

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. #1 /														
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID								
	DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)				
SBE 9+	6309		088234																			
PRESS SN	83012		FLUOR S/N																			
PRI TEMP SN	2841		SBE43-Dry (prime)																			
SEC TEMP SN	2824		0456																			
PRI COND SN	2575		NOME																			
SEC COND SN	2619		Transmissometer																			
NES	DEPTH	ROSET.	Hydro Team-PME				Wellbore		Julie		Sambrotto		Moran/		Harvey		Carr/		Moran		Katrin	Nis
No.	DESIRED	notes	SALT	02-BTL No	CHL.	Frac-CHL.	DOC	NUTS	018	815N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.			
1	61		F1/1	127224			/	/	003		X	X		X	P1				X	1		
2	50		F1/2		6		/	/											X	2		
3	40				5		/	/											X	3		
4	30				4													X	4			
5	20				3													X	5			
6	10				2													X	6			
7	0				1													X	7			
8																		X	8			
9																		X	9			
10																		X	10			
11																		X	11			
12																		X	12			

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID HT0902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (ID.) HT0902		STATION NO. 2									
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)	DRY BULB °C	WET BULB °C	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID			
		DEG	MIN	DAY	MO	HR	MIN	*	*	*	*	*	*	*			
002	58 02.	28	N	169	13.	68	W	05	APR	09	09	13	-1.	9	46	12122	NPL6.5
SBE 9+																	
PRESS SN																	
PRI TEMP SN																	
SEC TEMP SN																	
PRI COND SN																	
SEC COND SN																	
NEST DEPTH	Roset.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto	Moran/	Harvey	Carm/	Moran	Katrin	Nis			
NO DESIRED	notes	SALT	O2-Btl.No	CHL.	Frac CHL.	DOC	NUTS	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Shear	Th
1	~65	F/3	132/228	TB1				9								X	1
2	50							10								X	2
3	46							11								X	3
4	30							12								X	4
5	20							13								X	5
6	10							14								X	6
7	0							15								X	7
8																	8
9																	9
10																	10
11																	11
12																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring09		Ship Designation (I.D.) 1H0902						STATION NO. 2					
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN (deg)	WIND SPD (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/D
		DEG	MIN														
\$435803	.24N	169	44.50W	05 APR 09	1001	-1.6	.					11227				68	NP 4.5
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	Roset.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto	Moran	Harvey	Cann	Moran	Katrin	Nis			
No DESIRED notes	SALT	O2-BtlNo	CHL	Frac CHL	DOC	NUTS	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherri	Th	No.
1 ~6																	1
2 ~6																	2
3																	3
4																	4
5																	5
6																	6
7																	7
8																	8
9																	9
10																	10
11																	11
12																	12

ICE LOC: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BStERAP_Spring'09		Ship Designation (I.D.) H10902						STATION NO. 3							
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)			DRY BULB		WET BULB		PRESSURE		WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)
64 45S	15.24 N	169 46	.41 W	1236	-10.7	09	APR	09	14	05	149	11	69	St. 43					
SBE 9+		FLUOR S/N		SBE43-Oxy (prime)															
PRESS SN		SBE43-Oxy (sec)		Transmissometer															
PRI TEMP SN		PAR S/N		O2 Temp Sensor No.															
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
Roset.		Hydro Team-PMEI				Weingartner		Julie		Sambrutto		Moran/		Harvey		Carin/		Moran	
NO	DESIRED	notes	SALT	O2-BTL No	C+L	Frac CHL	DOC	NUTS	018	6.5N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No
1	~64		T/5	155 144	151	F/6				16									1
2	50		F/6							17									2
3	46					TB2	F/2			18									3
4	30					TB3	F/2			19									4
5	26					TB4	F/4			20									5
6	16					TB5	F/5			21									6
7	0					TB6	F/6			22									7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 3											
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID							
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	WEATHER					
00553	10.89	N	16905.56	W	45	APR	09	1340	4.4	.04	104	13	118	74					
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.																
MIS DEPTH	Roset.	Hydro Team+PHEL					Weingartner	Julie	Sambrotto		Moran / Harvey	Carin / Moran	Karin	Nis					
No.	DESIRED	notes	SALT	O2-Btl.No	CHL.	Frac CHL.	DOC	NUTS	018	615N	Iurea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	10																		1
2	10																		2
3	10																		3
4	10																		4
5	10																		5
6	10																		6
7	10																		7
8	10																		8
9	10																		9
10	10																		10
11																			11
12																			12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIRP_Spring'09				Ship Designation (I.D.) TH0902				STATION NO.				
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR			DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. DEGR.	WIND SPD. (kts)	CLOUD TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN	HR	MIN	*	*	(deg)	(mb)	*	(deg)	(kts)	*	*	(m)	
ΦΦ658	11.39 N	169°45' A	75°09' W	09	1611	0.9	.	02	135	22				70		
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.									
Hydro Team-PMEI																
NIS	DEPTH	ROSET.					Weingartner Julie									
No	DESIRED	notes	SALT	O2-Btl.No	CHL.	Frac CHL.	DOC	NUTS	018	615N	Urea	Part.	Prod	DON	Lomas	Moran'
1	65										X					Harvey
2	23										X					Cann'
3	15										X					Moran
4	12										X					Karin
5	9										X					Ns
6	6										X					No
7	3										X					
8	0										X					
9											X					
10																
11																
12																

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEI/FP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO 34/CE/Process 1									
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	WIND	BOTTOM	STA. NAME/ID		
		DEG	MIN	DEG	MIN	DAY	MO	HR	MB	(°C)	(°C)	(mb)	*	DIRN.	SPD.	CLOUD (amt)	
007	58	16	.68	N	169	04	.94	W	06	A P R	09	10	1.7	.	99	160	
SBE 9+	58	16.02				169	45.40									18	
PRESS SN						FLUOR SN											
PRI TEMP SN						SBE43-Oxy (prime)											
SEC TEMP SN						SBE43-Oxy (sec)											
PRI COND SN						Transmissometer											
SEC COND SN						PAR SN											
						O2 Tmp Sensor No.											
Nis		DEPTH		Roset.		Hydro Team-PMEI		Wingardner		Julie		Sambrotto		Moran'		Harvey	
No.	DESIRED	notes	SALT	O2-BLNO	CHL.	Frac CHL.	DOC	NUTS	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr
1	64																
2	50																
3	46																
4	30																
5	20																
6	10																
7	0																
8																	
9																	
10																	
11																	
12																	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSRP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 4/BCT		
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. DEPN. SPD. TYPE	WIND DIRN. CLOUD DEPTH WEATHER	60 BOTTOM DEPTH STA. NAME/ID
008	58 37 .24 N	168 51 .73 W	06 APR 09 48 35	1.4	.	1014216	Les Sand			BCT
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 Trip Sensor No.							
Hydro Team-PMEI										
Ns	DEPTH	Roset.	Weingartner	Julie	Sambrotto	Moran/	Harvey	Carin/	Moran	Katrin
No.	DESIRED	notes	SALT	O2-8t, No.	CHL.	Frac CHL.	DOC	NUTS	018	Ns
1	23						Q1		615N	urea
2	15						Q2	X	Lrea	Part.
3	12						Q3	X	Prod	Prod
4	10						Q4	X	DON	DON
5	6								Lomas	Lomas
6	6								Lessard	Lessard
7	4								Sherr	Sherr
8	6								Th	Th
9	6								No.	No.
10	6									
11	3	Leaker								
12	0									

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO 5 / M/V											
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE * * VISIBILITY	WIND DIRN. deg (kts)	WIND SPD. TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID				
		DEG	MIN																
0095954.	03 N	16759.	74 W	06	APR	09	2333	1.2	.03	17015	28	M/V							
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	ROSET.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto		Moran/	Harvey	Carrin/	Moran	Katrin	Nis				
No	DESIRED	notes	SALT	O2-BLNO	CHL	Frac CHL	DOC	NUTS	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No
1	26				1	1	✓	✓	39	007	X	X		X					1
2	26		F/9	218/009	2	2	1	1	40						X				2
3	10				3	3	1	1	41	008					X				3
4	0				4	4	1	1	42	009	X	X		X					4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOC: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 9/ M N 2												
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)
0	105	54	.44	N	168	35	80	07	APR	09	03	42	-6.0	.	06	26	214	41	M N 2	
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
NIS DEPTH	Roset.	Hydro Team-PMEI								Weighted	Julie	Sambroto		Moran /	Harvey	Carin /	Moran	Katrin	NIS	
No.	DESIRED	notes	SALT	O2-Bu, No	CHL	Frac CHL	DIC/ALK	DOC	NUTS	018	b15N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	35					/			✓	43	610					✓				1
2	30			206/208	2					44										2
3	20					3			✓	45						✓				3
4	10					4				46	011					✓				4
5	0					5			✓	47	112					✓				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIRP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. MN 3											
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	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)
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	Roset.	Hydro Team: PMEL		Wet gamma		June	Sambrotto		Moran/	Harvey	Carr/	Moran	Katrin	NIS	MAX. DEPTH =				
No.	DESIRED notes	SALT	02-Btl No	CHL	Frac OHL	DIC/AIK	DOC	NUTS	018	BSIN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	bet 46	159/65	T81				✓	✓	48										1
2	46	F/10					✓	✓											2
3	30	F/11	T82				✓	✓	49										3
4	20		T83																4
5	10		T84																5
6	6		T85				✓	✓	51										6
7	0		CAT 61																7
8																			8
9																			9
10																			10
11																			11
12																			12

Rosette Notes:

ICE LOG: Surface ice conditions or proximity to ice edge

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 8										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR MN	TIME (GMT) (°C)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN															
1	25 45.32 N	169 47.75 W	67 APR 09	1228	-4.3	.	.	11	11	11	11	11	11	11	11	11	11	11
SBE 9+																		
PRESS SN																		
PRBL TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
NIS DEPTH	Roset.	Hydro Team-PMEI							Weingartner	Julie	Sambrotto	Moran'	Harvey	Carron'	Moran	Katrin	NIS	
No DESIRED notes	SALT	02-BEL No	OHL	Frac CHL	DIC/ALK	DOC	NUTS	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	b5	F12	0.05	1.67	TB1		✓	✓	53	13								1
2	40	F13			TR2				54									2
3	30				TB3				55									3
4	20				TB4		✓	✓	56									4
5	10				TB5				57	14								5
6	5				TB6		✓	✓	58	15								6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

X
NOT FILTERED

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 9/MN4.5											
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	56 MN4.5	MNH.S	STA. NAME/ID				
		DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)				
Φ 1	35° 56'. 12 N	169° 59'. 59 W	Φ 7	A P R	0 9	14 36	-4.2	.09	1009	1	67	23	1	1000	1.5				
SBE 9+		FLUOR S/N																	
PRES 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 Tmp Sensor No.																	
Ns	DEPTH	Roset.		Hydro Team-PMEI		Wingardner Julie		Sambrutto		Moran/ Harvey		Garn/		Moran					
No.	DESIRED	notes	SALT	Nit.Btl	02-Btl No	CHL	Frac CHL..	DOC	018	015N	urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No
1	bot		54	59	058	/	/	/	016	X	X	X	X	X			X		1
2	40		F	15	60													+	2
3	30																		3
4	20																	+	4
5	10																		5
6	10																	+	6
7	0																	7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL
USCG Heavy

CRUISE ID
H10902

PROJECT & LEG
BEST/BSEIRR_Spring'09

Ship Designation (I.D.)
H10902

STATION NO
9/MV4.5

CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WIND TYPE	BOTTOM DEPTH	STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)			
0	1	4	59	56.	31	N	169	57.	10	10	1427	A P R	0	9	1427-3.5	.08	175	17	M N 4.5
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.											
NS	DEPTH	Roset.						Hydro Team-PHET						Wettgarnet	Julie	Sambrotto		Moran'	
No	DESIRED	notes	SALT	Nut.Bt	O2-BtL No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Harvey	Gavin'	Moran	Katrin
1	29																		Nis
2	19																		No.
3	15																		
4	11																		
5	8																		
6	6																		
7	0																		
8																			
9																			
10																			
11																			
12																			

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

ToP not completely seated

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERF_Spring09		Ship Designation (I.D.) 110902		STATION NO MN 4.5												
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	BOTTOM	STA. NAME/ID					
	DEG	MIN		DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
\$BE 9+											5.7	.								
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Roset.		Hydro Team-PMEI					Weltjanner Julie		Sambrotto		Moran/		Harvey		Carin/		Moran		Katri	
NO.	DESIRED	notes	SALT	NUT.BT	O2-BTl.No	CHL.	Frac CHL	DC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	46					1		1												1
2	40					2		2												2
3	36					3		3												3
4	20					4		4												4
5	10					5		5												5
6	0					6		6												6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

11/11/09

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 1D											
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT) ("C) (mb)	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																
Φ 16 59 53.	73 N	170 23.	99 W	08	APR	09	11	14	-7.1	.	12	26	Φ 22						
SBE 9+										FLUOR S/N									
PRESS SN										SBE43-Dry (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	Roset.	Hydro Team-PAL		Weingartner Julie		Sambrotto		Moran/ Harvey		Carm/		Moran		Katrin		NIS			
No.	DESIR ED notes	SALT	Nut.Bf	02Btl.No	CHL	Frac CHL	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.	
1	b6	E/16	7	12/26	1											X		1	
2	50	F/17	8															2	
3	46		9													X		3	
4	36		10													X		4	
5	20		11													X		5	
6	10		12													X		6	
7	10																	7	
8	10																	8	
9	10																	9	
10	10																	10	
11	O gushes	13																11	
12																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Not
planned

leaking (gushing)

O2 206 charged to 226 bottle number
was miss-read/recorded

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. MNS										
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/D	
									(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	
SBE 9+																		
PRESS SN									FLUOR S/N									
PRI TEMP SN									SBE43-Oxy (prime)									
SEC TEMP SN									SBE43-Oxy (sec)									
PRI COND SN									Transmissometer									
SEC COND SN									PAR S/N									
									O2 Tmp Seison No.									
NIS	DEPTH	ROSET.		Hydro Team-PMEI					Weingartner	Julie								
No.	DESIRED	notes		SALT	Nut.Btl	O2-Btl No	OHL.	Frac OHL.	DIC/AIk	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard
1	10																	
2	10																	
3	10																	
4	10	1mm																
5	10	Can?																
6	10	Can																
7	10	Can																
8	10	Can																
9	10	Shear																
10	10	Sue																
11	Sue Test outlet O-ring																	
12																		

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO.: MNS										
CONSC CAST #	LATITUDE	DEG MIN	LONGITUDE	DEG MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID		
								(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
18	59 54.72 N	170 25.87 W	08 APR 09	15 57-10.2														
SBE 9+				FLUOR SN														
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 Temp Sensor No.														
MIS	DEPTH	Roset.	Hydro Team-PBEL						Weingartner	Julie	Sambrotto	Moran /	Harvey	Carr /	Moran	Katrin	MIS	
No.	DESRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL	Frac CHL	DOC	018	\$15N	Urea	Part.	Prod	DON	Lomas	Lessard	Thierr	No.
1	bot		15/															1
2	26		16/9/9															2
3	17		17/9/0															3
4	13		18/9/1															4
5	16		19/9/2															5
6	7		20/9/3															6
7	3		21/9/4															7
8	9		22/9/5															8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID: H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO 111/MN5								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN													
019	59	52.75	N	170	32.37	W	08 APR 09	2123	-6.8	14	27568		64	MN5		
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							02 Trip Sensor No.									
Roset.		Hydro Team-PMLL					Weingartner	Julie								
No.	DEPTH	notes	SALT	Nut.BTU	02-BTU No	CHL	Frac CHL	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Moran
1	60		23					✓	✓							Harvey
2	50		24			1	/	✓	✓							Cainy
3	40		25			2	2									Moran
4	30		26	198/125		3	3	✓	✓							Katrin
5	26		27			4	4	✓	✓							Ns
6	10		28			5	5									No
7	0		29			6	6	✓	✓	022						
8										023						
9																
10																
11																
12																

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 77/MNC6										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY MO	YR	HR	MIN	TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID
		DEG	MIN					(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)		
020	59	54.	67	N	17	03.	63	W	09 APR 09	0023	-4.2	.	12	342	06	70 MN 06		
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 Sensor No.										
NIS	DEPTH	Roset.		Hydro Team-PML		Weingartner		JUlie	Sambrutto		Moran/	Harvey	Cain/	Moran	Karn	NIS		
No	DESRED	notes	SALT	Nut.Bt	O2-Bt/No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	No.
1	65			30				✓	✓	024	X	X	X	X				1
2	60																	2
3	50			31	203/658	1												3
4	40			32		2		✓	✓									4
5	30			33		3												5
6	20			34		4												6
7	10			35		5			025									7
8	0			36		6		✓	✓	026	X	X	X	X				8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEPP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 37/Mc7											
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	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)		
	21 59 54 . 05 N	17 13 5 . 74 W	09 APR 09	04 27	-4 . 6	09	09	09	04	27	70/16	69	1010	70/16	69	70/16	69	70/16	69
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	Roset.	Hydro Team/PMEI					Weingartner Julie		Sambrotto		Moran/ Harvey		Garn/		Moran		Karin		Nis
No DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL	Frac CHL	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th		No.
1 67			37																1
2 60		18	38																2
3 50		19	39	113/659	1														3
4 40		20	40		2														4
5 30		21	41		3														5
6 20		22	42		4														6
7 10		23	43		5														7
8 0		44	6																8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09				Ship Designation (I.D.) 1H0902				STATION NO. 14						
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)				DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRL.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
0225954.35 N	17210.67 W	09 APR 09	1118-6.5	04	051	16											MN8	
SBE 9+			FLUOR S/N															
PRESS S/N			SBE43-Oxy (prime)															
PRI TEMP S/N			Transmissometer															
SEC TEMP S/N			PAR S/N															
PRI COND S/N			O2 Trap Sensor No.															
SEC COND S/N																		
Hydro Team-PHEL																		
NIS	DEPTH	Roset.			Weingartner	Julie			Sambrotto			Moran/	Harvey	Carm/	Moran	Katrin	NIS	
No.	DESIRED	notes	SALT	NUT.BTU	02-Btl No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	bat		1/23	4/5	18 2/6/0		A	A	30									1
2	60		F/24	44	TB1	TB1												2
3	50		47															3
4	40		48		TB2	TB2												4
5	30		49		TB3	TB3	B	B										5
6	25		50		TB4	TB4												
7	10		51		TB5	F65		31										
8	6																	8
9	6																	9
10	6																	10
11	6																	11
12	0		52		TBL	FBL	C	C	32									12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) 1H0902						STATION NO. 5						
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)		DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN (kts)	WIND SPD. TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN						DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN (kts)	WIND SPD. TYPE	BOTTOM DEPTH (m)	STA. NAME/ID		
823	59 54.37 N	172 47.71 W	49	APR	09	15	01	-08.0	03	52	25	72	MN9					
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	Roset.	Hydro Team +PMEL						Weingartner	Julie	Sambrotto	Moran/	Harvey	Carn/	Moran	Katrin	Nis	
No	DESIRED	notes	SALT	Nut.Bti	O2-Bti.No	CHL.	Frac CHL.	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	bot		B1	53	78/69					33								1
2	60		B2	54														2
3	50			55		1												3
4	40				56		2											4
5	30				57		3											5
6	20				58		4											6
7	10			59		5				1	1							7
8	10				60		6											8
9	0																	9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSI/PP_Spring'09		Ship Designation (I.D.) 110902		STATION NO. 5																	
CONSC CAST #		LATITUDE DEG MIN		LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MIN		DRY BULB (*C)		WET BULB (*C)		PRESSURE (mb)		SEA STATE VISIBILITY		WIND DIRN. (kts)		WIND SPD. TYPE		CLOUD (amt) WEATHER		BOTTOM DEPTH (m)		STA. NAME/ID	
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	Roset.	Hydro Team-PMEI						Wengenmeier	Julie	Sambrotto		Moran/	Harvey	Carn/	Moran	Katrin	Ns							
No.	DESIRED	notes	SALT	Nut.Bt	O2-Bt	No.	CHL.	Frac CHL.	DIC/ALK	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.				
1	69						61										X							1	
2	29						62										✓							2	
3	19						63										X							3	
4	15						64										X							4	
5	11						65										✓							5	
6	8						66										X							6	
7	4						67										X							7	
8	0						68										X							8	
9																	✓							9	
10																								10	
11																								11	
12																								12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.)						STATION NO.						
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)			DRY BULB (°C)		WET BULB (°C)		PRESSURE (mb)		SEA STATE VISIBILITY	WIND DIRN. SPD. TYPE	WIND DIRN. SPD. TYPE	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	*	*	(deg)	(kts)	*	(m)
425	5953.	91	N	173	24.	29	W	09	APR	09	1924-9.7	.	04	435	15	86	MN10	
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
Ns	DEPTH	ROSET:	Hydro Team/PME						Weingartner	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Kaun	
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL	Frac CHL	DOC	01B	b1SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	~80			69					✓	36								
2	60			15½														
3	50			70		1	1											
4	40			71		2	2											
5	30			73		3	3	✓	✓									
6	20			73		4	4											
7	10			74		5	5		37									
8	0			75		6	6	✓	38									
9																		
10																		
11																		
12																		

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSI/RP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 17 / MN11										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MIN		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID			
		DEG	MIN	DAY	MO													
026	59	53.	60	N	173	58.	69	W	09 APR 09	2304-9.5	.	10823	101	MN11				
SBE 9+																		
PRESS SN																		
PRT TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
Ns DEPTH	Roset.	Hydro Team-PMEI					Weingartner	Julie	Sambrutto		Moran /	Harvey	Cain /	Moran	Katrin	Nis		
No DESIRED notes		SALT	Nut.Btl	02-Btl No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1 97		B/3	76	127			-	-										1
2 75			83				/	/										2
3 50		B/4	77				/											3
4 40		B/5	78			2	/	/										4
5 30			79			3	/	/										5
6 20			80			4												6
7 10			81	205		5												7
8 0			82			6												8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 18 MNW/2	
CONSC CAST #	LATITUDE	LONGITUDE							
	DEG MIN	DEG MIN	DAY	MO	YR	Hr MIN	(°C)	(°C)	(mb)
0275954.04N	17436.72W	10 APR 09	0459	0459	-8.3	.	07	34020	113 MNW/2
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	Roset.	Hydro Team-NMEI				Weingartner Julie	Sambrotto	
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No.	Chl.	Frac Chl.	DIC/AIk	DOC
1	109		B/6	74				✓	044
2	100		6/7	85	162				
3	75		B/8	86	Leaker				
4	50		87	1		✓	✓		
5	40		88	2					
6	30		B/9	87		3			
7	20		90	224	4				
8	10		91	5					
9	0		92	6					
10									
11									
12									

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSMPR_Spring'09		Ship Designation (I.D.) TH0902		STATION NO. 19/mN13												
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	120 BOTTOM DEPTH (m)	STA. NAME/ID					
		DEG	MIN	DAY	MO															
0285953.94 N	17512.11 W	10 APR 09	5926-11.1	10	33615	120	MN13													
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.																		
Roset.		Hydro Team-PME		Weingartner		Julie	Sambrotto		Moran'	Harvey	Cain'	Moran	Karin	Nis						
No	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL	Frac CHL	DNC/AIK	DOC	018	bSN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	100	115	B10	93	132/228				A	13										1
2		B11	94						B	9										2
3	80		95						C	C										3
4	60		96		TR1	D	D													4
5	40		97		TR2	E	E													5
6	30		98		TR3															6
7	20		99		TR4	F	F													7
8	10		100		TR5															8
9	0		101		TR6	G	G													9
10																				10
11																				11
12																				12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10502		PROJECT & LEG BEST/NSIFRP_Spring'09		Ship Designation (I.D.) 1H0902						STATION NO.							
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID						
029	59	52.46 N	175 12.68 W	09 APR 09	1122	10	33026					120	NN13						
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	ROSET	Hydro Team-PMLL						Wingender	Julie	Sambrotto	Moran'	Harvey						
No	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL..	DOC	018	515N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	~105		102												X			1	
2	100		103														X		2
3	80		104														X		3
4	65		105														X		4
5	45		106														X		5
6	30		107														X		6
7	15		108														X		7
8	6																		8
9	6																		9
10	6																		10
11	6																		11
12	0		109																12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSEI/PP_Spring09						Ship Designation (I.D.)						STATION NO.					
		CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	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)
43	45	59	52	.04	N	175	15	.38	W	10A P R 0 9	13 45	-11.5	.	10	330	18	120	MN13	
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	ROSET.	Hydro Team-PMEI						Weingartner	JUFE	Sambrotto		Moran/	Harvey	Cain/	Moran	Katrin	Nis	
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL..	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	115																	1	
2	96																	2	
3	60																	3	
4	30																	4	
5	10																	5	
6	10																	6	
7	10																	7	
8	10																	8	
9	10																	9	
10	10																	10	
11	10																	11	
12	0																	12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSERP Spring'09	Ship Designation (I.D.) 1H0902	STATION NO.
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CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID					
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
Φ 31 59	52	.35 N	175	12	.54 W	14	APR	09	1608	-12.9	.	11	345	16	124	MN13				
SBE 9+			FLUOR S/N																	
PRESS SN			\$8643-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.																	
Ns	DEPTH	Roset.	Hydro Team-PMEI				Wiegertner Julie		Sambrotto		Moran/ Harvey		Carin/ Karin		Moran	Katrin/ Nis				
No.	DESIR ED	notes	SALT	Nut.BH	O2-BH,Mo	CHL	Frac CHL..	DIC/AIK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	bot																		1	
2	7Φ																		2	
3	5Φ																		3	
4	26																		4	
5	17																		5	
6	13																		6	
7	16																		7	
8	10																		8	
9	7																		9	
10	5																		10	
11	Φ																		11	
12																			12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/ASIE RP_Spring'09				Ship Designation (I.D.) TH0902				STATION NO.						
CONSC CAST #	LATITUDE MIN	LONGITUDE		DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN. TYPE	WIND SPD. (kts)	CLOUD DEPTH (m)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN															
43	25	9	52	18	N	175	12.56	W	14	A P R 0 9	1640	-13.3	.	12	358	13	124 MN 13	
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
NIS	DEPTH	ROSET.	Hydro Team-PMEU				Weingartner	Julie	Sambrotto		Moran/	Harvey	Captin/	Moran	Katrin	NIS		
No.	DESIRED	notes	SALT	Nut/Btl	02-Btl.No	CHL	Frac CHL	DIC/ALK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sheir
1	129			111							V	X	X	X				
2	70			102							V	X	X	X				
3	50			103							V	X	X	X				
4	29			114								X	X	X				
5	19			115														
6	15			116														
7	15			117														
8	11			118														
9	8			119														
10	4			120														
11	Φ																	
12																		

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID HI0902		PROJECT & LEG BEST/SBIEP_Spring'09				Ship Designation (I.D.) HI0902				STATION NO. 19						
CONSC CAST #		LATITUDE		LONGITUDE				TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID	
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	(°C)	(°C)	(mb)	* •	(deg) •	(kts) •	(m) •*		
43	35	9	51	1.97	N	175	13	49	W	14	A P R	09	17	47	-13.4	.12	MN13	
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	ROSET		Hydro Team-PMEI				Weingartner		Julie		Sambrotto		Moran / Harvey		Carn / Moran	Katrin	
No.	DESIRED	notes	SALT	Nut/Btl	02-Btl, No	CHL.	Frac CHL..	DNC/ALK	DOC	018	6/5N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr Th
1	20																1	
2	20																2	
3	20																3	
4	20																4	
5	20																5	
6	20																6	
7	20																7	
8	20																8	
9	20																9	
10	20																10	
11	20																11	
12	20																12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10302		PROJECT & LEG BEST/BSI/P - Spring'09		Ship Designation (I.D.) H10302		STATION NO. 20/MN/4										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/D	
		DEG	MIN															
43	45 54 . 20 N	175 48 . 32 W		11	APR	09	00 06 - 12 . 4					14			33522	130	MN/4	
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	Roset.		Hydro Team-PMEI		Wenzel		Julie		Sambrutto		Moran/		Harvey		Cain/		Moran
No.	DESIRED	notes	SALT	Nut.Bti	02-Bti.No	Chl.	Frac Chl..	DOC/ALK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Katrin	NIS
1	127			121					1									1
2	100			122	✓45				1									2
3	75			123														3
4	50			124		1	1											4
5	40			125		2	2											5
6	30			126	155	3	3											6
7	20			127		4	4											7
8	10			128		5	5											8
9	0			129		6	6											9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEPP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 21/KM/5									
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	BOTTOM	STA. NAME/D	
DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	
6	35	55	95	46	0	17	623	03	W	11	11.9	.	15	34524	140	MW15	
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 Sensor No.									
N/S		DEPTH		Roset.		Hydro Team-PMEI		Weingartner		Julie		Sambrotto		Moran/		Harvey	
No	DESIRED	notes	SALT	Nut.Btl	O2-Btl/No	CHL.	Frac CHL.	DIC/ALK	DOC	018	b18N	Urea	Part.	Prod	DON	Lomas	Karin/
1	137					30										Lessard	Harvey
2	125					31	149										Th
3	100					32											No.
4	75					1											1
5	50					2											2
6	40					3	206	2									3
7	30					4		3									4
8	20					5											5
9	10					6		5									6
10	0					7		6									7
11																	8
12																	9
																	10
																	11
																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSERP_Spring09	Ship Designation (I.D.) 1H0902	STATION NO. 22
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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)
Φ 36 59 53.96 N	176 59.58 W	11 APR 09	0814	-12.8	.	.	17	34	14							136	MN16		
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			02 Trip Senson No.																
NIS DEPTH	Roset.	Hydro Team-PMEL						Weingartner	Julie	Sambrutto		Moran/	Harvey	Carin/	Moran	Katrin	NIS		
No.	DESIRED	notes	SALT	NUT.BTL	02-BL#No	CHL.	Frac CHL	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	~130		312	8	218			A	A	54							X		1
2	166		B12	9															2
3	75		10														X		3
4	50		11		TB1		B												4
5	46		12		TB2														5
6	30		13		TB3														6
7	20		14		TB4											X			7
8	10		15		TB5						55					X			8
9	0		16	-009	TB6	C	C									X			9
10																			10
11																			11
12																			12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERR Spring'09		Ship Designation (I.D.)						STATION NO. 23													
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB		WET BULB		PRESSURE		SEA STATE		WIND		WIND		CLOUD (amt)		BOTTOM		
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	*	DIRN.	SPD.	TYPE	WEATHER	DEPTH	STA. NAME/ID	
43	59	53.	18	N	177	36.	94	W	11	APR	09	13	24	-12.	8	.	19	346	15	138	MN	17			
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		Roset.		Hydro Team-PMEI						Weingartner		Julie		Sambrotto		Moran/		Harvey		Carr/		Moran		Kathrin	
No.	DESIRED notes	SALT	Nut.Btl	02-BBLNo	CHL..	Frac CHL..	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sheriff	Th	No.						
1	432	B4	17	159				A	'A	Q57										1					
2	160	Leaker-B5	18					B	'B										2						
3	75		19					C	'C										3						
4	50		20		TB1			D	'D										4						
5	40		21	TB2			E	'E											5						
6	30		22	TB3			F	'F											6						
7	20		23	TB4															7						
8	10		24	TB5															8						
9	0		25	165	TBL														9						
10																			10						
11																			11						
12																			12						

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIRP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 24																
CONSC CAST #		DEPTH DEG	MIN	LATITUDE DEG	MIN	LONGITUDE DEG	MIN	DAY	MO	YR	TIME (GMT) HR MN	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN. SPD. TYPE	WIND DIRN. SPD. TYPE	BOTTOM DEPTH (m)	STA. NAME/ID					
SBE 9+		43	85	9	54	.3	2	N	17	8	11	5	1	W	1	A P R	09	17	13 - 12.4	24	004	16	144	MN18
PRESS SN																								
PRI TEMP SN																								
SEC TEMP SN																								
PRI COND SN																								
SEC COND SN																								
MSL DEPTH	Roset.	Hydro Team-PMEL						Weingartner/Julie		Sambrotto		Moran/ Harvey		Carin/ Kathrin		Moran		Nis No.						
No.	DESRED notes	SALT	Nut.Btl	O2-Btl.No	CHL	Frac CHL-	DIC/Alk	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th						
1	~138	316	26	488	1			A	A	60	X	X	X						1					
2	125	B/7	27																2					
3	100		28																3					
4	75		29																4					
5	50		30																5					
6	40		31		TB1			B	B										6					
7	30		32		TB2														7					
8	26		33		TB3														8					
9	10		34		TB4														9					
10	10				TB5														10					
11	6		35					61											11					
12	0		36	162	TB6	C	C	62	X	X	X	X	X						12					

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

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TB6 - not sure if it was taken from the correct bottle

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIHP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 25										
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	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	DEPTH			
43	59	59	54.	10	N	178	53.	90	W	12	A P R 0 9	0727	-9.6	.	21	6508	490 MN19	
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.										
Nst DEPTH		Roset.		Hydro Team-PMLL		Weingarten/Juile		Sambrotto		Moran/		Harvey/		'Cain/		Moran		
No.	DESIRED	notes	SALT	Nut.Btl	O2 Btl.No	CHL.	Frac CHL	DIC/AIk	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Katrin	Nst
1	473		13.17	28.24	37	469			1	1	X	X	X	X				1
2	400				38	106			2	2								2
3	350				39	084			3	3								3
4	250				40	064			4	4	X	X	X	X				4
5	150				41	200			5	5	X	X	X	X				5
6	100				42	074			6	6	X	X	X	X				6
7	60				43	153	TBL	F81	7	7								7
8	40				44	86	TBL	F82	8	8	X	X	X	X				8
9	30				45	75	TBL	F83	9	9	X	X	X	X				9
10	20				46	7	TBL	F84	10	10	X	X	X	X				10
11	10				47	5	TBL	F85	11	11	73							11
12	0				48	2	TBL	F86	12	12	74	X	X	X				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BESSER Spring'09		Ship Designation (I.D.) H10902		STATION NO. 25											
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	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)	
44 05 54	.29	N	172 54	.21	W	12 A P R	09	0858	-19.5	.	22	47 06 09	388	MN19					
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.																
Roset.		Hydro Team-PMEL						Weingartner	Julie	Sambrotto		Moran /	Harvey	Cain /	Moran	Katrin	NIS		
No	DESRED	notes	SALT	Nut.BR	O2-Btl.No	CHL	Frac CHL	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sher	Th	No.
1	7																	1	
2	7																	2	
3	7																	3	
4	7																	4	
5	7																	5	
6	7																	6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERR_Spring09		Ship Designation (I.D.) H10902		STATION NO. 25													
CONSC CAST #	LATITUDE	DEG	MIN	LONGITUDE	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	WIND DRN.	WIND SPD.	CLOUD (amt)	WIND TYPE	BOTTOM DEPTH	STA. NAME/ID
		DEG	MIN							*	*	(°C)	(°C)	(mb)	(deg)	(kts)	*	(m)			
b4	159 54 . 05 N	172	54 . 28 W	12 A P R	09	13	32	-10	4	.	21	63	12	564	564	564	MN19				
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.																	
Ns DEPTH	Roset.	Hydro Team-PMEI						Wengenmaier Julie		Sambrotto		Moran/ Harvey		Carin/ Karin		Moran		Karin			
No. DESIRED	notes	SALT	Nut. Bt:	O2-Bt, No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Shear	Th	No.		
1	33																		1		
2	16																		2		
3	16																		3		
4	16			149															4		
5	16																		5		
6	16																		6		
7	16																		7		
8	10																		8		
9	10																		9		
10																			10		
11																			11		
12																			12		

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP Spring'09		Ship Designation (ID.) H10902		STATION NO. 25												
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)	*	*	
3	42	59	54.	33	N	178	54.	46	W	12	A P R	09	1624	-10.7	.	22	9547	395	MN/19	
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.									
Nls	DEPTH	Roset.	Hydro Team PHMEL						Wingardner Julie		Sambrotto		Moran/ Harvey		Carin/ Karin		Moran Katrin		Nls	
No	DESIRED	notes	SALT	Nut.Bt	02-BtL.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	33					Q18								V		✓*				1
2	21					Q11								V		✓				2
3	17					Q12								V		✓				3
4	13					Q13								V		✓				4
5	9					Q14								V		✓				5
6	4					Q15								V		✓				6
7	Φ													✓						7
8	Φ					Q16								✓						8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

risk n \neq - leaky

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIRP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 26														
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID		
		DEG	MIN																			
043553.88	N	17925.83	W	12	APR	09	23	04	-6.9	22	75	12	1013	1012	1011	1010	1009	1008	1007	1006	1005	
SBE 9+																						
PRESS SN																						
PRI TEMP SN																						
SEC TEMP SN																						
PRI COND SN																						
SEC COND SN																						
02 Trop Senson No.																						
Hydro Team-PME		Weingartner Julie		Sambrotto		Moran/ Harvey		Carin/ Katin		Moran		Katin		Nis No.		REMARKS		MAX. DEPTH =		m		
No	DESIRED notes	SALT	Nut.BH	02-BH#No	CHL.	Frac CHL..	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sierr	Th				
1	2723		50	175																		1
2	2500	B11	51	072																		2
3	2600	ND92G001																				3
4	1750	B13	52	068																		4
5	1500		53	136																		5
6	1200		54	143																		6
7	1000		55	167																		7
8	900		56	121																		8
9	750		57	226																		9
10	500		58	120																		10
11	400		59	003																		11
12	300		60	058																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Miskin 3-bed rosette

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 264 MN 20											
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR MN	TIME (GMT) (°C)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN																
0445	59 53 .05 N	179	26 .27 W	13	APR	09	01	34-6.8	-6.8	22	80	13	2730	MN 20					
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	Roset.	Hydro Team-PMEI						Wernagster	Julie	Sambrotto	Moran	Harvey	Carin	Moran	Katrin	Nis			
No.	DESIRED notes	SALT	Nut.Bt	02-Btl.No	CHL.	Frac CHL.	DIC/AIR	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	300		61	182				-	-	X	X			X					1
2	250		62	113				-	-	70									2
3	200		63					-	-	71									3
4	150		64					-	-	72									4
5	100		65					-	-	75	X	X	X						5
6	75		66					-	-	76									6
7	50		67F		1	1		-	-	77									7
8	40		68F		2	2	-	-	-	78	X	X	X						8
9	30		69		3	3		-	-	79									9
10	20		70		4	4	-	-	-	80	X	X	X						10
11	10		71		5	5		-	-	81	X	X	X						11
12	0		72		6	6	-	-	-	82	X	X	X						12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 26/MN 24											
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 WEATHER	BOTTOM DEPTH (m)	STA. NAME/D				
SBE 9+			DEG	MIN	DAY	MO	YR	HR	MIN										
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS	DEPTH	Roset*	Hydro Team+PML				Wingardner	Julie	Sambrotto		Moran/	Harvey	Carin/	Moran	Karin	Nis			
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Shear	Th	No.
1	10																	1	
2																		2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12		✓																12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 27/MN-SL2													
CONSC CAST #		DEG LATITUDE	MIN	DEG LONGITUDE	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	WIND DIRN.	WIND SPD.	CLOUD (amt)	TYPE	BOTTOM DEPTH	STA. NAME/ID
44	66	029	.35	N	179	12	.03	W	13	A P R 0 9	1632	-12.3	.	24	76	5		1600	MN-SL2		
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.										
Ns	DEPTH	Roset.	Hydro Team-PMEI						Weingartner	Julie	Sambrotto	Moran/	Harvey	Carin/	Moran	Katrin	Ns				
No	DESRED	notes	SALT	NUT.BTH	02-BTH.No	CHL	Frac CHL..	DIC/AIR	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No	
1	51		32	B23	B24	910/23		1								✓				1	
2	33		44	AS	Alu	911/24		2								✓				2	
3	27					912/25										✓				3	
4	26					913/26		3								✓				4	
5	13					914/27		4								✓				5	
6	7					915/28										✓				6	
7	Φ															✓				7	
8						916/29		5								✓				8	
9																				9	
10																				10	
11																				11	
12																				12	

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEER_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 28											
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)					
54 26.1	41.79	N	17 659.	17	W	14	APR 09	1055	-10.6	.31	311	5	117MAS13						
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.																
Ns	DEPTH	Roset.	Hydro Team+PMEI				Weingartner	Julie	Sanborro		Moran/	Harvey/	Carin/						
No	DESIRED	notes	SALT	Nut.Btl	O2-Btl No	CHL.	Frac CHL.	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	7																		1
2	7																		2
3	7																		3
4	7																		4
5	7																		5
6	7																		6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSERP_Spring09	Ship Designation (I.D.) 1H0902	STATION NO. 029									
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WIND SPD. BOTTOM (m)	STA. NAME/ID	
\$486146.90 N	17647.68 W	14 APR 09 1320-11.5	1320-11.5	31	29709	113	113	113	113	113	113	113NSL4	
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		0.2 Tmp Sensor No.											
Ns	DEPTH	ROSET	Hydro Team-PMEI	Wingate	Julie	Sambronto	Moran/	Harvey	Cain/	Moran	Katrin	Ns	
No.	DESIRED	notes	SALT Nut.Btl 02-Btl No	CHL. Frac CHL.	DIC/AIK	DOC	018	015N Urea Part.	Prod	DON	Lomas	Lessard	
1	B67		B1 80	-1029								X	1
2	B50		B2 81									X	2
3	B57		82									X	3
4	B50		83 -196	TB1								X	4
5	B50		84	TB2								X	5
6	B50		85	TB3								X	6
7	B50		86	TB4								X	7
8	B50		87	TB5								X	8
9	B50											X	9
10	B50											X	10
11												X	11
12												X	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP Spring'09		Ship Designation (I.D.) H10902		STATION NO. 429										
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
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRICOND SN																		
SEC COND SN																		
NIS	DEPTH	Roset.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto	Moran/	Harvey	Carn/	Moran	Katrin	Nis			
No.	DESIRED	notes	SALT	NUT.BTU	02-BTU/NO	CHL	Frac CHL	DOC/AIk	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr
1	10																	1
2																		2
3																		3
4																		4
5																		5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12		✓																12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL
USCG HealyCRUISE ID
H10902
PROJECT & LEG
BEST/BSIERP_Spring09
Ship Designation (I.D.)
H10902STATION NO.
029

CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	BOTTOM DEPTH (m)	STA. NAME/ID			
					DAY	MO	YR												
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS	DEPTH	Roset.	Hydro Team-PMEI					Weisgarber	Jule	Samoritto		Moran / Harvey	Cann / Karin	Moran	Karin	Nis			
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	b6t		90 ⁴⁰ ₄₀							X		X						1	
2	46		91 ⁰⁰ ₀₀							X	V	X	V					2	
3	30		92 ⁰⁰ ₀₀															3	
4	24		93 ²⁰ ₀₀															4	
5	18		94 ⁰⁰ ₀₀															5	
6	12		95 ⁰⁵ ₀₀															6	
7	6		96 ⁰⁰ ₀₀															7	
8	Φ		97 ⁰⁷ ₀₇							X	X	V						8	
9																		9	
10																		10	
11																		11	
12																		12	

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09				Ship Designation (I.D.) 1H0902				STATION NO. 29/PMN-SL4							
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	ICE Station 3					
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)	STA. NAME/ID
SBE 9+	51	61	46	.85	N	176	48	64	w	15	APR	09	02	19	-5	.6			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
No. DEPTH No. DESIRED notes	RoSet.	Hydro Team-PHEL						Weingartner	Julie	Sambrotto		Moran/ Harvey		Carrn/ Kattin		Moran/ Kattin		Nis No.	
1 105	B/3	98	074					815N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherff	Th			
2 75		99																1	
3 60																		2	
4 50	B/4	100		1														3	
5 40		101		2														4	
6 30	B/5	102		3														5	
7 20		103	200	4														6	
8 10	B/6	104		5														7	
9 5		105		6														8	
10																		9	
11																		10	
12																		11	
																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902							STATION NO. 30/SL14	
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID	
		DEG	MIN	DAY	MO	HR	MIN	(mb)	(deg)	(kts)	*	*		
0	52 62 13 . 17 N	175 56 . 91 W	15 A P R 09	10 05	11 . 9	.	34	1020	204	48	+	92	SL14	
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.										
Nst	DEPTH	Roset.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto	Moran/	Harvey	Carrin/	Moran	Katrin
No	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	615N	Urea	Part.	Th
1	~85'		B7	106	153		A	1	086					1
2	76			107			B	2						2
3	56			108		TB1	C	3						3
4	46			109		TB2	D	4						4
5	36			110		+TB3	E	5						5
6	26		B6	X	TB4	F	6							6
7	19			112		TB5		087						7
8	9													8
9	9													9
10	9													10
11	9													11
12	C		113	086	786		G	41	088					12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

111 not sampled

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 31								
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN (deg)	WIND SPD. (kts)	CLOUD TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/D	
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MN						
0536213.64N	17533.26W	15 APR 09	1446-15.2	.	29	19606	87	5413								
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		0.2 Tmp Sensor No.														
Hydro Team-PMEI																
NIS	DEPTH	ROSET				Wengartner	Julie									
NO	DESIRED	notes	SALT	Nut.Btl	02-Btl No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas
1	B07	80	114	1186		14	19	1089								
2	70	39	115	TB1	FL1											
3	40	B10	116	TB2	FC2	13	A									
4	30		117	TB3	FC3											
5	20		118	TB4	FC4											
6	10	B11	119	TB5	FC5											
7	0		120	1064	TB6	TC6	C	1091								
8																
9																
10																
11																
12																

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

REMARKS

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (ID.) H10902		STATION NO. 32 / SL 12											
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE DIRN. * * (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID				
		DEG	MIN																
6	54 62 11 . 58 N	175 08 . 44 W	5 A P R 09	20	58	-7.6	.	28	1977	.	79	SL 12							
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS	DEPTH	ROSET.	Hydro Team+PHEL				Wengenmeier Julie				Sambarroto				MAX. DEPTH =				
No	DESIRED	notes	SALT	Nut.BH	O2-BH No	CHL.	Frac CHL.	DOC	018	\$15N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	7.5	1	121	136							X	X						X	1
2	50		122			1					X	X						X	2
3	40		123			2					X	X						X	3
4	30		124			3					X	X						X	4
5	20		125	072		4					X	X						X	5
6	20	B/14																C	6
7	10		126	5														X	7
8	0		127	6														X	8
9																		X	9
10																		X	10
11																		X	11
12																		X	12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP Spring'09		SHIP DESIGNATION (ID.) H10902		STATION NO. 33 / SL 11						
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN (deg)	WIND SPD. (kts)	CLOUD (amt)	TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
055621	11.09 N	17439.30 W	16 APR 09 0247-7.4	31	2802							73	SL 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			PART S/N											
SEC COND S/N			O2 Temp Sensor No.											
N/S	DEPTH	ROSET.	HYDRO TEAM-PMEI				Weingartner/Julie	Sambrotto		Moran/Harvey	Cann/Moran	Katrin	Nas	
No.	DESIRED	notes	SALT	Nut/Bt	02-Bt, No	CHL.	Frac CHL.	DOC	018	015N Urea	Part.	Prod	DON	
1	69			125	068		/	/						1
2	50			129										2
3	40			131										3
4	30			131										4
5	20			132	143	4	4							5
6	10			133		5	5							6
7	0			134		6	6	/	/					7
8														8
9														9
10														10
11														11
12														12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEPP_Spring'09		Ship Designation (I.D.)						STATION NO. 34 / SL/0								
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)			
056	62	09	42	N	17	35	9.6	7	W	16	A P R	09	0949	-8.7	.	35	320	11		
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
NIS DEPTH	Roset.	Hydro Team-PTEL						Weigantree	Jule	Sambroto		Moran/	Harvey	Cain/	Moran	Katrin	NIS			
No	DESRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL	DIC/Alk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No
1	B19	60	B1B	135	224	TB6		A	A	95		X	X						1	
2	40			136		TB5		B	B			X	X						2	
3	30		B19	(37		TB6		C	C			X							3	
4	20			138		TB3		D	D			X							4	
5	10		B20	139		TB2		E	E	96									5	
6	10																		6	
7	10																		7	
8	10																		8	
9	10																		9	
10	10																		10	
11	10																		11	
12	0		140		101	F	f	97		X	X		X						12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 35 / 349												
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID					
	DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	•	•	(deg)	(kts)	•	(m)			
057 6265.39 N	173 16.88 W	16 APR 09	1403-7.1	35	31948											5209				
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 Trop Senson No.																	
NIS	DEPTH	ROSET.	Hydro Team-PHE				Weingartner	Julie	Sambroto		Moran/	Harvey	Carlin/	Moran	Katrin	NIS				
NO	DESIRED	notes	SALT	NUT.BR	02-Btl.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sher	Th	No
1	b6t		B21	141	132	T81	-	-	98							*	*	*	1	
2	46				142	T82												*	2	
3	36		B22	143		T83												*	3	
4	20				144	T84	-	-									*	*	4	
5	16		B23	145		T85											*	*	5	
6	10		Ketow														X	X	6	
7	8				146	T86	-	-	100							X	X	7		
8			B24															8		
9																		9		
10																		10		
11																		11		
12																		12		

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

* B24 Salinity Taken 4/14/09 at 1445 depth, Filtered Seawater Sample

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902						STATION NO. 35/SL9							
CONSC CAST #	LATITUDE	LONGITUDE		DAY	MO	YR	HR	MIN	TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID	
		DEG	MIN						DEG	MIN	(°C)	(°C)	(mb)	+	*	(deg)	(kts)	*	
058	62.04	62	N	173	16	49	W	16	APR	09	1511	-17.3	.	35	323	15	61	5409	
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	Roset.	Hydro Team-PHEI				Wellington		June		Sambrotto		Moran /	Harvey	Carn /	Moran	Karn	Nis	
No	DESRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	'Lessard	Sherr	Th	No.
1	10		F1																1
2	10		F2																2
3	10																		3
4	10																		4
5	10																		5
6	10																		6
7	10																		7
8	10																		8
9	10																		9
10	10																		10
11	10																		11
12	10																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/ASIFRP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 35 / SL9							
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
	DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	*	*	*	*	*	*	
05	96	24	3.64	N	173	16.35	W	/6	A P R	09	1633	-5.9	.	35	31714
SBE 9+															
PRESS SN															
PRI TEMP SN															
SEC TEMP SN															
PRI COND SN															
SEC COND SN															
NIS DEPTH	ROSET.	Hydro Team-PMEL						Weingartner Julie	Sambrotto		Moran/ Harvey	Cann/ Th	Moran	Karin	Nis No.
No DESIRED	notes	SALT	Nut/Bt	02-BT1NO	CHL.	Frac CHL.	DIC/ALK	DOC	018	b15N	Iurea Part.	Prod	DON	Lomas Lessard Sherri	
1	33	F3	148								✓		✓		1
2	21		149								✓		✓		2
3	17		156								✓		✓		3
4	13		151								✓		✓		4
5	9		152								✓		✓		5
6	4		153								✓		✓		6
7	3		154								✓		✓		7
8															8
9															9
10															10
11															11
12															12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP Spring'09		Ship Designation (ID.) 1H0902		STATION NO. 351 SL9									
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID			
	DEG	MIN	DEG	MIN	DAY	MO	YR	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
46 46 15	8.68	N	173 14 6	8	W	17	APR 09	01 39 -4.1		36		307	14		59	SL9	
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 Trip Sensor No.														
NIS	DEPTH	ROSET	Hydro Team-PMEI					Weingartner	Julie	Sambrotto	Moran/	Harvey	Cain/	Moran	Karin	Ns	
No.	DESIRED	notes	SALT	Nut.Bu	O2-Bu.No	CHL	Frac CHL	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr
1	56		155														1
2	50		15	156	224	1											2
3	40		16	157		2											3
4	30			158		3											4
5	20			159	145	4											5
6	10			160		5											6
7	0				1												7
8																	8
9																	9
10																	10
11																	11
12																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 36 / SL08										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID
		DEG	MIN						(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	
061	62 02.56 N	172 37.48 W		17	APR	09	06	40	-3.5	35	35	30014	55	55	SL08			
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.									
Ns	DEPTH	Roset.		Hydro Team-PALI		Weisgerber	Julie	Sambrotto		Moran/	Harvey	Garn/	Moran	Katrin	Nis			
No	DESIRED	notes	SALT	Nut.Btl	02-Btl/No	CHL	Frac CHL	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	51			2		1	/	/	/									1
2	40			3	155	2	2	/	/		X	X						2
3	30			4		3	3	/	/		X							3
4	20			5		4	4				X	X						4
5	10			6	228	5	5	/	/									5
6	10			7		6	6	/	/	107								6
7	0																	7
8																		8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSLRP_Spring'09		Ship Designation (I.D.) 1H9902		STATION NO. 371547												
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)	*	*	(m)
0626150.74N	17153.94W	17	153	94	W	17	APR	09	11	25	-3.8	.3	33	33	36014	55	5607			
SBE 9+																				
PRESS SN																				
PR/TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Ns DEPTH	Roset.	Hydro Team-PMEI		Weingartner		Julie	Sambrotto	Moran	Harvey	Cann	Moran	Kemitt	Ns							
NO. DESIRED	notes	SALT	Nut.Btl	02-Btl No	CHL	Frac CHL	DIC/ALK	DOC	018	b15N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	A/Ex	No.
1 49		F7	-8	20L	TBL	4	4	4	109											1
2 40			-9		TBL															2
3 36			-10		TBL															3
4 20			-11		TBL															4
5 26																				5
6 10		F8	12	*13	20L TBL	C	C													6
7 0																				7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 39									
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN DEGR.	WIND SPD. (kts)	CLOUD (alt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID			
		DEG	MIN	DAY	MO												
26	361	56	.81	N	171	13.7	4W	17	APR 09	1529	-4.1	.	32	314	11	53	5L6
SBE 9+																	
PRESS SN																	
PRI TEMP SN																	
SEC TEMP SN																	
PRI COND SN																	
SEC COND SN																	
NIS	DEPTH	Roset.	Hydro Team+PMEI						Weingartner Julie	Sambrotto	Moran/ Harvey	Carm/ Sherr	Moran	Katrin	Nis		
No	DESIR ED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL	DOC	018	015N Urea	Part.	Prod	DON	Lomas	Lessard	Th	No.
1	H6		F 9	14	198	TBL		T	112								1
2	40		F D	15		TB2											2
3	30			16		TB3		3									3
4	20			17		TB4		4									4
5	26		Flexeret														5
6	10		F 11	18		TB5		6	113								6
7	10		Kathru														7
8	C			19	049	TB6		8	114								8
9																	9
10																	10
11																	11
12																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Kathru at 10
A leise at 30

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEFRP Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 40/SL05												
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE +	VISIBILITY +	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) +	WEATHER TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN																	
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Ns DEPTH	Roset.	Hydro Team-PHEU						Weighted	Julie	Sambrotto		Moran/ Harvey		Cain/ Karin	Moran	Karin	Nis			
No. DESIRED	notes	SALT	Nut.Btu	O2-BLU.NO	CHL.	Frac CHL..	DIC/ALK	DOC	018	b1SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sheir	Th	No.	
1	44		F/12	20		1	1	/	117	X	X								1	
2	40			21	159	2	2												2	
3	30				22	3	3	/	/										3	
4	20		F/13	23		4	4			X	X								4	
5	10				24	165	5	5			118								5	
6	0				25	6	6	/	/	119	X	X							6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

ICE LOC: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Vessel USCG Healy		Cruise ID H10902		Project & Leg BEST/BSEPP_Spring'09		Ship Designation (I.D.) 1H0902		Station No. 41/SL04												
Consc Cast #		Latitude		Longitude		Time (GMT)		Dry Bulb	Wet Bulb	Pressure	Sea State	Wind Drn.	Wind Spd.	Cloud (amt)	Bottom Depth	Sta. Name/ID				
DEG	Min	DEG	Min	Day	Mo	YR	HR	Min	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)			
65	56	15	1.24	N	169	50.71	W	18	A P R 0 9	64	24	-2	.9	29	284	13	4554			
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									PAT S/N											
SEC COND SN									O2 Tmp Sensor No.											
Nis	Depth	Roset.	Hydro Team-PMEI					Weingartner	Jule	Sambrotto		Moran/	Harvey/	Cain/	Moran	Katrin	Nis			
No	Desired	Notes	Salt	Nut.Btl	O2-Btl.No	Chl.	Frac Chl.	DIC/ALK	DOC	018	h3N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	41		E/14	26															1	
2	30		E/15	21	088	2													2	
3	20																		3	
4	10																		4	
5	0																		5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11																			11	
12																			12	

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

Vessel USCG Healy		Cruise ID H10902		Project & Leg BEST/BSERF_Spring'09		Ship Designation (I.D.) H10902		Station No. 42 / 5603											
Consc Cast #	Latitude		Longitude		Time (GMT)		Dry Bulb	Wet Bulb	Pressure	Sea State	Wind Dirs.	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)
	66	61	48.	32	N	169	11.	00	W	18	A P R	09	0330	-3.4	.	28	203	14	40
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	Roset.		Hydro Team-PMEL		Weingartner		Julie	Sambrotto		Moran /	Harvey	Cann /	Moran	Katrin	NIS				
No. DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL	Frac CHL..	DOC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherri	Th	No.
1	36	15/16	31		1		/	/	125		V		V						1
2	30				32	196	2												2
3	20				33		3	/	/		V		V						3
4	10				17	34	069	4			124								4
5	5				35		5	/	/	123	V		V						5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/ASIERP Spring'03		Ship Designation (I.D.) H10902		STATION NO. 3 / SLC 2								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
67 41 44 . 95 N	168 29 . 43 W	10 APR 09	58 00	-3 . 3	.	26	33	112	35	SLC 2						
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		0.2 Temp Sensor No.														
Hydro Team-PMEL																
NIS	DEPTH	Roset.					Weingartner	Julie								
No.	DESIRED	notes	SALT	NUT.BT	02-BT,NO	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Moran/	Harvey
1	29		F18	36	984	TBL	1	1	194						Carr/	Moran
2	20			37		TB2	2	2							Katrin	Nis
3	10		F19	38		TB3	3	3	197							No.
4	10	Alexe,														
5	0		39			TB4	45	5	128	—	leaks easily or seeped —					
6																
7																
8																
9																
10																
11																
12																

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 45													
CONSC CAST #		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	-Variable-	BOTTOM DEPTH	STA. NAME/ID
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	Roset.									Hydro Team-PWEL										
No.	DESRED	notes	SALT	Nut.Btu	02-Btu,No	CHL	Frac CHL	DOC/ALK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th		Nis
1	23		F20	40	074	701	-	Fm-A	-	129								X		1	
2	16			41		TBZ	1522B	-B	130									X		2	
3	10					-	-												X	3	
4	10					-	-												X	4	
5	0		F21	42	200	7B3	c	FB3	c	131									X	5	
6																				6	
7																				7	
8																				8	
9																				9	
10																				10	
11																				11	
12																				12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 45										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. DEGR.	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN															
\$6 96 14 L	.82 N	167	44 .5	Phi W	18	APR 09	1451	-5.4	.	24	33447				28	541		
SBE 9+		FLUOR S/N																
PRESS SN		SBE43-Oxy (prime)																
PRI TEMP SN		SBE43-Oxy (sec)																
SEC TEMP SN		Thermometer																
PRI COND SN		PAR S/N																
SEC COND SN		O2 Tmp Sensor No.																
NIS	DEPTH	Roset.	Hydro Team-PHE					Weingartner	Jille									
No	DESIRED	notes	SALT	Nut.Btl	O2-Btl No	CHL.	Frac CHL.	DOC	O18	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	10	1	F22															1
2		2																2
3		3																3
4		4																4
5		5																5
6		6																6
7		7																7
8		8																8
9		9																9
10		10																10
11		11																11
12		12																12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 45			
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * * WIND DIRN. SPD. CLOUD (amt) WIND TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN	DEG	MIN	DAY	MO	HR	MIN		
67 46.1	41.42 N	167 43.92 W	13 A P R 09	16 49	-6.5	.	25	347	11	27	8441
SBE 9+		FLUOR S/N									
PRESS SN		SBE43-Dry (prime)									
PRI TEMP SN		SBE43-Oxy (sec)									
SEC TEMP SN		Transmissometer									
PRI COND SN		PAR S/N									
SEC COND SN		102 Tmp Sensor No.									
NIS	DEPTH	ROSET:	Hydro Team-PME				Wingartner Julie	Sambrotto	Moran/ Harvey	Cann/ Lomas	Moran Katrin
No.	DESIRED	notes	SALT	Nut.Bti	O2-Bti.No	CHL.	Frac CHL.	DIC/AIk	DOC	018	NIS
1	22		44/11	10						✓	1
2	19		45/11							✓	2
3	15		46/12							✓	3
4	11		47/13							X	4
5	8		48/14							✓	5
6	4		49/15							✓	6
7	0		50/16							✓	7
8											8
9											9
10											10
11											11
12											12

ICE LOC: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIRP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 45/5601											
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)	*	*	(deg)	(kts)	*	*	(m)
47	16	13	8	86	N	167	48	00	W	18	APR	09	23	14	-4	.7	2	4	326
SBE 9+																			26
PRESS SN																			SL01
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
Roset.		Hydro Team-pMEL						Weingartner	Julie	Sambrotto		Moran	Harvey	Carmi	Moran	Katrin	Nis		
No.	DESIRED	notes	SALT	Nut.BTU	02-BTU No	CHL _{...}	Frac CHL _{...}	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	23		51		1														1
2	20		52	086	2														2
3	10		S3	106	3														3
4	6		54		4														4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 066													
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	HR MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)								
72 65 49	85 N	167 28 . 93 W	19 APR 09	1032 - 8.7	-24	01509						25									
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.																			
Ns	DEPTH	Roset.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto	Moran/	Harvey	Carm/	Moran								
No	DESIRED	notes	SALT	Nut.Btl	02-Btl No	CHL.	Frac CHL.	DIC/ALK	DOC	018	615N	urea	Part.	Prod	DON	Lomas	Lessard	Sierr	Th	Katrn	Nis
1	10																			1	
2	10	A 1																		2	
3	10	top O-RINGS broken																		3	
4	10																			4	
5	10																			5	
6	10																			6	
7	10																			7	
8	10																			8	
9																				9	
10																				10	
11																				11	
12																				12	

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring09		Ship Designation (I.D.) 1H0902						STATION NO. 47/W1							
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. DEGR.	WIND SPD. KTS	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID					
		DEG	MIN	DAY	MO	YR	HR	MIN											
0	73 6.0	35.87	N	16 7 24	.75	W	19	APR 09	16 26	-8	.	24	60210	25					
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 Trip Sensor No.															
NIS	DEPTH	Roset.		Hydro Team-PMEI					Wengartner Julie		Sambrotto		Moran/ Harvey	Carn/ Th					
NO.	DESIRED	notes	SALT	NUT.BU	02-Btl.No	CHL.	Frac CHL.	DOC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	10.0	23	-55	472	TB1	-	-	-	-	132									1
2	10	-	-56		TB2	-	-	-	-	133									2
3	10	A2	-57	468	TB3	-	-	-	-	134									3
4	0																		4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

51.94°P 167.00°W

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 48/62											
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 WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID						
0746030.43 N	16759.92 W	19 APR 09	2055-7.6	26	57	7	29	W2											
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 Tmp Sensor No.																
Ns	DEPTH	Roset.	Hydro Team-PMEL	Weingartner	Julie	Sambrotto	Moran	Harvey	Carni	Moran	Katrin	Nis	No.						
No	DESIRED	notes	SALT	Nut.Btl	02-Btl/No	CHL	Frac CHL	DOC/AIk	DOC	018	615N Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th.	
1	26		58		1	1				135	X	X	X						1
2	23		59							136		X							2
3	20		60	167	2	2				137								3	
4	15		61							138	X	X	X					4	
5	12	A/3	62								X	X						5	
6	10	Did not close 7 hr.0																6	
7	9		63		3	3				139		X						7	
8	6		64								X							8	
9	3		65	121		4	4				X							9	
10	0		66							140	X	X	X					10	
11	0																	11	
12																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BSFRR_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 49 / W3										
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN. * * (deg)	WIND SPD. * * (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
0756023.72N	23.72N	16838.86W	20 APR 09	0030	-5.1	26	1056	36	W3									
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.																	
NS DEPTH	Roset.	Hydro Team-PMEI						Weingartner Julie	Sambrotto		Moran/ Harvey	Carini/ Sherr	Moran	Katrin	Nes			
No.	DESIRED notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DIC/AIk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Th	No.
1	32		67			1		141										1
2	30		68	226		2		142										2
3	20		69			3		143										3
4	10		70	120		4		144										4
5	0		71			5		145										5
6																		6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP Spring 09		Ship Designation (I.D.) H10902		STATION NO. 56/NSP1				
CONSC CAST #	LATITUDE	LONGITUDE				TIME (GMT)	DRY BULB	WET BULB	PRESSURE	WIND DIRN.	38	
DEG	MIN	DEG	MIN	DAY	MO	HR	(°C)	(°C)	(mb)	(deg)	(m/s)	BOTTOM DEPTH
67	65	92	7.26	N	167	48	63	W	24	APR	09	1040 - 6.8
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	Roset.	Hydro Team-PHEL		Weintraub	Julie						
No	DESIRED	notes	SALT	Nut.Btl	02-Btl No	CHL	Frac CHL	DIC/ALK	DOC	018	b1SN	
1	33	A +	72	058	1B1	A	A	146				
2	30		73									1
3	20		74		7B2	B	B					2
4	16	A5	75	7B3	C	C	C	147				3
5	10	↑										4
6	10	↓										5
7	10	Everywhere										6
8	10											7
9	16											8
10	10	↓										9
11	4		76	113	1B4	D	D	148				10
12												11
												12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 56 / N91											
CONSC CAST #	LATITUDE MIN	LONGITUDE DEG	MIN	DAY	MO	YR	HR	MIN	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	
6775927.44 N	16747.18 W	26 APR 09	1435 - 6.7	28	167	47	38												
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.																	
Ns	DEPTH	Roset.	Hydro Team-PME		Weingartner	Juile	Sambrotto			Moran/	Harvey	Carn/	Moran	Katrin	Nis				
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL	Frac CHL	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	10	1																	1
2	1	A6																	2
3	1	3																	3
4	1	4																	4
5	1	5																	5
6	1	6		77															6
7	1	7																	7
8	1	8																	8
9	1	9																	9
10	1	10																	10
11	1	11																	11
12	1	12																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 50/NP1														
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	WIND DIRN	WIND SPD.	CLOUD (amt)	38											
	DEG MIN	DEG MIN		DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	SEA STATE	SEA STATE									
07859	27.12	N	16748.47	W	2	Φ	A P R	09	16ΦΦ-6.1	28	15ΦΦ3	38										
SBE 9+			FLUOR S/N																			
PRESS SN			SBE43-Oxy (prime)																			
PRI TEMP SN			SBE13-Oxy (sec)																			
SEC TEMP SN			Transmissometer																			
PRI COND SN			PAR S/N																			
SEC COND SN			O2 Trip Sensor No.																			
MIS	DEPTH	ROSET.	Hydro Team-PH&EL				Wet/dry	Julie	Sambroto		Moran /	Harvey										
No	DESIRED	notes	SALT	Nut.BR	O2-Btl.No	CHL.	Frac CHL.	DOC	018	815N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Carlo /	Moran	Katrin	Nils	
1	29		78									V	V	V	V							
2	19		79																			
3	19																					
4	15		80									V	V	V	V							
5	11		81																			
6	8		82									V	V	V	V							
7	4		83									V	V	V	V							
8	0		84									V	V	V	V							
9																						
10																						
11																						
12																						

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. 50 / Np01												
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 WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID						
		DEG MIN	DEG MIN	DAY	MO	YR	HR	MIN												
57	51 27.	74	N	167	52.	00	W	21	A P R 0 9 0 2 1 7	-2.6	.26	137	17	37	NP01					
SBE 9+				FLUOR S/N											MAX. DEPTH =					
PRESS SN				SBE43-Oxy (prim)																
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	Roset.	Hydro Team +PMEL				Weinhardt	Julie	Sambrotto	Moran/	Harvey	Carn/	Moran	Katrin	NIS					
No	DESIRED	notes	SALT	Nut.Btl	O2-Btl No	CHL.	Frac CHL.	DIC/AIk	DOC	018	615N	Irea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	35		1	1	1															1
2	30		2	050	2															2
3	20		3	3																3
4	10		4	178	4															4
5	0		5	175	5															5
6	.																			6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 51/WP02								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE + * (deg)	WIND DIRL (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN													
0	80 59 03 . 00 N	167 53 . 36 W	21 APR 09	0555	5	3.5						24	13720		43	WP02
SBE 9+		FLUOR S/N														
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 Tmp Sensor No.														
Ns	DEPTH	ROSET.	Hydro Team-PME						Wetbarometer	Julie						
No.	DESIRED	notes	SALT	Nut.Bti	02-Bti.No	OHL	Frac CHL	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas
1	38	A8	6	1	1	1	1	1	151		X	X				
2	30		7	127	2	2										1
3	20		8		3	3	/	/	4		X	X				2
4	10		9	113	4	4			152							3
5	0		10		5	5	1	/	153		X	X				4
6																5
7																6
8																7
9																8
10																9
11																10
12																11
																12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEB_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 52/NP3												
CONSC CAST #	LATITUDE MIN	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	DAY	MO	HR	MIN	(mb)	*	(deg)	*	*	(m)							
081	53 49 . 56 N	168 09 . 36 W	21 APR 09	0813	-3	4	.	24	1	1	2	2	46	NP3						
SBE 9+		FLUOR S/N																		
PRESS SN		SBE43-Oxy (prime)																		
PRI TEMP SN		SBE43-Oxy (sec)																		
SEC TEMP SN		Transmissometer																		
PRI COND SN		PAT 5/N																		
SEC COND SN		O2 Tmp Sensor No.																		
NIS	DEPTH	Roset.	Hydro Team-PMEI				Weingartner Julie	Sambrotto		Moran/ Harvey	Cariñ/ Th	Moran	Karnin	NIS						
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl No	CHL.	Frac CHL.	DIC/ALK	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	41	A9	11	67	TB1	A	A	154												1
2	30		12		TB2	B	B													2
3	20		13		TB3															3
4	10		14		TB4	C	C	155												4
5	10																			5
6	0		15	121	TB5	D	D	152												6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10302		PROJECT & LEG B-5T/BSURP Spring 09				Ship Designation (I.D.) H10902				STATION NO. 52/NP3					
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB (°C)		WET BULB (°C)		PRESSURE (mb)		SEA STATE VISIBILITY			
DEG	MIN	DEG	MIN	DAY	MO	HR.	MIN	*	*	*	*	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
08	25	856.56	N	16849.41	W	21	APR 09	69	22	-3.6	.	12017	43	NP3			
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								02 Tmp Sensor No.									
NIS	DEPTH	Hydro Team-PMEI				Wengenmeier	Julie	Sambretto				Moran/ Harvey	Carin/ Lomas	Moran	Katrin	Nis	
No.	Desired	Roset.	notes	SALT	NUT.BTL	O2-BTL.No	CHL.	Frac CHL.	DOC/AIK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas
1	/D																1
2	/D																2
3	/D																3
4	/D																4
5	/D																5
6	/D																6
7	/D																7
8	/D																8
9																	9
10																	10
11																	11
12																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEI RP Spring'09		Ship Designation (I.D.) H10902		STATION NO. 53/RP4									
CONSC. CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (kts)	WIND SPD. (kt/s)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
6835836.51 N	16826.47 W	21 APR 09	12	29	-2.4	.21		111530			55						
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	Roset.	Hydro Team-PMEL						Wingartner Julie									
No DESIRED notes	SALT	Nut.Btl	O2-Btl.No	CHL	Frac CHL.	D/C/ALK	DOC	018	b1SN Urea	Part.	Prod	DON	Lomas	Moran/ Harvey	Carn/ Sher	Moran	Katrin
1 51	17	0.58	TBL	A	A			157									1
2 40	18		TB2														2
3 30	A11	19	TB3														3
4 20	20		TB4	B	B												4
5 10		21	TBL	C	C	158											5
6 0	22	003	TBL	C	C	159											6
7																	7
8																	8
9																	9
10																	10
11																	11
12																	12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BSEPP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 59/NP5										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID					
6845821.75 N	16842.16 W	21 APR 09 1723-04.	14	13131	66	NP5												
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		02 Tmp Sensor No.																
NIS DEPTH	Roset.	Hydro Team-PME	Wingardet	Julie	Sambrutto	Moran'	Harvey	Carin'	Moran	Karin	NIS							
No. DESIRED notes	SALT	Nut.Btu	O2-BTL No	CHL	Frac CHL	DIC/AIk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Shear	Th	No.
1 bct	61	A12	23	151	TB1	FC1 A	A	162	V	V	V	V			X			1
2 40			24		TB2	FC2 B	B		V	V	V	V			X			2
3 40																		3
4 30			25	TB3	FC3 C	C	C								X			4
5 25			26												X			5
6 20			27	TB4	FC4										X			6
7 10															X			7
8 10			28	TB5	FC5 D	D	163			V					X			8
9 6															X			9
10 5			29							V					X			10
11 0			30	TB6	FC6 E	E	164		V	V	V	V			X			11
12 6															X			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 55 / NPO6											
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	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	
0855808.50	N	16858.48	W	21	APR	09	12	330	0.6	.	07	12333				70	NP06		
SBE 9+				FLUOR S/N													MAX DEPTH =	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 Trip Senton No.															
NIS	DEPTH	Roset.		Hydro Team-PMEI					Weingartner Julie										
No.	DESIRED	notes	SALT	Nut.Bt!	02-Btl.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	\$15N	Urea	Part.	Prod	DON	Sambrotto	Moran/ Harvey	Garn/	Moran
1	66		31							165								Katrin	NIS
2	60		32	226														No.	
3	50		33			1												1	
4	40		34			2			/	/								2	
5	30		35			3												3	
6	20		36	182		4												4	
7	10		37			5												5	
8	0		38			6			/	/	166							6	
9																		7	
10																		8	
11																		9	
12																		10	
																		11	
																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID HI0902		PROJECT & LEG BEST/BSIRP_Spring'09		Ship Designation (I.D.) HI0902						STATION NO. 56/KP07							
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)			DRY BULB (°C)		WET BULB (°C)		PRESSURE (mb)		SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/D
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	HR	MIN	*	*	(deg)	(kts)	*	*	(m)
086	57	54.	87	N	169	14.	28	W	22	A P R	09	0254	1.8	.	04	15932	070	M P 07	
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
Ns	DEPTH	Roset.		Hydro Team-PMEI						Wengenmeier	Julie	Sambrotto	Moran/	Harvey	Carrin/	Moran	Katrin	Ns	
No	DESIRED	notes	SALT	Nut.BTU	02-BTU/No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	63			38				/	/	160		X							1
2	50		A/13	39	120	1		/	/										2
3	40			40		2													3
4	30			41		3		/	/			X	X						4
5	20			42	206	4													5
6	10			43		5		/	/	169									6
7	0			44		6		/	/	170	X	X	X						7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BSEPP_Spring'09				Ship Designation (I.D.) 1H0902				STATION NO. 57/NP08					
CONSC CAST #		LATITUDE		LONGITUDE				TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	BOTTOM DEPTH	STA. NAME/ID	
		DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(m)		
0	875	740	.61	N	169	26	03	W	22	A P R	09	0638	1	.8	09	17420	
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										02 Tmp Sensor No.							
Ns DEPTH	Roset.	Hydro Team-PMEI						Weingartner		Julie	Sambrotto		Moran	Harvey	Cann	Moran	Karin
No DESIRED	notes	SALT	NUT.BT	02-BTl.No	CHL.	Frac CHL.	DOC	018	b1SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1 65		45				/	/	171									
2 50		46	208	✓	1	1											1
3 40		47			2	2											2
4 30		48			3	3	/	/									3
5 20		49	196	✓	4	4											4
6 10		50			5	5											5
7 0		51			6	6	1	1	172								6
8																	7
9																	8
10																	9
11																	10
12																	11
																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEI RP Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 56 / N99						
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG 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
48 57	26.99	N 169 46.73	W	22	APR	09	6939	6.5	12	143	15	67	NP9	
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 Setson No.							
Roset.		Hydro Team/PMEI						Weingartner Julie	Sambrotto	Moran/ Harvey	Cain/ Lomas	Moran	Katrin	
No	DESIRED notes	SALT	Nut.Btl	02-Btl.No	CHL	Frac CHL.	DIC/AIK	DOC	018	015N	Urea	Part.	Prod	
1	67	A18	52	019	F8			A	174			X		
2	40		53		FC2			B				X		
3	30	Snowy	Leaker	713									2	
4	20		54		FC4			C				X		
5	10		55		FC5			D	175			X		
6	0		56	175	Hole			E	-176			X		
7													6	
8													7	
9													8	
10													9	
11													10	
12													11	
													12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10502		PROJECT & LEG BEST/BSI/RP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 58/NP9												
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)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID						
	DEG MIN	DEG MIN		DAY MO YR	HR MIN	HR MIN														
0895728.25 N	16947.30 W	22 APR 09	1033 - 0.6	17	17	17	1012	16213	62	MAX. DEPTH =	m									
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		02 Trip Sensor No.																		
NIS	DEPTH	Roset.	Hydro Team-PMEI	Weingartner	Julie	Sambrotto	Moran/	Harvey	Cairn/	Moran	Katrin	Nis								
No	DESIRED	notes	SALT	Nut.Bu	02-Bu.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	blSN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	9.7	A 16																		1
2																				2
3																				3
4																				4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP Spring'09		Ship Designation (I.D.) H10902		STATION NO. 5815899											
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. DEPTH	WIND SPD. TYPE	CLOUD (amt) WEATHER	BOTTOM DEPTH	STA. NAME/ID						
SBE 9+			FLUOR S/N																
PRESS SN			SBE43-Oxy (prime)																
PRI TEMP SN			SBE33-Oxy (sec)																
SEC TEMP SN			Transmissometer																
PRI COND SN			PAR S/N																
SEC COND SN			O2 Trip Sensor No.																
NIS	DEPTH	Roset.	Hydro Team-PHEL	Weingartner Julie	Sambrotto	Moran/ Harvey	Garn/ Carm	Moran	Katrin	NIS									
No.	DESIRED	notes	SALT	Nut.BH	O2-Btl.No	CHL.	Frac CHL.	DOC	O18	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	10																		1
2																			2
3																			3
4																			4
5																			5
6			57																6
7																			7
8																			8
9																			9
10																			10
11																			11
12			A17																12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/SBE43 Spring'09		Ship Designation (I.D.) H10902		STATION NO. 581/NP9												
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID					
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*					
49	15	7	26	.81	N	169	44	.53	W	22	A P R	09	16	45	-4.2	13	150	48	NP9	
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
NIS	DEPTH	ROSET.	Hydro Team-PMEI					Weingartner	Julie	Sambrotto	Moran/	Harvey	Cann/	Moran	Katrin	NIS				
No.	DESIRER	NOTES	SALT	NUT.BTU	02-BTU/NO	CHL.	Frac CHL.	DIC/ALK	DOC	018	615N	urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	bet		AB	58							X	X	X							1
2	36			59							X	X	X							2
3	25			60							X	X	X							3
4	26			61							X	X	X							4
5	15			62							X	X	X							5
6	10			63							X	X	X							6
7	5			64							X	X	X							7
8	0			65							X	X	X							8
9											X	X	X							9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy	CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 59/NP1Φ													
	CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY MO	YR	TIME (GMT) HR MIN	DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	50 bottom DEPTH (m)	STA. NAME/ID				
Φ9257	19.32 N	16954.58 W	22 APR 09	185Φ	1.4	.	13	16115	59	NP1Φ										
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN						O2 Temp Sensor No.														
NIS DEPTH	Desired notes	SALT	Nut.BTU	O2-BTU.NO	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Harvey	Cann/	Moran/	Katrin	NIS
No.																				No.
1	54		66	088	TB1	A	A		177											1
2	40		67	TB2																2
3	30		68	TB3		B	B													3
4	20		69	TB4																4
5	16		70	TB5					178											5
6	0		71	041	TB6	C	C		179											6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSE43 Spring'09		Ship Designation (I.D.) H10902		STATION NO. 60/Sed Trap #1										
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID				
	DEG	MIN	DEG	MIN	DAY	MO	HR	MN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
69 35 61	56 15	.97	N	171 04.50	W	23	APR	09	04	22	5.3	.	12	185	16	142	MP1441	
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
Mis DEPTH	Depth																	
No DESIRED	notes	SALT	Nut.Btl	O2-Btl/No	CHL	Frac CHL	DIC/ALK	DOC	018	\$15N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1 140					72													1
2 125					73	064												2
3 100					74													3
4 75					75													4
5 60					76													5
6 50					77		1	1										6
7 40					78	2	2											7
8 30					79	074	3	3										8
9 25					80													9
10 20					81		4	4										10
11 10					82		5	5										11
12 0					83	6	6											12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

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VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIAR_Spring'09		Ship Designation (I.D.) H10902						STATION NO. 61/NP15							
CONSC CAST #		LATITUDE		LONGITUDE				TIME (GMT)	DRY BULB	WET BULB	PRESSURE	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	94	56	03	37	N	171	17	67	W	23	A P R 0 9 0 7 13	3.3	.	12	19022	2760	NP15		
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
No.	DEPTH	Roset*		Hydro Team-PMEI						Wingard	Julie	Sambrotto	Moran/	Harvey	Cain/	Moran	Katrin	Nis	
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	2750		A19	84	200			X	X A 180	✓	X							1	
2	2500		A20	85	106			X	X 180									2	
3	2000		A21	86	075					180	X	X	X					3	
4	1750		A22	87	072			X	X C									4	
5	1500		A23	88	086					183	✓	X	X					5	
6	1250		A24	89	153													6	
7	1000	Leaker	90	011			X	X	184									7	
8	900		91	028			X	X										8	
9	750		92	080			X	X E										9	
10	500		93	143			X	X	185									10	
11	400		94	219						✓	+	✓						11	
12	300		95	222						✓	+	✓						12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BISERF_Spring'09		Ship Designation (I.D.) H10902		STATION NO.	
CONSC CAST #	LATITUDE	LONGITUDE			TIME (GMT)	DRY BULB	WET BULB	PRESSURE	2816
	DEG MIN	DEG MIN	DAY	MO	HR MIN	(°C)	(°C)	(mb)	BOTTOM DEPTH
0955	01.48 N	17117.62 W	23	APR	09	0943	3.2	13	19923
SBE 9+									
PRESS SN									
PRI TEMP SN									
SEC TEMP SN									
PRI COND SN									
SEC COND SN									
NIS DEPTH	Roset.	Hydro Team-PMEI				Weingartner Julie	Sambrotto	Moran/ Harvey	Cann/ Moran
No. DESIRED	notes	SALT	Nut.Bt!	02-Bt! No	CHL	Frac CHL	DIC/AIK	018	Katrin Nis No.
1	6.6	1.2	1.96					615N Urea	Part. Prod
2	4.3		1.97						DON Lomas
3	3.4		1.96						
4	2.5		1.99						
5	1.8		1.90						
6	1.8								
7	1.8								
8	1.8								
9	1.8								
10	1.8								
11	1.8								
12	9		1.01						
REMARKS									
<i>Lessard + Sambrotto</i>									
MAX. DEPTH = m									

Rosette Notes:

ICE LOG: Surface ice Conditions or proximity to ice edge

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. G / NPI5										
CONSC CAST #	LATITUDE		LONGITUDE		DAY	MO	YR	TIME (GMT) (°C)	DRY BULB (°C)	WET BULL (°C)	PRESSURE (mb)	* SEA STATE	WIND DRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
	DEG	MIN	DEG	MIN				HR	MIN		*	*	(deg)	(kts)	•	•	(m)	
0965603.17N	17116.10W	23APR09	1053	3.1	.	.	14	220	26	14	2254	WPA15						
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.															
Nes	DEPTH	Roset.	Hydro Team-PMEL					Weingartner	Jule	Sambrotto		Moran/	Harvey	Carn/	Moran	Katrin	NIS	
No.	DESIRED	notes	SALT	Nut.Bt	02-BT,NO	CHL	Frac CHL	DOC	018	b15N	Urea	Part.	Prod	DON	Lomas	Lessard	Sher	Th
1	400		B2	102	1100		X	X										1
2	300		103	-103			X	X										2
3	250		104	104	116					186.5								3
4	200		105	172						187.5								4
5	150		106	111			X	X	189.5									5
6	100		107	220						189.5								6
7	50		108	TBL	FC1		X	X	196.5									7
8	40		109	1147	782	FC2	X	X	191.5									8
9	30		110	TBL	FC3					191.5								9
10	20		111	TBL	FC3					193.5								10
11	10		112	TBL	FC3					194.5								11
12	0		113	TBL	FC3		X	X	195.5									12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEBP Spring 09		Ship Designation (ID.) H10902		STATION NO. 62 / Sed. trap rec.									
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)	BOTTOM DEPTH (m)	STA. NAME/ID		
	DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	*	*	(deg)	(kts)	*	*			
\$97.56	20.76	N	171.01	22	W	23	APR	09	23	13	3.6	.	21	201	17		
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 Time Sensor No.														
Nst DEPTH		Roset.		Hydro Team-PMEI		Weingartner/Julie		Sambrotto		Moran/ Harvey		Carrn/ Moran		Katrln NIS			
No.	DESIRED notes	SALT	Nut.Bt	02-BtH.No	Chl.,	Frac Chl.,	DIC/Alk	DOC	018	615N Urea	Part.	Prod	DON	Lomas	Lessard	Sherr Th	No.
1	125		114														1
2	100		115	113 ✓													2
3	75		116														3
4	50		117		1												4
5	40		118		2												5
6	30		119		3												6
7	20		120	122 ✓	4												7
8	10		121		5												8
9	0		122		6												9
10																	10
11																	11
12																	12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIRP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 63/NP/4												
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	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
098	56	17	46	N	17103	11	APR	09	20/13	4.2	.	20	19225	140	NP/4	14				
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 Temp Sensor No.											
NIS	DEPTH	ROSET.	Hydro Team-PMEI						Wingate	Julie	Sambroto						Moran/	Harvey	Cavin/	Katrin
No.	DESIRED	notes	SALT	Nut.BRI	O2-BRI.No	CHL	Frac CHL..	DI/C/AIK	DOC	018	815N	Urea	Part.	Prod	DON	Lomas	Lessard	Sier	Th	Nis No.
1	130		123						/											1
2	125		124	50	✓															2
3	100		125																	3
4	75		126	178	✓				/											4
5	50		127			1														5
6	40		128			2														6
7	30		129			3														7
8	20		130			4														8
9	10		131			5														9
10	0		132			6														10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/ASSEERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 64/NP13						
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SBD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID		
	DEG MIN	DEG MIN		DAY	MO	YR	HR MIN	(°C)	(°C)	(mb)	*	*		
0995630	.44	N	17048.51	W	24	APR	09	0255	3.1	20	19322	125NP13		
SBE 9+														
PRESS SN														
PRI TEMP SN														
SEC TEMP SN														
PRI COND SN														
SEC COND SN														
O2 Trip Sensor No.														
Hydro Team:PMEL														
Weingartner Julie Sambrutto Moran/ Harvey Cann/ Moran Katrin Nis Lomas Lessard Shear Th No.														
No.	DEPTH	ROSET.												
DESIRED	notes	SALT	NUT.BT	O2-BH.NO	CHL	Frac CHL	DIC/ALK	DOC	O18	61SN	Urea	Part.	Prod	
1	117			133	1674		/	/						
2	100			134										1
3	75			135			/	/						2
4	50			136			/	/						3
5	40			137		2								4
6	30			138		3								5
7	20			139	121	4								6
8	10			140		5								7
9	0			141		6								8
10														9
11														10
12														11
														12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSERP Spring'09						Ship Designation (I.D.) H10902						STATION NO 65 / APR/2					
		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID							
CONSC CAST #	DEPTH DEG	MIN	DEPTH DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
1005643.73N	17031.46W	24APR09	0543	2.6	.	20	19223			112	MP12								
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 Tmp Sensor No.																
Hydro Team-PMEI																			
Ns	DEPTH	Roset.	Weingartner	Julie	Sambrotto	Moran'	Harvey	Carin'	Moran	Katrin	Ns								
No.	DESIRED	notes	SALT	Nut.Btl	02-BL.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sher	Tn
1	105		13/3	142						199		✓	✓		✓				1
2	100		Tell/As	143	003														2
3	75		1/4																3
4	50		144		1	1													4
5	40		145		2	2	✓	✓											5
6	30		146		3	3													6
7	20		147	058	4	4													7
8	10		148		5	5													8
9	0		149		6	6	✓	✓	✓	✓									9
10																			10
11																			11
12																			12

ICE LOC: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID HT0902		PROJECT & LEG BEST/BSERP, Spring'09		Ship Designation (I.D.) HT0902		STATION NO. 66/NP11											
CONSC CAST #		DEG MIN	LATITUDE	DEG MIN	LONGITUDE	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)	WEATHER	STA. NAME/ID
10	15	6	58.26 N	174	16.64 W	24	APR	09	49 48	1.7	.	10	177 26			75	NA11		
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									02 Trip Sonar No.										
Hydro Team: PMEL										Weingartner Julie	Sambrotto	Moran/ Harvey	Carrin/ Moran	Katrin	NIS No.				
NIS DEPTH	RoSet:																		
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	Chl.	Frac Chl..	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	
1	14	27	28	B5															1
2	14																		2
3	14																		3
4	14																		4
5	14																		5
6	14																		6
7	14																		7
8	14																		8
9	15																		9
10	15																		10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEFRP_Spring09		Ship Designation (I.D.) H10902		STATION NO. LL/NP1							
CONISC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	(°C)	(°C)	(mb)	*	*	(deg)	(m)	
102	56	58.	63	N	124	16.85	W	24	A P R	09	1204	1.7	.	18	16028
SBE 9+															
PRESS SN															
PRI TEMP SN															
SEC TEMP SN															
PRI COND SN															
SEC COND SN															
Roset.		Hydro Team-PHEL						Wingate/Jule		Sambrotto		Moran/ Harvey		Cain/ Moran	
No	DESIRED notes	SALT	NAT.BTL	O2-BTL No	CHL.	Frac CHL.	DOC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas
1	b6t	67	84	156	246			A	A						
2	60														
3	50														
4	40														
5	30														
6	26														
7	16														
8	C														
9															
10															
11															
12															

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID HI0902		PROJECT & LEG BEST/BSRP Spring'09		Ship Designation (I.D.) HI0902		STATION NO. 66 / N911									
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN														
1635658.	47 N	17016.40	W	24	APR	09	1438	1.4	.	15		15422			73	N911	
SBE 9+																	
PRESS SN																	
PRI TEMP SN																	
SEC TEMP SN																	
PRI COND SN																	
SEC COND SN																	
NIS DEPTH	ROSET.	Hydro Team PMEL						Weninger	Julie	Sambrotto	Morany	Harvey	Carin/	Moran	Katrin	NIS	
No DESIRED notes	SALT	Nut.Bt	02-Bt.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	b15N	Urea	Part.	Prod	DON	Lomas	Lessard	Shear	No.
1 /0																	1
2																	2
3																	3
4																	4
5																	5
6																	6
7																	7
8																	8
9																	9
10																	10
11																	11
12																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIRP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 66/NP11									
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. DEGR.	WIND SPD. (kts)	CLOUD TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN														
1045	658.36	N	17016.16	W	24	APR 09	1647	1.8	.	15	17429			73	NP11		
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.									
Hydro Team PMEL																	
NIS	DEPTH	Roset.		Weingartner	Julie			Sambrotto		Moran/	Harvey	Carr/	Moran	Karin	NIS		
No	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DOC/AIK	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	
1	67			159							X	X		X			1
2	46			160													2
3	30																3
4	24			B8	F	1					X	X	X	X	V		4
5	18																5
6	12			F	2												6
7	6			F	3												7
8	0			F	4												8
9																	9
10																	10
11																	11
12																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BESTP Spring'09		Ship Designation (I.D.) 1H0902						STATION NO. 67 / ORT				
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/I.D	
		DEG MIN	MIN	DEG MIN	DAY MO YR	HR. MIN	*	*	*	*	*	*	*	*		
10	55	7	42.	02	N	167	15.	91	W	24	A P R	09	22	24	8.6	
SBE 9+															12	
PRESS SN															154	
PRI TEMP SN															28	
SEC TEMP SN															72	
PRI COND SN															0A.2	
SEC COND SN																
NIS	DEPTH	ROSET.	Hydro Team-PMEI						Weingartner	Julie	Sambrotto	Moran/	Harvey	Carn/	Moran	Katrin
No	DESIRED	notes	SALT	NUT.BH	02-BH.No	CHL.	Frac CHL.	DOC/AIK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas
1	6.5			7												Lessard
2	50			8	151	✓	1									Sherr
3	40			9												Th
4	30			10			2									
5	26			11			3									
6	10			12	226	✓	5									
7	0			13			6									
8																
9																
10																
11																
12																

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIRP Spring'09		Ship Designation (I.D.) H10902		STATION NO. 69/BL										
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)	*	*	(deg)	(kts)	*	*	(m)
1065931.73 N	17512.18 W	1508	6.7	86	155	16	133	BL1										
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
02 Trip Sensor No.		Hydro Team-PMEI		Weingartner		Julie		Sambrotto		Moran/		Harvey		Cain/		Moran		Nis
No.	DESIRED notes	SALT	Nut.Bt	O2-BT,NO	CHL	Frac CHL	DOC	O18	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	7																	1
2																		2
3		E1																3
4																		4
5																		5
6		F1																6
7																		7
8																		8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 69/BLL						
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MIN		DRY BULB (*C) (mb)	WET BULB (*C)	PRESSURE • (deg) (kts)	SEA STATE VISIBILITY WIND DIRL WIND SPD. CLOUD (amt) TYPE WEATHER BOTTOM DEPTH STA. NAME/ID					
		DEG	MIN	DAY	MO	YR	HR	MIN						
14759	32.94 N	17511	.35 W	26	APR	09	16	43	9.8 87 01415 3L1					
SBE 9+									FLUOR S/N SBE43-Oxy (prime) SBE43-Oxy (sec) Transmissometer PAR S/N O2 Tmp Sensor No.					
PRESS SN														
PRI TEMP SN														
SEC TEMP SN														
PRI COND SN														
SEC COND SN														
Rosette Team-PMEI														
Ns	DEPTH	Hydro Team-PMEI		Wellingamn Julie		Sambrotto		Moran/ Harvey Carn/ Moran Katrin Nes						
No	DESIRED	notes	SALT	Nut.Btt	O2-Btt/No	CHL.	Frac CHL	DOC	018	615N Urea Part.	Prod	DON	Lomas Lessard Sherr Th	No
1	120		F2	49/2	211/3					X	X	X		1
2	100													2
3	75			49/4						X	X	X		3
4	50		F	493/5										4
5	46		F	494/6										5
6	30		F	495/7										6
7	24		F	496/8						X	X	X		7
8	10		F	497/9						X	X	X		8
9	12		F	52/10						X	X	X		9
10	10													10
11	6		F	53/11						X	X	X		11
12	0		F	54/12						X	X	X		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP, Spring '09		Ship Designation (I.D.) H10902		STATION NO. PROGRESS STA													
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID							
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*							
1085934	11	N	17511.77	W	26	APR	09	1745	48.8	86	153	11	131	69							
SBE 9+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN										O2 Temp Sensor No.											
NIS DEPTH		Roset.		Hydro Team-PMEI		Wengermet/Julie		Sambrotto		Moran/		Harvey		Carin/							
No.	DESIRED	notes	SALT	NUT,BTU	02-BTU,NO	CHL	Frac CHL	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	Katrin	NIS
1	hot			13	22					-205									✓		1
2	110			14															✓		2
3	90			15															✓		3
4	70			16															✓		4
5	50			17	E														✓		5
6	40			18	E														✓		6
7	30			19	E														✓		7
8	20			20	E														✓		8
9	20			-															✓		9
10	10			21	E					-206									✓		10
11	0			22	E	-196	TBL			-207								✓		11	
12																		✓		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSTERF_Spring'09		Ship Designation (I.D.) H10902						STATION NO. 70 / BL2																
CONSC CAST #	LATITUDE					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)	*	(m)	
1	89 59 30 .65 N	175	05 .16 W	26	APR 09	22 20	0 .5	.	91	130	13						130	BL2										
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	ROSET	Hydro Team-PMEL						Weingartner	Julie	Sambrotto	Moran'	Harvey	Cain'	Moran	Katrin	NIS											
No	DESIRED	notes	SALT	Nut.BTU	02-BTU.No	CHL.	Frac CHL..	DIC/ALK.	DOC	018	b15N	Urea	Part.	Prod	DON	Lomas	Lessard	Sher	Th	No.								
1	126		F/4	23																								1
2	100		F/3	24	208																							2
3	75					25																						3
4	50					26			1	1																		4
5	40					27			2	2																		5
6	30					28			3	3																		6
7	20					29	120	4	4																		7	
8	10					30			5	5																		8
9	0					31			6	6																		9
10																												10
11																												11
12																												12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 711 MN13											
CONSC CAST #	LATITUDE DEG MIN.	LONGITUDE DEG MIN.		TIME (GMT) DAY MO YR HR MIN		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE DIRN. (deg)	WIND SPD. (kt/s)	WIND CLOUD (amt)	WIND TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID				
		DEG	MIN.	DAY	MO	YR	HR	MIN											
110	59	54.	26	N	175	12.	15	W	27	A P R	0906	53	0.	5	92	132	12	123	M N 13
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.										
Roset.		Hydro Team-PMEI						Weingartner Julie		Sambrotto		Moran/ Harvey		Carin/ Katrien		Moran Katrien		Nis No.	
No	DESIRED notes	SALT	Nut-Btl	O2-Btl-No	CHL.	Frac CHL.	DOC/ALK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	
1	115				3.2														1
2	100				3.3														2
3	75																		3
4	50				3.4	TB 1													4
5	40				3.5	12													5
6	30				3.6	1													6
7	20				3.7	143/219 268/163	4												7
8	10				3.8	5													8
9	0				3.9	~6													9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Rosette Notes:

ICE LOG: Surface ice conditions or proximity to ice edge

VESSEL USCG Healy		CRUISE ID HI0902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) HI0902		STATION NO. 73/BL4											
CONSC CAST #	LATITUDE	LONGITUDE	TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SBD.	CLOUD (amt)	BOTTOM	STA. NAME/ID						
			DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	•	(deg)	(kts)	•	(m)		
11	25° 9' 3" N	175° 41' 6" W	175	41	162	APR	09	09	49	39	-5	.2	97	350	48	344			
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	Roset.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto		Moran/	Harvey	Cainn/	Moran	Katrin	NIS				
No.	DESIRED notes	SALT	Nut.Btl	02-Btl.NO	CHL.	Frac CHL.	DIC/AIk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sher	Th	No.
1	124	F5	10	172					208									x	1
2	100		11															x	2
3	7.5		12															x	3
4	50		13		19	FB1											x	4	
5	40		F14		7B2	FB2											x	5	
6	30	F15		FB3	FB3												x	6	
7	26	F16		TB4	FB4												x	7	
8	18	F17		FB5	FB5		209									x	8		
9	Q	F18		166	TB6	FB6		210								x	9		
10																	10		
11																	11		
12																	12		

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSIERR_Spring19						Ship Designation (I.D.) H10902						STATION NO. 73/BLW					
		CONSC CAST #	DEPTH DEG	LATITUDE MIN	LONGITUDE DEG	MIN	DAY	MO	YR	TIME (GMT) HR	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. DEGR.	WIND SPD. (kts)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
02 Tmp Sensor No.																			
NS DEPTH	Roset.	Hydro Team-PMEL						Wingstrand	Julie	Sambrotto						Moran/ Harvey	Carrin/ Sherri	Moran	Katrin
NO. DESRED	notes	SALT	NUT.BI	O2-BI.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	61.5N	Urea	Part.	Prod	DON	Lomas	Lessard	Th	No.	Nis
1	(6)																	1	
2																		2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID HT0902	PROJECT & LEG BEST/BESTERP Spring'09		Ship Designation (I.D.) HT0902		STATION NO. 73/BL4									
		CONSC CAST #	LATITUDE DEG MN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MN	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. deg	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
SBE 9+															
PRESS SN															
PRI TEMP SN															
SEC TEMP SN															
PRI COND SN															
SEC COND SN															
Nst DEPTH	Roset.	Hydro Team: PMEL				Weingartner Julie	Sambrotto	Moran/ Harvey	Carr/ Th	Moran	Katrin	Nis			
No. DESIRED notes		SALT	Nut. Bt	O2-Bt, No	CHL.	Frac CHL..	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	
1	6														1
2															2
3															3
4															4
5															5
6															6
7															7
8															8
9															9
10															10
11															11
12															12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/SBEP_Spring09		Ship Designation (I.D.) H10902						STATION NO. 73/814			
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN. WIND SPD. (kts)	CLOUD TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG MIN	MIN	DEG	MIN										
SBE 9+															
PRESS S/N															
PRI TEMP S/N															
SEC TEMP S/N															
PRI COND S/N															
SEC COND S/N															
NIS	DEPTH	ROSET.	Hydro Team-PMEI				Weingartner Julie	Sambrotto	Moran/ Harvey	Cain/ Sherri	Moran	Katrin	Nis		
No.	DESIRED	notes	SALT	NUT.BT	O2-BT,NO	CHL.	Frac CHL.	DIC/AIk	DOC	018	61SN	Urea	Part.	Prod	DON
1	bot		19.5	58	20						X	X			
2	100			21											
3	75			22											
4	38			23E											
5	25			24E											
6	20			25E											
7	15			26E											
8	10			27E											
9	5			28E											
10	Φ			29E											
11															
12															

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSI RP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 74 / 3L5											
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID				
		DEG	MIN	HR	MIN														
116	59	32	.62	N	175	09	25	W	27 APR 09	2308-0.3	.	06	345	6	133	8L5			
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NS DEPTH	RoSet.	Hydro Team-PMEI				Wengartner	Julie	Sambrotto		Moran/	Harvey	Carrin/	Moran	Katrin	Nis	No.			
No DESRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	
1	126			2	113	✓													1
2	100			3															2
3	75																		3
4	50			4		1	1												4
5	40			5	f	2	2												5
6	30			6	f	3	3												6
7	20			7	f	4	4												7
8	10			8	f	5	5												8
9	0			9	f	6	6												9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEI/RP Spring'09		Ship Designation (I.D.) H10902		STATION NO. 75/B6											
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SBD. (kts)	CLOUD (amt)	BOTTOM DEPTH (m)	STA. NAME/ID						
117 59 42.	28 N	17501.64 W	28 APR 09	0036	-1.0	06	18	4	126	BL6									
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 Trip Sensor No.																
NIS	DEPTH	Roset.	Hydro Team-PMEL	Weingartner Julie		Sambrotto	Moran/ Harvey	Cain/ Sher	Moran	Katrin	NIS								
No.	DESIRED	notes	SALT	Nut,Bu	02-Bu,NO	CHL	Frac CHL	DOC/AIK	DOC	018	615N	Urea	Part,	Prod	DON	Lomas	Lessard	Th	No.
1	119			10															1
2	160			11	178 ✓														2
3	75			12															3
4	50			13 f		1													4
5	40			14 f		2													5
6	30			15 f		3													6
7	20			16 f		4													7
8	10			17 f	127 ✓	5													8
9	0			18 f		6													9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSI/RP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 76 / BL7										
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIREC.	WIND SPD.	CLOUD (amt)	BOTTOM TYPE	STA. NAME/ID		
		DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)
		168	59	51	.35	N	174	54	.37	W	28	APR 09	0201	-3.1	.	06	555	115
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
		Hydro Team-PWEL		Wingartner Julie		Sambrotto		Moran/ Harvey		Carin/ Lessard		Moran		Katrinn		Nis No.		
No.	DEPTH	Roset.																
No.	DESIRED notes	SALT	NAT.BR	02-BR.NO	CHL.	Frac CHL.	DIC/AIK	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Sherr	Th	
1	112	F/9	19															1
2	100	F/10	20	003✓														2
3	75			21														3
4	50			22		1												4
5	40			23 F		2												5
6	30			24 F		3												6
7	20			25 F		4												7
8	10			26 F	167 ✓	5												8
9	0			27 F		6												9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL
USCG HealyCRUISE ID
H10902PROJECT & LEG
BEST/BSE/EP_Spring'09Ship Designation (I.D.)
H10902

STATION NO. 77/BL8

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	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
1196000.66 N	17445.98 W		28 APR 09	0332	-22.7	.	07		95	3		111							
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	Rosett.	Hydro Team-PMEL				Weingartner	Julie	Sambrotto		Moran/	Harvey	Carin/	Moran	Katrin	Nis			
No.	DESIRED	notes	SALT	Nut.Bt	02-Btl.No	CHL	Frac CHL	DIC/AIK	DOC	018	6.5N	Urea	Part.	Prod	DON	Lomas	Lessard	Shear	No.
1	105			28															1
2	100			29	121 ✓														2
3	75			30 f															3
4	50			31 f		1													4
5	40			32 f		2													5
6	30			33 f	0.58✓	3													6
7	20			34 f		4													7
8	10			35 f		5													8
9	0			36 f		6													9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID HT0902		PROJECT & LEG BEST/BSEIRP Spring'09		Ship Designation (I.D.) HT0902		STATION NO. 78 / 369			
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	DRY BULB (*C) (mb)	WET BULB (*C)	PRESSURE * SEA STATE VISIBILITY	WIND DRN. (deg) SPD. (kts)	WIND CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
120 60 09.	91 N	174 38.34 W	28 APR 09 0501 - 3.0	12	85	8	107	869			
SBE 9+											
PRESS SN			FLUOR SN								
PRI TEMP SN			SBE43-Oxy (prime)								
SEC TEMP SN			SBE43-Oxy (sec)								
PRI COND SN			Transmissometer								
SEC COND SN			PAR SN								
NIS DEPTH	Roset.	Hydro Team:PMEL				Weingartner/Julie	Sambrotto				
No DESIRED notes	SALT	NUT.SHL	02-BE! No	CHL.	Frac CHL.	DOC	018	6.1SN	Urea	Part.	Prod
1 101		37	222					X	X		X
2 75		38									
3 50		39		1							
4 40		40		2							
5 30		41		3							
6 20		42		4							
7 10		43	(82	5							
8 0		44		6							
9											
10											
11											
12											

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 79 / 8L10				
CONSC CAST #	LATITUDE MIN	LONGITUDE DEG MIN	DAY MO YR	TIME (GMT) HR MN	DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. SPD.	WIND CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
121	60 19.	13 N 174 30 . 49 W	28 APR 09	06 25 - 2.7							103	103 BL10
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 Tmp Sensor No.							
NIS	DEPTH	ROSET.	Hydro Team:PMEL				Weingartner	Julie	Sambrotto		Moran/	Harvey
No.	DESIRED	notes	SALT	Nut.Bt	02-Bt,NO	CHL.	Frac CHL..	DOC	018	015N	Urea	Part.
1	97		45	151								
2	75		46									
3	50		47	206	181							
4	40		48									
5	30		49									
6	20		50									
7	10		51									
8	0		52									
9												
10												
11												
12												

REMARKS *Open Water*

*Ice 2 miles ahead - broken & dispersed
on this transect.*

Rosette Notes:

ICE LOG: Surface Ice Conditions or proximity to ice edge

VESSEL USCG Healy		CRUISE ID HI0902		PROJECT & LEG BEST/BSRPP Spring'09				Ship Designation (I.D.) HI0902				STATION NO. 80/BL11						
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 TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN															
122	6028.	45	N	17	42	26	60W	28	APR	09	0847-2.4	.	12	119	47	96	BL11	
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	Roset.	Hydro Team-PMEI				Weingartner	Julie										
No	DESIRED	notes	SALT	Nut.Bu	02-Bu.No	CHL	Frac CHL.	DIC/ALK	DOC	018	61SN Urea	Part.	Prod	DON	Lomas	Lessard	Shear	Th
1	91		F W	53	196													1
2	45			54														2
3	50			55			TB1											3
4	40			56		-	TB2											4
5	30			57			TB3											5
6	20			58			TB4											6
7	10			59			TB5											7
8	10	Alexei																8
9	0	- found a bit early -																9
10	0		6d	126	7B6													10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 81 8L12													
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	CLOUD (amt)	BOTTOM	STA. NAME/ID							
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	DIRN.	SPD.	CLOUD TYPE	WEATHER	DEPTH	STA. NAME/ID	
1	2	3	6	4	3	7	.55	N	17414.44	W	28	A	P	R	09	1016	-1.3	.	11	45647	91 8L12
SBE 9+										FLUOR S/N											
PRESS SN										SBE43-Oxy (prime)											
PRI TEMP SN										SBE43-Oxy (sec)											
SEC TEMP SN										Thermometer											
PRI COND SN										PAR S/N											
SEC COND SN										O2 Tmp Sensor No											
NIS	DEPTH	RoSet:	Hydro Team-PMBL		Weingartner Julie		Sambrotto		Moran/ Harvey		Carin/ Moran		Katrin Nis		MAX. DEPTH =						
No	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.	
1	~85			61	107															1	
2	60			62	TB1															2	
3	50			63																3	
4	46			64	TB2															4	
5	36			65	TB3															5	
6	26			66	TB4															6	
7	16			67	TB5															7	
8	0			68	111	TB6														8	
9																				9	
10																				10	
11																				11	
12																				12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10302		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0302		STATION NO. 82/BL13	
CONSC CAST #		LATITUDE		LONGITUDE					
		DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)
						HR	MIN	(°C)	DRY BULB
								(°C)	WET BULB
								(mb)	PRESSURE
						*	*	(deg)	SEA STATE
						*	*	(deg)	WIND DIRN.
						*	*	(kts)	WIND SPD.
						*	*	(m)	CLOUD (amt)
						*	*		WEATHER
						*	*		BOTTOM
						*	*		STA. NAME/ID
1	24	60	41	61	N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
2	10	40	41	61	N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
3	50	50	50	50	N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
4	40	40	40	40	N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
5	35	35	35	35	N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
6	20	20	20	20	N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
7	16	16	16	16	N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
8	10	10	10	10	N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
9					N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
10					N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
11					N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4
12					N	174	11	.46	W 28 A P R 0 9 11 29 - 1 .4

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP Spring'09		Ship Designation (I.D.) 1H0902		STATION NO 83/TC63											
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)	*	(m)		
1256	048.77	N	17423.02	W	23	APR	09	2036	-11.0	.04	8712			70	TC63				
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 Tmp Sensor No.																
NS	DEPTH	Roset.	Hydro Team-PMEI						Weingartner	Julie	Sambrotto	Moran/	Harvey	Carin/	Moran	Katrin	Nis		
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sheriff	Th.	No.
1	84		73						211										1
2	75		74	198	v														2
3	50		75				1												3
4	40		76			2													4
5	30		77			3													5
6	20		78	226	v	4													6
7	10		79			5													7
8	0		80			6			212										8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

Vessel USCG Healy		Cruise ID H10902		Project & Leg BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		Station No. 84 / 8614											
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)
126 59 35 . 91 N	17 44 8 . 28 W	29 A P R 09 0726	11 . 2	03	140	8									1122	BL14			
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		02 Tmp Sensor No.																	
N/S		Depth		Roset.		Hydro Team-PME		Weingartner		Julie		Sambrotto		Moran/		Carin/		Moran	
No.	Desired notes	SALT	Nut.Btl	02-Btl.No	CHL	Frac CHL	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	Katrin	Nis No.
1	119	F13	1	219															1
2	100		2																2
3	75		3																3
4	50		4		TR1														4
5	40		5	E	TR2														5
6	30		6	F	TB3														6
7	20		7	F	TB4														7
8	10		8	F	TB5														8
9	0		9	F	143	TBL													9
10																			10
11																			11
12																			12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. 85/BL15								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (*°C)	WET BULB (*°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	BOTTOM DEPTH (m)	WEATHER	STA. NAME/D
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						02 Tmp Sensor No.										
NIS	DEPTH	Roset.	Hydro Team-PMEL				Weingartner	Julie	Sambrotto		Moran/	Harvey	Carin/	Moran	Katrin	Nis
No.	DESRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	δ15N	Urea	Part.	Prod	DON	Lomas
1	123		14	10	172											X
2	18			11												1
3	75		12													X
4	50		13F	7B1	FB1											2
5	40		14F	7B2	FB2											X
6	30		15F	7B3	FB3											3
7	20		16F	7B4	FB4											X
8	10		17F	7B5	FB5											4
9	10	- Alexeu -														5
10	0		18F	242	136	FB6										6
11																7
12																8
																9
																10
																11
																12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) 1H0902						STATION NO. 851815								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT) (°C)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN																	
1	28 59 32.	94	N	175 45.	17	29	A	P	R 0 9	1101	-10.7	.	03	69408	*	*	*	131	8415	
SBE 9+				FLUOR S/N																
PRESS SN				SBE 43-Oxy (prime)																
PRI TEMP SN				SBE 43-Oxy (sec)																
SEC TEMP SN				Transmissometer																
PRI COND SN				PAR 5/N																
SEC COND SN				O2 Tmp Seison No.																
NO.	DEPTH	ROSET.	Hydro Team-PMEI						Weingartner	Julie	Sambrotto	Moran/	Harvey	Cann/	Moran	Karn	Nis			
NO.	DESIRED	NOTES	SALT	NUT.BTL	O2-BTL.NO	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	5															X				1
2																				2
3																				3
4																				4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 85/BL15											
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE 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
		DEG	MIN						(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
1295933.64N	17545.45W	1242-1.3	.43	09	APR	09	12	42	133	105	105	133	133	133	133	133	133	133	
SBE 9+		FLUOR S/N																	
PRESS SN		SBE43-Oxy (prime)																	
PRI TEMP SN		SBE43-Oxy (sec)																	
SEC TEMP SN		Thermometer																	
PRI COND SN		PAR S/N																	
SEC COND SN		O2 Tmp Sensor No.																	
NIS	DEPTH	ROSET.	Hydro Team-PHEL						Weingartner Julie	Sambrotto						Moran/ Harvey	Carin/ Katrin	Nis	
No	DESRED	notes	SALT	Nut.Btl	02-Btl No	CHL.	Frac CHL.	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	bef			19															1
2	100			20															2
3	45			21															3
4	50			22															4
5	30			23F															5
6	46			24E															6
7	20			25F															7
8	10			26															8
9	0			27F															9
10																			10
11																			11
12																			12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. 65/BL5												
CONSC CAST #		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	(39)	
											(°C)	(°C)	(mb)	*	*	DIRN.	SPD.	TYPE	BOTTOM	
13	59	34	.49	175	45	74	w	29	A	P	R	09	1557	-1	6	.	43	494	124	
SBE 9+																			132	
PRESS S/N																			BL15	
PRI TEMP S/N																				
SEC TEMP S/N																				
PRI COND S/N																				
SEC COND S/N																				
No.	DEPTH	ROSET.		Hydro Team-PHFL				Weingartner	Julie	Sambrotto	Moran/	Harvey	Carn/	Moran	Katrin	Nis				
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	65		F 16	28/Q10								✓	X	X	X					1
2	70			29/Q11								✓	X	X	X					2
3	38		F 30/Q2																	3
4	25		F 31/Q3																	4
5	20		F 32/Q4																	5
6	15		F 33/Q5																	6
7	10		F 34/Q6																	7
8	5		F 35/Q7																	8
9	0		F 36/Q8																	9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID. H10902		PROJECT & LEG BEST/BSIERP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. 85/BL15								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	* SEA STATE	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
1315935.04N	17547.52W	29APR09	1745	-1	6	1745	-1.6	.	103	48304					132	
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						02 Tmp Sensor No.										
NIS	DEPTH	Roset.	Hydro Team-PMEI				Weingartner	Julie								
No	DESIR ED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	01SN	Urea	Part.	Prod	DON	Moran/
1			5													Harvey
2																Carin/
3																Moran
4																Karn
5																Nis
6																No.
7																1
8																2
9																3
10																4
11																5
12																6
																7
																8
																9
																10
																11
																12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09				Ship Designation (I.D.) 1H0902				STATION NO. 86/BL16	
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY MO YR	TIME (GMT) HR MN	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
1325938.	14N	1744F.99W	29 APR 09	2116	-1.3	.01	4710	47	10	122	BL16		
SBE 9+													
PRESS SN													
PRI TEMP SN													
SEC TEMP SN													
PRI COND SN													
SEC COND SN													
Ns	DEPTH Roset.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran
No	DESIRED notes	SALT	NUT.BTU	O2-BTU/NO	CHL.	Frac CHL.	DOC/AIK	018	015N	Urea	Part.	Prod	DON
1	117	F/18	38										
2	100		39	220									
3	75		46										
4	50		41 F										
5	40		42 f										
6	30		43 F										
7	20		44 F										
8	10		45 F	239	5	5							
9	0	F/19	46 F		6	6							
10													
11													
12													

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/SIEERRP_Spring'09				Ship Designation (I.D.) 1H0902				STATION NO. 87/3617	
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/I.D.
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MN	(°C)	(°C)	(mb)	*	*
133	59	40	.43	N	174	43	.81	W	24	4	00	32	11
SBE 9+													
PRESS SN													
PRI TEMP SN													
SEC TEMP SN													
PRI COND SN													
SEC COND SN													
Nis DEPTH	Roset.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto				Moran/	
No. DESIRED notes	SALT	NUT.BTU	02-BTU No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	Carin/	Moran
1 115		47										Lessard	Harvey
2 100		48	069									Sherr	Th
3 75		49											
4 50		50											
5 45		51	4		2								
6 30		52	4		3								
7 20		53	4	080	4								
8 10		54	4		5								
9 0		55	4		6								
10													
11													
12													

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09				Ship Designation (I.D.) 1H0902				STATION NO. 88/BL/8							
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPO.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID				
	DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*		
13	45	9	45	.70	N	174	27	00	W30	A P R 0 9	0000-0.9	00	*	2710	114				
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		Hydro Team-PHEM				Weingartner	Julie	Sambrutto		Moran/	Harvey	Cain/	Moran	Katrin	NIS		
No.	Desired	notes	SALT	NUT-BTU	O2-BTU No	CHL.	Frac CHL.	DOC	018	6.5N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	107		S 6							X	X			X					1
2	108		S 7	232	✓														2
3	75		S 8																3
4	50		S 9 f			1													4
5	40		S 0 p			2													5
6	30		S 1 A			3													6
7	20		S 2 f			4													7
8	10		S 3 p	086	✓	5													8
9	0		S 4 f			6													9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERRP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 89 / BL19										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/D	
		DEG	MIN															
13	55	9	48	.3	1	N	174	18.50	W	30	A P R	09	055	0.8	79	57	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							PAR S/N											
SEC COND S/N							02 Tmp Sensor No.											
Nis DEPTH No. DESIRED notes		Hydro Team-PMEI		Weingartner Julie		Sambrotto		Moran/ Harvey		Carin/ Moran		Katrin Nis No.		Lomas Lessard		Sherr Th		
1	105			SALT	Nut.Btl	O2.Btl.No	CHL	Frac CHL	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr
2	75						65	155										1
3	50						66											2
4	30						67		1									3
5	20						68		2									4
6	10						69		3									5
7	0						70		4									6
8							71	205	5									7
9																		8
10																		9
11																		10
12																		11
																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 90 / BL 24											
CONSC. CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY	MO	YR	TIME (GMT) HR MN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE DIRN.	WIND DIRN. SPD. (kts)	CLOUD TYPE	WEATHER DEPTH (m)	BOTTOM DEPTH (m)	STA. NAME/ID				
1365931.56 N	17507.76 W	34 APR 09	094751	12	1	02	164	12	1022	4	10	+	132	8424					
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
Ns DEPTH No. DESIRED notes	Roset.	Hydro Team-PMEL										Wengenmeier Julie	Sambrotto	Moran/ Harvey	Carr/ Karlin	Ns No.			
		SALT	Nut.Btl	02-BLNo	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sheriff	Th	
1 127		F20	72	144															1
2 160			73																2
3 75	Value		74																3
4 50	open		75		TB1	F-B1													4
5 40			76		TB2	F-B2													5
6 30			77		TB3	F-B3													6
7 26			78		TB4	F-B4													7
8 10			79		TB5	F-B5													8
9 0			80	165	TB6	F-B6													9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSME/RP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 9010424													
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 DEPTH	STA. NAME/ID	
										HR	MN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)	
137	59	32.	10	N	175	07.	36	W	30	APR	09	49	47	-	1.	4	.	03	149	04	134
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.																
Ns	DEPTH	Roset.	Hydro Team-PMEL						Wengartner	Julie	Sambrutto	Moran	Harvey	Carin	Moran	Katrin	Ns				
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl No	CHL.	Frac CHL	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.	
1	20																			1	
2	5,5																			2	
3																				3	
4																				4	
5																				5	
6																				6	
7																				7	
8																				8	
9																				9	
10																				10	
11																				11	
12																				12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEI/EP Spring'09		Ship Designation (I.D.)		STATION NO. 96/BL26												
CONSC CAST #	LATITUDE	LONGITUDE				TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * VISIBILITY	WIND DIRN. SPD.	WIND TYPE	BOTTOM DEPTH (m)	STA. NAME/ID						
DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(mb)	(deg)	(kts)	*	*							
138	59	32	.20	N	175	07	.18	W	30	A P R 0 9	141	07	1.2	132						
SBE 9+					FLUOR S/N															
PRESS SN					SBE43-Dry (prime)															
PRI TEMP SN					SBE43-Dry (set)															
SEC TEMP SN					Transmissometer															
PRI COND SN					PAR S/N															
SEC COND SN					O2 Tmp Sensor No.															
Ns	DEPTH	Roset.	Hydro Team-PMEL						Weingartner	Julie	Sambrotto	Moran/	Harvey	Cairn/	Moran	Katrin	Ns			
No.	DESIRED	notes	SALT	Nut.Btl	02-BLNo	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No
1	4															X				1
2																				2
3																				3
4																				4
5																				5
6																				6
7																				7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 90/BL24										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY	MO	YR	HR	MIN	TIME (GMT) (°C)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	135 BOTTOM DEPTH (m)	STA. NAME/ID
1395932.77 N	17548.61 W	34A P R 09	1421-1.7	.	63	85	7										133 3426	
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 Tmp Sensor No.																
NES DEPTH Roset.	Hydro Team-PMEU		Weingartner	Julie	Sambrotto	Moran'	Harvey	Cairn'	Moran	Katrin	Nis							
No. DESIRED notes	SALT	Nut.Bt!	02-BH.No	CHL	Frac CHL	DOC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No
1 10																		1
2 4			F21															2
3 1																		3
4 5																		4
5 6																		5
6 7																		6
7 8			81															7
8 9																		8
9 10																		9
10 11																		10
11 12																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. 9C/BL24			
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	DRY BULB °C	WET BULB °C	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN. SPD. (kts)	WIND TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
1405932.	35 N	17547.81 w	36 APR 09 1541 - 1.4	04	08918	104	0	0	0	134	
SBE 9+			FLUOR S/N								
PRESS SN			SBE43-Dry (prime)								
PRI TEMP SN			SBE43-Cdry (sec)								
SEC TEMP SN			Transmissometer								
PRI COND SN			PAR S/N								
SEC COND SN			O2 Trip Sensor No.								
NIS	DEPTH	Roset.	Hydro Team-PMEL	Weingartner	Jule	Sambrotto	Moran/	Harvey	Carm/	Moran	Katrin
No.	DESRED	notes	SALT	Nut.BH	O2-Btl.No	CHL	Frac CHL	DOC	O18	61SN	Urea
1	126										X
2	80		422	83							X
3	38					84F					X
4	25					85 F					X
5	20										X
6	15										✓
7	10										X
8	5										X
9	0										X
10											
11											
12											

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSE/RP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 91 / M14.5														
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MIN		DRY BULB (°C)		WET BULB (°C)		PRESSURE (mb)		SEA STATE VISIBILITY		WIND DIRN. SPD.		CLOUD (amt) TYPE		WEATHER BOTTOM DEPTH		STA. NAME/D		
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	*	*	(deg)	(kts)	*	*	*	(m)	WEATHER	BOTTOM DEPTH	STA. NAME/D		
141	51 55.23 N	17607.20 W	30 APR 09	2349-0.6	.	07	71	19														
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				02 Tmp Sensor No.																		
NIS	DEPTH	Roset.	Hydro Team-PMEI						Weingartner	Julie	Sambroto						Moran/	Harvey	Carin/	Moran	Katrin	Nis
No	DESIRED	notes	SALT	Nut.Btl	02-Btl No	CHL	Frac CHL	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th		No.		
1	132			93	155																1	
2	100			94	155																2	
3	50			95	1	1															3	
4	40			96	2	2															4	
5	30			97	3	3															5	
6	20			98	4	4															6	
7	10			99	5	5															7	
8	4																				8	
9	4																				9	
10	4																				10	
11	4			top seal did not seal right	100	6	6														11	
12	0																				12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID: H10902		PROJECT & LEG BEST/BSIE/RP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 72 / MN SL5											
CONSC CAST #	LATITUDE	LONGITUDE	MAY	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.	CLOUD TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID
142	6133.01	N	17339.87	W	Φ	1	24	09	1645	-11.4	.11	11	11412					MN SL5	
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			02 Tmp Sensor No.																
NIS	DEPTH	Roset.	Hydro Team-PMEI	Wingartner	Julie	Sambretto	Moran/	Harvey	Carin/	Moran	Karim								
No	DESIRED	notes	SALT	Nut.Btl	02-Btl No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No
1	64		T01	108/44						X	V								1
2	50		T02	TB1															2
3	38		T03/Q11	TB2						X	X	-X							3
4	30		T04	TB3						V									4
5	25		-105/012							X									5
6	20		-104/013	TB4						X									6
7	15		-107/014							X									7
8	10									X									8
9	10		T08/015	TB5															9
10	5		109/016							X									10
11	Φ		-110/017	TB6						V	V	X							11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Bottom to TB5
Cle B16

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP Spring'09		Ship Designation (I.D.) H10902		STATION NO. A2/MN-SLS							
CONSC CAST #	LATITUDE	LONGITUDE				TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	BOTTOM	Ice Station	
	DEG MIN	DEG MIN	DAY	MO	YR	HR	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	CLOUD (amt)	STA. NAME/ID
143 61 34 . 79 N	173 42 . 32 W	02 MAY 09	00 16	00	5	.	15	86	12	72	M4-5L5				
SBE 9+			FLUOR S/N												
PRESS SN			SBE43-Dby (prime)												
PRI TEMP SN			SBE43-Dby (sec)												
SEC TEMP SN			Transmissometer												
PRI COND SN			PAR S/N												
SEC COND SN			02 Tmp Sensor No.												
NIS DEPTH	Roset.	Hydro Team-PMEL				Weingartner	Julie	Sambrotto	Moran/	Harvey	Cairn/	Moran	Katrin	Nis	
NO DESIRED	notes	SALT	NUT.BT	02-BRN/NO	CHL	Frac CHL	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas
1 69		E/23	111						214						
2 50		P/24	112		1										X
3 40			113		2										2
4 30			114		3										X
5 20			115		4										3
6 10			116	175/106	5										X
7 0			117		6										4
8															5
9															6
10															7
11															8
12															9
															10
															11
															12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

Benthic NIRVANA I

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSMERP_Spring'09	Ship Designation (I.D.) 1H0902	STATION NO. 93/44
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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	MN	DAY	MO	YR	HR	MN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)
14 41.62	14	96 N	172 30	.85 W	02 MAY	09	09	09	24	-1.7	.	1010	A/2	58	B/N2		B/N1	
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.															
Ns DEPTH	Roset.		Hydro Team-PMEL															
No. DESIRED	notes	SALT	NUT.BU	02-BU#NO	CHL.	Frac CHL.	DOC/AIK	DOC	018	815N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1 52			118	109/142	TB1	FB1												1
2 40			119		TB2	FB2												2
3 30			120		TB3	FB3												3
4 20			121		TB4	FB4												4
5 10			122		TB5	FB5												5
6 10			123															6
7 0																		7
8																		8
9																		9
10																		10
11																		11
12																		12

ICE LOC: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL
USCG Healy

CRUISE ID
H10902

PROJECT & LEG
BEST/BSERP_Spring'09

Ship Designation (I.D.)
1H0902

STATION NO. 93/ BNL

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	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)		
145	62	15.300	N	172	32.600	W	02	28	0.9	0.0	0.08	-3.6	.	19	033	14	59	BNL	
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	Roset.	Hydro Team-PME				Wengartner	Julie	Sambrotto	Moran/	Harvey	Carin/	Moran	Katrin	Ns				
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL	Frac CHL	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	10																	1	
2																		2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10		A2 →	124															10	
11																		11	
12																		12	

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO.							
CONSC CAST #		LATITUDE		LONGITUDE				TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	57
		DEG	MIN	DEG	MIN	DAY	MO	HR	(°C)	(°C)	(mb)	VISIBILITY	DIRN.	SPD.	BOTTOM
14	62	15	.13	N	17231.72	W	02	15 MAY	15.3	-3.5	1019	+	*	STA. NAME/ID	
SBE 9+															
PRESS S/N															
PRI TEMP S/N															
SEC TEMP S/N															
PRI COND S/N															
SEC COND S/N															
Ns	DEPTH	Roset.	Hydro Team-PNEL		Weingartner Julie		Sambrotto		Moran/ Harvey	Carin/ Moran	Katrin	Nis			
No	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DOC	O18	615N	Urea	Part.	Prod	DON	Lomas
1	52			125/914						X	X				
2	33			126/911						X	X	X			
3	21			127/912						X	X				
4	17			128/913						X	X				
5	13			129/914						X	X				
6	9			130/915						X	X				
7	4		A3	(31/916						X	X				
8	Φ			132/917						X	X				
9															
10															
11															
12															

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEI/EP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO.												
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)	*		
1	47	16	2	17	.44	N	172	36	14	W	53	54	0154	+	1	.2	.	38		
SBE 9+																		BW!		
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Roset.		Hydro Team-PMEI						Weisgerber	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Karin	Nes			
No.	DESIRED	notes	SALT	NUT.BU	O2-BL/No	CHL.	Frac CHL..	DIC/ALK	DOC	018	65SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	53	A/4	133 f																	1
2	50		134 f																	2
3	46		135 f																	3
4	30		136 f																	4
5	20		137 f	112/002																5
6	10	A/5	138 f																	6
7	0		139 f																	7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 94/5L7											
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)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID			
	DEG	MN	DEG	MIN	DAY	MO	HR	MIN	*	*	(deg)	(kts)	*	*	*				
1486159.65N	17155.51W	03 MAY 09	0646	-10.4	.				118	1311					34	5L7			
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	Roset.	Hydro Team+PMEL					Wenngarfaer	Julie	Sambrotto	Moran/	Harvey	Cain/	Moran	Katrin	Nis			
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL	Frac CHL.	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	51		1160 f			54.1	5.0												1
2	40		1141 f			2	2												2
3	30		1142 f			3	3												3
4	20		1143 f			4	4												4
5	10		1144 f	228/616		5	5												5
6	0		1145 f			6	6												6
7																			7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BST/EP_Spring'09		Ship Designation (I.D.)		STATION NO. 95/548														
CONSC CAST #	LATITUDE	DEG	MIN	LONGITUDE	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/D
1496203.48	N	17238.47	W	03 MAY 09	1057	-3.4	.	.	18	012	12	.	54	548								
SBE 9+				FLUOR S/N																		
PRESS SN				SBE 43-Oxy (prime)																		
PRI TEMP SN				SBE 43-Oxy (sec)																		
SEC TEMP SN				Transmissometer																		
PRI COND SN				PAR S/N																		
SEC COND SN				O2 Tmp Sensor No.																		
NIS DEPTH	Roset.	Hydro Team-PMEI						Weingartner	Julie	Sambrotto		Moran/	Harvey	Carin/	Moran	Katrin	Nis	REMARKS				
No. DESIRED	notes	SALT	Nut.Btl	02-Btl No	CHL	Frac CHL	DOC/ANK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th				
1	Box	57		145E	SA 1																	
2	40			147E	SA 2																	
3	30			148E	SA 3																	
4	20			149E	SA 4																	
5	10			150E	SA 5																	
6	7																					
7	7																					
8	7																					
9	7																					
10	7																					
11	7																					
12	D																					

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 096/5C7					
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									
1506203.49	N	17317.33	W	84 MAY 09 0000	+1.3	.	16	27106				60	5109
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 Trip. Sensor No.									
MIS DEPTH	Roset.	Hydro Team-PME				Wellingame	Julie	Sambrotto		Moran /	Harvey /	Garn /	Moran /
No.	DESIRED notes	SALT	Nut.Btl	O2-BtlNo	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	Karin
1	56			f				722		X	X	X	
2	50			f	107/63	1	1						1
3	40			f		2	2						2
4	30			f		3	3						3
5	20			f		4	4						4
6	10			f		5	5	223					5
7	0			f		6	6	224	X	X	X		6
8													7
9													8
10													9
11													10
12													11
													12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Assume
NOT
Bottoms
152-158
deep - 500

VESSEL USCG Healy		CRUISE ID HT0902		PROJECT & LEG BEST/BSEIP Spring'09		Ship Designation (I.D.) 1H0902						STATION NO. 097 / SL10									
CONSC CAST #		DEG MIN	LATITUDE	DEG MIN	LONGITUDE	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPO. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
15	16	20	8.69 N	173	58.42 W	04	MAY	09	03	33	-0.1	15	2153	6	63	SL10					
SBE 9+				FUOR 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 Tme Sensor No.																	
NIS	DEPTH	ROSET	Hydro Team-PML						Wengert	Jule	Sambrotto		Moran/ Harvey		Caron/ Lomas		Moran Katrin		NIS		
No.	DESIRED	notes	SALT	NUT.BT	02-BTL.NO	CHL.	Frac CHL.	DIC/ALK	DOC	018	GSLN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.	
1	60			159 f	167/26																1
2	50			160 f		1															2
3	40			1 f		2															3
4	30			2 f		3															4
5	20			3 f		4															5
6	10			4 f		5															6
7	0			5 f		6															7
8																					8
9																					9
10																					10
11																					11
12																					12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIRP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 06/SL12				
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	80		
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	SEA STATE	VISIBILITY
1	52	62	11	19	N	175	49	17	W	44	MAY	09
SBE 9+												
PRESS SN												
PRI TEMP SN												
SEC TEMP SN												
PRI COND SN												
SEC COND SN												
NIS DEPTH	Roset:		Hydro Team-PMEU		Weingartner, Julie		Sambrotto		Moran, Harvey		Carrin, Moran	
No. DESIRED	notes	SALT	Nut.Bt!	02-Bt!,No	CHL	Frac CHL	DOC	018	615N	Urea	Part.	Prod
1	75		6									
2	50		7		SA1							
3	40		8		SA2							
4	30		9		SA3							
5	20		10		SA4							
6	10		11		SA5							
7	0		12		242/49, SA6							
8												
9												
10												
11												
12												

Rosette Notes:

ICE LOG: Surface Ice Conditions or proximity to ice edge

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEI RP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 98/SL12												
CONSC CAST #	LATITUDE	DEG MIN	LONGITUDE	DEG MIN	DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * (deg) (kts)	WIND DIRN. SPD. CLOUD TYPE	WIND DIRN. SPD. CLOUD TYPE	BOTTOM DEPTH (m)	STA. NAME/ID				
								HR MIN												
153 62 11 . 42 N	175 09 . 04 W				04	MAY	09	14	14	14	14	14	14	14	14	14				
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	ROSET	Hydro Team-PME				WEBSARNAME	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Karin	NIS				
No	DESRED	notes	SALT	Nut.Btl	02-Btl.No	CHL	Frac CHL	DIC/ALK	DOC	018	B1SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	10																		1	
2																			2	
3																			3	
4																			4	
5																			5	
6																			6	
7																			7	
8																			8	
9																			9	
10																			10	
11		A9																	11	
12	✓																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/NSF/PP Spring'09		Ship Designation (I.D.) H10902		STATION NO. 98/SL12											
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	MN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)		
15	42	14	.96	N	75	47	85	W	14	24	1014	2.6	.	14	285	57	84		
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 Tmp Sensor No.										
N/A		DEPTH		Roset.		Hydro Team-PMEI		Wingartner		Julie		Sambrotto		Moran/		Harvey		Cain/	
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	Nis
1		10																1	
2																		2	
3																		3	
4																		4	
5																		5	
6																		6	
7																		7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL NSC Healy		CRUISE ID H10902		PROJECT & LEG BEST/ASFRP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 98/SL12				
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	DAY MO YR	HR MIN	TIME (GMT) (*C)	DRY BULB (C)	WET BULB (C)	PRESSURE (mb)	SEA STATE * * (deg) WIND DIRN. SPD. (kts)	WIND CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
1556210.82 N	17567.42 W	09 MAY 09	1534-2.7	.	13	287.4			80			
SBE 9+												
PRESS SN												
PRI TEMP SN												
SEC TEMP SN												
PRI COND SN												
SEC COND SN												
Ns No	DEPTH DESRED notes	ROSET.	Hydro Team-PMEI		Weingartner Julie		Sambrotto		Moran/ Harvey	Cain/ Sherri	Moran	Katrin Ns No
1 1	b6t		14 / 10									
2 2	38		15 / 11									
3 3	25		16 / 12									
4 4	26		17 / 13									
5 5	15		18 / 14									
6 6	10		19 / 15									
7 7	5	A16	20 / 16									
8 8	Φ		21 / 17									
9 9												
10 10												
11 11												
12 12												

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BASIERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 100 / 70MS8										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR MIN	TIME (GMT)	DRY BULB (*C)	WET BULB (*C)	(mb)	PRESSURE * * SEA STATE VISIBILITY	WIND DIRN. SPD.	WIND SPD. TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN															
SBF 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
N	DEPTH	ROSET.	Hydro Team-PMEU					Weingartner Julie		Sambrotto		Moran/ Harvey	Cano/ Sherr	Moran	Katrin	Nes		
No.	DESIRED	notes	SALT	Nut.Btu	02-Btu.No	CHL	Frac CHL	D/C/AIK	DOC	018	015N	Urea	Part.	Prod	Don	Lomas	Lessard	
1	69		A/11	22	143/18					225		X	X					1
2	50			23		1	-	/										2
3	40		A/12	24			2											3
4	30			25		3	/											4
5	20			26		4	/											5
6	10			27		5	/			224								6
7	0			28		6	/			227	X	X						7
8																		8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIRP_Spring'09		Ship Designation (I.D.) H10902						STATION NO. 101 / 70M57									
CONSC CAST #		LATITUDE		LONGITUDE		DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
SBE 9+		DEG	MIN	DEG	MIN						(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)		
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
PAR S/N																					
02 Tmp Sensor No.																					
Hydro Team-PMEI		Weltzinger Julie		Sambrotto		Moran/ Harvey		Carr/ Sherr		Moran Katrin		NIS No.									
No.	DEPTH	Roset.																			
No.	DESIRED	NOTES	SALT	NAT.BTU	02-BTU,NO	CHL.	Frac CHL.	DIC/AIK	DOC	O18	615N	Urea	Part.	Prod	DCN	Lomas	Lessard	Sherr	Th		
1	72			29																	1
2	60		30																		2
3	50		31			1															3
4	40		32			2															4
5	30		33			3															5
6	20		34			4															6
7	16		35	080	220	5						229									7
8	0		36			6						230									8
9																					9
10																					10
11																					11
12																					12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID HI0902		PROJECT & LEG BEST/BSEERP_Spring'09		Ship Designation (I.D.) HI0902						STATION NO. 162/TOM 36								
CONSC CAST #		LATITUDE		LONGITUDE		DAY	MO	YR	HR	MN	(°C)	(°C)	(mb)	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
SBE 9+		DEG	MIN	DEG	MIN									*	*	(deg)				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Ns	DEPTH	ROSET.	Hydro Team-PME				Weingartner	Julie	Sambrotto		Moran/		Harvey	Cann/	Moran	Katrin	Ns			
No	DESIRED	notes	SALT	Nut.Bu	O2-Bu	No	CHL.	Frac CHL.	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	69			37	239	172														1
2	60			38																2
3	50			39			1	1												3
4	40			40			2	2												4
5	30			41			3	3												5
6	20			42			4	4												6
7	10			43			5	5												7
8	0			44			6	6												8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Vessel USCG Healy		Cruise ID H10902		Project & Leg BEST/SBEP Spring 09				Ship Designation (I.D.) 1H0902				Station No 103 / 20455									
Consc Cast #	Latitude Min	Longitude		Time (GMT)				Dry Bulb	Wet Bulb	Pressure	Wind Dirn.	Cloud (amt)	Bottom Depth	Sta. Name/ID							
		deg	min	Day	Mo	Yr	HR	Min	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)			
1	59	51	.80	N	17	40	6	21	W	05	MAY	09	03	20	-1	.0	14	5	21	47	7270455
SBE 9+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
Nis	Depth	Hydro Team-PMEI				Weingartner	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Katrin	Nis						
No	Desired	Notes	Salt	Nut.Btl	02-Btl.No	Chl	Frac Chl..	DIC/AIk	DOC	018	61SN	Urea	Part.	Prod	Don	Lomas	Lessard	Sherr	Th	No.	
1	68			45					/												1
2	60			46																	2
3	50			47																	3
4	40			48																	4
5	30			49																	5
6	20			50																	6
7	10			51	069/232	5															7
8	0			52		6															8
9																					9
10																					10
11																					11
12																					12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/SBIEP-Spring'09		Ship Designation (I.D.) H10902		STATION NO. 10470454													
CONSC CAST #	LATITUDE	DEG	MIN	LONGITUDE	DEG	MN	DAY	MO	YR	HR	MIN	(°C)	DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
1606143.54 N	17351.00 W	05 MAY 09	0542-2.0	14	299	7	7270454														
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	Roset.	Hydro Team-PMEI				Wingartner	Julie	Sambrotto		Moran/	Harvey	Carin/	Moran	Katrin	Nis						
No DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th			No.
1 68		A/13	53	086/105					237												1
2 60		A/14	54																		2
3 59			55		1	1															3
4 40			56		2	2															4
5 30			57		3	3															5
6 20			58		4	4															6
7 10			59		5	5															7
8 0			60		6	6															8
9																					9
10																					10
11																					11
12																					12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERRP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 65/70M53											
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	73 BOTTOM DEPTH	STA. NAME/ID			
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)
161 61 33.57 N	173 42.45 W	05 MAY 09	4747-2.3	.	14	315	10												
SBE 9+			FLUOR S/N																
PRESS S/N			SBE43-Dwy (prime)																
PRI TEMP S/N			SBE43-Oxy (sec)																
SEC TEMP S/N			Transmissometer																
PRI COND S/N			PAT S/N																
SEC COND S/N			O2 Temp Sensor No.																
Roset.		Hydro Team-PMEI		Weingartner Julie		Sambrotto		Moran/		Harvey		Cain/		Moran		Kevin		NIS	
No.	DESIRED notes	SALT	Nut-Bt	02-Bt-No	CHL	Frac CHL..	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Tn	No.
1	69		61	050/113				/	/	240									1
2	50	A15	62		TB1														2
3	46		63		TB2														3
4	36		64		TB3														4
5	26		65		TB4														5
6	15		66		TB5														6
7	0		67		TB6	7	7	242											7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERF-Spring'09		Ship Designation (I.D.) H10902		STATION NO. 106/7GMS2									
CONSC CAST #		DEPTH DEG	MIN LATITUDE	DEPTH DEG	MIN LONGITUDE	DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE DIRN. * * (deg)	WIND SPD. DIRN. * * (kts)	WIND CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
SBE 9+																	
PRESS SN																	
PRI TEMP SN																	
SEC TEMP SN																	
PRI COND SN																	
SEC COND SN																	
Nis DEPTH	Roset.																
No. DESIRED notes	SALT	Nut.Bt	02-BTLNO	CHL	Frac CHL	DOC	018	615N	Weingartner Julie								
1 bot				68	TB1												
2 50				69													
3 46				70	TB2												
4 30				71	TB3												
5 26				72	TB4												
6 0				73	TB5												
7 0		A 11e	74	660/674	TB6												
8 0																	
9 0																	
10 0																	
11 0																	
12 0																	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09				Ship Designation (I.D.) H10902				STATION NO. 147/74N 51							
CONSC CAST #	LATITUDE	DEG	MIN	LONGITUDE	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID
16361	15.41	N	17344.38	W	15	5	10	MAY	09	1152-2.7	14	304	7	7674M51					
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				02 Temp Sensor No.															
Roset.		Hydro Team-PMEI				Wiegandner Julie				Sambrotto				Moran/ Harvey				MAX DEPTH =	
No.	DESIRED notes	SALT	NUT.BR	02-Btl.No	CHL.	Frac CHL.	DIC/AIk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	NIS No.
1	71		75	222/182		A	A	246											1
2	50		76		TB1	B	B												2
3	40		77		TB2														3
4	30		78		TB3	C	C												4
5	20		79		TB4														5
6	10		80		TB5	D	D	247											6
7	0		81		TB6	E	E	248											7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. 168 76M5											
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	STA. NAME/ID		
									HR	MIN	(°C)	(°C)	(mb)	VISIBILITY	DIRN.	SPD.	TYPE	BOTTOM	
1	64°10'4.05"N	173°49.81"W	65	MAY	09	14	23	-3.1	.	14	33	01	10	05	φ	81			
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	Roset.	Hydro Team-PMEI				Wenigmann	Julie	Samprerto				Moran/	Harvey	Cain/	Moran	Katrin	NIS		
No.	DESIRED notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	74		82	058121					-249									1	
2	50		83															2	
3	46		84															3	
4	30		85															4	
5	26		86															5	
6	10		87						-250									6	
7	0	NO bottom	red															7	
8																		8	
9																		9	
10																		10	
11																		11	
12																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. 103/74015°				
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MN	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE + (deg)	WIND DIRN. (kts)	WIND SPD. CLOUD (amt)	CLOUD TYPE WEATHER	BOTTOM DEPTH	STA. NAME/ID
1656163.97 N	17349.67 W	05 MAY 09 1436 - 3.1	1436 - 3.1	14	33510	33510	*	*	*	*	*	103/74015°
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.										
Ns DEPTH	Roset.	Hydro Team-PHEL				Weingartner Julie	Sambrotto		Moran/ Harvey	Carni/ Sherri	Moran	Karin
No DESIRED notes	SALT	Nut.Btl	O2-Btl No	CHL.	Frac CHL.	DIC/AIk	DOC	018	015N Urea Part.	Prod	DON	Lomas Lessard Th. 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

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSETRP Spring'09		Ship Designation (I.D.)						STATION NO. 109/32M49								
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB		WET BULB		PRESSURE		79							
	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
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
NIS DEPTH	Roset.		Hydro Team-PMEI						Weingartner Julie		Sambrotto		Moran/ Harvey		Carin/ Katin		Moran Nis			
No.	DESRED	notes	SALT	Nut.Btl	02-Btl.No	CHL	Frac CHL	DIC/AIR	DOC	018	815N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	77		88	19/24					A		X		X							1
2	56		89		TBL	FBL														2
3	40		90		TBL2	FBL2														3
4	33		91		TBL3	FBL3														4
5	21		92		TBL4	FBL4														5
6	17		93																	6
7	13		94																	7
8	10		95		TBL5	FBL5														8
9	9		96																	9
10.	4	—	97																	10
11.	4	—	98		TBL	FBL	R		252		X		X							11
12																				12

ICE LOG: Surface ice conditions or proximity to ice edge

heavy ice, some melt pools -
fusion

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 116/70M48					
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MIN	DRY BULB (*C) (mb)	WET BULB (*C)	PRESSURE SEA STATE VISIBILITY	WIND DIRN. SPD.	WIND CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
SBE 9+													
PRESS SN													
PRI TEMP SN													
SEC TEMP SN													
PRI COND SN													
SEC COND SN													
NIS DEPTH	Roset.	Hydro Team PMEL				Weingartner Julie	Sambrotto		Moran/ Harvey	Cain/ Thierry	Moran	Katrin	NIS
No.	DESIRED notes	SALT	Nut.Btl	O2-Btl.No	ChL..	Frac ChL..	DOC	018	615N Urea	Part.	Prod	DON	Lomas Lessard Sherr
1	67				99			254					1
2	60				100	151/120							2
3	50				101		1						3
4	40				102		2						4
5	30				103		3						5
6	20				104		4						6
7	10				105		5						7
8	0				106		6						8
9													9
10													10
11													11
12													12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEPP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. 111 / 70 N 47										
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULLB	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)
16860	34.28	N	17338.50	W	05	MAY	09	23	06	-2.3	.	15	2856		6870	147		
SBE 9+			FLUOR S/N															
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 Tmp Sensor No.															
MS DEPTH	Roset.	Hydro Team-PHLL						Weingartner	Julie	Sambrotto		Moran / Harvey		Gavin /	Moran	Katrin	NIS	
No.	DESIRED	notes	SALT	Nut.BH	O2-Btl No	CHL.	Frac CHL.	DOC	018	515N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	65		A/19	107														
2	60		A/18	108														1
3	50			109		1	1											2
4	40					110	2	2										3
5	30					111	3	3										4
6	20					112	4	4										5
7	10					113	5	5			258							6
8	0					114	6	6			259							7
9																		8
10																		9
11																		10
12																		11
																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIRP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 112/7cM46										
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR MN	(C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
1	69	025.70	N	17335.78	W	06	MAY	09	01.08	-11.6	.	15	299	5	60	7.0	446	
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
Ns DEPTH	RoSet.	Hydro Team-PHEL		Weingartner Julie		Sambrotto		Moran/ Harvey		Carin/ Kathrin		Moran		Kathrin		Ns No.		
No	DESIRED notes	SALT	Nut.Btl	O2Btl No	ChL.	Frac ChL.	DOC/AIK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	62			115														1
2	60			116														2
3	50			117		1												3
4	40			118		2												4
5	30			119		3												5
6	20			120		4												6
7	10			121	112/09	5												7
8	0			122		6												8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIE/RP_Spring09		Ship Designation (I.D.) H10902						STATION NO. 113/76145									
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	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
1706015.47 N	17330.85 W	06	MAY	09	0309-11.7	15	317	15													
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		Hydro Team-PMEI						Weingartner	Julie												
No.	DESIRED	notes	SALT	NUT,BTL	02-BTL,NO	CHL.	Frac CHL.	DIC/AIK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Harvey	Clairn/	Moran	Katrin	Nis
1	65			123														Lessard	Sherr	Th	No.
2	60			124	179/06																1
3	50			125		1	1														2
4	40			126		2	2														3
5	30			127		3	3														4
6	20			128		4	4														5
7	10			129		5	5														6
8	0			130		6	6														7
9																					8
10																					9
11																					10
12																					11
																					12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring 09		Ship Designation (I.D.) 1H0902		STATION NO. /14/70M44											
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	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)
SBE 9*																			
PRESS SN																			
PRT TEMP SN																			
SEC TEMP SN																			
PRT COND SN																			
SEC COND SN																			
SBE 43-Dwy (sec)		FLUOR S/N		SBE43-Dwy (prime)		Transmissometer		PAR S/N		O2 Trip Sensor No.		REMARKS		MAX. DEPTH =		m			
Hydro Team-PMEI		Weingartner/Julie		Sambrotto		Moran/ Harvey		Cain/ Karin		Moran		Katin		Nis		No.			
NIS	DEPTH	Roset.																	
No.	DESIRED	notes	SALT	Nut.Bt	02.Bt/ln.No	CHL.	Frac CHL..	DIC/ALK	DOC	018	815N	Urea	Part.	Prod	DON	Lomas	Lessard	Sierr	Th
1	67			131															1
2	60			132	(avg/28														2
3	50			133															3
4	40			134		1													4
5	30			135		3													5
6	20			136		4													6
7	10			137		5													7
8	0			138		6													8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 115/BL21									
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MIN		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. deg	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM (m)	STA. NAME/ID		
		DEG	MIN	DAY	MO	YR	HR	MIN									
1	72 59	27	.35	N	1	74	4	34	W	06	MAY	09	10	46	-1.7	.	16
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	Hydro Team-PMEI						Wingameer	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Karin	
No.	DESIRED	notes	SALT	Nut.BtI	02-BtI,No	CHL.	Frac CHL..	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	
1	110																
2	75	A 19	140		139	111	147										
3	50																
4	40																
5	30																
6	20																
7	10		A 20		145												
8	3																
9	3																
10	3																
11	3																
12	0																

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEPP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 115 BL21											
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)	
17	35	92	59	17	40	44	14	50	-10.8	-15	1015	31	1	4	115	BL21			
SBE 9+				FLUOR S/N													MAX. DEPTH =	m	
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.															
Ns DEPTH		Roset.		Hydro Team-PMEI		Weingartner		Julie		Sambrotto		Moran/		Harvey		Cain/		Moran	
No.	DESIRED	notes	SALT	Nut.BtI	02-BtI.No	CHL..	Frac CHL..	DIC/AIK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	15																	X	1
2	15																		2
3	15																		3
4	15																		4
5	3																		5
6	3																		6
7	3																		7
8	3																		8
9	3																		9
10	3																		10
11	3																		11
12	3																		12

ICE LOC: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 115 / BLZ 21											
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	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							
SBE 9+	17 45 9	25 . 94 N	17 40 3 . 84 W	66	M A Y 0 9 15 11 - 0 . 9	16	3 16 6 8				115	3421							
PRESS SN			FLUOR S/N																
PRI TEMP SN			SBE43-Oxy (prim)																
SEC TEMP SN			SBE43-Oxy (sec)																
PRI COND SN			Transmissometer																
SEC COND SN			PAR S/N																
NIS DEPTH	Roset.	Hydro Team-PML				Weingartner	Julie	Sambroto		Moran/	Harvey	Cain/							
No.	DESIR ED	notes	SALT	NUT.BT	O2-BTl/No	CHL..	Frac CHL..	DOC	018	McN	urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	110					149 / Q	10			X	X	X	X						1
2	75					159 / Q	11			X	X	X	X						2
3	33					151 / Q	12			X	X	X	X						3
4	21					152 / Q	13			X	X	X	X						4
5	17					153 / Q	14			X	X	X	X						5
6	13					154 / Q	15			X	X	X	X						6
7	9					155 / Q	16			X	X	X	X						7
8	4					156 / Q	17			X	X	X	X						8
9	Φ					157 / Q	18			X	X	X	X						9
10																		10	
11																		11	
12																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 116 / BL15								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MIN		DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. deg	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN	DEG	MIN											
SBE 9+																
PRESS S/N																
PRI TEMP S/N																
SEC TEMP S/N																
PRI COND S/N																
SEC COND S/N																
NIS	DEPTH	Roset*		Hydro Team-PMEI		Weingartner Julie		Sambrotto		Moran/ Harvey		Cain/ Karin		Moran		
No.	DESIRED	notes	SALT	Nut.Bt!	02-BtlNo	CHL.	Frac CHL..	DIC/Aik	DOC	018	615N	Urea	Part.	Prod	DCN	Lomas
1	128			158												Lessard
2	100			159	27/28											Sherr
3	75			160												Th
4	60			1												1
5	50			2												2
6	40			3												3
7	30			4												4
8	20			5												5
9	10			6												6
10	0			7												7
11																8
12																9
																10
																11
																12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERR Spring'09		Ship Designation (I.D.) H10902						STATION NO. 117/BL21							
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT)		DRY BULB (*C)		WET BULB (*C)		PRESSURE (mb)		SEA STATE VISIBILITY	WIND DIRN. SPD. TYPE	WIND DIRN. SPD. TYPE	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DAY	MO	YR	HR	MIN	(mb)	*	*	(deg)	(kts)								
176	59	26.	08	N	174	04.	23	W	07	MAY	09	0229	0.0	.	16	210	4	115 BL21	
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	Roset.	Hydro Team-PMEI						Weisgarber	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Katrin	NIS		
No.	DESIRED notes	SALT	NuLBt!	02-Btl.No	CHL	Frac CHL..	DIC/ALK	DOC	018	BLSN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	160		8																1
2	100		9	113/66g															2
3	75		10																3
4	60		11																4
5	50		12			1													5
6	40		13			2													6
7	30		14			3													7
8	20		15			4													8
9	10		16			5													9
10	0		17			6													10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 118 / 70M44											
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	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)	
SSE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	ROSET	Hydro Team-PMEI						Wengenmark	Julie	Sambrotto	Moran/	Harvey	Cann/	Moran	Katrin	NIS			
No. DESRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DIC/AIk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	bot	A1	18	222/14															1
2	50		19	7B1															2
3	40		20	7B2															3
4	30		21	7B3															4
5	25		22	7B4															5
6	16		23	7B5															6
7	7																		7
8	7																		8
9	7																		9
10	6		24	7B6															10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEPP_Spring'09		Ship Designation (I.D.) H10902		STATION NO 119 / 70M 43							
CONSC CAST #	LATITUDE DEG MN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MN		DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. SPD.	WIND CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MN	DEG	MIN										
1	78 6 05.2	74	N	173 46.58	W	67	MAY	09	1233-2.5	.	17	1444	4	6870M43	
SBE 9+				FLUOR SN											
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 Tmp Sensor No.											
NIS	DEPTH	ROSET.		Hydro Team-PMEI				WEINGARTNER	JULIE	SAMBROTTO	MORAN / HARVEY	CAIN / KARIN	MORAN	NIS	
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DOC	018	615N	urea	Part.	Prod	DON	Lomas
1	63			25			A	A	269						Lessard
2	50			26		TB1									Sherr
3	40			27		7B2									Th
4	30			28		TB3									1
5	20			29		7B4									2
6	10			30		TR5									3
7	0			31	58/52	TB6	B	B	271						4
8															5
9															6
10															7
11															8
12															9
															10
															11
															12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy	CRUISE ID H10902	PROJECT & LEG BEST/BSEIIPR_Spring09						Ship Designation (I.D.) 1H0902						STATION NO. 120/70M42							
		CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB		WET BULB		PRESSURE		WIND DIRN.	WIND SPD.	CLOUD (amt)	WIND TYPE	BOTTOM DEPTH	STA. NAME/ID
		DEG	MN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
SBE 9+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
Nis DEPTH Roset.	Hydro Team-PMEI						Weingartner Julie						Sambrotto		Moran/ Harvey		Carin/ Karin		Moran Karin		Nis
No. DESIRED notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Shear	Th	No.			
1	10																				
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERR - Spring'09		Ship Designation (I.D.)						STATION NO. 1720M42							
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID		
	DEG	MN		DEG	MN	DAY	MO	YR	(°C)	(°C)	(mb)	•	•	(deg)	(kts)	•	•	(m)	
1	84	59	59.	45	N	172	44	.21	W	67	MAY 09	1535	-2.5	.	17	133	6	7070M42	
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
									O2 Trop Sensor No.										
Nest DEPTH		Roset.		Hydro Team-PHEL						Weingartner	Julie								
No.	DESIR ED notes		SALT	Nut.BTU	02-BTU.No	CHL.	Frac CHL..	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Moran/ Harvey	Cain/ Moran	Karin Nis
1	~65		A22	33	/Q 10						X	X							No.
2	56		A22	34	/Q 11														1
3	38			35	/Q 12														2
4	25			36	/Q 13														3
5	20			37	/Q 14														4
6	15			38	/Q 15														5
7	10			39	/Q 16														6
8	5			40	/Q 17														7
9	0			41	/Q 18														8
10																			9
11																			10
12																			11
																			12

Rosette Notes:

iCE LOG: Surface Ice Conditions or proximity to ice edge

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERRP_Spring09		Ship Designation (I.D.)						STATION NO. 120/70042								
CONSC CAST #	LATITUDE	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
SBE 9+	18 15 59.5	59	.7	8	N	17 22 43	.5	1	W	67	MAY 09	16 27 -2.7	.	17	145	2		687 dm42		
PRES SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Mis	DEPTH	Hydro Team-PML						Weingarten	Jule	Sambrotto		Moran/	Harvey/	Cain/	Moran	Katrin	Mis			
No	DESRED	notes	SALT	Nut.Btl	02-BTLNO	CHL.	Frac CHL..	DOC/AIK	DOC	018	615N	Urea	Part.	Prod	DCN	Lomas	Lessard	Sherr	Th	No.
1	63	A24	42	165/239								272					L	X		1
2	50		43	TB1													a	X		2
3	40		44	TB2													s	+		3
4	30		45	TB3													1	X		4
5	20		46	TB4													o	7		5
6	10		47	TB5								273					h	X		6
7	0		48	TB6								274					e	X		7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP Spring'09		Ship Designation (I.D.) H10902						STATION NO. 121 / 70M41							
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB	WET BULL	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
		DEG	MIN							(°C)	(°C)	(mb)	(deg)	(kts)	(m)				
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
Ns DEPTH	RoSet	Hydro Team-PME						Weingartner Julie	Sambrotto		Moran/ Harvey	Carn/ Lomas	Katrin/ Lessard	Th/ Sierr	MAX DEPTH =		m		
No DESIRED	notes	SALT	Nut.BTU	O2-BTU.No	CHL	Frac CHL..	DIC/AIR	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Harvey	Carn/	Moran	Katrin
1	70		49																No.
2	56		50			1													1
3	40		51			2													2
4	30		52			3													3
5	20		53			4													4
6	10		54			5													5
7	0		55	121/200		6													6
8																			7
9																			8
10																			9
11																			10
12																			11
																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 70 146 / 132												
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT) HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb) *	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts) *	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID				
		DEG MIN	MIN	DEG	MIN	DAY	MO	YR												
18	35	95	0.	24	N	172	04.	48	W	07	MAY	09	2028	-2.	3.	.	19	160	7	7470440
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
NIS DEPTH	Rosett.	Hydro Team-PMEU					Weingartner	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Katrin	NIS				
No	DESIR ED	notes	SALT	NuL.Btl	02-Btl.No	CHL.	Frac CHL..	DOC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	70		56																	1
2	60		57	176/136																2
3	50		58			1														3
4	40		59			2														4
5	30		60			3														5
6	20		61			4														6
7	10		62			5														7
8	0		63			6														8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

Vessel USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEFRP Spring'09		Ship Designation (I.D.) H10902						STATION NO./23/751139								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
		DEG	MIN						(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
184	59	50	.39	N	171	51	.28	W	07	MAY	09	21	54	-	1.	4	17	150	3	7270459
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 Tmp Sensor No.											
NIS	DEPTH	ROSET.	Hydro Team-PMEI						WEINGARTNER	JULIE	SAMBROTTO		MORAN/ HARVEY		CANN/	MORAN	KARRIN	NES		
No.	Desired	Notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	69		B1	64							281									1
2	60		B2	65																2
3	50		B3	66		1														3
4	40		B4	67		2														4
5	30			68		3														5
6	20			69		4														6
7	10			70	200/616	5					282									7
8	0			71		6	5				283									8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIRP_Spring'09		Ship Designation (I.D.) 1h0902		STATION NO. 124 / 76M38																
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID											
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)				
1855946.46	N	17126.80	W	08	MAY	09	00	11	-2	.5	.	20	164	10					7470M38					
SBE 9+																			MAX. DEPTH =	m				
PRESS SN																								
PRI TEMP SN																								
SEC TEMP SN																								
PRI COND SN																								
SEC COND SN																								
O2 Tmp Sensor No.																								
Hydro Team-PMEI																								
NIS	DEPTH	ROSET.														Wiegandner	Julie	Sambrotto	Moran/	Harvey	Cann/	Moran	Katrin	Nis
NO.	DESIRED	NOTES	SALT	NUT.BTL	O2-BTL.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sher	Th		No.			
1	68			72						284		X	X									1		
2	60			73	50/221																	2		
3	50			74		1																3		
4	40			75		2																4		
5	30			76		3																5		
6	20			77		4																6		
7	10			78		5				285											7			
8	0			79		6				286		X	X								8			
9																					9			
10																					10			
11																					11			
12																					12			

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSIERP_Spring09						Ship Designation (I.D.) 1H0902						STATION NO. 125/76437								
		CONSC CAST #	DEG MIN	DEG MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER
SBE 9+																						
PRESS SN																						
PRI TEMP SN																						
SEC TEMP SN																						
PRI COND SN																						
SEC COND SN																						
Nisk DEPTH	Roset.	Hydro Team-PMEI						Weingartner	Julie	Sambrotto						Moran/	Harvey	Cain/	Moran	Katrin	Nic	
No.	DESIRED notes	SALT	Nut.Btl	02-Btl.No	CHL..	Frac CHL..	DOC/AIk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.			
1	68				80																	1
2	60				81																	2
3	50				82		1															3
4	40				83		2															4
5	30				84		3															5
6	20				85		4															6
7	10				86	167/26	5				288											7
8	0				87	167/26	6				289											8
9																						9
10																						10
11																						11
12																						12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSTERP Spring'09		Ship Designation (I.D.) 1H0902						STATION NO. 126/120436								
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)
1875835.73 N	17054.74 W	08 MAY 09	0329	-1.8	.	21					195	8				727dm36				
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
NIS	DEPTH	ROSET.	Hydro Team-PMEI				Wingartner	Julie	Sambrotto		Moran'	Harvey	Cain'	Moran	Katrin	Nis				
No.	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DOC/AIk	DOC	018	b1SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	67			88						290.										1
2	60			89	603/107															2
3	50			90																3
4	40			91		1														4
5	30			92		2														5
6	20			93		3														6
7	10			94		4														7
8	0			95		5				291.										8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSERP_Spring'09							Ship Designation (I.D.) H10902							STATION NO. 127/70M35		
		CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)			DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN. (kts)	WIND SPD. (m/s)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID
			DEG MIN	DEG MIN	DAY MO YR	HR MIN												
		1885926	18 N	17053.94 W	08 MAY 09	0507-21											1807	7370M35
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
NIS DEPTH	Roset.	Hydro Team-PMEI						Weingartner	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Katrin	Nis	
No	DESIRED	meters	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th
1	68			86														1
2	60			87														2
3	50			88														3
4	40			89														4
5	30			90														5
6	20			61														6
7	10			62	10/143	5												7
8	0			63														8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEER_Spring09		Ship Designation (I.D.) H10902		STATION NO. /128/701438												
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. DEPR.	WIND SPD. TYPE	CLOUD (amt) WEATHER	BOTTOM DEPTH	STA. NAME/D								
1	89 59 20 .08 N	170 38 .68 W	18 MAY 09 06 31 -2.6	22	180	6					73	701434								
SBE 9+		FLUOR S/N																		
PRESS SN		SBE3-Oxy (prime)																		
PRI TEMP SN		SBE3-Oxy (sec)																		
SEC TEMP SN		Transmissometer																		
PRI COND SN		PAR S/N																		
SEC COND SN		02 Trip Session No.																		
NIS	DEPTH	Roset.	Hydro Team-PMEI				Weingartner Julie	Sambrotto		Moran/ Harvey	Garn/	Moran								
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th.	Katrin	Nis
1	66		104					296	-											1
2	60		105																	2
3	50		106			1	1													3
4	40		107			2	2													4
5	30		108			3	3													5
6	20		109			4	4													6
7	10		110	289/297		5	5	297	-											7
8	0		111			6	6	298	-											8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BStLrp Spring 09		Ship Designation (I.D.) H10902		STATION NO. 129/170 M33										
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID		
DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	*	*	(deg)	(kts)	*	*	(m)			
190	59	14	.73	N	170	24	.79	W	08	MAY	09	84	2	-2	.6	138	16870 M33	
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
Roset.		Hydro Team-PMEI		Wengenmeier		Juie	Sambrutto		Moran/ Harvey	Cain/ Sheriff		Moran	Katrin	Nis				
NO.	DESIRED notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL..	DIC/AIk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Th	No.
1	64			112	269/232		/	/	2199									1
2	50			113	7B1													2
3	46			114														3
4	36			115	TB2		2	2	300									4
5	20			116	TB4													5
6	10			117	TB5													6
7	0			118	TB6		3	3	301									7
8																		8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BEST/FP_Spring'09		Ship Designation (I.D.)						STATION NO. 130/ 75M32										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MN	TIME (GMT)		DRY BULB	WET BULB	PRESSURE		SEA STATE	WIND	WIND	CLOUD	WEATHER	BOTTOM	STA. NAME/ID	
		DEG	MIN						(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)				
19	15° 56'. 47 N	170° 14'. 92 W	09 MAY 09	49	34	-12	.6	.	23	138	1	6876M32										
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									PAT S/N													
SEC COND S/N									O2 Tmp Sensor No.													
Roset.		Hydro Team-PME							Wellington	Jillie												
No.	DESIRED	notes	SALT	Nut.Btl	02-BTLNO	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th				
1	63		B5	1/9																		
2	50		B6	120		7B1																
3	46		B7	121		TB2																
4	36		B8	122		TB3																
5	26			123		TB4																
6	16		124		7B5					303												
7	0		125	220	080	7B6				308												
8																						
9																						
10																						
11																						
12																						

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Vessel USCG Healy		Cruise ID H10902		Project & Leg BEST/BSERP_Spring'09				Ship Designation (I.D.) H10902				Station No. 131/20M31						
Consc Cast #	Latitude Deg Min	Longitude Deg Min		Time (GMT) Day Mo YR		Dry Bulb Wet Bulb (°C)		Pressure mb * (deg)		Wind Dirn. Spd. Cloud (amt)		Sea State Visiblity Wind Dirn. Type Bottom Depth STA. NAME/ID						
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	(m)
1925856.92	N	17419.69	W	48	MAY	09	1132	-2.5	.	23	159	3	7470M31	73				
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.														
No.	Depth	Hydro Team-PMEL		Weingartner	Julie	Sambrotto		Moran/	Harvey	Cann/	Moran	Katrin	Nic					
No.	Desired	Notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL..	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr
1	65		126		126	155			1	265								
2	50		127			FB1												1
3	40		128			FB2												2
4	30		129			FB3												3
5	24		130			FB4												4
6	10		131			FB5			366									5
7	Φ		132			FB6			34.7									6
8																		7
9																		8
10																		9
11																		10
12																		11
																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP-Spring09		Ship Designation (I.D.) H10902		STATION NO. 132/74M3d												
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MIN		DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN SPD.	WIND CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID						
		DEG	MIN	DAY	MO															
1	93 58' 46.40 N	170 17.48 W	09 MAY 2013	24	191 48	74	74	1010	74% ice coverage	MAX DEPTH =	m									
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	Roset.					Hydro Team-PMEI					Weingartner	Julie	Sambrotto	Moran/	Harvey	Carrin/	Moran	Katrin	NIS
No	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL	Frac CHL..	DIC/Ak	DOC	01B	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No
1	67		133							308										1
2	50		134			TB1	FC1													2
3	40		135			TB2	FC2													3
4	30		136			TB3	FC3													4
5	20		137			TB4	FC4													5
6	10		138			TB5	FC5			309										6
7	0		139	132	205	TB6	FC6			310										7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSPRP_Spring'09		Ship Designation (I.D.) 110902		STATION NO. 33170M29											
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	75 BOTTOM DEPTH	STA. NAME/ID				
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	
SBE 9+	19	45	837	.47	N	17	16	44	W	15.02	-2.2	1015.4	24	24	246	5	7376	M29	
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS DEPTH	Roset.	Hydro Team-PME					Weingartner	Julie	Sambrutto		McKeev/		Harvey/		Cain/		Moran/		
No DESIRED	notes	SALT	Nut.BtI	02-BtI No	CHL	Frac CHL	DIC/ALK	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	Nis
1	68			140	18.2														1
2	50			141	TBI														2
3	48			142	TB2														3
4	39			143	TB3														4
5	28			144	TB4														5
6	16			145	TBS														6
7	0			146	T06														7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSTERR Spring'09		Ship Designation (I.D.)						STATION NO. 134/74m28								
CONSC CAST #	LATITUDE					TIME (GMT)	DRY BULB		WET BULB		PRESSURE		WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	DEPTH (m)	STA. NAME/ID		
		DEG	MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	
1	95 55 N	8	26.	79	N	17	0	11.	27	W	68	MAY	09	16	27	-2.	0	25	229	7375m28
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.														
Ns DEPTH	Roset.	Hydro Team-PMEI						Weingartner	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Katrin	Ns			
No DESIRED notes	SALT	Nut.Btl	O2-Btl.No	Chl.	Frac Chl.	DOC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sher	Th	No.		
1	68			147															1	
2	49			148		TB1.													2	
3	39			149		TB2													3	
4	29			150		TB3													4	
5	25			151															5	
6	19			152		TB4													6	
7	9			153	V alv	TBS	not seat												7	
8	8			154		174/176	TBL												8	
9																			9	
10																			10	
11																			11	
12																			12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H0902		PROJECT & LEG BEST/BSIERP_Spring09		Ship Designation (I.D.) H0902		STATION NO. 135/26W27											
CONSC CAST #	LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	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)				
1	96	58	17	.05	N	17	05	.51	w	18	MAY	09	12	43	-1.7	.			
SBE 9+										FLUOR S/N									
PRESS S/N										SBE43-Oxy (prim)									
PRI TEMP S/N										SBE43-Oxy (sec)									
SEC TEMP S/N										Transmissometer									
PRI COND S/N										PAR S/N									
SEC COND S/N										02 Tmp Sensor No.									
Roset.		Hydro Team-PMEL						Weingartner	Julie	Sambrotto		Moran/	Harvey	Cain/	Moran	Katrin			
No.	DESIRED notes	SALT	Nut.Bt!	02-SLNO	CHL	Frac CHL	DOC/Clik	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Tn	Nis No.
1	68	155	193/79					>1	>1	317									1
2	50	156		TB1															2
3	40	157		TB2															3
4	36	158		TB3															4
5	20	159		TB4															5
6	10	160		TB5						318									6
7	0	161		TB6						319									7
8																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERR_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 136/7ΦM26									
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD (amt)	WEATHER	BOTTOM	STA. NAME/ID	
		DAY	MO	YR	HR	MN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
1	19 47 58	08	.84	N	16 49 55	.49	W	148	MAY 09	19 18 - 1 . 2	.	26	143	1	727ΦM26		
SBE 9+																	
PRESS SN																	
PRI TEMP SN																	
SEC TEMP SN																	
PRI COND SN																	
SEC COND SN																	
Ns DEPTH	Roset.		Hydro Team-PHEL			Weingartner Julie			Sambrotto			Moran/ Harvey			Karin		
No DESIRED notes	SALT	Nut-Btl	O2-Btl-No	CHL	Frac CHL	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	67			2													1
2	50			3		1											2
3	40			4		3											3
4	30			5		3											4
5	26			6		4											5
6	10			7		5											6
7	8			8	19 9/2	3 6											7
8																	8
9																	9
10																	10
11																	11
12																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. / 37 / 70M25											
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT)		DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE DIRN. (deg)	WIND SPD. (kt/s)	CLOUD (amt) TYPE	BOTTOM DEPTH (m)	STA. NAME/ID						
		DAY	MO	HR	MIN	*	*	*	*	*	*	*							
SBE 9+																			
PRESS SN																			
PRI TEMP SN																			
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
O2 Depth Sensor No.		Hydro Team-PHETL		Weingartner/Jule		Sambrotto		Moran/ Harvey		Cain/ Thierry		Moran							
No.	DESIRED notes	SALT	Nat.Btl	O2-Btl No	CHL.	Frac CHL.	DOC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	65			9				—	—	323									1
2	60			10	19	190													2
3	50			11				1	1										3
4	40			12		2	2												4
5	30			13		3	3												5
6	20			14		4	4												6
7	10			15		5	5			324									7
8	0			16		6	6			325									8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSERP_Spring'09						Ship Designation (I.D.) H10902				STATION NO. 138/2012F				
		CONSC CAST #	DEG MIN	DEG MIN	DAY MO	YR	HR MIN	TIME (GMT)	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD TYPE	BOTTOM DEPTH (m)
		1995757.56	N	16921.72	W	08	MAY 09	2329-0.9	29	29	77	4				6870M24
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								02 Tmp Sensor No.								
NIS	DEPTH	Roset.	Hydro Team PMEL						Weingartner Julie	Sambrotto		Moran/ Harvey	Garnier/ Sherr	Moran	Katrin	Nis
No.	DESIRED	notes	SALT	NUT.BT	O2-BTl/No	CHL.	Frac CHL.	DOC	018	b18N	Urea	Part.	Prod	DON	Lomas	No.
1	63		17					326	•							1
2	60		18													2
3	59		19			1										3
4	40		20			2										4
5	30		21			3										5
6	20		22			4										6
7	10		23	15/33	✓	5		327	•							7
8	0		24			6		328	•							8
9																9
10																10
11																11
12																12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEER_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 139 / 70423									
CONSC CAST #	LATITUDE	DEG	MIN	LONGITUDE	DEG	MIN	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID	
		DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	(m)
2	00 57 54.	28	N	16 9 03.	83	W	09	MAY	09	10 52	-0.8	.	29	126	3		71724423
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 Trip. Session No.													
NIS DEPTH	Roset.	Hydro Team-PMEI					Weingartner	JULIE	Sambrotto		Moran/	Harvey	Garny/	Moran	Karin	NIS	
No.	DESIRRED notes	SALT	Nut.BH	O2-Bt.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr
1	64			25				/	/	329°							1
2	60			26	62/42												2
3	50			27		1											3
4	40			28		2											4
5	30			29		3											5
6	20			30		4											6
7	10			31		5				330°							7
8	0			32		6		/	/	331°							8
9																	9
10																	10
11																	11
12																	12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERR_Spring09		Ship Designation (I.D.) H10902								STATION NO./ 46 / 70 122					
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID
		DEG	MIN						(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)		
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	Roset.		Hydro Team-PMEL		Wingartner Julie		Sambrotto		Moran/ Harvey		Carr/ Karin		Moran		Katrin		NIS	
No	DESIRED	notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	No
1	68					33					332 *								1
2	60					34													2
3	50					35													3
4	40					36													4
5	30					37													5
6	20					38													6
7	10					39	159/31	5			333 *								7
8	0					40		6	6		334 *								8
9																		9	
10																		10	
11																		11	
12																		12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 141/70 M21														
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR		DRY BULB (*C) (mb)	WET BULB (*C)	PRESSURE SEA STATE VISIBILITY	WIND DIRN (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID									
		DEG	MIN	HR	MIN																	
20	25° 47.78' N	168° 50.11' W	09 MAY 09	04	24	-10.7	.30	310	2				7020M21									
SBE 9+						FLUOR S/N																
PRESS SN						SBE43-Oxy (prime)																
PRI TEMP SN						SBE43-Oxy (sec)																
SEC TEMP SN						Thermometer																
PRI COND SN						PAR S/N																
SEC COND SN						O2 Tmp Sensor No.																
Ns	DEPTH	Roset.						Hydro Team-PHET														
No.	DESIRED	notes	SALT	NUT.BTU	O2-BTU.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	b1SN	urea	Part.	Prod	DON	Lomas	Moran/	Harvey	Carin/	Moran	Katrin	Ns
1	66					44											Lessard	Sherr	Th		No.	
2	60					42																1
3	50					43																2
4	40					44																3
5	30					45																4
6	20					46																5
7	10					47																6
8	0					48																7
9																						8
10																						9
11																						10
12																						11
																						12

ICE LOC: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902						STATION NO. / 142/70120															
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)	*	*	*	(m)	DIRN.	SPD.	TYPE	WEATHER	DEPTH			
20	35	73	7	84	N	168	48	.99	W	09	MAY	09	0552	-0.8	.	30	28500					73	70120				
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.																		
Ns DEPTH		Roset.		Hydro Team-RMEL						Weingartner		Julie		Sambrotto		Moran/		Harvey		Carin/		Moran		Katin		Ns	
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th		No.							
1	67			49					328																	1	
2	60			50																						2	
3	50			51			1																			3	
4	40			52			2																			4	
5	30			53			3																			5	
6	20			54			4																			6	
7	10			55			5		339																	7	
8	0			56			6		346																	8	
9																											9
10																											10
11																											11
12																											12

ICE LOC: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 143/20M19											
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)	(kt)	*	(m)	
SBE 9+																			
PRESS S/N																			
PRI TEMP S/N																			
SEC TEMP S/N																			
PRI COND S/N																			
SEC COND S/N																			
NIS DEPTH	ROSET.	Hydro Team-PME				Weingartner	Julie	Sambrotto		Moran/ Harvey	Garn/ Moran	Katrin	Nis						
No DESIRED notes		SALT	NUT.BTU	O2-BTU,NO	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	Don	Lomas	Lessard	Sherr	Th	No.
1 67								/	/										1
2 60																			2
3 50																			3
4 40																			4
5 30																			5
6 20																			6
7 10																			7
8 0																			8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Should be NOT bales
57(1) + 64(8)

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. 144 / 76M 18			
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	DRY BULB ("C) (mb)	WET BULB ("C) (mb)	PRESSURE * SEA STATE VISIBILITY	WIND DIRN. (deg) (kts)	WIND SPD. TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
2	65°57'31.1" N	168°18.24°W	09 MAY 09 04823 - 1.1	31	01945					7370 M 18	
SBE 9+											
PRESS SN											
PRI TEMP SN											
SEC TEMP SN											
PRI COND SN											
SEC COND SN											
Nis DEPTH No DESIRED notes	RoSet.	Hydro Team-PMEL	Weingeriter Julie	Sambrotto	Moran/ Harvey	Carin/ Moran	Karin	Nis No.			
1	67	69	65		344						
2	50	50	64	TB 1							
3	40	31	67	TB 2							
4	36	312	68	TB 3							
5	26		69	TB 4							
6	10	70	TB 5		345						
7	D	71	TB 6		346						
8											
9											
10											
11											
12											

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEFRP_Spring09		Ship Designation (ID.) H10902		STATION NO./ROM 17								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (*C)	WET BULB (*C)	(mb)	PRESSURE SEA STATE VISIBILITY	WIND DIRN. SPD.	WIND CLOUD (amt) TYPE	WEATHER BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN													
20657	29.99 N	16759	.33 W	09	MAY	09	1424	-0.6	.	31	14	2	72	70M17		
SBE 9+		FLUOR S/N														
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 Tmp Sensor No.														
NIS	DEPTH	ROSET.	Hydro Team-PMEI				Weisgarber	Julie	Sambrotto	Moran/	Harvey	Carr/	Moran	Katrin	NIS	
No.	DESIRED	notes	SALT	Nut, BSI	O2-BSI, NO	CHL.	Frac CHL..	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas
1	67		72						1	1	347					Lessard
2	65		73													Sherr
3	50		74		TB1	Tc1										Th
4	40		75		TB2	Tc2										
5	35		76		TB3		5	5								
6	28		77		TB4	Tc4										
7	10		78		TB5	Tc5										
8	0		79		TB6	Tc6	8	8								
9																
10																
11																
12																

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERR Spring'09		Ship Designation (I.D.) H10902		STATION NO.													
CONSC CAST #		LATITUDE		LONGITUDE																	
		DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	*	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID		
2	47	57	30	.52	N	16	73	9	.57	W	49	MAY	09	12	0-2.3	.	31	3234	7276		
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		Roset.		Hydro Team-PML		Vela/garnet		Julie		Sambroto		Morai/		Harvey		Cain/		Moran		Katrin	
No	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	b1SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.	
1	67		80							354										1	
2	66		81			TB1														2	
3	50		82																	3	
4	40		83			TG2														4	
5	36		84			TG3														5	
6	20		85			TB4														6	
7	10		86			TB5				351										7	
8	6		87			TBL				352										8	
9																				9	
10																				10	
11																				11	
12																				12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Pancakes, max 35m, ~85% coverage

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEFR_Spring'09		Ship Designation (I.D.) 1H0902						STATION NO. 47 / 70M15						
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT)			DRY BULB (*C)		WET BULB (*C)		PRESSURE (mb)		SEA STATE VISIBILITY		WIND DIRN. SPD. CLOUD (amt) TYPE WEATHER		BOTTOM DEPTH STA. NAME/ID	
		DAY	MO	YR	HR	MIN	*	*	*	*	(deg)	(kts)	*	*	*	(m)		
SBE 9+																		
PRESS SN																		
PRI TEMP SN																		
SEC TEMP SN																		
PRI COND SN																		
SEC COND SN																		
Ns DEPTH	Roset.	Hydro Team-PMEI						Wiegandner Julie		Sambrutto		Moran/ Harvey		Cain/ Sherr		Moran		Katrin
No DESIRED	notes	SALT	Nut.Btl	02-Btl No	CHL.	Frac CHL.	DOC/AIK	DOC	018	61SN	Urea	Part.	Prod	DON	Lomas	Lessard	Tn	Ns No.
1 67			38						353									1
2 60			89															2
3 50			96		T81													3
4 40			91		T82													4
5 30			92		T83													5
6 20			93		T84													6
7 10			94		T85													7
8 0			95		T86													8
9																		9
10																		10
11																		11
12																		12

Rosette Notes:

iCE LOG: Surface Ice Conditions or proximity to ice edge
pancakes, some overland, max size ~35m
ice coverage = 90%

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEPP_Spring'09		Ship Designation (I.D.) 1H0902						STATION NO. 73 / 70M14							
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	73 BOTTOM DEPTH	STA. NAME/ID
		DEG	MIN						(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)		
2	49 57	31 . 27	N	167 41 . 94	W	49	MAY	09	15 48 - 1 . 9	.	31	34 46 9					7170M14		
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									02 Tmp Sensor No.										
Nis	DEPTH	Roset.	Hydro Team-PML					Weingartner	Julie	Sambrotto		Moran/	Harvey	Gavin/	Moran	Katrin	Nis		
No.	DESIRED	notes	SALT	Nut.Btl	O2.Btl.No	CHL.	Frac CHL.	DOC	018	SiSN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	66		96						356	V	V	V							1
2	50		97			TB1													2
3	40		98			TB2													3
4	33		99	10		TB3				V	V	V	V						4
5	30		100	11		TB4													5
6	21		10	12															6
7	17																		7
8	13																		8
9	10		101	13		TB5													9
10	9		102	14															10
11	4		103	15															11
12	6		102	16		TB6													12

ICE LOG: Surface ice conditions or proximity to ice edge — No ice, nearest ice ~7 miles SW

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO 149/70m13							
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
		DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)
SBE 9+															
PRESS SN															
PRI TEMP SN															
SEC TEMP SN															
PRI COND SN															
SEC COND SN															
Roset.		Hydro Team-PMEL				Weingartner Julie	Sambrotto		Moran/ Harvey	Cain/ Sherri	Moran	Katrin	Nic		
No.	DESIRED notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL..	DIC/ALK	DOC	018	65N	Urea	Part.	Prod	DON	Lomas
1	65		103					✓	359						
2	60		104					✓							
3	50		105		TBL	FB1									
4	40		106		TBL	FB2									
5	30		107												
6	25		108		TBL	FB3									
7	20		109		TBL	FB3									
8	10		110		TBL	FB5									
9	0		111		TBL	FB6		✓	361						
10															10
11															9
12															11
															12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP Spring'09		Ship Designation (I.D.) H10902		STATION IND. 156°7.0M12			
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MN	DRY BULB (*C) (mb)	WET BULB (*C)	PRESSURE SEA STATE VISIBILITY	WIND DIRN. SPD. (kts)	WIND CLOUD (amt) TYPE WEATHER	72 BOTTOM DEPTH (m)	STA. NAME/ID	
2115726.52 N	16631.47 W	09 MAY 09 1817 - 1.8 .	32	35648							
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 Roset.	Hydro Team-PME				Weingartner Julie	Sambrotto		Moran/ Harvey	Cann/ Katrin	NIS
No.	DESIRED notes	SALT	Nut.BH	02-BH, No	CHL.	Frac CHL..	DIC/ALK	DOC	018	615N Urea Part. Prod DON Lomas Lessard Sher Th	No.
1	65		112						362		1
2	60		113								2
3	50		114		TB1						3
4	40		115		TB2						4
5	30		116		TB3						5
6	20		117		TB4						6
7	10		118		TB5				363	— long haul replaced —	7
8	10		119		TB6						8
9	0										9
10											10
11											11
12											12

ICE LOG: Surface Ice Conditions or proximity to ice edge — No ice

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEER Spring'09		Ship Designation (I.D.) H10902		STATION NO. 151 / 70 MIL				
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN	TIME (GMT) DAY MO YR HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. • (deg)	WIND SPD. • (kts)	CLOUD (amt) TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
21	25° 7' 19.77 N	66° 20.29 W	09 MAY 09 / 1938 - 1.7	33.	339	7					7270MIL	
SBE 9+	-											
PRESS SN												
PRI TEMP SN												
SEC TEMP SN												
PRI COND SN												
SEC COND SN												
NIS	DEPTH	ROSET.	Hydro Team: PMEL	Weingartner	Julie	Sambrotto	Moran/	Harvey	Carrin/	Moran	Katrin	NIS
No	DESIRED	NOTES	SALT	NUT.BU	02-BTU.NO	CHL.	Frac CHL.	DIC/ALK	DOC	018	015N	UREA
1	65			120						36.5		Lomas
2	60			121								Lessard
3	50			122		1						
4	40			123		2						
5	30			124		3						
6	20			125		4						
7	10			126		5						
8	0			127		6						
9												
10												
11												
12												

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSPR_Spring'09				Ship Designation (I.D.) H10902				STATION NO. / 52/70146												
CONSC CAST #		LATITUDE		LONGITUDE		DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	*	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
SBE 9+													(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
SBE SN																								
PRI TEMP SN																								
SEC TEMP SN																								
PRI COND SN																								
SEC COND SN																								
NIS	DEPTH	Roset:		Hydro Team-PMEI		Wingardnet		Julie		Sambrotto		Moran/ Harvey		Cain/ Karin		Moran		Katrin		Nis				
No.	DESRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL	Frac CHL..	DIC/AIk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sher	Th	No.				
1	64			128							368										1			
2	60			129																	2			
3	56			130		1	1														3			
4	40			131		2	2														4			
5	30			132		3	3														5			
6	20			133		4	4														6			
7	10			134		5	5				369										7			
8	0			135		6	6				370										8			
9																					9			
10																					10			
11																					11			
12																					12			

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL ISCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSI/RP_Spring'09		Ship Designation (I.D.) H10902							STATION NO./S3/Z0M09							
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	CLOUD	BOTTOM	STA. NAME/ID	
									(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
2	145715.58	N	16545.47	W	09	MAY	09	22	29	+1.4	.	33	351	9			7170409			
SBE 9+																		MAX. DEPTH =	m	
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Ns	DEPTH	Roset.	Hydro Team/PMEI					Weingartner	Julie	Sambrotto		Moran'	Harvey	Cain'	Moran	Karin	Nis			
No.	DESIRED	notes	SALT	Nut.BH	02-BH No	CHL.	Frac CHL.	DNC/ALK	DOC	018	65N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	65							/	/	371									1	
2	60							/	/										2	
3	50						1												3	
4	40						2												4	
5	30						3												5	
6	20						4												6	
7	10						5												7	
8	0						6												8	
9																			9	
10																			10	
11																			11	
12																			12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

Assume Nw to 136(1) to 143(8)

Vessel USCG Healy		Cruise ID H10902		Project & Leg BEST/BSIERP Spring'09		Ship Designation (I.D.) H10902		Station No. 154/70008												
Consc Cast #	Latitude	Longitude		Time (GMT)	Dry Bulb	Wet Bulb	Pressure	Wind Dirn.	Wind Spd.	Wind Cloud (amt)	Bottom Depth	Sta. Name/ID								
deg	MN	deg	min	Day	Mo	YR	HR	Min	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
21	55	74	6.53	N	165	36.76	W	10	MAY 09	00 28	-0.4	.	33	327	7		7270408			
SBE 9+																				
PRESS SN																				
PRI TEMP SN																				
SEC TEMP SN																				
PRI COND SN																				
SEC COND SN																				
Nst	Depth	Roset.	Hydro Team-PME				Weingartner	Julie	Sambrotto		Moran/V	Harvey	Cain/V	Moran	Katrin	Nis				
No.	Desired	Notes	Salt	Nit, Br	O2, Br, No	Chl.	Frac Chl.	DIC/AIk	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	65		144							324										1
2	60		145																	2
3	50		146			1														3
4	40		147			2														4
5	30		148			3														5
6	20		149			4														6
7	10		150			5				375										7
8	0		151			6				376										8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H0902		PROJECT & LEG BEST/BSERP Spring 09		Ship Designation (I.D.) H0902		STATION NO. 155/70407							
CONSC CAST #	LATITUDE DEG MN	LONGITUDE DEG MIN		TIME (GMT)		DRY BULB °C	WET BULB °C	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID
		DAY	MO	HR	MIN	(deg)	(kts)	*	*	(m)					
2	16 56 59 . 69 N	16 52 27 9 W	10 MAY 09	02	16	-16.8	-18	33	333	8	8			7470407	
SBE 9+															
PRESS SN															
PRI TEMP SN															
SEC TEMP SN															
PRI COND SN															
SEC COND SN															
NIS DEPTH	Roset.	Hydro Team PMEL				Weingartner Julie	Sambrotto	Moran/ Harvey	Carrin/ Thierry	Moran	Katrin	Nis			
No. DESIRED notes	SALT	NUT.ATL	O2-BALNO	CHL.	Frac CHL.	DIC/ALK	DOC	018	BSN	Urea	Part.	Prod	DON	Lomas	Lessard
1	67	B/13	152					377							
2	60	B/14	153												
3	50	B/15	154		1										
4	40		155		2										
5	30		156		3										
6	20		157		4										
7	0		158		5			378							
8			159		6			379							
9															
10															
11															
12															

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSRP Spring'09		Ship Designation (I.D.) H10902		STATION NO. 15670406								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * (deg)	WIND DIRN. * (kts)	WIND SPD. * (m/s)	CLOUD TYPE * (m)	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN													
21	175651.54	N	16507.22	W	10	MAY	09	04	22	1.2	.	32	350	8	7770406	
SBE 9+																
PRESS SN																
PRI TEMP SN																
SEC TEMP SN																
PRI COND SN																
SEC COND SN								O2 Trip Sensor No.								
NIS	DEPTH	Roset.	Hydro Team-PMEI				Weinbrenner	Julie	Sambrotto	Moran'	Harvey	Cain'	Moran	Karin	NIS	
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DOC/AIK	DOC	018	019N	Urea	Part.	Prod	DON	Lomas
1	70					160	1									Lessard
2	60					2										Sheir
3	50					3	1	1			X					Th
4	40						2	2			X					No
5	30					4		3	3							1
6	20					5		4	4							2
7	10					6		5	5	381						3
8	0					7	6	6			X					4
9	0										X					5
10																6
11																7
12																8
																9
																10
																11
																12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL JSCG Heavy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) H10902		STATION NO. / 157/70005				
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)		DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE * * (deg) WIND DIRN. SPD. (kts)	WIND CLOUD TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
		DEG	MIN	DAY	MO							
21	85654.	58	N	164	49.57	W	10	MAY 09	0607+1.8	32	35011	7270M05
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		Roset.		Hydro Team/PMEI		Wingate/Julie		Sambroto		Moran/ Harvey		Karin
No	Desired	notes	SALT	Nut.Btl	O2-Btl No	CHL.	Frac CHL.	DOC	018	015N Urea	Part.	Cann/ Moran
1	68				8				383			
2	60				9							1
3	50				10		1					2
4	40				11		2					3
5	30				12		3					4
6	20				13		4					5
7	10				14		5					6
8	0				15		6		384			7
9	0											8
10												9
11												10
12												11
												12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSPER_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 158/20M04										
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	TIME (GMT) HR MIN	DRY BULB ("C)	WET BULB ("C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN (deg)	WIND SPD. (kts)	CLOUD (amt)	TYPE WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID	
		DEG	MIN															
2	19 56 54	40	.97	N	16 42 9	.95	W	14 MAY 09	47 52 -1 .4	.	32	444	15	*	75	7570 M04		
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		Roset.		Hydro Team-PML		Wingard/Julie		Sambrotto		Moran/		Harvey		Cann/		Moran		
No.	DESIRED	notes	SALT	Nut-Btl	O2-Btl No.	CHL.	Frac CHL.	DIC/AIK	DOC	018	815N	Urea	Part.	Prod	DON	Lomas	Karrin	Nis
1	70					16				386								
2	60					17												1
3	50					18		TB1										2
4	40					19		TB2										3
5	30					20		TB3										4
6	20					21		TB4										5
7	10					22		TB5										6
8	0									387								7
9	0					23		TB6		9		388						8
10										-							9	
11										-							10	
12																	11	
																	12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

always without, max length ~ 5m
coverage, < 10%

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSIERP Spring'09		Ship Designation (I.D.) H10902		STATION NO. 159 / 74 M03												
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)	BOTTOM DEPTH	STA. NAME/ID		
									HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	(m)	
22	45	6	49	76	N	164	18	.66	MAY	09	49	11	-1.4	.	32	356	43	73	74 M03	
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 Tmp Sensor No.																
NIS	DEPTH	Roset.	Hydro Team-PMEL					Wingartner	Julie	Sambrotto					Moran/	Harvey	Cairn/	Moran	Katrin	
No	DESIRED	notes	SALT	INUT.Btl	02-Btl No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	Nis
1	68			24							38.9									1
2	50			25		TB1	FB1													2
3	46			26		TB2	FB2													3
4	30			27		TB3	FB3													4
5	40			28		TB4	FB4													5
6	10			29		TB5	FB5				39.0									6
7	8			30		TB6	FB6				39.1									7
8																				8
9																				9
10																				10
11																				11
12																				12

ICE LOG: Surface Ice Conditions or proximity to ice edge

No ice

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERp_Spring'09				Ship Designation (I.D.) H10902		STATION NO 1281-76M&2								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR		DRY BULB (*C)	WET BULB (*C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN. (deg)	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	T-5 BOTTOM DEPTH (m)	STA. NAME/ID			
		DEG	MIN	HR	MN	(deg)	*	*	(deg)	*	*	*	(m)					
22	13 56.52 N	164 04.12 W	103 20 09	11	15	-1.2	.3	32	35648	7375	48	100	2					
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.																
Roset.		Hydro Team-PMEI				Weingartner	Julie	Sambrotto	Moran/	Harvey	Cain/	Moran	Katrin	Nis				
No	DESIRED notes	SALT	Nut.Bu	02-Bu.No	CHL.	Frac CHL.	DOC	018	015N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	69	31					✓	✓	392									1
2	50	32	TB1															2
3	40	33	TB2															3
4	30	34	TB3															4
5	20	35	TB4															5
6	18	36	TB5					393										6
7	5	37	TB6			✓	/	394										7
8																		8
9																		9
10																		10
11																		11
12																		12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERR_Spring'09		Ship Designation (I.D.) H10902						STATION NO. 141								
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	WEATHER	BOTTOM DEPTH	STA. NAME/ID	
		(°)	(°)						(°C)	(°C)	(mb)	(deg)	(kts)	*	(m)					
22	25	6	47	.16	N	163	57	.44	W	10 MAY 09	1241	-1.2	32	343	3	470	MΦ1			
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.										
Nest DEPTH		Roset.		Hydro Team-PMEI						Velageneine	Jule									
No.	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL	Frac CHL	DIC/ALK	DOC	018	b1SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	
1	69		B16	38							1	1								
2	55		B17	39		TB1					2									
3	40		B18	40		TB2														
4	30		B19	41		TB3					4									
5	20			42		TB4														
6	10			43		TB5					6	4	3%							
7	5			44		TB6					7	7	397							
8																				
9																				
10																				
11																				
12																				

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

jellies
post
likely

VESSEL USCG Healy		CRUISE ID HT0902		PROJECT & LEG BEST/BSEERP_Spring'09		Ship Designation (I.D.) HT0902		STATION NO. 42/CN3					
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		TIME (GMT) DAY MO YR HR MIN	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE * * (deg)	WIND DIRN. Spd. Cloud Type Bottom Depth (m)	VISIBILITY * * (kts)	WEATHER STA. NAME/ID		
		DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(mb)	(deg)	(kts)	(m)
27	35	47	38	32	N	163	16	.74	W	10 MAY 09	1811	-1.4	32
SBE 9+													
PRESS SN													
PRI TEMP SN													
SEC TEMP SN													
PRI COND SN													
SEC COND SN													
NIS DEPTH	Roset.	Hydro Team-PMEI				Weingartner	Julie	Sambrotto	Moran'	Harvey	Cain'	Moran	Katrin
No. DESIRED	notes	SALT	NUT.BT	02-BT,NO	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N Urea	Part.	Prod	DON
1	HAT				1								
2	30				2								
3	20				3								
4	10				4	*	*	*					
5	0				5								
6													
7													
8													
9													
10													
11													
12													

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL
USCG HealyCRUISE ID
HO902PROJECT & LEG
BEST/BIEP Spring'09Ship Designation (I.D.)
HO902STATION NO
163/CW4

CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)				DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	WIND	WIND	BOTTOM	STA. NAME/ID	
DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	CLOUD (amt)	DEPTH (m)			
22	45	72	3.02	N	16332	17	W	14	MAY	09	2018	-0.5	.	32	358	13	55	CW4	
SBE 9+		FLUOR S/N		SBE43-Oxy (prime)															
PRESS SN		SBE43-Oxy (sec)		Transmissometer															
PRI TEMP SN		PAT S/N		O2 Tmp Sensor No.															
SEC TEMP SN																			
PRI COND SN																			
SEC COND SN																			
NIS	DEPTH	Roset.	Hydro Team-PMEL				Weingartner	Julie	Sambrotto		Moran /	Harvey	Carm /	Moran	Katrin	Nis			
No.	DESIR ED	notes	SALT	Nut.Bt	O2-Bt, No	CHL	Frac CHL	DOC	018	01SN	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	49					6													1
2	40					7													2
3	30					8													3
4	20					9		*											4
5	10					10		*											5
6	0					11		*											6
7								*											7
8								*											8
9								*											9
10								*											10
11								*											11
12								*											12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSPERF_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 164 / C 315													
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	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)				
22	55	70	7.35	N	16	34	8	17	W	10	MAY	09	22	11	-0.8	.	33	350	7	66	CNO5
SBE 9+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
MIS DEPTH	Roset.	Hydro Team-PME					Wellington		Julie	Sambrotto		Moran/ Harvey		Carlin/		Moran		Katrin	Nis		
No	DESRED	notes	SALT	Nut.Bt	O2-Btl.No	CHL.	Frac CHL	DIC/ALK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.	
1	61																			1	
2	50																			2	
3	49																			3	
4	30																			4	
5	26																			5	
6	6																			6	
7	0																			7	
8																				8	
9																				9	
10																				10	
11																				11	
12																				12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSEIRP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 165/c1k07															
CONSC CAST #		LATITUDE		LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID								
		DEG	MIN	DEG	MIN	DAY	MO	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	(m)						
2	2	2	6	5	6	54.	20	N	164	02.	72	W	10	MAY	09	23	51	-0.5	.32	346	8	71	C1K07
SBE 9+										FLUOR S/N													
PRESS S/N										SBE43-Dry (prime)													
PRI TEMP S/N										SBE43-Oxy (sec)													
SEC TEMP S/N										Transmissometer													
PRI COND S/N										PAR S/N													
SEC COND S/N										CO2 Temp Sensor No.													
Met DEPTH		Roset.		Hydro Team-PHEL		Weingartner Julie		Sambrotto		Moran / Harvey		Carin / Moran		Katrin / Nis		MAX. DEPTH =							
No	DESIRED notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DOC	01B	515N	Urea	Part.	Prod	DOC	Lomas	Lessard	Sherr	Th	No.					
1	65			19														1					
2	60			20														2					
3	50			21														3					
4	40	*		22		*	*			*		*		*		*		4					
5	30			23														5					
6	20			24														6					
7	10			25														7					
8	0			26														8					
9																		9					
10																		10					
11																		11					
12																		12					

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) 1H0902						STATION NO. / CNO8										
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)	
22	75	6	42	.32	N	16	43	0	74	W	11	MAY	09	01	58	-0	.1	32	352	9	73	
SBE 9+																						
PRESS SN																						
PRI TEMP SN																						
SEC TEMP SN																						
PRI COND SN																						
SEC COND SN																						
MSL DEPTH	Roset.	Hydro Team-PMEL						Weingartner	Julie	Sambrotto		Moran/		Harvey		Carin/		Moran		Katrin	Nis	
No.	DESIRED notes	SALT	Nut.Bt	O2-Btl.No	CHL.	Frac CHL.	DOC	018	815N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.				
1	70			27																		1
2	60			28																		2
3	50			29																		3
4	40			30		*	*	*	*					*	*	*	*	*				4
5	30			31																		5
6	20			32																		6
7	10			33																		7
8	0			34																		8
9																						9
10																						10
11																						11
12																						12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09				Ship Designation (I.D.) 1H0902				STATION NO. 67/CN09							
CONSC CAST #		LATITUDE		LONGITUDE		DEG	MIN	DAY	MO	YR	TIME (GMT)	DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND	CLOUD (amt)	BOTTOM	STA. NAME/ID
		DEG	MIN	DEG	MIN	HR	MIN	(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)		
2	22856	33.	87	N	16454	.05	W	11	MAY	09	0347	-10.4	.	31	23	12	78	CN09	
SBE 9+											FLUOR S/N								
PRESS SN											SBE43-Dby (prime)								
PRT TEMP SN											SBE43-Dby (sec)								
SEC TEMP SN											Transmissometer								
PHT COND SN											PAR S/N								
SEC COND SN											O2 Trig Sensor No.								
NIS DEPTH	Roset.	Hydro Team-PMEL				Weingartner				Julie				Sambrotto				MAX. DEPTH =	
No.	DESIRED notes	SALT	Nut.Bei	02-Btl.No	CHL.	Frac CHL.	DIC/AIK	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	73				35														1
2	60				36														2
3	50				37														3
4	40				38		*					*							4
5	30				39		*					*							5
6	20				40		*					*							6
7	10				41		*					*							7
8	0				42		*					*							8
9							*					*							9
10							*					*							10
11							*					*							11
12							*					*							12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/SBEP_Spring'09				Ship Designation (I.D.) H10902				STATION NO. 68/CN10							
CONSC CAST #	LATITUDE MIN	LONGITUDE		DAY	MO	YR	HR	MIN	TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE	WIND DIRN.	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID
		DEG	MIN						(°C)	(°C)	(mb)	*	*	(deg)	(kts)	*	*	(m)	
2295625.	49	N	16517.	76	W	11	MAY	09	0548	-0.9	.	31		2511			84	CN10	
SBE 9+			FLUOR S/N																
PRESS SN			SBE43-Oxy (prime)																
PRI TEMP SN			SBE43-Oxy (sec)																
SEC TEMP SN			Transistorometer																
PRI COND SN			PAR S/N																
SEC COND SN			O2 Tmp Sensor No.																
Roset.		Hydro Team-PMEI				Weingartner		Jule		Sambrotto		Moran / Harvey		Cann / Moran		Karin		Nis	
No	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DOC	018	b1SN	Ikeea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.
1	80			43															1
2	70			44															2
3	60			45															3
4	50	•	46			•	•	•											4
5	40		47																5
6	30		48																6
7	20		49																7
8	10		50																8
9	0		51																9
10																			10
11																			11
12																			12

ICE LOG: Surface ice conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring09		Ship Designation (I.D.) 1H0902		STATION NO. 169 / CW11													
CONSC CAST #	LATITUDE MIN	LONGITUDE		TIME (GMT)		DRY BULB	WET BULB	PRESSURE	SEA STATE VISIBILITY	WIND DIRN	WIND SPD.	CLOUD (amt)	BOTTOM DEPTH	STA. NAME/ID							
		DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	*	(deg)	(kts)	*	*	(m)				
2	30	56	16	.87	N	165	41	.59	W	1	1	MAY	09	07	45	-1.4	34	34	4	93	CW11
SBE 9+																					
PRESS SN																					
PRI TEMP SN																					
SEC TEMP SN																					
PRI COND SN																					
SEC COND SN																					
NIS	DEPTH	ROSET.	Hydro Team-PMEV				Weisgarber	Julie	Sambrotto		Moran	Harvey	Cann	Moran	Katrin	NIS					
No	DESIRED	notes	SALT	NUT.BTU	O2-BLU.NO	CHL	Frac CHL	DIC/ALK	DOC	018	615N	Urea	Part	Prod	DON	Lomas	Lessard	Sherr	Th	No	
1	88	PMEV SALE SALIS	295	52																1	
2	45	PMEV SALE SALIS	53																	2	
3	56	PMEV SALE SALIS	54																	3	
4	46		55																	4	
5	30		56																	5	
6	20		57																	6	
7	16		58																	7	
8	0		59																	8	
9																				9	
10																				10	
11																				11	
12																				12	

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSI/EPP_Spring'09		Ship Designation (I.D.) 1H0902		STATION NO. 110/CD12											
CONSC CAST #	LATITUDE	LONGITUDE		TIME (GMT)			DRY BULB	WET BULB	PRESSURE	WIND DIRN.	WIND SPD.	CLOUD TYPE	WEATHER	110 BOTTOM DEPTH	STA. NAME/ID				
		DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(°C)	(mb)	* * *	(deg)	(kts)	(m)		
23	156	48	.46	N	16	60	13	W	11	MAY 09	Φ 95	1 - 1 .Φ	30	41	4	110	CN12		
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	Roset.		Hydro Team-PMEI			Wengartner		Julie	Sambrotto		Moran /	Harvey	Carr /	Moran	Karin	Nis		
NO	DESIRED	notes	SALT	Nut.Btl	O2-Btl.No	CHL.	Frac CHL.	DOC	018	615N	Urea	Part.	Prod	DON	Lomas	Lessard	Shear	Th	No
1	105	/				60													1
2	75					61													2
3	55					62													3
4	46		*			63	*		*			*			*		*		4
5	36					64													5
6	29					65													6
7	19					66													7
8	Φ					67													8
9																			9
10																			10
11																			11
12																			12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy		CRUISE ID H10902		PROJECT & LEG BEST/BSERP_Spring'09		Ship Designation (I.D.) H10902		STATION NO. 171/CU13														
CONSC CAST #	LATITUDE DEG MIN	LONGITUDE DEG MIN		DAY	MO	YR	HR	MIN	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE	VISIBILITY	WIND DIRN.	WIND SPD. (kts)	CLOUD (amt)	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID		
		DEG	MIN																			
23	25	5	59.	47	N	166	36.	74	W	11	MAY	09	12	11	-5.	.7	.	29	41	16	128	CN13
SBE 9+										FLUOR S/N												
PRESS SN										SBE43-Oxy (prim)												
PRI TEMP SN										SBE43-Oxy (sec)												
SEC TEMP SN										Transmissometer												
PRI COND SN										PAR S/N												
SEC COND SN										02 Tmp Sensor No.												
Ns	DEPTH	Roset.		Hydro Team-PMEI		Weingartner		Julie		Sambrotto		Moran/		Harvey		Carin/		Moran		Katri		
No.	DESIRED	notes	SALT	Nut.Btt	02-Btt.No	CHL.	Frac CHL.	DIC/ALK	DOC	018	615N	Ikeia	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.		
1	123					68																1
2	160					69																2
3	75	baker				70																3
4	50					71																4
5	40					72																5
6	30					73																6
7	20					74																7
8	10					75																8
9	0					76																9
10																						10
11																						11
12																						12

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes:

VESSEL USCG Healy	CRUISE ID H10902	PROJECT & LEG BEST/BSIERP_Spring09		Ship Designation (I.D.) 1H0902								STATION NO. 172/ C1114										
		CONSC CAST #	DEG MIN	LATITUDE		DEG MIN	LONGITUDE		DAY	MO	YR	TIME (GMT)	DRY BULB (°C)	WET BULB (°C)	PRESSURE (mb)	SEA STATE VISIBILITY	WIND DIRN.	WIND SPD. (kts)	CLOUD (amt) TYPE	WEATHER	BOTTOM DEPTH (m)	STA. NAME/ID
23	35	55	1.22	N	166	53.92	W	1	MAY	09	1356	-14.5	.	28	63	4	135	CN14				
SBE 9+												FLUOR S/N										
PRESS SN												SBE43-Dby (prime)										
PRI TEMP SN												SBE43-Dby (sec)										
SEC TEMP SN												Transmissometer										
PRI COND SN												PAR S/N										
SEC COND SN												O2 Trip Sensor No.										
NIS DEPTH	Roset.	Hydro Team-PMEI				Weingartner Julie				Sambrotto		Moran/ Harvey		Cain/ Moran		Karin		Nis				
NO.	DESIRED notes	SALT	Nut.Btl	02-Btl.No	CHL.	Frac CHL.	DIC/AIk	DOC	018	b15N	urea	Part.	Prod	DON	Lomas	Lessard	Sherr	Th	No.			
1	130				77															1		
2	100				78															2		
3	80																			3		
4	60				79		*	*				*	*			*	*	*		4		
5	60				80															5		
6	50				81															6		
7	40				82															7		
8	30				83															8		
9	40				84															9		
10	10				85															10		
11	4				86															11		
12																				12		

ICE LOG: Surface Ice Conditions or proximity to ice edge

Rosette Notes: