8
10	0					512		X							9
11	0														10
12															11
															12

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013		STATION NO. 3EA5																				
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB (°C)		WET BULB (°C)		PRESSURE (mb)		SEA STATE (deg)		WIND DIRN. SPD. (kts)		WIND DIRN. TYPE WEATHER		CLOUD (amt) BOTTOM DEPTH (m)		STA. NAME/ID					
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	*	*	*	*	*	*	*	*	*	*	*	*					
4	4	56	26	42	N	13	51	9	.8	6w	14	A	P	R	1	3	18	23	4	.7	.	22	3540	7	12	2
SBE 9+																										
PRESS SN																										
PRI TEMP SN																										
SEC TEMP SN																										
PRICOND SN																										
SEC COND SN																										
O2 Temp Sensor No.																										
Nis	DEPTH	Rosette Number		Hydro Team-PME		Strom		Phyto		Micro zoops		Ana A-I		Dean		Comments		Nis								
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formaline g	Glut.-plastic	Lugols-	FE								No.							
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1								
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2								
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3								
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4								
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5								
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6								
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7								
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8								
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9								
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10								
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11								
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12								

SST=

SSSal=

CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	SEA STATE		WIND		WIND		CLOUD (amt)	TYPE		WEATHER		STATION NO.		
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	DEPTH	STA. NAME/ID						
15	56	29.02	N	135	12.46	W	14	APR 13	25.7	22	1010.6	*	*	(deg)	(kts)	*	*	(m)	142	SEA-0					
SSE 9+				FLUOR SN				SBE43-Oxy (prime)																	
PRESS SN				SBE43-Oxy (sec)																					
PRI TEMP SN				Transmissometer																					
SEC TEMP SN				PAR SN																					
PRI COND SN				02 Temp Sensor No.																					
SEC COND SN																									
NIS		DEPTH		Hydro Team-PMEI		Strom		Phyto		Macro Zoopl		Ana A-I		Dean		Comments		NIS		STATION NO.					
No.	DESIRRED			SALT	NuL.BuL	O2-BuL.NO		Chloro-1	Formalin g	Gilt.-Plastic	Lugols-		FE						No.						
1	B65			513	182														1						
2	100			514															2						
3	75			515															3						
4	50			516															4						
5	40			517															5						
6	30			518															6						
7	20			519															7						
8	10			520															8						
9	D			521															9						
10				522															10						
11				523															11						
12				524															12						

SST-
6.11
SSSA-
31.95

VESSEL NOASHIP OSCAR DYSON		CRUISE ID 1N263 DY1304		PROJECT & LEG GOA/ERI-LTL Spring 2013		STATION NO. C ST 1											
CONSC CAST #	LATITUDE	DEG MIN	LONGITUDE	DEG MIN	DAY MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	* SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	WEATHER	STA. NAME/ID
D 46 56	10.6	1 N	13 41.9	34 W	15	A P R 1	0626	.	.	.	*	*	*	*	139	139 C ST 1	
SBE 9+			FLOOR SN														
PRESS SN			SBE43-OXY (prime)														
PRI TEMP SN			SBE43-OXY (sec)														
SEC TEMP SN			Transmissometer														
PRICOND SN			PAR SN														
SEC COND SN			O2 Temp Sensor No.														
Nis	DEPTH	Repete Nores	Hydro Team-RPMEL		Strom	Phyto	Macro zoops	Aha A-I	Dean		Comments						
No.	DESIRED		SALT	Nut.Btl	O2-Btl.No	Chloro-a	Formalin g/Glut.-plastic	Lugols-	FE								
1	85		522														1
2	100		523														2
3	75		524														3
4	50		525														4
5	40		526														5
6	30		527														6
7	20		528														7
8	10		529														8
9	0		530	262													9
10																	10
11																	11
12																	12

SST = 4,35

SSSal= 32.04

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERRP-LTL Spring 2013		STATION NO. C ST 2														
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID	
									HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
0 47 56	10.65 N	13	42.3	.66	w 15	A P R 1	3	0	R 11	40.0	C 5.2		
SBE 9+																				
PRESS SN																				
PRITTEMP SN																				
SEC TEMP SN																				
PRICOND SN																				
SEC COND SN																				
NIS	DEPTH	SALINE NOTES		Hydro Team-FMEL		Stron	Phyto	Microzoopl	Ana-H	Dean	Comments		NIS							
No.	DESIRED			SALT	Nut.Btl	02-BU.NO	Chloro-I	Formating	Glut.-plastic	Lugols-			No.							
1	301			531	255								1							
2	350			532									2							
3	250			533									3							
4	150			534									4							
5	100			535									5							
6	50			536			L6						6							
7	40			537			L7						7							
8	30			538			L8						8							
9	20			539			L9						9							
10	10			540			L10	X(2)	X(2)				10							
11	0			19	541		L11						11							
12													12							

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID 1N263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013		STATION NO. C5T3 48														
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
									HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
D 48 56	10.93 N	13	45	7.55	1	15	A P R	1 3	100	2	61	05	CS 3
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Nis	DEPTH	Rosette Notes:		Hydro Team-PMEI		Stron	Phyto	Micro zoopl	Ana A-I	Dean	Comments	Nis								
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-l	Formalin g	Glut.-plastic	Lugols-	FE	No.								
1	52			542								1								
2	330			543								2								
3	250			544								3								
4	150			545								4								
5	100			546								5								
6	50			547								6								
7	410			548								7								
8	30			549								8								
9	20			550								9								
10	10			551								10								
11	0			552	247							11								
12												12								

SST =

SSSal =

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013		STATION NO. C 574 (49)									
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt deg)	WEATHER TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	*	*	*	
49	56	10.87	N	13433.6	1	5	A P R	1	3	1218	.	.	.	555	C 574
SBE 9+															
PRESS SN															
PRIT TEMP SN															
SEC TEMP SN															
PRI CLOUD SN															
SECOND SN															
NIS	DEPTH	descri. Notes	Hydro Team -PMEL		Stron	Phyto	Micro Zoopl	Ana A-I	Dean						
No.	DESIRED		SALT	Nut. Brt	O2-Brt, No	Chloro-a	Formalin g	Glut.-plastic	Lipids-	FE					
1	10	550	553	300											1
2	350		554												2
3	250		555												3
4	150		556												4
5	100		557												5
6	50		558												6
7	40		559												7
8	30		560												8
9	20		561												9
10	10		562												10
11	0		563												11
12															12

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013		STATION NO. C575 50									
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. SPD.	WIND SPD.	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	*	*	(deg)	(kts)	*	*	
50	56.11	08° N	134° 37' 32" W	15	APR	13	14	20	350	C575
SBE 9+			FLUOR S/N												
PRESS SN			SBE43-Doy (prime)												
PRI TEMP SN			SBE43-Doy (sec)												
SEC TEMP SN			Transmissometer												
PRI COND SN			PAC S/N												
SEC COND SN			02 Temp Sensor No.												
NIS	DEPTH	Rosette Notes	Hydro Team-PMEI	Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments				NIS		
No.	DESIRED		SALT Nut.Btl O2-Btl.No	Chloro-l	Formalin g	Glut.-plastic	Lugols-	FE					No.		
1	16	34	20	564	296								1		
2	25	0	565										2		
3	35	0	566										3		
4	40	0	567										4		
5	48	0	568										5		
6	50	0	569										6		
7	40	0	570										7		
8	30	0	571										8		
9	20	0	572										9		
10	10	0	573										10		
11	0	0	574										11		
12													12		

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERPL-TL Spring 2013		STATION NO. 52440								
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)									
	DEG MIN		DEG MIN	DAY	MO	YR	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * WIND DIRN.	WIND SPO.	CLOUD (amt) TYPE	BOTTOM DEPTH	STA. NAME/ID
Φ 51 56 0 8. 49 N	13 6 1 3.	16 W	15 A P R 1 3 2 3 1 2 5 . 1 . 3 0											
SBE 9+			FLUOR S/N											
PRESS SN			SBE43-Oxy (prime)											
PRITEMP SN			SBE43-Oxy (sec)											
SEC TEMP SN			Transmissometer											
PRI COND SN			PAR S/N											
SEC COND SN			O2 Temp Sensor No.											
NIS	DEPTH	Rosette Notes		Hydro Team-PMEL		Stron	Phyto	Micro zoops	Ara A-1	Dean	Comments		NIS	
No.	DESIRED			SALT	Nut.Bt	O2-Btl.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE		No.	
1	671			575	279								1	
2	350			576									2	
3	200			577									3	
4	100			578									4	
5	75			579									5	
6	50			580									6	
7	40			581									7	
8	30			582									8	
9	20			583									9	
10	10			584									10	
11	0			585									11	
12				586									12	

REMARKS
*✓ TTD Cast
at 500m*

MAX DEPTH = m

SST= 6.4 SSSal= 32.52

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-EREL-LTL Spring 2013		STATION NO. SEA440									
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	* SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO.	YR	HR	MIN	(°C)	(°C)	(mb)	(deg)	(kt)	*
525608.55	N	13613.60	W	15APR13	0919	23905SEA440
SBE 9+					FLUOR S/N										MAX DEPTH =
PRESS SN					SBE43-Oxy (prime)										m
PRI TEMP SN					SBE43-Oxy (sec)										
SEC TEMP SN					Transmissometer										
PRI COND SN					PAR S/N										
SEC COND SN					O2 Tmp Samson No.										
Nis	DEPTH	Conduct. Meter	Hydro Team-PMEI	Strom	Phyto	Micro zoopl	Ana A-H	Dean	Comments						Nis
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No.	Chloro-I	Formalain g	Glut.-plastic	Lugols-					No.
1	500														1
2	300														2
3	200														3
4	100														4
5	75														5
6	50														6
7	20														7
8	0														8
9															9
10															10
11															11
12															12

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERR-LTL Spring 2013		STATION NO.													
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN	WIND SPD	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID
									HR	MIN	(°C)	(°C)	(mb)	(deg)	(kts)	*	TYPE	DEPTH	
45356	18.483 N	135	42.00 W	16	APR 13	0305	44.1	.1	31	30.9	0	1013.5	SEAS	42	4	A24			
SBE 9+																			
PRESS SN																			
PRIM TEMP SN																			
SEC TEMP SN																			
PRICOND SN																			
SECOND SN																			
Ns	DEPTH	Hydro Team+FMEL		Stron	Phyto		Microzoopl		Ana A-I	Dean		Comments							
No.	DESIRED	SALT	Nut.Btl	O2-Btl.No.	Chloro-l	Formalin g	Glut.-plastic	Lugols-	F/E				Ns						
1	500			586									No.						
2	300			587									1						
3	150			588									2						
4	75			589									3						
5	50			LS									4						
6	40			590									5						
7				591									6						
8	30			592									7						
9	20			593									8						
10	10			594									9						
11	0			595									10						
12				286									11						
				411									12						
SET =	6.1	SSSal =	32.0?																

drifter deployed at end of cast

111976 16-Apr-2013 46:42

56 18.72

135 42.51

111973 deployed after Multinet
 56 50.564 136 07.383
 0523 16 April (local)

VESSEL		CRUISE ID TN263		PROJECT & LEG		STATION NO.															
NOASHIP OSCAR DYSON		DY1304		GOA-JERP-LTL Spring 2013		56020 54															
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* SEA STATE	* VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
		54	56	45	.25	N	13	60	8.	.20	W	16	A P R 1 3	1035	4.0	.	30	14802	14903	ED20	
SBE 9+																					
PRESS S/N																					
PRI TEMP S/N																					
SEC TEMP S/N																					
PRI COND S/N																					
SEC COND S/N													O2 Tmp Sensor No.								
NIS	DEPTH	Rosette Notes		Hydro Team-FNEL		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS								
No.	DESIRED	SALT	Nut.BTU	O2-BTU.NO	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE				No.								
1	500	22	596	281									1								
2	350		597										2								
3	200	200	598										3								
4	100		599										4								
5	50		600	L5									5								
6	40		601	L6									6								
7	-												7								
8	30		602	L8									8								
9	20		603	L9									9								
10	10		604	L10									10								
11	0		605	L11									11								
12													12								

SST=

SSSal=

111974
 120542

VESSEL		CRUISE ID TN263		PROJECT & LEG				STATION NO.								
NOASHIP OSCAR DYSON		DY1304		GOA-IEP-LTL Spring 2013				55 56604								
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(mb)	*	*	(deg)	(kts)	*	*	(m)
5	55	7	23.0	6	N	13600	.53	W	16	A P R	1	3	1648	2.0	27	1200
SBE 9+																MAX DEPTH = 55 m
PRESS SN																
PR TEMP SN																
SEC TEMP SN																
PR COND SN																
SEC COND SN																
NIS DEPTH	Rosette Notes		Hydro Team-PMEL		Strom		Phyto		Micro zooops		Ana A-I		Dean		Comments	
No DESIRED	#	SA10	Nut. Btl	O2-BUING	Chloro-a	Formalin g	Glut.-plastic	Lugols-	FE						NIS No.	
1	10.5	-55	607												1	
2	40		608												2	
3	30		609												3	
4	20		610												4	
5	10		611												5	
6			612	262											6	
7															7	
8															8	
9															9	
10															10	
11															11	
12															12	

SST= 60.6 Underway sample
SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013		STATION NO. 56																				
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)																			
DEG	MIN	DEG	MIN	DAY	MO	HR	MIN																			
5	65	22	54	N	136	04	.2	2	W	L6	A	P	R	1	3	1723	2.8	.	27		156	12		95	3660	
SBE 9+					FLUOR-S/N																					
PRESS SN					SBE43-Oxy (prime)																					
PRI TEMP SN					SBE43-Oxy (sec)																					
SEC TEMP SN					Transmissometer																					
PRI COND SN					PAT S/N																					
SEC COND SN					O2 Temp Sensor No.																					
Nis	DEPTH	Rosette Notes		Hydro Team-PWEL		Strom	Phyto	Micro zoops	Ana A-1	Dean	Comments		Nis													
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE		No.													
1	13			613	283								1													
2	75			614									2													
3	50			615			X						3													
4	40			616			X						4													
5	30			617			X						5													
6	20			618			X						6													
7	20												7													
8	10												8													
9	10						X						9													
10	0						X						10													
11													11													
12													12													

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013										STATION NO.						
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE * * *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
05757	19.61	N	1361	11.98	W	16	A P R	13	12	18	3.0	.26	15714	175	14	175	665			
SBE 9+				FLUOR S/N															MAX. DEPTH = 172 m	
PRESS SN				SBE43-Oxy (prime)																
PRF TEMP SN				SBE43-Oxy (sec)																
SEC TEMP SN				Transmissometer																
PRI COND SN				PAR S/N																
SEC COND SN				O2-Temp Sensor No.																
No.	DEPTH	Rosette Notes		Hydro Team-PNEL		Strom	Phyto	Micro zoops		Ana A-I	Dean	Comments		No.						
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No.	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE									
1	13	172	23	621	284														1	
2	100			628															2	
3	75			603															3	
4	50			624			L												4	
5	40			625			L2												5	
6	30			626			L3												6	
7	20			627			L4												7	
8	10			628			L5												8	
9	0			629			L6												9	
10																			10	
11																			11	
12																			12	

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-MERL-LTL Spring 2013										STATION NO. S6610 58										
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB		WET BULB		PRESSURE		* SEA STATE	* VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID		
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	(deg)	(kts)	(deg)	(m)	(m)								
0	58	57	17.08	N	136	19.8	S	W	16	A P R	13	19	12	2.5	-	26	146	15	386	350	380	m		
SEE 9+					FLUOR S/N																			
PRESS SN					SS43-Oxy (prime)																			
PRI TEMP SN					SS43-Oxy (sec)																			
SEC TEMP SN					Transmissometer																			
PRI COND SN					P/R S/N																			
SEC COND SN					O2 Temp Sensor No.																			
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom		Phyto		Micro zoops		Ana-A-I		Dean		Comments		NIS						
No.	DESIRED			SALT	Nut.Bti	O2-Bti,NO		Chloro-	Formalin g	Gut,-plastic	Lugols-		FE					No.						
1	3			630														1						
2	300			631														2						
3	200			632														3						
4	100			633														4						
5	75			634														5						
6	50			635				L7										6						
7	40			636				L8										7						
8	30			637				L9										8						
9	20			638				L10										9						
10	10			639				L11										10						
11	0			640	285			L12										11						
12																		12						

SST=

SSsal=

VESSEL		CRUISE ID TN263		PROJECT & LEG				STATION NO.												
NOASHIP OSCAR DYSON		DY1304		GOA-IEP-LTL Spring 2013				59												
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amb	WEATHER	BOTTOM	STA. NAME/ID	
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
65957	12.00	136	35.55	W	16	A P R	1	3	26	55	2.8	.	24	16727	16583	620				
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS							
No.	DESIRED			SALT	Nut.Bt	O2-Bu.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-			FE							
1	-																		1	
2	-																		2	
3	-																		3	
4	-																		4	
5	-																		5	
6	-																		6	
7	-																		7	
8	-																		8	
9	-																		9	
10	-																		10	
11	-																		11	
12	-																		12	

SST=

SSSal=

VESSEL NOADSHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013				STATION NO.													
CONSC CAST #		LATITUDE DEG	MIN	LONGITUDE DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN. SPD. (kts)	WIND CLOUD TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID			
460	57	12.	17	N	3633.	96	W	16 APR 13	2244	3.3	22	15326	160852424								
SBE 9+				FLUOR S/N																	
PRESS SN				SBE43-Oxy (prime)	904																
PRI TEMP SN				SBE43-Oxy (sec)	(910) wet heat																
SEC TEMP SN				Transmissometer																	
PRI COND SN				PAR S/N																	
SEC COND SN				02 Tmp Sensor No.																	
NIS		DEPTH		Rosette Notes		Hydro Team-PMEL		Strom		Phyto		Micro zoops		Ana A-I		Dean		Comments			
No.		DESIRED		SALT		Nut.Btl		02-Btl No		Chloro-I		Formalin g		Glut.-plastic		Lugols-		FE		Nis No.	
1	b6t					641	286													1	
2	1622					642	287												2		
3	500					643													3		
4	360					644													4		
5	160					645													5		
6	50					646													6		
7	40					647													7		
8	30					648													8		
9	20					649													9		
10	10					650													10		
11	0					24	651												11		
12																			12		

SST= 6.14

SSSal= 32.34

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013										STATION NO.					
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)				DRY BULB	WET BULB	PRESSURE (mb)	* SEA STATE	WIND DIRN.	WIND SPD. (kts)	* CLOUD (amt type)	BOTTOM DEPTH	WEATHER	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	*	*	(m)		
Φ	61	57	29	N	136	37	58	W	17 APR 13	20.53	13.3	1012.2	5	3	10	5 EK	10		
SBE 9+									FLUOR S/N										
PRESS SN									SBE43-Oxy (prime)										
PRI TEMP SN									SBE43-Oxy (sec)										
SEC TEMP SN									Transmissometer										
PRI COND SN									PAT S/N										
SEC COND SN									O2 Temp Sensor No.										
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoops		Ana A-I	Dean	Comments		NIS					
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No.	Chloro-I	Formalin g	Gluc.-plastic	Lugols-	FE			No.					
1	85			652	286									1					
2	75			653										2					
3	50			654										3					
4	40			655										4					
5	30			656										5					
6	20			657										6					
7	10			658										7					
8	0			659										8					
9	-													9					
10	-													10					
11	-													11					
12	-													12					

SST=

SSSal=

Mackerel bottles are wrong -
4 to be corrected

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013						STATION NO.												
CONSC CAST #	DEG MIN	LATITUDE		DEG MIN	LONGITUDE		DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* SEA STATE	* VISIBILITY	WIND DIRN.	WIND SPD. (kt/s)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
06257	53.84	N		13647.15	W		17	APR	13	13	46	4.8	.12	2521	17	155	35K5					
SBE 9+				FLUOR S/N																		
PRESS SN				SBE43-Oxy (prime)																		
PRI TEMP SN				SBE43-Oxy (sec)																		
SEC TEMP SN				Transmissometer																		
PRI COND SN				P/R S/N																		
SEC COND SN				O2 Temp Sensor No.																		
Nts	DEPTH	Rosette Notes		Hydro Team-PWEL			Strom	Phyto	Micro zoop	Ana A-I	Dean	Comments		Nls								
No.	DESIRED			SALT	Nut. Blt	O2 Blt No	Chloro-	Formalin g	Glut.-plastic	Lugols-	FE			No.								
1	60			640	289									1								
2	180			661										2								
3	75			662										3								
4	50			663			St4							4								
5	40			664			35							5								
6	30			665			36							6								
7	20			666			St7							7								
8	10			667			St12							8								
9	0			668			59							9								
10														10								
11														11								
12														12								

SST=

SSsal=

Drifters 111974 Dec 5 7 51, 986 136 54.624
41 17.1 80 13 15:05 6mT

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013						STATION NO. SEK10 43										
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* SEA STATE	WIND DIRN.	WIND SPD. (kt/s)	CLOUD (amt)	WEATHER TYPE	BOTTOM DEPTH	STA. NAME/ID
063575.2	43 N	13655.0	1	17	A P R 1 3	1449	4	4	.	12	260	17	454	SEK10						
SBE 9+				FLUOR S/N																
PRESS S/N				SBE43-Oxy (prime)																
PRT TEMP S/N				SBE43-Oxy (sec)																
SEC TEMP S/N				Transmissometer																
PRT COND S/N				P/R S/N																
SEC COND S/N				O2 Temp Sensor No.																
NIS	DEPTH	Rosette Notes		Hydro Team-PWEL		Strom	Phyto	Micro zoops	Ana A-I		Dean		Comments		NIS					
No.	DESIRED			SALT	Nut. Blt.	O2-BLU.NO	Chloro- Formalini	Glut.-plastic	Lugols-	PE						No.				
1	150	450	25	669		671										1				
2	350															2				
3	250					672										3				
4	150					673										4				
5	100					674										5				
6	50					675										6				
7	40					676										7				
8	30					677										8				
9	20					678										9				
10	10					679										10				
11	0					680										11				
12						681										12				

SST=

SSSal=

290

Numerous bottle 670 underway
669 wasn't needed cost 67 so there
is a gap

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013		STATION NO. SEL20							
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN. (kts)	WIND SPD. (kt)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/D
b457	47.64 N	137.43 W		17 A P R 1 3 16 41	41.4	14	1014	259114	263				
SBE 9+			FLUOR S/N										
PRESS SN			SBE43-Oxy (prime)										
PRI TEMP SN			SBE43-Oxy (sec)										
SEC TEMP SN			Transmissometer										
PRI COND SN			PAR S/N										
SEC COND SN			O2 Temp Sensor No.										
Nis	DEPTH	Rosette Notes	Hydro Team-PML	Strom	Phyto	Micro zoopl	Ana A-I	Dean	Comments				Nis
No.	DESIRED		SALT	Nut. Blt	O2 BU/BNO	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE			No.
1	249		691.24										1
2	150		692										2
3	100		693										3
4	50		694										4
5	40		695										5
6	30		696										6
7	20		697										7
8	10		698										8
9	10												9
10	0												10
11	0												11
12													12

SST=

SSSal=

Lost, labels 681-688

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERPL-TL Spring 2013		STATION NO. 561C3065										
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(C)	(C)	(mb)	*	*	(m)	
	65	57	42.50	N	137	27.78	W	17	APR	1	3	1935	3.9	17	07	2013
SBE 9+					FLUOR SN											
PRESS SN					SBE43-Oxy (prime)											
PRI TEMP SN					SBE43-Oxy (sec)											
SEC TEMP SN					Transmissometer											
PRI COND SN					PAR S/N											
SEC COND SN					O2 TmS Sensor No.											
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS			
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-l	Formalin g	Glut.-plastic	Lugols-			No.			
1	-												1			
2	-												2			
3	-												3			
4	-												4			
5	-												5			
6	50												6			
7	49												7			
8	36												8			
9	25												9			
10	16												10			
11	9												11			
12	-												12			

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304						PROJECT & LEG GOA/ERL-LTL Spring 2013						STATION NO.					
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	* SEA STATE	* VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amb)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	(deg)	(deg)	(kt)	*	*	(m)	SEK 34	
65	57	42.	42.N	137	30.	68	17	A P R 1 3	21	22	4.3	.	18	289	14		2159		
SBE 9+				FLUOR S/N														MAX DEPTH =	
PRESS SN				SBE43-Oxy (prime)															
PRI TEMP SN				SBE43-Oxy (sec)															
SEC TEMP SN				Transmissometer															
PRI COND SN				P/R S/N															
SEC COND SN				O2 Tmp Sensor No.															
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI			Strom	Phyto	Micro zoopps	Ana A-I	Dean	Comments						NIS	
No.	DESIRED			SALT	Nut. Blt	O2-BLU.NO		Chloro- Formalini	Glut.-plastic	Lugols-	FE							No.	
1	35			26	746	292												1	
2	1560				761	293												2	
3	1000				762													3	
4	300				763													4	
5	150				764													5	
6	50				765													6	
7	40				766													7	
8	30				767													8	
9	10				768													9	
10	10				769													10	
11	0				770													11	
12																		12	

SST= 5.95

SSSal= 31.97

Δ₂ 2.92

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013						STATION NO. SEM-2.5										
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	* SEA STATE	* VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	(deg)	(deg)	(kts)	*	*	*	(m)		
46	75.8	16.21	N	136.52	85	W	18	A P R 1 3	05	22	3.9	.	24	25	41	1	89	5EM-2.5		
SBE 9+				FLUOR S/N																
PRESS S/N				SBE43-Oxy (prime)																
PRI TEMP S/N				SBE43-Oxy (sec)																
SEC TEMP S/N				Transmissometer																
PRI COND S/N				PAR S/N																
SEC COND S/N				O2 Trip Sensor No.																
NIS	DEPTH	Rosette Notes		Hydro Team-PNEL		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS							
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No.	Chloro-	Formalin g	Glut.-plastic	Lugols-	FE			No.						
1	60			3711															1	
2	50			712															2	
3	40			713															3	
4	30			714															4	
5	20			715															5	
6	10			716															6	
7	0			717															7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

SST=

SSSal=

VESSEL NO/SHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013		Morning PA		STATION NO. SEMO							
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE *	VISIBILITY WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
06 85 81	58 15 . 02 N	176 56 . 76 W	19 APR 13	055	04	2	20	25	15	*	*	*	*	1150	SEMO
SBE 9+															
PRESS SN															
PRI TEMP SN															
SEC TEMP SN															
PRI COND SN															
SEC COND SN															
Nis DEPTH	Rosette Notes	Hydro Team-PHILL	Strom	Phyto	Micro zoops	Ana A-H	Dean	Comments							
No.	DESIRED	SALT	Nut.B1	O2-B1,NO	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE						
1	80	-	718	-169	-	-	-	-	-						
2	100	-	719	-	-	-	-	-	-						
3	75	-	720	-	-	-	-	-	-						
4	50	-	721	-	-	-	-	-	-						
5	40	-	722	-	-	-	-	-	-						
6	30	-	723	-	-	-	-	-	-						
7	20	-	724	-	-	-	-	-	-						
8	10	-	725	-	-	-	-	-	-						
9	0	-	27	726	-	-	-	-	-						
10	-	-	-	-	-	-	-	-	-						
11	-	-	-	-	-	-	-	-	-						
12	-	-	-	-	-	-	-	-	-						

SST=

SSSal=

12

VESSEL NOOSHIP OSCAR DIVON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013				STATION NO. 5EM2.5							
CONSC CAST #	LATITUDE	LONGITUDE				TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * *	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
	69 38'	13.71 N	136.01 W	18 A P R 13	06 43	4.1									
SBE 9+					FLUOR S/N										
PRESS SN					SBE43-OXY (prime)										
PRI TEMP SN					SBE43-OXY (sec)										
SEC TEMP SN					Transmissometer										
PRI COND SN					PAR S/N										
SEC COND SN					O2 Tmp Sensor No.										
Nis	DEPTH	Rosette Notes	Hydro Team-PMEI	Strom	Phyto	Micro zoops	Ana A-I	Dean		Comments					
No.	DESIRED		SALT Nut.BR O2.BR.NO	Chloro-I	Formalin g Glut.-plastic	Lugols-	FE								Nis No.
1	84		727												1
2	106		728												2
3	75		729												3
4	50		730												4
5	40		731												5
6	30		732												6
7	20		733												7
8	10		734												8
9	0		735												9
10															10
11															11
12															12

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013										STATION NO. S5M5				
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE	WIND DIRN.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
745012.60 N	13705.00 W	18	A P R 1 3 0 7 2 1	4.1	.	20	244	07	128	5	M	128	S5M5	m				
SSE 9+				FLUOR S/N														
PRESS SN				SSE43-Oxy (prime)														
PRI TEMP SN				SSE43-Oxy (sec)														
SEC TEMP SN				Transmissometer														
PRI COND SN				P/R S/N														
SEC COND SN				O2 Trap Sensor No.														
NIS	DEPTH	Rosette Notes		Hydro Team-PWEL		Strom	Phyto	Micro zoops	Ana A-I	Dean								
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-	Formalin g	Gut.-plastic	Lugols-	PE							
1	BOY			736	146												1	
2	100			737													2	
3	75			736													3	
4	50			739													4	
5	40			740													5	
6	30			741													6	
7	20			742													7	
8	10			743													8	
9	0			744													9	
10																	10	
11																	11	
12																	12	

SST=

SSSal=

VESSEL		PROJECT & LEG		STATION NO.																	
NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		3EM10 071																	
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	* SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID					
DEG	MIN		DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*			
7158	10	.33 N	137	12	92	W	18	A	P	1	3	0P16	4	.	20	255	9	124	3EM10		
SSE 9+					FLUOR S/N																
PRESS SN					SBE43-Oxy (prime)																
PRI TEMP SN					SBE43-Oxy (sec)																
SEC TEMP SN					Transmissometer																
PRI COND SN					PAR S/N																
SEC COND SN					O2 Temp Sensor No.																
Nis	DEPTH	Rosette Notes		Hydro Team-PWEL		Strom		Phyto		Micro zoops		Ana A-I		Dean		Comments		Nis			
No.	DESIRED					SALT		Nut.Btl		O2-Btl No		Chloro-I		Formalin		Glut.-plastic		Lugols-	FE		No.
1	13			27		745		182												1	
2	100			74		746														2	
3	75			74		747														3	
4	50			74		748														4	
5	40			74		749														5	
6	30			75		750														6	
7	20			75		751														7	
8	10			75		752														8	
9	0			75		753		X		Sq										9	
10																				10	
11																				11	
12																				12	

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERPL-TL Spring 2013		STATION NO. SEM30 72										
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE	WIND DIRN.	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	*	(deg)	*	*	(m)		
	72	58	05	.54	N	137	29	.16	W	18	A P R 1 3	0944	41	19	22908	1403EM30
SBE 9+																MAX. DEPTH = 133 m
PRESS SN																
PRI TEMP SN																
SEC TEMP SN																
PRI COND SN																
SEC COND SN																
NIS	Rosette Notes		Hydro Team-PMEL		Strom		Phyto	Micro zoopl		Ana A-I		Dean	Comments		NIS	
No.	DESIRED		SALT	Nut.Btl	O2-Btl No		Chloro- Formalini g	Glut.-plastic	Lugols-	FE					No.	
1	b		755												1	
2	100		756												2	
3	75		757												3	
4	50		758				54								4	
5	40		759				55								5	
6	30		760				56								6	
7	20		761				57								7	
8	10		762				58								8	
9	0		763				59								9	
10															10	
11															11	
12															12	

SST=

SSSal=

Fine weather Ground

VESSEL NOASHIP OSCAR DIXON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013						STATION NO. 73												
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	DRY BULB	WET BULB	PRESSURE	* SEA STATE	* VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
											(°C)	(°C)	(mb)	(deg)	(kts)	(deg)	(m/s)	TYPE	WEATHER			
	73 50 25 . 86 N	135 50 . 05 W		18	A P R 1 3	1725	21	3	16		31 3	31 3	14	PE	FC 2							
SBE 9+																						
PRESS SN																						
PRI TEMP SN																						
SEC TEMP SN																						
PRI COND SN																						
SEC COND SN																						
Nis	DEPTH	Rosette Notes		Hydro Team-PNEL		Strom	Phyto		Micro zoops		Ana A-I		Dean		Comments							
No	DESIRED			SALT	Nut.BTU	O2-BTU.NO					FE											
1	b	80	28	764	243	X														1		
2	50			765		X														2		
3	40			766		X														3		
4	30			767		X														4		
5	20			768		X														5		
6	10					-														6		
7	10			769		X														7		
8	0					-														8		
9	0			770		X														9		
10																				10		
11																				11		
12																				12		

SST=

SSSal=

VESSEL		CRUISE ID TN263		PROJECT & LEG		STATION NO.												
NOASHIP OSCAR DYSON		DY1304		GOA-IEP-LTL Spring 2013		74												
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)
	74	58	41	7.85	N	140	47.67	W	19	A P R 1 3	1225	3.2	.20	26603		205	YBC50	
SBE 9+										FLUOR S/N								
PRESS SN										SBE43-Oxy (prime)								
PRI TEMP SN										SBE43-Oxy (sec)								
SEC TEMP SN										Transmissometer								
PRI COND SN										PAT S/N								
SEC COND SN										O2 Temp Sensor No.								
Nis	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoops	Ana A-H	Dean								
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-								
1	-																1	
2	-																2	
3	-																3	
4	-																4	
5	-																5	
6	-																6	
7	-																7	
8	-																8	
9	-																9	
10	-																10	
11	-																11	
12	-																12	

SST=

SSal=

Lots of rock nsn
Put over here as so 43040?

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013						STATION NO.								
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	BOTTOM	STA. NAME/ID		
DEG	MIN		DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	DIRN.	SPD.	TYPE	WEATHER
7558	48.01	N	14047.56	W	19	APR	13	13	47	3.1	.	20	3000.5				061805	
SBE 9+			FLUOR S/N															
PRESS SN			SBE43-Oxy (prime)															
PRI TEMP SN			SBE43-Oxy (sec)															
SEC TEMP SN			Transmissometer															
PRI COND SN			PAT S/N															
SEC COND SN			O2 Temp Sensor No.															
Nis	DEPTH	Rosette Notes	Hydro Team-PMEL		Strom	Phyto	Micro zoops											
No.	DESIRED			SALT	Nut. Blt.	O2 Blt. No.	Chloro-	Formalin g	Glut.-plastic	Lugols-	FE							
1	B			778	252												1	
2	130			773													2	
3	100			774													3	
4	75			775													4	
5	50			776		L5	X										5	
6	40			777		L6											6	
7	30			778		L7	X										7	
8	20			779		L8	X										8	
9	10			780		L9	X	X									9	
10	0			781		L0											10	
11																	11	
12																	12	

SST =

SSsal =

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013						STATION NO.											
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE * VISIBILITY DIRN. (deg)	WIND SPD. (kts)	WIND DIRN. (deg)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
		76	58	56.	18	N	140	37.	24	W	19	A P R 1 3	1600	5.6	.	21	187961	1864	YBC40	m	
SBE 9+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
NIS DEPTH	Rosette Notes	Hydro Team-PWEL			Strom	Phyto	Micro zoops			Ana A-I	Dean	Comments			NIS No.						
No. DESIRED		SALT	Nut.BTU	O2-BLU.NO			Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE										
1	13	29	782															1			
2	150		783																2		
3	100		784																	3	
4	75		785																	4	
5	50		786																	5	
6	40		787																	6	
7	30		788																	7	
8	20		789																	8	
9	10		790																	9	
10	0		791	254																10	
11																				11	
12																				12	

SST= 254

REMARKS
180
MAX. DEPTH =

180

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013				STATION NO.									
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE VISIBILITY DIRN. (deg)	* WIND SPD. (kt)	CLOUD (amt) TYPE	BOTTOM DEPTH	STA. NAME/ID
	27 59 03 . 69 N	140 26 . 69 W	19 APR 13	1757	41 . 7	.	20	1270	1455								
SBE 9+				FLUOR S/N													
PRESS SN				SBE43-Oxy (prime)													
PRI TEMP SN				SBE43-Oxy (sec)													
SEC TEMP SN				Transmissometer													
PRI COND SN				P.R. S/N													
SEC COND SN				O2 Temp Sensor No.													
NIS	DEPTH	Rosette Notes	Hydro Team-PNEL	Strom	Phyto	Micro zooplans	Ana A-I	Dean		Comments							
No.	DESIRED		SALT	Nut.Btl	O2 Btl.No.	Chloro-I	Formating	Glut.-plastic	Lugols-	FE							
1	130	140	792	255													
2	100		793														1
3	75		794			X											2
4	50		795			X											3
5	40		796			X											4
6	30		797			X											5
7	20	PLD															6
8	20		798			X											7
9	10	PLD															8
10	10		799			X											9
11	0		800			X											10
12																	11
																	12

SST=

SSSal=

VESSEL		CRUISE ID TN263		PROJECT & LEG				STATION NO.											
NOASHIP OSCAR DYSON		DY1304		GOA-ERP-LTL Spring 2013				78											
CONSC CAST #		LATITUDE		LONGITUDE				TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kt)	*	*	(m)	
78	59	03.71	N	140.26	.73	W	19	A P R 1 3	1835	3.6	.	22	111	16	1145	-			
SBE 9+		FLUOR S/N																	
PRESS S/N		SBE43-Oxy (prime)																	
PRI TEMP S/N		SBE43-Oxy (sec)																	
SEC TEMP S/N		Transmissometer																	
PRI COND S/N		PAR S/N																	
SEC COND S/N		O2 Temp Sensor No.																	
Nis	DEPTH	Rosette Notes:		Hydro Team-PMEI				Strom	Phyto	Micro zoops	Ana-A-I		Dean		Comments		Nis		
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No		Chloro-I	Formalin g	Gut.-plastic	Lugols-		FE				No.		
1	-																1		
2	-																2		
3	-																3		
4	-																4		
5	-																5		
6	-																6		
7	-																7		
8	-																8		
9	-																9		
10	-																10		
11	-																11		
12	-																12		

SST=

SSSal=

VESSEL		CRUISE ID TN263		PROJECT & LEG				STATION NO.											
NOASHIP OSCAR DYSON		DY1304		GOA-IERP-LTL Spring 2013				79											
CONSC CAST #		LATITUDE		LONGITUDE				TIME (GMT)	DRY BULB	WET BULB	PRESSURE	* SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kt/s)	*	*	(m)	
79	59	12	.83	N	140	14	40	W	19	A P R	13	215	14	.5	.	24	164	6	123
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS	DEPTH	Rosette Notes		Hydro Team-PNEL		Strom	Phyto	Micro zoopl		Ana A-I	Dean	Comments		NIS					
No.	DESIRED			SALT	Nut.Btl	02-BNL NO.	Chloro-l	Formalin g	Glut.-plastic	Lugols-	FE			No.					
1	32			32	801									1					
2	75			802										2					
3	55			803										3					
4	50			804										4					
5	40			805										5					
6	30			806										6					
7	20			807										7					
8	10			808										8					
9	0			809										9					
10				262										10					
11														11					
12														12					

SST=

SSSal=

VESSEL		CRUISE ID TN263		PROJECT & LEG		STATION NO.										
NOASHIP OSCAR DYSON		DY1304		GOA-HERR-LTL Spring 2013												
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN.	WIND SPD.	CLOUD (amt TYPE	BOTTOM DEPTH	WEATHER	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN (°C)	(°C)						
	8459	21.17	N	14063.96	W	20	APR	13	0505	4.2	.	25	23	2	164	YBC14
SBE 9+																MAX. DEPTH = m
PRESS SN																
PRI TEMP SN																
SEC TEMP SN																
PRI COND SN																
SEC COND SN																
NIS	DEPTH	Rosette Notes		Hydro Team-PMEL		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS			
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-	Formalin	Glut.-plastic	Lugols-				No.		
1	-															1
2	-															2
3	-															3
4	-															4
5	-															5
6	-															6
7	-															7
8	-															8
9	-															9
10	-															10
11	-															11
12	-															12

SST=

SSSal=

VESSEL		CRUISE ID TN263		PROJECT & LEG		STATION NO.							
NOASHIP OSCAR DYSON		DY1304		GOA-IERP-LTL Spring 2013		YBC10							
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (ft/s)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	* (deg)	* (ft/s)	* WEATHER		
68	159	21.43 N	140.46 W	24	APR	13	01	22	4.2	.25	9	5	163 YBC10
SBE 9+													
PRESS SN													
PRI TEMP SN													
SEC TEMP SN													
PRI COND SN													
SEC COND SN													
NIS	DEPTH	Rosette Notes	Hydro Team-PMEL	Strom	Phyto	Micro zoops	Ana A-I	Comments	NIS				
No.	DESIRED			SALT	Nut. Brt	O2-Brt No	Chloro-l	Formalin g	Glut.-plastic	Lugols-	FE		No.
1	Bot			810	275								1
2	125			811									2
3	105			812									3
4	75			813									4
5	50			814		X		79					5
6	40			815		X							6
7	30			816		X		78					7
8	20			817		X		77					8
9	10			818		X		76					9
10	0			819		X							10
11													11
12													12

SST=

SSSal=

Fluorometer did ~ 55 m coming back up
Drifter after barge 11/978

20-Ag-2013 42:59
59 21.55
140 43.54

VESSEL		CRUISE ID TN263		PROJECT & LEG		STATION NO.								
NOASHIP OSCAR DYSON		DY1304		GOA-IERL-LTL Spring 2013										
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * (deg)	WIND DIRN. SPD. (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
DEG	MIN		DEG	MIN	DAY	MO	YR	HR	MIN	*	*	*	*	
082	59	29.49 N	139	57.95 W	24	APR	13	03	29	5.2	.25	06400	71	Y8c+
SBE 9+			#FLUOR S/N											MAX. DEPTH =
PRESS SN			SBE43-Dry (prime)											m
PRI TEMP SN			SBE43-Dry (sec)											
SEC TEMP SN			Transmissometer											
PRI COND SN			PAR S/N											
SEC COND SN			O2 Temp Sensor No.											
NIS	DEPTH	Rosette Notes	Hydro Team-PMEI	Strom	Phyto	Micro zooops	Ana A-I	Dean	Comments	NIS				
No.	DESIRED		SALT	Nut. Btl	O2-Btl No.	Chloro-I	Formalin	Gut.-plastic	Lugols-	FE				No.
1	65		830	2955		X		X						1
2	50		821			X								2
3	40		822			X								3
4	30		823			X								4
5	20		824			X		X						5
6	10		825			X		X						6
7	4		826			X								7
8														8
9														9
10														10
11														11
12														12

SST=

SSSal=

Dri Flex 122542 at ~43c50
58 50.04 140 46.52
20mBd 1809 GMT

VESSEL		CRUISE ID TN263		PROJECT & LEG		STATION NO.													
NOASHIP OSCAR DYSON		DY1304		GOA-IEPR-LTL Spring 2013		4BC50 / 83													
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID				
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
	33	58	47	39	N	140	53	.56	W	20	A P R 1 3	1648	4.5	.	30	0851	10	233	
SBE 9+										FLUOR S/N									
PRESS S/N										SBE43-Oxy (prime)									
PRI TEMP S/N										SBE43-Oxy (sec)									
SEC TEMP S/N										Transmissometer									
PRI COND S/N										PAR S/N									
SEC COND S/N										O2 Temp Sensor No.									
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoopl	Ana A-I	Dean	Comments		NIS						
No.	DESIRED			SALT	Nut. Blt	O2 Blt. No	Chloro-	Formalin g	Gut.-plastic	Lugols-									No.
1	100																		1
2	75																		2
3	50						X												3
4	40						X												4
5	30						*												5
6	30						-												6
7	20						X												7
8	10						1												8
9	10						X												9
10	0																		10
11																			11
12																			12

SST =

SSSal =

O₂ - top / S_{al} - Bot

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304				PROJECT & LEG GOA-IERP-LTL Spring 2013				STATION NO.									
CONSC CAST #	LATITUDE			LONGITUDE			TIME (GMT)			DRY BULB	WET BULB	PRESSURE	* SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	DEG	MIN		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(mb)	(deg)	(kts)	*	*	(m)	
	84	58	58	43	N	141	21	52	W	24	A P R 1 3	31	52	5.0	.	32	10907	762	YBE 56
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom		Phyto		Micro zoops		Ana A-H		Dean		Comments		NIS	
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-	Formalin g	Gut.-plastic	Lugols-			FE					No.	
1	560			31	836													1	
2	400			837														2	
3	360			838														3	
4	150			839														4	
5	50			840														5	
6	40			841														6	
7	30			842			X											7	
8	20			843			X											8	
9	15			844			X											9	
10	10			845			X											10	
11	5			846			X											11	
12																		12	
																		MAX DEPTH = m	
																		REMARKS	

SST = 5.6

SSSal = 32, 37

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IEPP-LTL Spring 2013		STATION NO. YB 1540												
CONSC CAST #	DEG MIN	LATITUDE	DEG MIN	LONGITUDE	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE	WIND DIRN.	WIND SPD (kt/s)	CLOUD (amt) TYPE	BOTTOM DEPTH	WEATHER	STA. NAME/D (m)
85 59 06 . 91 N		141 22 W	21	A P R 1 3	31	26	5 . 5	. 02	08503	2191640								
SSE 9+		FLUOR S/N		SBE43-Oxy (prime)														
PRES S/N				SBE43-Oxy (sec)														
PRT TEMP S/N				Transmissometer														
SEC TEMP S/N				PAR S/N														
SEC COND S/N		O2 Temp Sensor No.																
NIS DEPTH	Rosette Notes	W.D. Hydro Team-PMEI		Strom	Phyto		Micro zoops		Ana A-I		Dean		Comments					
No. DESIRED		Nut.Btl	O2-Btl.No	Chloro-l	Formalini g	Glut.-plastic	Lugols-	FE										
1 122		842	344															1
2 175		848																2
3 125		849																3
4 75		850																4
5 50		851																5
6 40		852																6
7 38		853																7
8 30		854																8
9 10		856																9
10 0		857																10
11																		11
12																		12

SST=

SSSal=

→ wet bottle 855 empty
and - Bring Fluorometer cable
32.41

card - Bring Fluorometer cable

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013						STATION NO. YBE 48								
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
	86	59	46	69	N	141	11	32	W	21	A P R 1 3	23	5.9	.	32	121	13	222
SSE 9+								FLUOR S/N										
PRESS SN								SSE43-Oxy (prime)										
PRI TEMP SN								SSE43-Oxy (sec)										
SEC TEMP SN								Transmissometer										
PRI COND SN								P.R. S/N										
SEC COND SN								O2 TMP Sensor No.										
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoops		Ana A-1	Dean	Comments		NIS				
No.	DESIRED			SALT	Nut.BTU	O2-BTU,NO	Chloro-I	Formalin g	Gut.-plastic	Lugols-	FE			No.				
1	—	○		858							X			1				
2	—										?			2				
3	—													3				
4	—													4				
5	—													5				
6	—													6				
7	—													7				
8	—													8				
9	—													9				
10	—													10				
11	—													11				
12	—													12				

SST=

SSSal=

O₂ sensor sucked a jelly

Job for pressing one bottle for
Deeun Stockwell's growth experiment

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013						STATION NO. YB E 30							
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
8759	15	.0	1 N	141	00	74	21	A P R 1 3	0458	3.8	.	31		35703		177	YB E 30
SBE 9+																	MAX DEPTH =
PRESS SN																	m
PRI TEMP SN																	
SEC TEMP SN																	
PRI COND SN																	
SEC COND SN																	
NIS DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS No.					
No. DESIRED			SALT	Nut. Bt	O2-Btl.No	Chloro-I	Formalin	Glut.-plastic	Lugols-								
1	<i>Bottom</i>		32	859													1
2	<i>125</i>			860													2
3	<i>75</i>			861													3
4	<i>50</i>			862		L4											4
5	<i>40</i>			863		L5											5
6	<i>35</i>			864		L6											6
7	<i>20</i>			865		L7											7
8	<i>10</i>			866		L8											8
9	<i>0</i>			867		L9											9
10																	10
11																	11
12																	12

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013				STATION NO. YB E 200												
CONSC CAST #	DEG MIN	LATITUDE	DEG MIN	LONGITUDE	DEG MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE (deg)	* VISIBILITY (km)	WIND DIRN.	WIND SPD. (kt)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
08859	23.78	N	14049.86	W	31	APR	1	3	306	3.9	.32	1003.05	154	154	154	154	154	154	154	154
SSE 9+									FLUOR S/N											
PRESS SN									SBE43-Oxy (prime)											
PRI TEMP SN									SBE43-Dry (sec)											
SEC TEMP SN									Transmissometer											
PRI COND SN									P/R S/N											
SEC COND SN									O2 Temp Sensor No.											
Nis	DEPTH	Rosette Notes	Hydro Team-PMEL		Strom		Phyto		Micro zooops		Ana A-I		Dean		Comments		Nis			
No.	DESIRED		SALT	Nut.Btl	O2-Btl.No		Chloro-l	Formating	Glut.-plastic	Lugols-		FE						No.		
1	100		248	304														1		
2	100		869															2		
3	75		870															3		
4	50		871															4		
5	40		872															5		
6	30		873															6		
7	20		874															7		
8	10		875															8		
9	0		876															9		
10																		10		
11																		11		
12																		12		

SST=

3

SSSal=

32.15

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERR-LTL Spring 2013		STATION NO.											
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE	* VISIBILITY (deg)	WIND DIRN	WIND SPD. (kt)	CLOUD (amt)	TYPE	BOTTOM DEPTH	WEATHER	STA. NAME/ID	
Φ 89° 59' 31.70 N	140° 39.25 W	21 APR 13 0904 2.5	.32	04707	270	270	1014	10	30	04707	270	10	270	270	YBE 10		
SEE 9+	FLUOR S/N			SBE43-Oxy (prime)													
PRESS S/N				SBE43-Oxy (sec)													
PRI TEMP S/N				Transmissometer													
SEC TEMP S/N				PAR S/N													
PRI COND S/N				O2 Temp Sensor No.													
SEC COND S/N																	
NIS	DEPTH	Rosette Notes	Hydro Team-PMEL	Strom	Phyto	Micro zooops		Ana A-I	Dean								
No.	DESIRED		SALT	Nut.Btl	O2-Btl.No	Chloro-l	Formating	Gut.-plastic	Lugols-	FE							
1	13	264	33	878	229												1
2	200			879													2
3	150			880													3
4	100			881													4
5	75			882													5
6	50			883													6
7	40			884													7
8	30			885													8
9	20			886													9
10	10			887													10
11	0			888													11
12				889													12

SST = SSsal =

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERLP-LTL Spring 2013						STATION NO.											
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(C)	(C)	(mb)	* SEA STATE	* VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amb)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
		90	59	36	N	140	31	.72	W	21	A P R 1 3	11	10.9	.32	0530	2	173	173	YB625		
SBE 9+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
NIS DEPTH	Rosette Notes	Hydro Team-PNEL			Strom	Phyto	Micro zoops			Ana A-I	Dean	Comments			NIS No.						
No. DESIRED		SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-		FE											
1	B				899	240													1		
2	130				890														2		
3	100				891														3		
4	75				892														4		
5	50				893														5		
6	40				894														6		
7	30				895														7		
8	20				896														8		
9	10				897														9		
10	0				898														10		
11	-				19														11		
12	-				L10														12		

SST=

SSSal=

VESSEL		CRUISE ID TN263 NOASHIP OSCAR DYSON DY1304						PROJECT & LEG GOA-HERP-LTL Spring 2013						STATION NO.							
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE VISIBILITY DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WIND DIRN. (deg)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
9	15 9 15.2	N	14 10 0.6	7	W	21	A P R	13	17	4.7										91	
SBE 9+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
O2 Temp Sensor No.												FLUOR S/N	REMARKS								
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoops		Ana A-I		Dean	Comments		NIS						
No.	DESIRED			SALT	Nut.BI	O2-BI.NO	Chloro-l	Formalin g	Gut.-plastic	Lugols-	FE				No.						
1	3			34	299	281									1						
2	100			900											2						
3	75			901											3						
4	50			902											4						
5	40			903											5						
6	30			904											6						
7	20			905											7						
8	10			906											8						
9	10			1											9						
10	10														10						
11	0			907											11						
12															12						

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304						PROJECT & LEG GOA-IERP-LTL Spring 2013						STATION NO. 92							
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)			DRY BULB	WET BULB	PRESSURE (mb)	* SEA STATE (deg)	* VISIBILITY (km)	WIND DIRN.	WIND SPD. (kt)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*							
	9	25	9	17	.24	N	1	41	6.57	W	21	A P R 1 3	18	11	6.0	.	32	143	07	260	YTK01
SSE 9+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PERI COND SN																					
SEC COND SN																					
NIS DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS No.									
No. DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formating	Gut.-plastic	Lugols-			No.									
1	13		195		908							1									
2	150				909							2									
3	100				910							3									
4	75				911							4									
5	50				912							5									
6	40				913							6									
7	30				914							7									
8	20				915							8									
9	10				916							9									
10	10				917	282						10									
11												11									
12												12									

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013		STATION NO. 93									
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb) *	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD. (kts) *	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID YT X 02	
	DEG MIN	DEG MIN	DAY	MO	YR	HR MIN	(°C)	(mb) *	(deg) *	(kts) *	*	*	*		
	93	59	20.72	N	141	16.55	W	21	APR 13	1927	4.5	.	32	13003	326
SBE 9+															
PRESS SN															
PRI TEMP SN															
SEC TEMP SN															
PRI COND SN															
SEC COND SN															
NIS DEPTH	Rosette Notes		Hydro Team-PH&EL		Strom	Phyto	Micro zoopl	Ara A-I	Dean	Comments		NIS No.			
No. DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formalin g	Gut.-plastic	Lugols-	FE		No.			
1 13			35	918	283							1			
2 800			35	919								2			
3 150				920								3			
4 100				921								4			
5 75				922								5			
6 50				923								6			
7 40				924								7			
8 30				925								8			
9 20				926								9			
10 10				927								10			
11 0				928								11			
12												12			

SST=

SSSal=

PROJECT & LEG										STATION NO.							
VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		GOA-HRP-LTL Spring 2013						Y7X03							
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	* SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* (deg)	(kt/s)	* (°)	(m)	
φ 9459	22	.94	N	14123	.19	W	21	A P R 1 3	21	46	32	1191	32	1191	32	Y7X05	
SBE 9+																	
PRESS SN																	
PRI TEMP SN																	
SEC TEMP SN																	
PRI COND SN																	
SEC COND SN																	
MIS	DEPTH	Rosette Notes		Hydro Team-PMEI			Strom	Phyto	Micro zooops		Ana A-I	Dean	Comments			MIS	
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No		Chloro-I	Formalining	Gut.-plastic	Lugols-	FE				No.	
1	90					929										1	
2	250					930										2	
3	200					931										3	
4	150					932										4	
5	100					933										5	
6	50					934										6	
7	46					935										7	
8	30					936										8	
9	10					937										9	
10	10					938										10	
11	0					939										11	
12						284										12	

SST=

SSSal=

Ask Carol - Standard Fluor cube with C pur &
4 pm M3

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERL-LTL Spring 2013						STATION NO. XTO4 / YB836											
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kt)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID				
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(mb)	*	*	(deg)	*	*	(m)					
09	55	925	.93	N	141	32	65	W	21	A P R 1 3	22	45	4.	1	32	112	14	178 X 1164			
SBE 9+					FLUOR S/N																
PRESS S/N					SSE43-Oxy (prime)																
PRT TEMP S/N					SSE43-Oxy (sec)																
SEC TEMP S/N					Transmissometer																
PRT COND S/N					PAR S/N																
SEC COND S/N					DO2 Temp Sensor No.																
Nis	DEPTH	Rosette Notes		Hydro Team-PMEI			Strom		Phyto		Micro zoopgs		Ana A-I		Dean		Comments		Nis		
No	DESIRED						SALT		Nut.Btl		02-BLU.NO		Chloro-I		Formalin g		Glut.-plastic		Lugols-		No.
1	<u>100</u>						<u>36</u>		<u>940</u>		<u>285</u>										1
2	<u>185</u>						<u>941</u>														2
3	<u>100</u>						<u>942</u>														3
4	<u>75</u>						<u>943</u>														4
5	<u>50</u>						<u>944</u>														5
6	<u>40</u>						<u>945</u>														6
7	<u>30</u>						<u>946</u>														7
8	<u>20</u>						<u>947</u>														8
9	<u>10</u>						<u>948</u>														9
10	<u>0</u>						<u>949</u>														10
11	-																				11
12	-																				12

SST = 5.5

SSSal = 32.04

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013										STATION NO.									
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	* SEA STATE	* VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amb)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
											(°C)	(°C)	(mb)	(deg)	(deg)	(kts)	*	*			(m)		
φ 96 59 58 . 80 N	141 54 . 66 W	22	A P R 1 3 0 5 2 4 3 . 4	1	30	120	21														12187	YBG54	
SBE 9+				FUJOR S/N																			
PRESS SN				SBE43-Oxy (prime)																			
PRI TEMP SN				SBE43-Oxy (sec)																			
SEC TEMP SN				Transmissometer																			
PRI COND SN				PAR S/N																			
SEC COND SN				O2 Trip Sensor No.																			
NIS	DEPTH	Rosette Notes		Hydro Team-FNEL		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS										
No.	DESIRED			SALT	Nut.Bt!	O2-BTU.NO	Chloro-I	Formalin g	Glu t.-plastic	Lugols-	PE			No.									
1	360			954																			1
2	350			951																			2
3	200			952																			3
4	160			953																			4
5	75			954																			5
6	50			955																			6
7	40			956																			7
8	30			957																			8
9	20			958																			9
10	10			959																			10
11	5			960																			11
12				286																			12

SST=

SSSal=

O₂ shallows

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013										STATION NO. YB<4097							
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB		WET BULB		PRESSURE		* SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)			
0	97	59	17.44	N	14	43.79	W	22	A P R 1 3 0	817	3.6	.	30	11023	174	YB630					
SBE 9+									FUOR S/N										MAX DEPTH = 185 m		
PRESS S/N									SSE43-Oxy (prime)												
PRI TEMP S/N									SSE43-Oxy (sec)												
SEC TEMP S/N									Transmissometer												
PRI COND S/N									Up/R S/N												
SEC COND S/N									02 Tmp Seison No.												
Nis	DEPTH	Rosette Notes		Hydro Team-PMEL		Strom		Phyto		Micro zoops		Ana A-I		Dean		Comments		Nis			
No.	DESIRED			SALT	Nut.BI	O2-BRI.NO		Chloro-l	Formalin g	Glut.-plastic	Lugols-		FE					No.			
1	B			37	961	287												1			
2	150				962													2			
3	100				963													3			
4	75				964													4			
5	50				965													5			
6	40				966													6			
7	30				967													7			
8	20				968													8			
9	10				969													9			
10	0				970													10			
11	-																	11			
12	-																	12			

SST=

SSSal=

VESSEL		CRUISE ID TN263		PROJECT & LEG				STATION NO.														
NOASHIP OSCAR DYSON		DY1304		GOA-IERP-LTL Spring 2013				98														
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID		
DEG	MIN	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
		98	59	26	.18	N	141	33	05	W	22	A P R	13	10	51	2	.7	.	31	115	27	176
SBE 9+																						
PRESS S/N																						
PRI TEMP SN																						
SEC TEMP SN																						
PRI COND SN																						
SEC COND SN																						
Nis	DEPTH	Rosette Notes		Hydro Team+PME		Strom		Phyto		Micro zoopsh		Ana A-I		Dean		Comments		Nis				
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE								No.			
1	13			971															1			
2	100			972															2			
3	75			973															3			
4	50			974			SLP			X									4			
5	40			975			SLP												5			
6	30			976			SLP												6			
7	20			977			SLP			X									7			
8	10			978			SLP			X									8			
9	0			979	288		SLP			X									9			
10																			10			
11																			11			
12																			12			

SST=

SSSal=

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-HRP-LTL Spring 2013		STATION NO. 99								
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE VISIBILITY	* WIND DIRN. (deg)	* WIND SPD. (kt)	CLOUD (amb) TYPE	BOTTOM DEPTH	WEATHER	STA. NAME/ID
	DEG 99 59	MIN 34.66	N	DEG 14121.	MIN 48	DAY 22	MO APR	YR 13	HR 13	MIN 13	SEC 6.8	SEC 31	SEC 07521	SEC 11648620
SBE 9+				FLUOR S/N										
PRESS SN				SBE43-Oxy (prime)										
PRI TEMP SN				SBE43-Oxy (sec)										
SEC TEMP SN				Thermometer										
PRI COND SN				P/R S/N										
SEC COND SN				O2 Temp Sensor No.										
Nis	DEPTH	Rosette Notes	Hydro Team-PNEL	Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments					
No.	DESIRED		SALT	Nut. Brt	O2-Brt. No	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE				
1	13		38	980	389									1
2	7.5		981											2
3	SD		982			X								3
4	4D		983			X								4
5	BD		984			X								5
6	20		985			X								6
7	10		986			X								7
8	0		987			X								8
9														9
10														10
11														11
12														12

SST

SSsat

VESSEL		PROJECT & LEG						STATION NO.													
NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304						GOA:IERP-LTL Spring 2013													
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	DRY BULB	WET BULB	PRESSURE (mb)	* SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kt)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
1005443.18N	14110.89W	22	A P R 1 3	1637	2.5	.	32												42	43610	
SBE 9+				FLUOR S/N																	
PRESS SN				SBE43-Oxy (prime)																	
PRI TEMP SN				SBE43-Oxy (sec)																	
SEC TEMP SN				Transmissometer																	
PRI COND SN				P/R S/N																	
SEC COND SN				O2 Temp Sensor No.																	
Nis	DEPTH	Rosette Notes	Hydro Team-PWEL			Strom	Phyto	Macro zooops		Ana A-I		Dean		Comments							
No.	DESIRED		SALT	Nut.Btl	02-Btl.No.	Chloro-l	Formalin g	Gut.-plastic	Lugols-	FE											
1	30		988			X														1	
2	30		989			X		X												2	
3	30		990																	3	
4	10		991																	4	
5	10		992	290		X		X												5	
6	10		993			X														6	
7	0		993																	7	
8	0		—																	8	
9	—																			9	
10	—																			10	
11	—																			11	
12	—																			12	

SST#

SSSal-

VESSEL		CRUISE ID TN263		PROJECT & LEG		STATION NO.																
NOASHIP OSCAR DYSON		DY1304		GOA-IEP-LTL Spring 2013		K1A4																
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	DRY BULB	WET BULB	PRESSURE (mb)	SEA STATE * * (deg)	VISIBILITY * * (kts)	WIND DIRN.	WIND SPD.	CLOUD (amb) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
1015932.98	N	14354.97	W	23	A P R 1 3	22	47	4.6	.	34		106	14	1175	K1A4							
SBE 9+				FLUTOR S/N																		
PRESS SN				SBE43-Oxy (prime)																		
PRI TEMP SN																						
SEC TEMP SN				Transmissometer																		
PRI COND SN				PAT S/N																		
SEC COND SN				O2 Temp Sensor No.																		
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoopl	Ana A-H	Dean	Comments		NIS	No.								
No.	DESIRED	SALT	Nut.Btl	O2-Btl.No	Chloro-	Formalin g	Glu t.-plastic	Lugols-	FE													
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

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VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013										STATION NO. K1A4												
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB (°C)		WET BULB (°C)		PRESSURE (mb)		SEA STATE VISIBILITY		WIND DIRN. SPD.		CLOUD (amt) TYPE		WIND WEATHER		BOTTOM DEPTH		STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	*	(m)							
102	59	33	.17	N	143	55	14	W	22	A	P	R	1	3	54	19	4	.3	.3	34	96	17	1220	K1A4		
SBE 9+																										
PRESS SN																										
PRI TEMP SN																										
SEC TEMP SN																										
PRI COND SN																										
SEC COND SN																										
NIS	DEPTH	Rosette Notes		Hydro Team-PMEL			Strom		Phyto		Micro zoops		Ana A-I		Dean		Comments		NIS							
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No	Chloro-1	Formalin g	Glut.-plastic	Lugols-			FE							No.						
1	550			30	994	291														1						
2	450				995															2						
3	300				996															3						
4	200				997															4						
5	100				998															5						
6	50				999															6						
7	40				1000															7						
8	30				1001															8						
9	20				1002															9						
10	15				1003															10						
11	0				1004															11						
12																				12						

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The numbers on the bottle lids are written like this 1000 = 100 ?!?!?

VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY 1304		PROJECT & LEG GOA-ERP-LTL Spring 2013										STATION NO. <i>K/A 3</i>						
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB (°C)		WET BULB (°C)		PRESSURE (mb)		SEA STATE VISIBILITY		WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
153	39	40	.01	N	144	11	09	W	23	APR	13	06	57	4.7	35	100	15	165	<i>K/A 3</i>	
SBE 9+									FLUOR.S/N											
PRESS SN									SBE43-Oxy (prime)											
PRI TEMP SN									SBE43-Oxy (sec)											
SEC TEMP SN									Transmissometer											
PRI COND SN									PAR S/N											
SIC COND SN									O2 Temp Sensor No.											
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS							
No	DESIRED	SALT	Nut.Btl	O2-Btl.No	Chloro-	Formalin	Glut.-plastic	Lugols-	FE					No.						
1	<i>20T</i>			1065										1						
2	<i>150</i>			1006										2						
3	<i>75</i>			1007										3						
4	<i>50</i>			1008		X S4								4						
5	<i>40</i>			1069		X S5								5						
6	<i>30</i>			1010		X S6								6						
7	<i>20</i>			1011		X S7								7						
8	<i>10</i>			1012		X S8		X(100)						8						
9	<i>0</i>					X S9								9						
10														10						
11														11						
12														12						

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VESSEL NOAHSHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013		STATION NO. K1A2														
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	* SEA STATE	* VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID
									(^o C)	(^o C)	(mb)	*	*	(deg)	(kts)	*	*	*		
1	04 59 43 . 39 N	144	18 . 58 W	23	A P R 1 3	08	55	41 . 6		35		094	16							12.0 K1A2
	SBE 9+								FLUOR S/N											MAX. DEPTH = 115 m
	PRESS SN								SBE43-Oxy (prime)											
	PRI TEMP SN								SBE43-Oxy (sec)											
	SEC TEMP SN								Transmissometer											
	PRI COND SN								PAR S/N											
	SEC COND SN								O2 Tmp Sensor No.											
NIS	DEPTH	Rosette Notes	Hydro Team-PMEL			Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS							
No.	DESIRED		SALT	Nut. Blt	O2-Btl No	Chloro-	Formalin g	Gut.-plastic	Lugols-	FE			No.							
1	65		1014										1							
2	75		1015										2							
3	50		1016										3							
4	40		1017										4							
5	30		1018										5							
6	20		1019										6							
7	10		1020										7							
8	0		40	1021	293								8							
9													9							
10													10							
11													11							
12													12							

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VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013								STATION NO. K/A 1 105					
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	* SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	(m)
105	59	46	43	N	14	43	0	55	5	23	A P R 1	1043	4.3	35	10620	33	K/A 1
SBE 9+																	MAX DEPTH = 77 m
PRESS SN																	
PRI TEMP SN																	
SEC TEMP SN																	
PRI COND SN																	
SEC COND SN																	
NIS	DEPTH	Rosette Notes		Hydro Team-PMEI				Stron	Phyto	Micro zoops		Ana A-I		Dean			
No.	DESIRED			SALT	Nut.Btl	O2-Btl.No		Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE					
1	B				1022												1
2	50				1023			S2									2
3	40				1024			S3									3
4	30				1025			S4									4
5	20				1026			S5									5
6	10				1027			S6									6
7	D				1028			S7									7
8																	8
9																	9
10																	10
11																	11
12																	12

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VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013				STATION NO. K1Bb 106									
CONSC CAST #		LATITUDE	LONGITUDE			TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)
106	60	00	.12	N	144	54	45	W	23	A P R	13	140	41.0	.	34	093	20
SBE 9+																	
PRESS SN																	
PRI TEMP SN																	
SEC TEMP SN																	
PRI COND SN																	
SEC COND SN																	
NIS	DEPTH	Rosette Notes		Hydro Team-PMEL													
No.	DESIRED			SALT	Nut.Bt	O2-BtL.No			Chloro-I	Formalin g	Glut.-plastic	Lugols-		Ana A-I		Dean	
1	b			41	1030												
2	100			1031													1
3	75			1032													2
4	50			1033													3
5	40			1034													4
6	30			1035													5
7	20			1036													6
8	10			1037													7
9	0			1038													8
10																	9
11																	10
12																	11
																	12

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VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013		STATION NO. KIBa 107	
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE
	DEG MIN	DEG MIN	DAY	MO	YR	(°C)	(°C)
1075952.21	N	14454.77W	23	A P R 1 3	1602	4.4	33
SBE 9+							
PRESS SN							
PRI TEMP SN							
SEC TEMP SN							
PRI COND SN							
SEC COND SN							
Nis No.	DEPTH DESIRED	Rosette Notes	Hydro Team-PMEI	Strom	Phyto	Micro zoops	Ana A-I
				Chloro-I	Formaline g	Gut.-plastic	FE
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

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VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-ERP-LTL Spring 2013		STATION NO. 108									
CONSC CAST #	LATITUDE MIN	LONGITUDE MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE VISIBILITY (deg)	WIND DIRN.	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
108	59	52.2	14	54	.75	W	3	A P R 1 3	1707	4.5	.	33	10522	212	K16A
SBE 9+															
PRESS SN															
PRI TEMP SN															
SEC TEMP SN															
PRI COND SN															
SEC COND SN															
NIS	DEPTH	ROSETTE NOTES	HYDRO TEAM-PMMEL			STROM	PHOTO	MICRO ZOOPS	ANAL-A-I	DEAN	COMMENTS		NIS		
NO.	DESIRED		SALT	NUT.BTL	02-BTL.NO		CHLORO-I	FORMALIN G	GUT.-PLASTIC	LUGOLIS-	FE		NO.		
1	Bat	208				1039	294							1	
2	150					1040								2	
3	100					1041								3	
4	75					1042								4	
5	50					1043								5	
6	40					1044								6	
7	30					1045								7	
8	20					1046								8	
9	10					1047								9	
10	0					1048								10	
11														11	
12														12	

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VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-LTL Spring 2013				STATION NO. 109								
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	* SEA STATE VISIBILITY (deg)	WIND DIRN. (kts)	WIND SPD. (m)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	DEG	MIN	DEG	MIN	DAY	MO	HR	MIN		*	*	*	*	*	*	
109	59	44.12	N	144	55.19	W	23	APR	13	1936	4.4	31	9626	115	K131	
SBE 9+										FLUOR S/N						
PRESS SN										SBE43-Oxy (prime)						
PRI TEMP SN										SBE43-Oxy (sec)						
SEC TEMP SN										Transmissometer						
PRI COND SN										PAR S/N						
SEC COND SN										O2 Temp Sensor No.						
NIS	DEPTH	Rosette Notes			Hydro Team-PMEL		Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS		
No.	DESIRED	1	SALT	Nut.Btl	O2-Btl.No		Chloro-I	Formalining	Glut.-plastic	Lugols-	FE			No.		
1	13	110	42	1049										1		
2	75			1050										2		
3	50			1051										3		
4	40			1052										4		
5	30			1053										5		
6	20			1054										6		
7	10			1055										7		
8	0			1056										8		
9														9		
10														10		
11														11		
12														12		

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VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013				STATION NO.									
CONSC CAST #	LATITUDE	LONGITUDE				TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM	WEATHER	STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)
110	69 35.9	8 N	144 55.8	7 W	23	APR	1	3	21	37	41.7	.	30	10529	.	165	KIB2
SBE 9+			FLUOR SAN														
PRESS SN			SBE43-Dwy (prime)														
PRI TEMP SN			SBE43-Dwy (sec)														
SEC TEMP SN			Transmissometer														
PRI COND SN			PAR S/N														
SEC COND SN			O2 Temp Sensor No.														
NIS	DEPTH	Rosette Notes	Hydro Team-PMEL			Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS				
No.	DESIRED		SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE			No.				
1	1057		1057														1
2	100		1058														2
3	75		1059														3
4	50		1060														4
5	46		1061														5
6	30		1062														6
7	20																7
8	10		1063														8
9	0		1064														9
10																	10
11																	11
12																	12

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VESSEL NOADSHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-JERP-L-TL Spring 2013							STATION NO.										
CONSC .CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amb	BOTTOM	STA. NAME/ID	
									*	*	(mb)	(°C)	(°C)	(mb)	DIRN.	SPD.	TYPE	WEATHER	DEPTH		
1	11	59	28	07	N	144	54	.96	W	23	A.P.R. 1 3	25	34	5	2	.	29	/	05	17	KIB3
SBE 9+											FLUOR S/N										
PRESS SN											SBE43-Oxy (prime)										
PRI TEMP SN											SBE43-Oxy (sec)										
SEC TEMP SN											Transmissometer										
PRI COND SN											PAR S/N										
SEC COND SN											O2 Temp Sensor No.										
NIS No.	DEPTH DESIRED	Rosette Notes			Hydro Team-PWEL			Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments		NIS No.	REMARKS					
					SALT	Nut.Btl	O2-Btl.No	Chloro-I	Formalin g	Glut.-plastic	Lugols-	FE									
1	11	550			413	1066															1
2	400					1567															2
3	300					1068															3
4	200					1069															4
5	100					1070															5
6	50					1071															6
7	40					1072															7
8	30					1073															8
9	20					1074															9
10	10					1075															10
11	0					1076															11
12																					12

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VESSEL NOASHIP OSCAR DYSON		CRUISE ID TN263 DY1304		PROJECT & LEG GOA-IERP-LTL Spring 2013							STATION NO.										
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt	BOTTOM	STA. NAME/ID								
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	DIRN.	SPD.	TYPE	WEATHER
11259	24.13 N	14454.79 W	44 A P R 13	9225	5.1	.	27		118	14	2630			9225							
SBE 9+				FLUOR SN														MAX DEPTH =			
PRESS SN				SBE43-Oxy (prime)														m			
PRI TEMP SN				SBE43-Oxy (sec)																	
SEC TEMP SN				Transmissometer																	
PRI COND SN				PAR SN																	
SEC COND SN				O2 Temp Sensor No.																	
NIS No.	DEPTH DESIRED	Rosette Notes	Hydro Team-PME	Strom	Phyto	Micro zoops	Ana A-I	Dean	Comments									NIS No.			
1	25			1037			FE											1			
2	1500			1478														2			
3	500			1679														3			
4	250			1080														4			
5	100			1081														5			
6	50			1082														6			
7	40			1683														7			
8	30			1684														8			
9	20			1085														9			
10	10			1686														10			
11	0			1087														11			
12																		12			

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