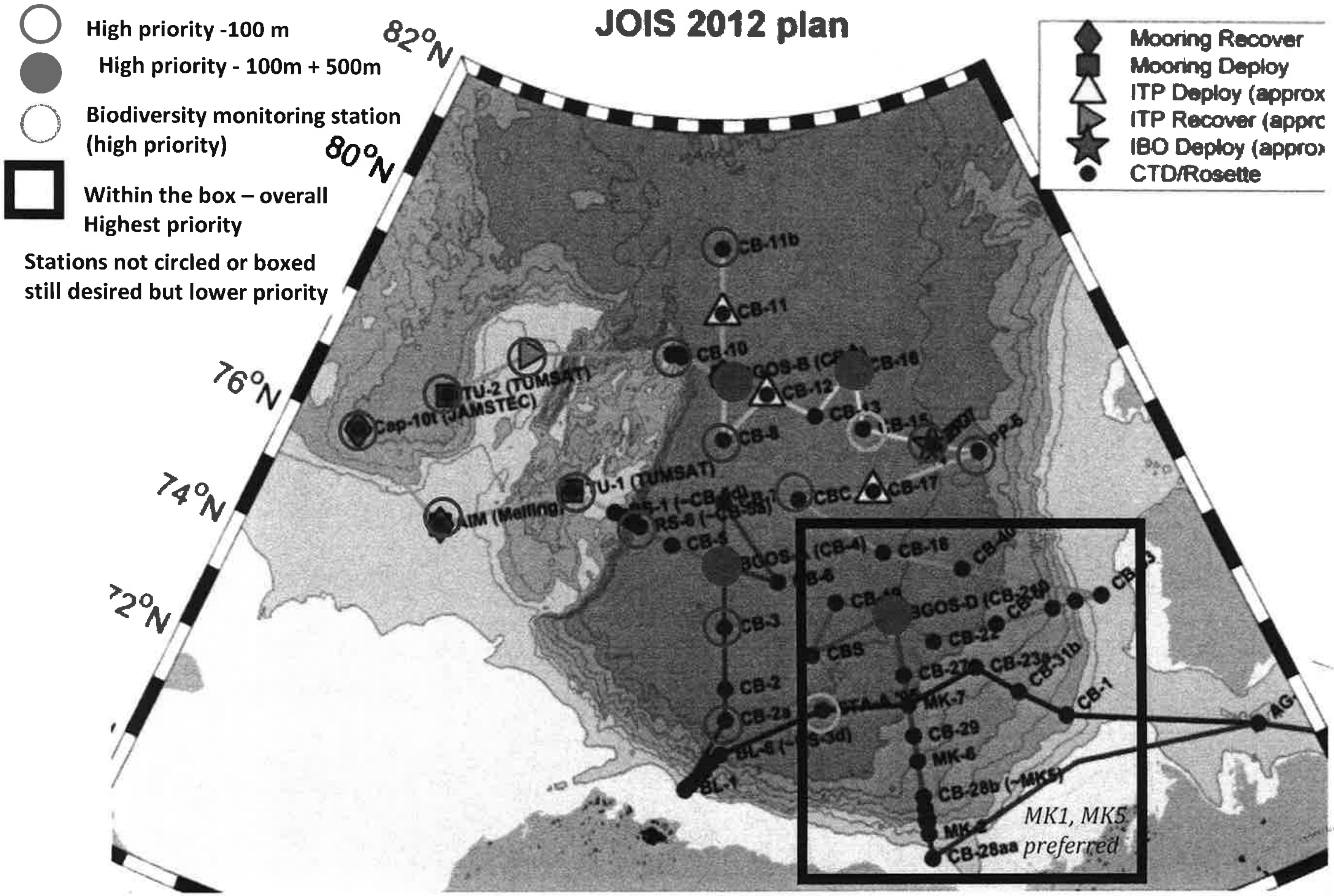

JOIS 2012 plan
High priority -100 m
High priority - 100m + 500m
Biodiversity monitoring station (high priority)
Within the box – overall Highest priority
Stations not circled or boxed still desired but lower priority
Mooring Recover
Mooring Deploy
ITP Deploy (approx
ITP Recover (appro
IBO Deploy (approx
CTD/Rosette
82°N
80°N
76°N
74°N
72°N
CB-11b
CB-11
CB-10
CB-12
CB-16
CB-8
CB-15
PP-5
CBC
CB-17
TU-2 (TUMSAT)
Cap-10t (JAMSTEC)
TU-1 (TUMSAT)
AIM (Melling)
CB-5
CB-18
CB-6
CB-3
CBS
CB-22
CB-27
CB-23a
CB-31b
CB-1
CB-2
CB-2a
MK-7
CB-29
MK-6
CB-28b (~MK5)
CB-28aa
BL-1
AG
MK1, MK5 preferred

Plankton Net Tow Log Sheet

Survey #: 2012-11 Vessel: LasL Page: 1

Project(s): JOIS Contact: Kelly

Date: 5 Aug 2012	Station: AG5	Time: 15:53	local	Mountain
Net Event # 1	CTD # 2	Time:	UTC	

Latitude: 70 33 455 N		Longitude: 122 54 927 W			
deg	min.dec	deg	min.dec		

Wire out: 100	Wire angle: 10	Bottom Depth: 635	?
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	150 µm	SG 2	89376.2	89748.1	EtOH	
Net 2	236	TSK5294	55849	55535	Form	
Net 3	53	SG 1	40002.0	40384.8	Form	> preserved together
Net 4	53	SG 3	00894.6	01226.7	Form	

Additional Notes: wire angle 10°

Date: 6.8.2012	Station: CB1	Time: 9:05	local	Mountain
Net Event # 2	CTD # 3	Time:	UTC	

Latitude: 71 46 175 N		Longitude: 131 52 453 W			
deg	min.dec	deg	min.dec		

Wire out: 100	Wire angle: 7°	Bottom Depth: 1095	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	150	SG2	89748.1	90301.0	Form	
Net 2	236	TSK5294	55535	56390	FORM	
Net 3	53	SG1	40384.8	40783.6	FORM	>
Net 4	53	SG3	01226.7	01597.3	FORM	

Additional Notes: wire angle 70

Date: 6.8.2012	Station: CB1	Time: 9:30	local	Mountain
Net Event # 3	CTD # 3	Time:	UTC	

Latitude: 71 46 092 N		Longitude: 131 52 320 W			
deg	min.dec	deg	min.dec		

Wire out: 100	Wire angle: 70	Bottom Depth: 1095	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	150	SG2	90301.0	90686.4	Form	
Net 2	236	TSK5294	56390	56780		
Net 3	53	SG1	40783.6	41127.1	EtOH	>
Net 4	53	SG3	01597.3	01848.8		

Additional Notes: wire angle 70°

Plankton Net Tow Log Sheet

Survey #: 2012-11 Vessel: LSSL Page: 2

Project(s): JOIS Contact: Kelly Young

Date: 6 Aug 2012	Station: CB 31b	Time: 15:10	local MNT
Net Event # 4	CTD # 4	Time:	UTC

Latitude: 72 21.012	N	Longitude: 134 0.33	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle: 5	Bottom Depth: 2050
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	150	#2	90686.4	91036.6	form	
Net 2	236	tsk	56780	57489		
Net 3	53	1	41127.1	41489.6		> into 1 jar
Net 4	53	3	1848.8	2250.0		

Additional Notes:

Date: 6 Aug 2012	Station: CB 31b	Time: 15:42	local
Net Event # 5	CTD # 4	Time:	UTC

Latitude: 72° 21.095	N	Longitude: 134 0.400	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle: Ø	Bottom Depth: 2050
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	150	#2	91036.6	91370.4	froze-80	
Net 2	236	tsk	57489	57942	EtOH	
Net 3	53	1	41489.6	41865.8		> EtOH
Net 4	53	3	2250.0	2623.9		

Additional Notes:

Date: 6 Aug 2012	Station: CB 23a	Time: 22:24	local
Net Event # 6	CTD # 5	Time: 04:24	UTC

Latitude: 72° 50.746	N	Longitude: 135° 55.324	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle: Ø	Bottom Depth: 2695
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	150	2	91370.4	91680.2	form	
Net 2	236	tsk	57942	58465		
Net 3	53	1	41865.8	42216.1		> combined
Net 4	53	3	2623.9	2841.2		

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 Vessel: LSSL Page: 3

Project(s): JOIS Contact: Kelly Young

Date: 6 Aug 2012	Station: CB 23a	Time: 22:37	local
Net Event # 7	CTD # 5	Time: 4:37	UTC

Latitude: 72 50.720 N			Longitude: 135 55.402 W		
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle: 0	Bottom Depth: 2695
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	150	2	91680.2	92005.7	froze	* picked cal ↓
Net 2	236	tsk	58465	58989		
Net 3	53	1	42216.1	42566.0		
Net 4	53	3	2841.2	3157.3		

Additional Notes:
Carlton picked 5 Calcy ♀, 10 Calgl ♀ from 150 µm net

Date: 7 Aug 2012	Station: MK 7	Time: ~~7:16~~	local Mountain
Net Event # 8	CTD # 6	Time: ~~15:16~~	UTC

Latitude: 73 30 812 N			Longitude: 140 0 268 W		
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle:	Bottom Depth: 2987
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	150	2	92005.7	92513.0	form	
Net 2	236	TSK	58989	60094	form	
Net 3	53	1	425660	430035	form	)
Net 4	53	3	3157.3	3559.1	form	

Additional Notes:
Very Windy / Fix lines to cod ends one broke

Date: 7 Aug 2012	Station: MK 7	Time: 7:40	local Mountain
Net Event # ~~8~~ 9	CTD # 6	Time: 13:40	UTC

Latitude: 72 30 812 N			Longitude: 140 0 268 W		
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle:	Bottom Depth: 2987
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	150	2	92513.0	93446.0	Froze	
Net 2	236	TSK	60094	62345	ETOH	
Net 3	53	1	430035	43709.5	ETOH	)
Net 4	53	3	3559.1	4082.1	ETOH	

Additional Notes:
Very Windy

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:** 4

Project(s): JOIS **Contact:**

Date: 7 Aug 2012	Station: Sta - 9	Time:	local	
Net Event # 10	CTD # 8	Time:	UTC	

Latitude:	N	Longitude:	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle:	Bottom Depth:	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk				
Net 2	150	2				
Net 3	53	1				
Net 4	53	3				

Additional Notes: Cancelled due to wind.

BL 8 - Cancelled due to wind

Date: 8 Aug 2012	Station: BL 6	Time: 12:46	local	PAC
Net Event # 10	CTD # 8	Time: 18:46	UTC	

Latitude: 71 40.067	N	Longitude: 151 3.960	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle: Ø	Bottom Depth: 1723	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	* 62345	61740	form	? Start from last station but wire chang
Net 2	150	2	934460	938395		
Net 3	53	1	* 437095	14087.7	>	
Net 4	53	3	* 4082.1	4084.6		

Additional Notes: flow not taken at start of cast?

Date: 8 Aug 2012	Station: BL 6	Time: 12:09	local	PAC
Net Event # 11	CTD # 8	Time: 19:09	UTC	

Latitude: 71 39.950	N	Longitude: 151 2.964	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle: Ø	Bottom Depth: 1723	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	61740	62341	EtOH	
Net 2	150	2	93839.5	94173.7	-80	
Net 3	53	1	14087.7	14426.7	> EtOH	
Net 4	53	3	4084.6	4474.9	>	

Additional Notes:
some wind

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:** 5

Project(s): JOIS **Contact:**

Date:	8 Aug 2012	Station:	BL4	Time:	local
Net Event #	12	CTD #	9	Time:	01:00 UTC

Latitude:	71	30.335	N	Longitude:	151	38.898	W
	deg	min.dec			deg	min.dec	

Wire out:	100	Wire angle:	Ø
Net Type:	B	Tow Type:	B VNH

Bottom Depth: 997

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	62341	62900	form	
Net 2	150	2	94173.7	94494.2	↓	
Net 3	53	1	14476.7	14744.7	↓	
Net 4	53	3	4474.9	4688.8		

Additional Notes:

Date:	8 Aug 202	Station:	BL4	Time:	local
Net Event #	13	CTD #	9	Time:	01:14 UTC

Latitude:	71	30.292	N	Longitude:	151	38.440	W
	deg	min.dec			deg	min.dec	

Wire out:	100	Wire angle:	Ø
Net Type:	B	Tow Type:	VNH

Bottom Depth: 997

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	62900	63375	EtOH	
Net 2	150	2	94494.2	94806.7	-80	
Net 3	53	1	44744.7	45073.0	> EtOH	
Net 4	53	3	4688.8	4808.8		

Additional Notes:
Carlton picked 10 Cal C5's from 150µm

Date:	8 Aug 2012	Station:	BL1	Time:	local
Net Event #	14	CTD #	11	Time:	6:14 UTC

Latitude:	71	20.80	N	Longitude:	151	47.62	W
	deg	min.dec			deg	min.dec	

Wire out:	75	Wire angle:	30
Net Type:	B	Tow Type:	VNH

Bottom Depth: 85

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	63375	63900	form	
Net 2	150	2	94806.7	95125.5	EtOH	
Net 3	53	1	45073.0	46461.8	> form	
Net 4	53	3	4808.8	5133.8		

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:** 6

Project(s): SOLS **Contact:**

Date: 9.8.2012	Station: CB2A		Time:	local	
Net Event # 15	CTD # 12		Time: 16:34	UTC	

Latitude:	72° 28.871	N	Longitude:	150° 0.404	W
	deg min.dec			deg min.dec	

Wire out: 100	Wire angle: 0	Bottom Depth: 3721	
Net Type: BVNH	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
√Net 1	236	tsk	63910	*65585	form	*most likely 64585
Net 2	150	2	95125.5	95476.6		
Net 3	53	1	45460.8	45817.5		
Net 4	53	3	5133.8	5484.3		

Additional Notes:

Date: 9.8.2012	Station: CB2A		Time:	local	
Net Event # 16	CTD # 12		Time: 16:47	UTC	

Latitude:	72 28.771	N	Longitude:	150° 0.420	W
	deg min.dec			deg min.dec	

Wire out: 100	Wire angle: 0	Bottom Depth: 3721	
Net Type: BUNH	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	TSK	64585	65022	EtOH	
Net 2	150	2	95476.6	95808.2	-80	
Net 3	53	1	45817.5	46173.8	EtOH	
Net 4	53	3	5484.3	5857.8	EtOH	

Additional Notes:

Date: 9 Aug 2012	Station: CB2		Time: 18:04	local	
Net Event # 17	CTD # 13		Time: 1:04	UTC	

Latitude:	72 59.632	N	Longitude:	150 0.131	W
	deg min.dec			deg min.dec	

Wire out: 100	Wire angle: 0	Bottom Depth: 3750	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
√Net 1	236	tsk	65022	65647	form	
Net 2	150	2	95808.2	96171.4		
Net 3	53	1	46173.8	46573.6		
Net 4	53	3	5857.8	6203.7		

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:** 7

Project(s): JOIS **Contact:** K Young

Date: 9 Aug 2012	Station: CB2	Time: 19:17	local
Net Event # 18	CTD # 13	Time: 1:17	UTC

Latitude:	72 59.558 N	Longitude:	150 0.181 W
	deg min.dec		deg min.dec

Wire out: 100	Wire angle: 0	Bottom Depth: 3750
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	65647	66231	EtOH	1g Beroe in sample
Net 2	150	2	9617.4	9661.3.6	−80	
Net 3	53	1	46573.6	46957.4	> EtOH	
Net 4	53	3	6203.7	6512.1		

Additional Notes:

Date: 10 Aug 2012	Station: CB7	Time: 17:31	local
Net Event # 19	CTD # 14	Time: 0:31	UTC

Latitude:	76 1.057 N	Longitude:	149 58.879 W
	deg min.dec		deg min.dec

Wire out: 100	Wire angle: 10	Bottom Depth: 3800
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	66242	67672	form	
Net 2	150	2	96613.6	97057.6		
Net 3	53	1	46957.4	47368.0	>	
Net 4	53	3	6512.1	6823.3		

Additional Notes:
Windy - ~ 23 knt.

Date: 10 Aug 2012	Station: CB7	Time: 17:45	local
Net Event # 20	CTD # 14	Time: 0:45	UTC

Latitude:	76 1.020 N	Longitude:	149 58.897 W
	deg min.dec		deg min.dec

Wire out: 100	Wire angle: 0	Bottom Depth: 3800
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	67672	68142	EtOH	
Net 2	150	2	97057.6	97404.6	−80	*
Net 3	53	1	47368	47724.6	> EtOH	
Net 4	53	3	6823.3	6839.8		

Additional Notes:
windy ~23 kn. * Carlton took 10 f Cathy

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): 1015 **Contact:** Kelly Young

Date: 11.8.2012	Station: CB4	Time: 2:50	local
Net Event # 21	CTD # 15	Time: 9:50	UTC

Latitude: 74 57.57 N (deg min.dec)	Longitude: 141 56.7 W (deg min.dec)

Wire out: 100	Wire angle:	Bottom Depth: 3825
Net Type: BVNH	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	68142	68585	FORM	
Net 2	150	2	97404.6	97731.5	FORM	
Net 3	53	1	47724.6	48091.0	FORM	} 2
Net 4	53	3	6839.8	7125.5		

Additional Notes:
* net event # wrong on labels

Date: 11.8.2012	Station: CB4	Time: 3:15	local
Net Event # 22	CTD # 15	Time: 10:15	UTC

Latitude: 74 57.566 N (deg min.dec)	Longitude: 141 56.590 W (deg min.dec)

Wire out: 100	Wire angle:	Bottom Depth: 3825
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	68585	69195	ETOH	
Net 2	150	2	97731.5	98079.3	-80	
Net 3	53	1	48091.0	48712.0	ETOH	} 2
Net 4	53	3	7125.5	7463.7		

Additional Notes:
* net event # wrong on labels
May be some seawater in the ETOH samples. Small tear at top of

Date: 11 Aug	Station: CB5	Time:	local
Net Event # 23	CTD # 16	Time: 1:35	UTC

Latitude: 75 18.979 N (deg min.dec)	Longitude: 153 19.565 W (deg min.dec)

Wire out: 100	Wire angle: 0	Bottom Depth: 3840
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	69600	69670	form	
Net 2	150	2	98079.3	98389.6		* capped net
Net 3	53	1	48712.0	48825.9		
Net 4	53	3	7463.7	7740.6		

Additional Notes:
Large holes ~ 2" x 3
euphausiids in 150mm net

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** **Page:**

Project(s): **Contact:**

Date:	11 Aug 2012	Station:	CB5	Time:	local
Net Event #	24	CTD #	16	Time: 1148	UTC

Latitude:	75 19.042 N		Longitude:	153 19.536 W	
	deg	min.dec		deg	min.dec

Wire out:	100	Wire angle:	0
Net Type:	B	Tow Type:	VNH

Bottom Depth: 3840

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	69670	70134	ETOH	
Net 2	150	2	98389.6	98729.7	-80	* ripped net
Net 3	53	1	48825.9	49173.2	ETOH	
Net 4	53	3	7740.6	8115.2	ETOH	

Additional Notes:

* Carlton took 10 calhy ♀ from sample

150 µm net replaced w/ new

Date:	~~12~~ 13 Aug 2012	Station:	CB3	Time: 12:50	local Pacific
Net Event #	25	CTD #	17	Time: 7:50	UTC

Latitude:	74 0.312 N		Longitude:	150 3 3.73 W	
	deg	min.dec		deg	min.dec

Wire out:	100	Wire angle:	
Net Type:	B	Tow Type:	VNH

Bottom Depth: 3825

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	70134	70520	Form	
Net 2	150	2	98729.7	99053.9	Form	
Net 3	53	1	49173.2	49440.7	Form	
Net 4	53	3	8115.2	8422.1	Form	

Additional Notes:

Date:	~~12~~ 13 Aug 2012	Station:	CB3	Time: 1:10	local Pacific
Net Event #	26	CTD #	17	Time: 8:10	UTC

Latitude:	74 0.30 N		Longitude:	150 3 3.80 W	
	deg	min.dec		deg	min.dec

Wire out:	100	Wire angle:	
Net Type:	B	Tow Type:	VNH

Bottom Depth: 3825

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	70520	71048	ETOH	
Net 2	150	2	99053.9	99396.7	-80	
Net 3	53	1	49440.7	49777.3	ETOH	
Net 4	53	3	8422.1	8760.2	ETOH	

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** L55C **Page:**

Project(s): JOIS **Contact:**

Date: 13.8.2012	Station: CBS	Time: 13:59	local
Net Event # 27	CTD # 18	Time: 19:59	UTC

Latitude: 73 30.203 N		Longitude: 144 59.524 W			
deg	min.dec		deg	min.dec	

Wire out: 100	Wire angle: Ø	Bottom Depth: 3646
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	71048	71634	FORM	
Net 2	150	2	99396.7	99738.4	FORM	
Net 3	53	1	49777.3	50148.1	FORM	
Net 4	53	3	8760.2	9999.9	FORM	roll over

Additional Notes:

Date: 13 Aug 2012	Station: CBS	Time: 13:12	local
Net Event # 28	CTD # 18	Time: 20:12	UTC

Latitude: 73 30.182 N		Longitude: 144 59.695 W			
deg	min.dec		deg	min.dec	

Wire out: 100	Wire angle: Ø	Bottom Depth: 3646
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	71634	72250	ETOH	
Net 2	150	2	99738.4	00219.9	-80	*
Net 3	53	1	50148.1	~~50520.2~~	ETOH	
Net 4	53	3	9999.9	19221.8	ETOH	stuck?

Additional Notes:

* Carlton took 10 ♀ Calby
20 ♀ C. glacialis

Date: 13 Aug 2012	Station: Sta-9	Time:	local
Net Event # 30	CTD # 20	Time: 6:38	UTC

Latitude: 72 36 632 N		Longitude: 144 42 18 W			
deg	min.dec		deg	min.dec	

Wire out: 100	Wire angle:	Bottom Depth: 3440
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	72810	73285	FORM	Flow
Net 2	150	2	599.3	883.0	FORM	* Meter reading wrong
Net 3	53	1	50826.9	51168	FORM	
Net 4	53	3	19504.8	19899.9	FORM	

Additional Notes:

* Carlton took 20 C glacialis ♀, 10 C. hyperb. ♀

Should be mid cast

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): JOIS **Contact:**

Date: 13 Aug 2012	Station: Sta-a	Time:	local
Net Event # ~~29~~ 29	CTD # 20	Time: 6:51	UTC

Latitude: 72	36.610	N	Longitude: 144	42.174	W
	deg min.dec			deg min.dec	

Wire out: 100	Wire angle:	Bottom Depth: 3440	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	72550	72810	ETOH	2nd Coast processed as 1st
Net 2	150	2	219.9	559.3	-80	
Net 3	53	1	50520.2	50826.9	ETOH	
Net 4	53	3	192221.8	19504.8	ETOH	

Additional Notes:

Date: 14.8.2012	Station: CB29	Time:	local
Net Event # 31	CTD # 21	Time: 16:34	UTC

Latitude:		N	Longitude:		W
	deg min.dec			deg min.dec	

Wire out: 100	Wire angle:	Bottom Depth: 2717	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	73285	73790	FORM	
Net 2	150	2	883.0	1217.6	FORM	
Net 3	53	1	51171.8	51522.1	FORM	
Net 4	33	3	09899.9	10177.3	FORM	

Additional Notes: SG3?

Date: 14.8.2012	Station: CB29	Time:	local
Net Event # 32	CTD # 21	Time: 16:48	UTC

Latitude: 71	59.954	N	Longitude: 140	0.882	W
	deg min.dec			deg min.dec	

Wire out: 100	Wire angle:	Bottom Depth: 2717	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	73790	74048	ETOH	
Net 2	150	2	1217.6	1546.9	-80	
Net 3	53	1	51522.1	51893.2	ETOH	
Net 4	53	3	10177.3	10505.8	ETOH	

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): DBS **Contact:**

Date: 14 Aug 2012	Station: MK6	Time:	local
Net Event # 33	CTD # 22	Time: 21:15	UTC

Latitude:	N	Longitude:	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle:	Bottom Depth: 2517
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	74048	74638	form	
Net 2	150	2	1546.9	1884.6	form	
Net 3	53	1	51893.2	52206.9	form	
Net 4	53	3	105058	10687.2		? flow end 00687.2 ?

Additional Notes:

Date: 14 Aug 2012	Station: MK6	Time:	local
Net Event # 34	CTD # 22	Time: 21:31	UTC

Latitude: 71 35.570	N	Longitude: 140 0.822	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle: 0	Bottom Depth: 2517
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	74638	75220	EtOH	2 lg Beroe in sample
Net 2	150	2	1884.6	1982.5	-80	* Carlton
Net 3	53	1	52206.9	52562.2	EtOH	
Net 4	53	3	00687.2	02213.0		

Additional Notes: * Carlton picked 10 ♀ Calmy, 14 ♀ Calgl, 3 ♀ Paugl

Date: 19 Aug 2012	Station: CB285	Time: 19:41	local
Net Event # 35	CTD # 23	Time: 2:41	UTC

Latitude: 70 59.71	N	Longitude: 139 59.065	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle: 0	Bottom Depth: 2078
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	75220	75842	form	1g Beroe
Net 2	150	2	1982.5	2584.9		
Net 3	53	1	52562.2	52914.1		
Net 4	53	3	2213	1400.8 ?		flow not working

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): IOLS **Contact:**

Date: 14 Aug 2012	Station: CB286	Time: 19:53	local
Net Event # 36	CTD # 23	Time: 2:53	UTC

Latitude: 70 59.664 N		Longitude: 139 58.759 W	
deg	min.dec	deg	min.dec

Wire out: 100	Wire angle: Ø	Bottom Depth: 2078
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	75842	76250	EtOH	
Net 2	150	2	25849	2914.7	-80	Carlton 10 Calby 7
Net 3	53	1	52914.1	53276.2	> EtOH	
Net 4	53	3	1400.8	~~536.3~~ 1747.4	EtOH	Not working?

Additional Notes:

Date: 14 Aug 2012	Station: MK3'	Time: 23:27	local
Net Event # 37	CTD # 24	Time: 6:27	UTC

Latitude: 70 39.372 N		Longitude: 139 59.278 W	
deg	min.dec	deg	min.dec

Wire out: 100	Wire angle: Ø	Bottom Depth: 1316
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	76250	76775	form	
Net 2	150	2	2914.7	3237.2	>	
Net 3	53	1	53276.2	53596.4		
Net 4	53	3	11765.3	12938.2		flow not working

Additional Notes:

Date: 14 Aug 2012	Station: MK3'	Time: 23:40	local
Net Event # 38	CTD # 24	Time: 6:40	UTC

Latitude: 70 39.357 N		Longitude: 139 59.282 W	
deg	min.dec	deg	min.dec

Wire out: 100	Wire angle: Ø	Bottom Depth: 1316
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	76775	77275	EtOH	
Net 2	150	2	3237.2	3568.1	-80	
Net 3	53	1	53596.4	53934.3	> EtOH	
Net 4	53	3	12938.2	11159.6		flow not working

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** CSSL **Page:**

Project(s): JOIS **Contact:**

Date: 15.8.2012	Station: MK2	Time:	local
Net Event # 39	CTD # 25	Time: 10:11	UTC

Latitude:	70 24	054 N	Longitude:	140 0	008 W
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle:	Bottom Depth: 515	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	77275	77762	FORM	
Net 2	150	2	035681	03953.1	ETOH	
Net 3	53	1	53934.3	54326.2	FORM	
Net 4	53	3	11159.6	12309.8	FORM	

Additional Notes:

Date: 15.8.2012	Station: CB2Baa	Time:	local
Net Event # 40	CTD # 26	Time: 13:20	UTC

Latitude:	69 59	982 N	Longitude:	140 0	.330 W
	deg	min.dec		deg	min.dec

Wire out: 50	Wire angle:	Bottom Depth: 57	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	TSK	77762	77840	FORM	
Net 2	150	2	3953.1	4112.3	ETOH	
Net 3	53	1	54326.2	54489.9	FORM	
Net 4	53	3	12309.8	12428.8	FORM	

Additional Notes:

Date: 21 Aug 2012	Station: CB22	Time:	local
Net Event # 41	CTD # 27	Time: 03:08	UTC

Latitude:	73 26.855	N	Longitude:	138 0.552	W
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle: 0	Bottom Depth: 3118	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	77845	78434	form	
Net 2	150	2	4112.3	4456.9		
Net 3	53	1	54489.9	54827.0		2 net ends together
Net 4	53	3	12428.3	12809.0		

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): JOIS **Contact:** Kelly Young

Date: 21 Aug 2012	Station: CB22	Time:	local
Net Event # 42	CTD # 27	Time: 3:18	UTC

Latitude:	73	26.802 N	Longitude:	138	0.565 W
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle: Ø	Bottom Depth: 318
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	78434	79095	ETOH	
Net 2	150	2	4456.9	4794.0	-80	x Carlton
Net 3	53	1	54827.0	55105.4	>ETOH	
Net 4	53	3	12809.0	13074.3		

Additional Notes:
Carlton picked 10 calcy from 150µm

Date: 22 Aug 2012	Station: CB21	Time: 05:00	local
Net Event # 43	CTD # 29	Time: 12:00	UTC

Latitude: 74	0.144	N	Longitude: 139	58.080	W
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle: 5°	Bottom Depth: 349.1
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	79095	79565	FORM	(spill, lost 2 mls)
Net 2	150	2	47740	5106.3	FORM	
Net 3	53	1	55105.4	55432.9	FORM	7
Net 4	53	3	13074.3	13358.4	FORM	

Additional Notes:

Date: 22 Aug 2012	Station: CB21	Time: 05:15	local
Net Event # 44	CTD # 29	Time: 12:20	UTC

Latitude: 74	0.131	N	Longitude: 139	58.097	W
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle: 5°	Bottom Depth: 349.1
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	TSK	79565	79575?	ETOH	
Net 2	150	2	5106.3	5443.1	-80	
Net 3	53	1	55432.9	55785.0	ETOH	
Net 4	53	3	13358.4	13676.5	ETOH	

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): 1015 **Contact:**

Date: 22 Aug 2012	Station: CB19	Time: 19:14	local
Net Event # 45	CTD # 30	Time: 2:14	UTC

Latitude: 74	18	133 N	Longitude: 143	18	895 W
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle: 10	Bottom Depth: 3699
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	79575	80200	form	
Net 2	150	2	5443.1	5804.2		
Net 3	53	1	55785.0	56165.2	> 1	
Net 4	53	3	13676.5	14015.9		

Additional Notes:

Date: 22 Aug 2012	Station: CB19	Time: 19:28	local
Net Event # 46	CTD # 30	Time: 2:28	UTC

Latitude: 74	18	096 N	Longitude: 143	18	804 W
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle: 5	Bottom Depth: 3699
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	80200	80603	EtOH	
Net 2	150	2	5804.2	6171.8	-80	* carlton
Net 3	53	1	56165.2	56511.6	> EtOH	
Net 4	53	3	14015.9	14384.0		

Additional Notes:

* Carlton picked to Cathy & from 150µm

Date: 23 Aug 2012	Station: CB6	Time:	local
Net Event # 47	CTD # 31	Time: 9:30	UTC

Latitude: 74	46	810 N	Longitude: 146	40	579 W
	deg	min.dec		deg	min.dec

Wire out: 100	Wire angle:	Bottom Depth: 3780
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	80603	80910	form	
Net 2	150	2	6171.8	6517.7		larval fish
Net 3	53	1	56511.6	56845.9	> 1	
Net 4	53	3	14384.0	14730.9		

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** CSSL **Page:**

Project(s): JOIS **Contact:**

Date:	23 Aug 2012	Station:	CB6	Time:	local
Net Event #	48	CTD #	31	Time:	9:45 UTC

Latitude:	74	41	936	N	Longitude: 146	40	465 W
	deg	min.dec			deg	min.dec	

Wire out:	100	Wire angle:	Bottom Depth: 3780
Net Type:	B	Tow Type:	VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	80910	81220	EtOH	
Net 2	150	2	6517.7	6879.9	-80	
Net 3	53	1	56847	57213.0	> EtOH	
Net 4	53	3	14730.9	15197.9		

Additional Notes:

Date:	23.8.2012	Station:	CBC	Time:	13:38	local	
Net Event #	49	CTD #	32	Time:	20:38	UTC	

Latitude:	75	59.502		N	Longitude: 145	12.397	W
	deg	min.dec			deg	min.dec	

Wire out:	100	Wire angle: 0	Bottom Depth: 3786
Net Type:	B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	81220	81800	Form	
Net 2	150	2	6879.9	7221.9	↓	
Net 3	53	1	57213.0	575579	↓	
Net 4	53	3	15197.7	1549.9		

Additional Notes:
Some wind

Date:	23.8.2012	Station:	CBC	Time:	13:50	local	
Net Event #	50	CTD #	32	Time:	20:50	UTC	

Latitude:	75	59.		N	Longitude: 145	12.	W
	deg	min.dec			deg	min.dec	

Wire out:	160	Wire angle: ∅	Bottom Depth: 3786
Net Type:	B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	81800	82360	EtOH	
Net 2	150	2	7221.9	7561.3	-80	
Net 3	53	1	57557.9	57889.9	EtOH	
Net 4	53	3	15449.9	15890.4	EtOH	

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): JOIS **Contact:** Kelly

Date: 23 Aug 2012	Station: CB8	Time: 23:46	local
Net Event # 51	CTD # 33	Time:	UTC

Latitude: 76 59.718	N	Longitude: 149 59.224	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle: 0	Bottom Depth: 3825
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	82360	82798	form	
Net 2	150	2	7561.3	7972.5	|	
Net 3	53	1	57889.9	58246.4	> |	
Net 4	53	3	15890.4	16156.6	> |	

Additional Notes:
windy

Date: 23 Aug 2012	Station: CB8	Time:	local
Net Event # 52	CTD # 33	Time:	UTC

Latitude: 76 59.	N	Longitude: 149 59.	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle: 5	Bottom Depth: 3825
Net Type: B	Tow Type: VNH	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	82798	83500	EtOH	
Net 2	150	2	7972.5	8373.0	-80	
Net 3	53	1	58246.4	58665.9	> EtOH	
Net 4	53	3	16156.6	16521.3		

Additional Notes:
windy

Date: 24 Aug 2012	Station: CB12	Time: 20:30	local
Net Event # 53	CTD # 35	Time: 3:32	UTC

Latitude: 77 34.975	N	Longitude: 145 37.831	W
deg min.dec		deg min.dec	

Wire out: 100	Wire angle:	Bottom Depth: 3801
Net Type: B	Tow Type: VNF	

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	~~236~~	~~tsk~~			~~form~~	lost cod end
Net 2	150	2	8373.5	8738.5	form	
Net 3	53	1	58665.9	59010.3	> |	
Net 4	53	3	16521.3	16830.9	> |	

Additional Notes:
windy. Lost 1st cod end waiting for power to A-frame. 2nd cod end lost when re-deploying. ~~Cancelled 2nd cast~~ Fixed + did 2nd

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): JOIS **Contact:**

Date: 24 Aug 2012	Station: CB 12		Time: 22:00	local	
Net Event # 54	CTD # 35		Time: 12	UTC	
Latitude: 77 35.392 N		Longitude: 145 37.260 W			
deg min.dec		deg min.dec			
Wire out: 100	Wire angle:		Bottom Depth: 3801		
Net Type: B	Tow Type: VNH				

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk 5294	84090	84385	EtOH	Berge (1g) in sample jar
Net 2	150	2	8738.5	9068.3	-80	Carlton 10 Calky
Net 3	53	1	59010.3	59242.7	>EtOH	
Net 4	53	3	16830.9	17193.7		

Additional Notes:

Date: 25.8.2012	Station: CB 9		Time:	local	
Net Event # 55	CTD # 36		Time: 12:00	UTC	
Latitude: 78 0 596 N		Longitude: 149 56 411 W			
deg min.dec		deg min.dec			
Wire out: 100	Wire angle: 30		Bottom Depth: 3823		
Net Type: B	Tow Type: VNH				

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	TSK	84385	86820	Form	
Net 2	150	2	9068.3	9671.0	ETOH	
Net 3	53	1	59242.7	59744.5	Form	
Net 4	53	3	17193.7	17696.3	FORM	

Additional Notes: 20+, Rough, Large tear in Net 4. Noticed at start of 2nd cast / cast called off, weather

Date: 25 Aug 2012	Station: CB11		Time: 13:05	local	
Net Event # 56	CTD # 37		Time: 20:05	UTC	
Latitude: 79 0.589 N		Longitude: 149 59.077 W			
deg min.dec		deg min.dec			
Wire out: 100	Wire angle: Ø		Bottom Depth: 3825		
Net Type: B	Tow Type: VNH				

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	86820	87193	Form	
Net 2	150	2	9671.0	10014.9		
Net 3	53	1	59744.5	60094.9	>	
Net 4	53	3	17696.3	17998.8		

Additional Notes:
Replaced Net 4 with old spare. Net material feels pretty brittle

CB
16B
42

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): JOIS **Contact:**

Date: 25 Aug 2012	Station: CB11		Time: 13:22	local
Net Event # 57	CTD # 37		Time: 20:22	UTC

Latitude: 79 0.532	N	Longitude: 149 58.856		W
deg min.dec		deg min.dec		

Wire out: 100	Wire angle: 5	Bottom Depth: 3825	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#.	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk 5294	87195	87680	~~EtOH~~	
Net 2	150	2	10014.9	10350.4	-80	Carlton to Calhy ♀
Net 3	53	1	60094.9	60410.2	~~EtOH~~	
Net 4	53	3	17998.8	18013.9		

Additional Notes:
don't think old net on #4 is as efficient - no lg. copepods in that net.

Date: 28.8.2012	Station: CB16B	Time: 11:50	local
Net Event # 58	CTD # 42	Time: 18:50	UTC

Latitude: 78 46.237	N	Longitude: 136 29.518		W
deg min.dec		deg min.dec		

Wire out: 100	Wire angle: 0	Bottom Depth: 3713	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	87680	88054	form	
Net 2	150	2	10350.4	10674.4	|	
Net 3	53	1	60410.2	60719.8	|	
Net 4	53	3	18013.9	18340.5	|	

Additional Notes:

Date: 28.8.2012	Station: CB16B	Time: 12:01	local
Net Event # 59	CTD # 42	Time: 19:01	UTC

Latitude: 78 46.25	N	Longitude: 136 29.49		W
deg min.dec		deg min.dec		

Wire out: 100	Wire angle: 0	Bottom Depth: 3713	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	88054	88592	~~EtOH~~	
Net 2	150	2	10674.4	10996.6	-80	* Carlton to Calhy ♀
Net 3	53	1	60719.8	61039.1	~~EtOH~~	
Net 4	53	3	18340.5	18666.3		

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-1 **Vessel:** LSSL **Page:**

Project(s): 1015 **Contact:**

Date: 28 Aug 2012 | Station: CB16 | Time: 19:10 local | Time: 2:10 UTC

Net Event # 60 | CTD # 43

Latitude: 77 59.908 N (deg / min.dec) | Longitude: 139 59.910 W (deg / min.dec)

Wire out: 100 | Wire angle: 0 | Bottom Depth: 3752

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	88581	88630	form	
Net 2	150	2	10996.6	11321.3		
Net 3	53	1	61039.1	61371.0	>	
Net 4	53	3	18666.3	29912.5		? or 18801.4

Additional Notes:

Date: 28 Aug 2012 | Station: CB16 | Time: 19:23 local | Time: 2:23 UTC

Net Event # 61 | CTD # 43

Latitude: 77 59.900 N (deg / min.dec) | Longitude: 139 59.851 W (deg / min.dec)

Wire out: 100 | Wire angle: 10 | Bottom Depth: 3752

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	88630	89230	ETOH	
Net 2	150	2	11321.3	11683.6	-80	Carlton 10 Gal by ?
Net 3	53	1	61371.0	61707.2	> ETOH	
Net 4	53	3	29912.5	29065.9		* flow not working

Additional Notes:

Date: 29.8.2012 | Station: CB9 | Time: local

Net Event # 62 | CTD # 44 | Time: 13:10 UTC

Latitude: 78.0 286 N (deg / min.dec) | Longitude: 149 58 865 W (deg / min.dec)

Wire out: 500 | Wire angle: — | Bottom Depth: 3823

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	89230	92040	ETOH	
Net 2	150	2	11683.6	13321.0	FORM	
Net 3	53	1	61707.2	63414.7	FORM	
Net 4	53	3	29065.9	29792.8	FORM	Check 3)?

Additional Notes:

Date: 30 Aug 2012 | Station: TU1 | Time: 15:23 local | Time: 22:23 UTC

Net Event # 63 | CTD # 46

Latitude: 76 1.010 N (deg / min.dec) | Longitude: 160 15.806 W (deg / min.dec)

Wire out: 100 | Wire angle: 0 | Bottom Depth: 2096

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	92040	92439	form	
Net 2	150	2	13321.0	13655.3		
Net 3	53	1	63414.7	63751.6	>	
Net 4	53	3	29792.8	10828.8		not working

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): JOIS **Contact:**

Date: 30 Aug 2012	Station: TU 1		Time: 15:35	local	
Net Event # 64	CTD # 46		Time: 22:35	UTC	
Latitude: 76 1.044 N	Longitude: 160 15.742 W				
deg min.dec	deg min.dec				
Wire out: 100	Wire angle: 0		Bottom Depth: 2096		
Net Type: 0	Tow Type: VNH				

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	92439	93040	ETOH	
Net 2	150	2	13655.3	14028.7	-80	Carlton ID Cathy ID Calgl &
Net 3	53	1	63751.6	64084.2	ETOH	
Net 4	53	3	10828.8	11225.2		Not working

Additional Notes:

Date: 31.8.2012	Station: TU2		Time:	local	
Net Event # 65	CTD # 47		Time: 1115	UTC	
Latitude: 76 59.9 N	Longitude: 170 1.18 W				
deg min.dec	deg min.dec				
Wire out: 100	Wire angle:		Bottom Depth: 2212		
Net Type: B	Tow Type: VNH				

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	93040	93730?	Form	
Net 2	150	2	14028.7	14409.9		
Net 3	53	1	64084.2	64477.2		
Net 4	53	3	11225.2	11626.4		

Additional Notes:

Date: 31-8-2012	Station: TU2		Time:	local	
Net Event # 66	CTD # 47		Time: 1135	UTC	
Latitude: 76 59.84 N	Longitude: 170 1.39 W				
deg min.dec	deg min.dec				
Wire out: 100	Wire angle:		Bottom Depth: 2212		
Net Type: B	Tow Type: VNH				

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	93730	94330?	ETOH	
Net 2	150	2	14409.9	14827.8	-80	
Net 3	53	1	64477.2	64846.0	ETOH	
Net 4	53	3	11626.4	11835.5	ETOH	

Additional Notes:

Date: 31 Aug 2012	Station: CAP ID		Time: 1:50 pm	local	
Net Event # 67	CTD # 49		Time: 8:50	UTC	
Latitude: 76 0 982 N	Longitude: 175 18 096 W				
deg min.dec	deg min.dec				
Wire out: 100	Wire angle: —		Bottom Depth: 2111		
Net Type:	Tow Type:				

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	94330	94595	FORM	Euphausiid
Net 2	150	2	14827.8	15264?		
Net 3	53	1	64846.0	65224.3		
Net 4	53	3	11835.5	12025.4		

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): JOIS **Contact:**

Date: 31 Aug 2012 | Station: CAP 10 | Time: 2:10 local

Net Event # 68 | CTD # 49 | Time: 9:10 UTC

Latitude: 76 1.096 N | Longitude: 175 18.574 W

deg min.dec | deg min.dec

Wire out: 100 | Wire angle: 15° | Bottom Depth: 211

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	94595	95170		
Net 2	150	3	15246.1	15704.1		
Net 3	53	1	652243	656035		
Net 4	53	3	12025.4	12455.3		

Additional Notes:

Date: 3 Sept 2012 | Station: CB10S | Time: 13:23 local

Net Event # 69 | CTD # 50 | Time: 20:23 UTC

Latitude: 77 9.865 N | Longitude: 153 53.911 W

deg min.dec | deg min.dec

Wire out: 100 | Wire angle: 10 | Bottom Depth: 2142

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	95180	95730	form	
Net 2	150	2	157041	16036.9		
Net 3	53	1	656035	65690.1		
Net 4	53	3	12455.3	12788.8		

Additional Notes:

Date: 3 Sept 12 | Station: CB10S | Time: 13:36 local

Net Event # 70 | CTD # 50 | Time: 20:36 UTC

Latitude: 77 9.869 N | Longitude: 153 53.831 W

deg min.dec | deg min.dec

Wire out: 100 | Wire angle: 5 | Bottom Depth: 2142

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	95730	95740	ETOH	flow not working
Net 2	150	2	16036.9	16358.4	-80	Carlton to Cathy ?
Net 3	53	1	65690.1	66039.5	ETOH	
Net 4	53	3	12788.8	13122.4		

Additional Notes:

Date: 4.09.2012 | Station: CB15 | Time: local

Net Event # 71 | CTD # ~~53~~ 51 | Time: 13:04 UTC

Latitude: 77 0.091 N | Longitude: 139 59.768 W

deg min.dec | deg min.dec

Wire out: 100 | Wire angle: | Bottom Depth: 3708

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	95740	96313	FORM	big jelly thing? long
Net 2	150	2	16358.4	16699.3		
Net 3	53	1	66039.5	66359.4		
Net 4	53	3	13122.4	13279.4		

Additional Notes:

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): JOIS **Contact:** Kelly

Date: 4.09.2012	Station: CB 15	Time:	local
Net Event # 72	CTD # 51	Time: 13:11	UTC
Latitude: 77 0.110 N (deg min.dec)		Longitude: 139 59.695 W (deg min.dec)	
Wire out: 100	Wire angle:	Bottom Depth: 3708	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	96318	96760	ETOH	
Net 2	150	2	16699.3	17018.8	-80	
Net 3	53	1	66359.4	66732.0	ETOH	
Net 4	53	3	13279.4	13550.7	ETOH	

Additional Notes:

Date: 4 Sept 2012	Station: PP7	Time: 18:02	local
Net Event # 73	CTD # 53	Time: 01:02	UTC
Latitude: 76 32.233 N (deg min.dec)		Longitude: 135 24.906 W (deg min.dec)	
Wire out: 100	Wire angle: 5	Bottom Depth: 3555	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5214	96760	97336	form	
Net 2	150	2	17018.8	17343.5	↓	
Net 3	53	1	66732	66997.0	↓	
Net 4	53	3	13551.9	14902.7	↓	

Additional Notes:

Date: 4 Sept	Station: PP7	Time: 18:15	local
Net Event # 74	CTD # 53	Time: 01:16	UTC
Latitude: 76 32.246 N (deg min.dec)		Longitude: 135 24.818 W (deg min.dec)	
Wire out: 100	Wire angle: 0	Bottom Depth: 3555	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	97336	97705	EtOH	
Net 2	150	2	17343.5	17693.9	-80	Carlton 10 Cal hyg ♀, 15 Cal gl ♀
Net 3	53	1	66997.0	67340.3	EtOH	
Net 4	53	3	14902.7	14293.2	↓	

Additional Notes:

Date: 4 Sept	Station: PP6	Time:	local
Net Event # 75	CTD # 54	Time: 7:15	UTC
Latitude: 76 16 648 N (deg min.dec)		Longitude: 132 36 160W (deg min.dec)	
Wire out: 100	Wire angle: 20°	Bottom Depth: 3074	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	97705	98050	FORM	
Net 2	150	2	17693.9	17693.9	↓	Frozen
Net 3	53	1	67340.3	67660.2	↓	?
Net 4	53	3	142932	14519.5	↓	?

Additional Notes: windy 20, snow

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** LSSL **Page:**

Project(s): JOIS **Contact:** Kelly Young

Date: 4 Sept 2012 | Station: PP6 | Time: local

Net Event # 76 | CTD # 54 | Time: 7:40 UTC

Latitude: 76 16 ~~724~~ N (deg min.dec) | Longitude: 132 36 745 W (deg min.dec)

Wire out: 100 | Wire angle: 20 | Bottom Depth: 3074

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk5294	98050	98640		
Net 2	150	2	17693.9	17693.9		Frozen
Net 3	53	1	67660.2	22221.9		
Net 4	53	3	145195	13741.6		

Additional Notes:

Date: 6.9.12 | Station: CB 40 | Time: local

Net Event # 77 | CTD # ~~55~~ | Time: 13:50 UTC

Latitude: 74 29 869 N (deg min.dec) | Longitude: 135 25 956 W (deg min.dec)

Wire out: 100 | Wire angle: — | Bottom Depth: 3243

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	TSK	98641	99220	FORM	
Net 2	150	2	176939	18048.1	↓	
Net 3	53	1	33310	33538.8	↓	1 cod end spill
Net 4	53	3	13742.9	12686	↓	2

Additional Notes:

Date: 6.9.12 | Station: CB 40 | Time: local

Net Event # 78 | CTD # 55 | Time: 14:10 UTC

Latitude: 74 29 789 N (deg min.dec) | Longitude: 135 26 028 W (deg min.dec)

Wire out: 100 | Wire angle: — | Bottom Depth: 3243

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	TSK	99290	99525	ETOH	
Net 2	150	2	18048.1	18382.1	-80	(coast 77 small tag by mistake
Net 3	53	1	33538.8	33979.1	ETOH	
Net 4	53	3	12668.6	151809	ETOH	2

Additional Notes:

Date: 6 Sept 2012 | Station: CB 50 | Time: 13:44 local

Net Event # 79 | CTD # 56 | Time: UTC

Latitude: 73 30.2 N (deg min.dec) | Longitude: 134 15.6 W (deg min.dec)

Wire out: 100 | Wire angle: Ø | Bottom Depth: 2886

Net Type: B | Tow Type: VNH

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk	99525	100702	form	
Net 2	150	2	18382.1	18708.7	↓	
Net 3	53	1	33979.1	34331.3	↓	
Net 4	53	3	151809	15317.5	↓	

Additional Notes:

Bongo Bill's cast

Plankton Net Tow Log Sheet

Survey #: 2012-11 **Vessel:** CSSL **Page:**

Project(s): JOIS **Contact:** Kelly Young

Date: 6 Sept 2012	Station: CB50	Time: 13:56	local
Net Event # 80	CTD # 56	Time:	UTC
Latitude: 73 30.248 N (deg, min.dec)		Longitude: 134 15.334 W (deg, min.dec)	
Wire out: 100	Wire angle: ∅	Bottom Depth: 2886	
Net Type: B	Tow Type: VNH		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1	236	tsk 5294	100702	101 370	ETOH	
Net 2	150	2	18708.7	19075.5	-80	10 Calby ♀ for Carlton
Net 3	53	1	34331.3	34680.6	>ETOH	
Net 4	53	3	18317.5 5	15839.4		

Additional Notes: Bills cast

Date:	Station:	Time:	local
Net Event #	CTD #	Time:	UTC
Latitude: N (deg, min.dec)		Longitude: W (deg, min.dec)	
Wire out:	Wire angle:	Bottom Depth:	
Net Type:	Tow Type:		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1						
Net 2						
Net 3						
Net 4						

Additional Notes:

Date:	Station:	Time:	local
Net Event #	CTD #	Time:	UTC
Latitude: N (deg, min.dec)		Longitude: W (deg, min.dec)	
Wire out:	Wire angle:	Bottom Depth:	
Net Type:	Tow Type:		

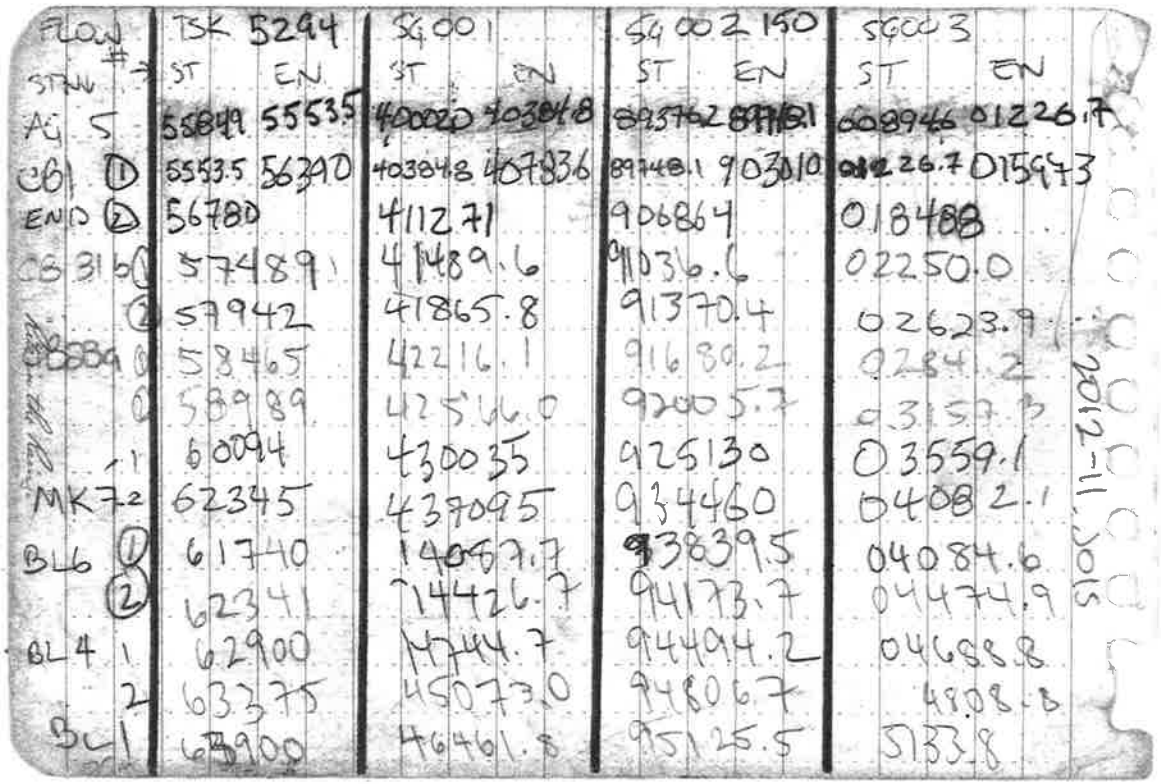
	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1						
Net 2						
Net 3						
Net 4						

Additional Notes:

Date:	Station:	Time:	local
Net Event #	CTD #	Time:	UTC
Latitude: N (deg, min.dec)		Longitude: W (deg, min.dec)	
Wire out:	Wire angle:	Bottom Depth:	
Net Type:	Tow Type:		

	Mesh	Flow serial#	Flow start	Flow end	Preservative	Notes:
Net 1						
Net 2						
Net 3						
Net 4						

Additional Notes:



FLOW # →	TSK 5294		SG001		SG002 150		SG003	
STNG	ST	EN	ST	EN	ST	EN	ST	EN
AJ 5	55849	55535	400020	403848	893762	897181	008946	012267
CB1 ①	55535	56390	403848	407836	897481	903010	012267	015943
END ②	56780		411271		906864		018488	
CB 316 ①	57489		41489.6		91036.6		02250.0	
②	57942		41865.8		91370.4		02623.9	
8884 ①	58465		42216.1		91689.2		02842	
②	58989		42546.0		92005.7		03157.3	
11	60094		430035		925130		03559.1	
MK72	62345		437095		934460		04082.1	
BL6 ①	61740		14067.7		938395		04084.6	
②	62341		14426.7		94173.7		04474.9	
BL4 1	62900		44744.7		944494.2		04688.8	
2	63375		45073.0		948067		4908.8	
BL1	63900		46461.8		95125.5		5133.8	

2012-11-2015

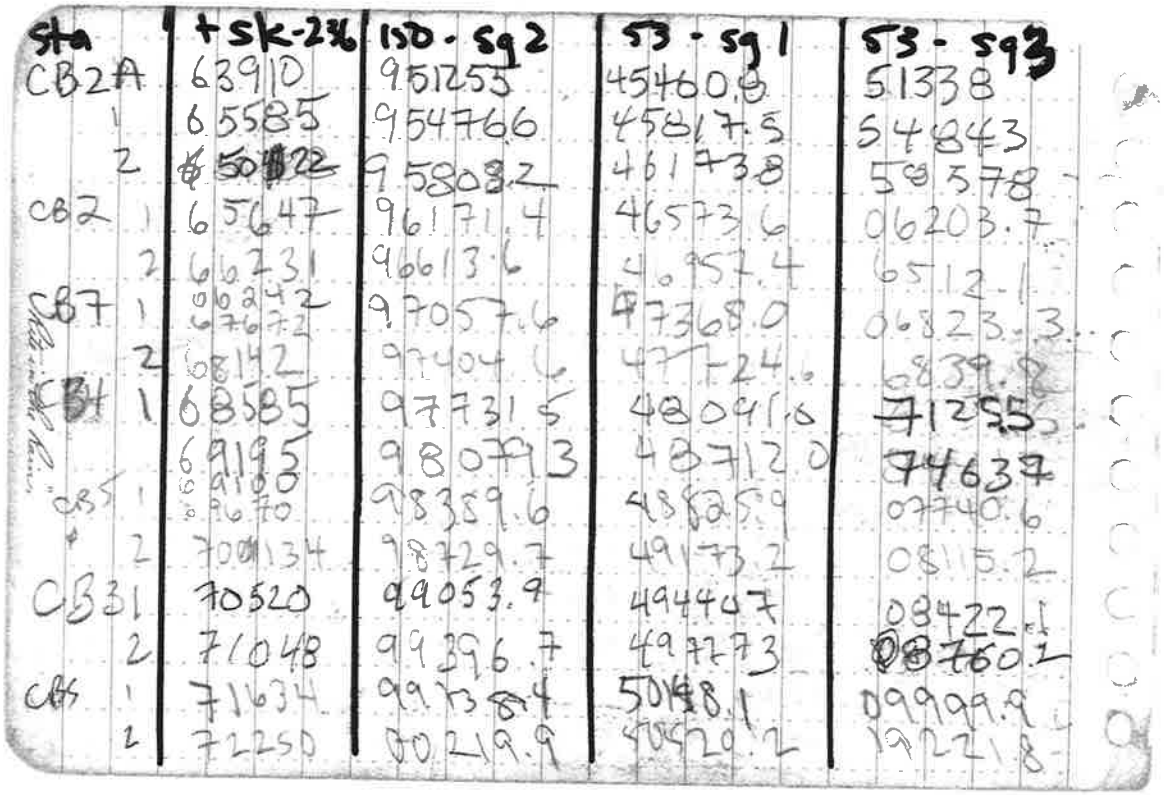
AGS - wire angle 10°
t = 15.53
1- cast 100 m

CBI - Coot
CTDH - 3

1 t = 9:05
∠ - 7°
② 9:30
∠ 7°

MK 7
① 7:16 no wire ang
② 7:40 ∠0 windy

CBI ① 2:50
② 3:10 windy

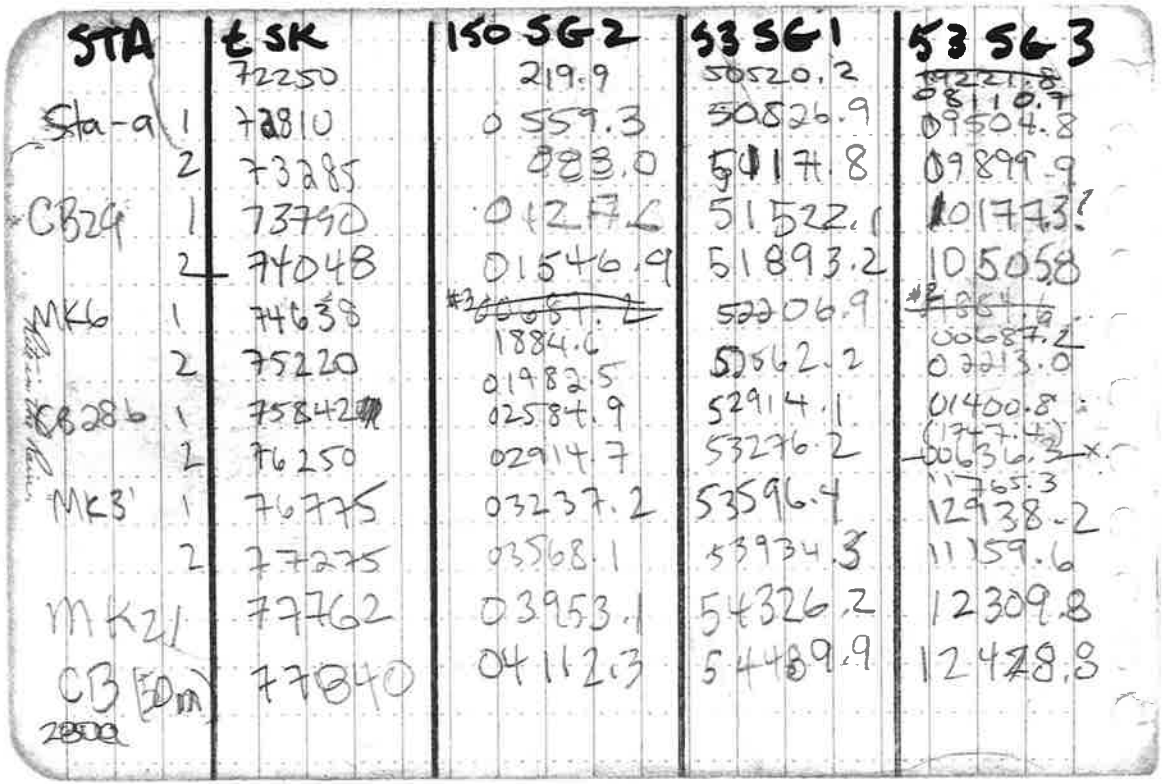


Sta		tsk-2%	150 - sg2	53 - sg1	53 - sg3
CB2A	1	63910	951255	454608	51338
	2	65585	954766	458175	54843
		[illegible]	958082	461738	58578
CB2	1	65647	96171.4	465736	06203.7
	2	66231	96613.6	470957.4	06512.1
CB7	1	06842	97057.6	473680	06823.3
	2	07672	97404.6	477124.6	06839.8
CB1	1	68585	977315	480416	71255
		69195	980793	483712.0	74637
CB5	1	69100	98359.6	488259	07740.6
	2	70134	98729.7	491732	08115.2
CB3	1	70520	99053.9	494407	08422.1
	2	71048	99396.7	497773	08760.2
CB4	1	71634	99738.4	501481	09099.9
	2	72250	100219.9	505202	09221.8

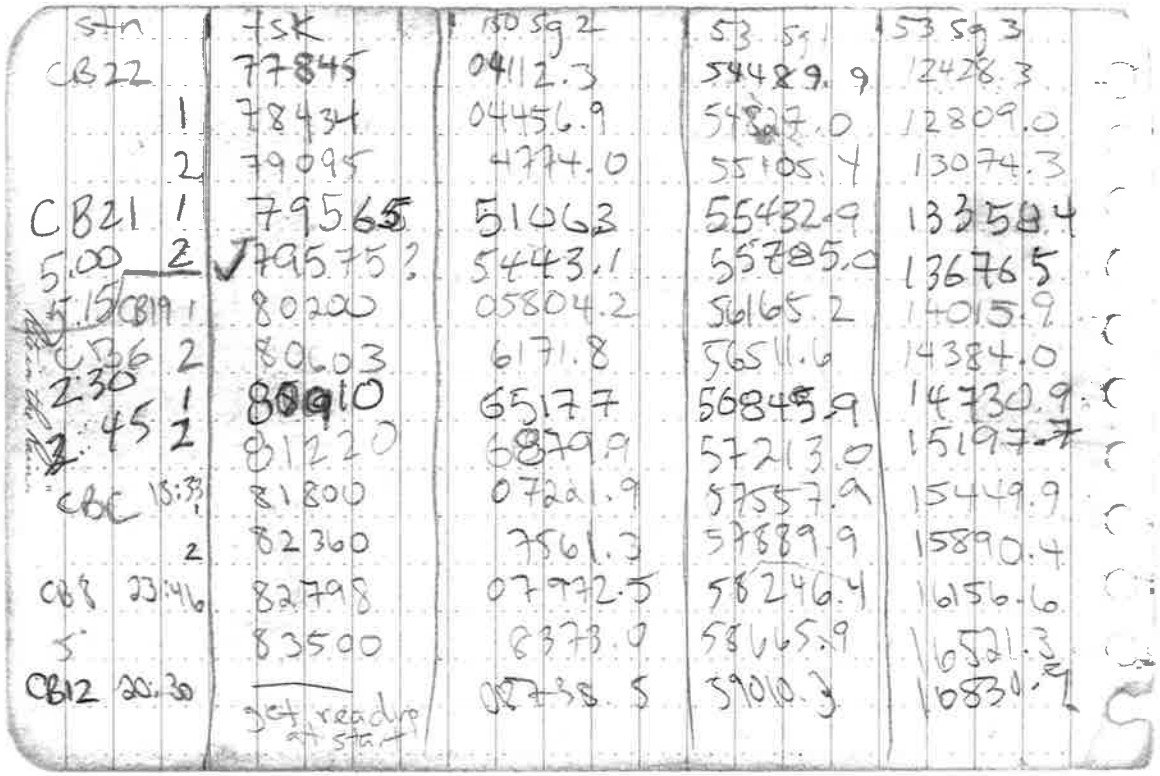
CB2A - 1 - 9:37

CB4 - 1 2:50
2 3:15

- Small tear near top of blade most (150 - 236 ?)

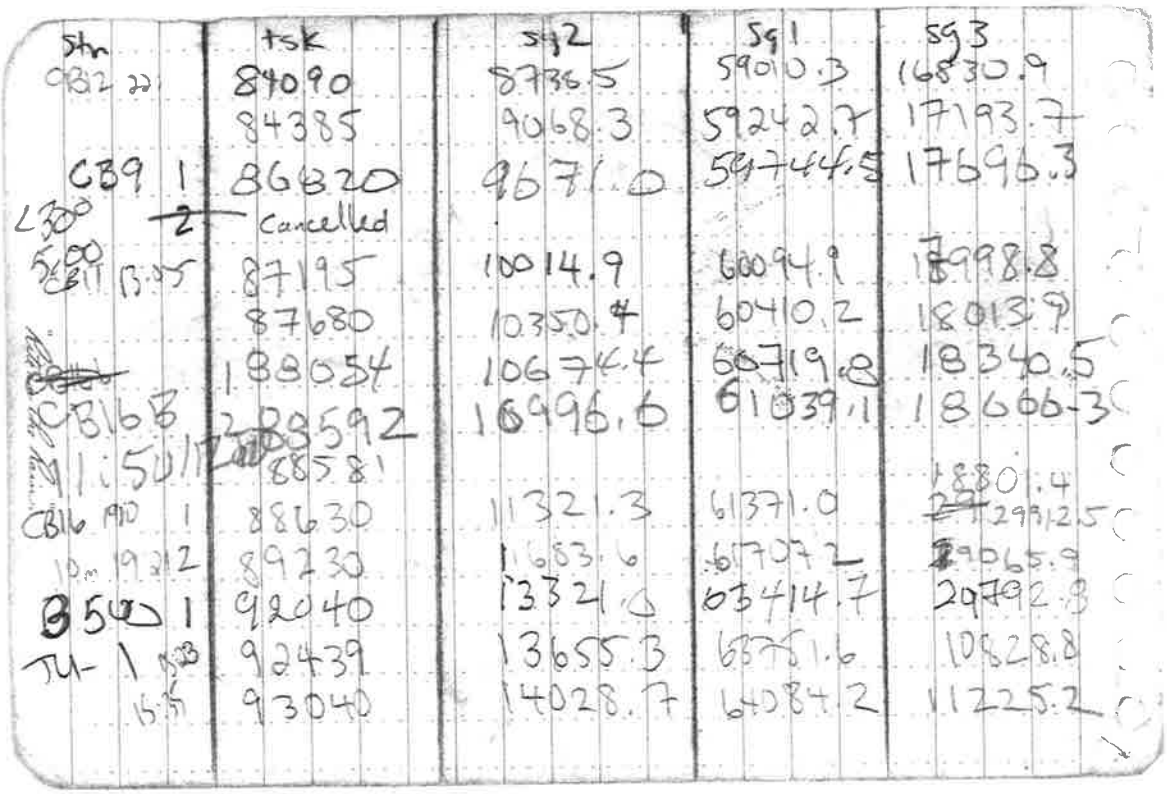


STA		℄ SK	150 SG2	53 SG1	53 SG3
		72250	219.9	50520.2	~~52221.8~~ 08110.7
Sta-9	1	72810	0559.3	50826.9	09504.8
	2	73285	0883.0	51017.8	09899.9
CB24	1	73790	01277.6	51522.1	10177.3
	2	74048	01546.9	51893.2	10505.8
MK6	1	74638	~~#3 00087.2~~ 1884.6	~~52206.9~~ 50562.2	~~#3 10864.6~~ 00687.2
	2	75220	01482.5	52914.1	02213.0
CB28b	1	75842	02584.9	53276.2	01400.8 (1347.4)
	2	76250	02914.7	53596.4	00636.3 x 11765.3
MK3'	1	76775	03237.2	53934.3	12938.2
	2	77275	03568.1	54326.2	11159.6
MK2'		77762	03953.1	54489.9	12309.8
CB (Em) 2800		77840	04112.3		12428.3



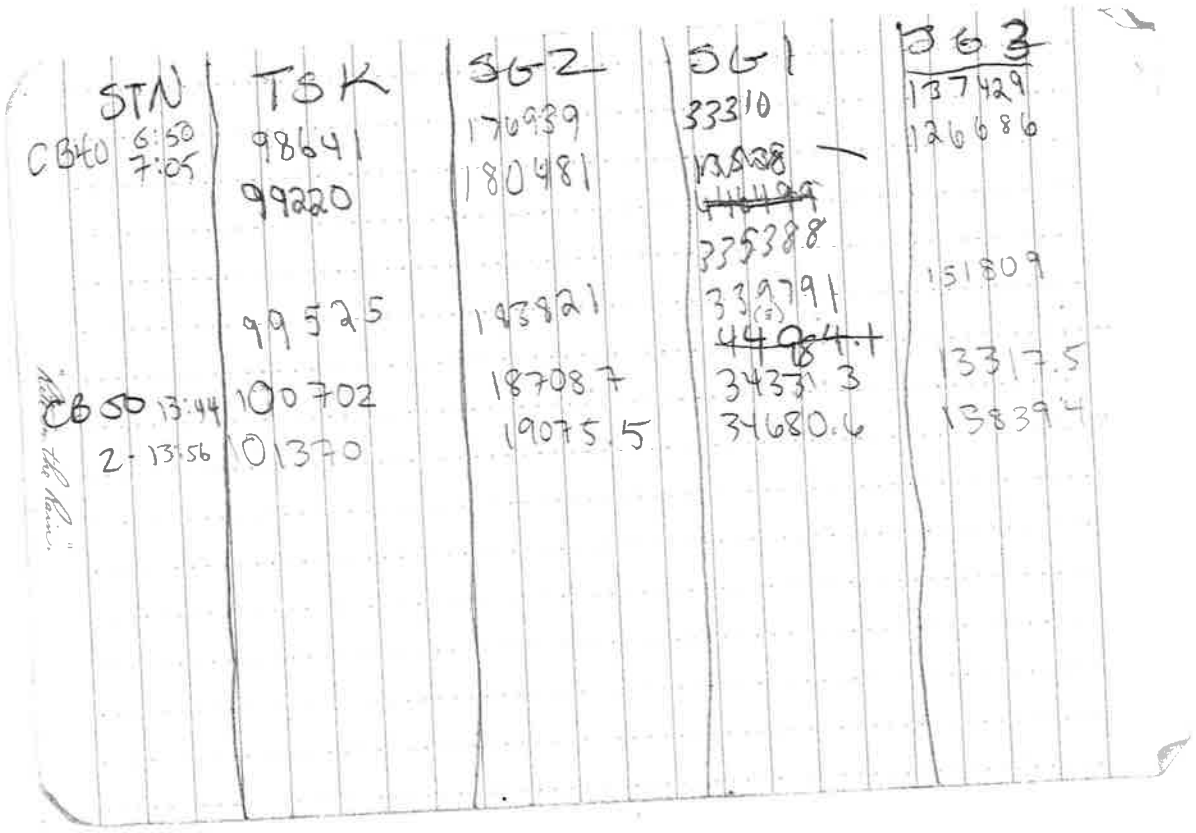
Stn		TSK	180592	53 591	53593
CB22		77845	04112.3	54489.9	12428.3
	1	78434	04456.9	54827.0	12809.0
	2	79095	4774.0	55105.4	13074.3
CB21	1	79565	51063	55432.9	13358.4
5.00	2	✓79575?	5443.1	55785.0	136765
5.15	CB19 1	80200	05804.2	56165.2	14015.9
	CB6 2	80603	6171.8	56511.6	14384.0
2:30	1	80910	65177	56845.9	14730.9
2:45	2	81220	6879.9	57213.0	15197.7
	CBC 15:33 1	81800	07201.9	57557.9	15449.9
	2	82360	7561.7	57889.9	15890.4
CB8	23:46	82798	07772.5	58246.4	16156.6
5.		83500	8373.0	58665.9	16521.3
CB12	20.30		07738.5	59010.3	16830.7

get ready at stn



Sta	tsk	sig2	sig1	sig3
0832 22	84090	87365	59010.3	16830.9
	84385	9068.3	59242.7	17193.7
CB9 1	86820	9671.0	59744.5	17696.3
1300 2	cancelled			
5:00 CB11 13.05	87195	10014.9	60094.9	17998.8
	87680	10350.4	60410.2	18013.9
	188054	10674.4	60719.8	18340.5
CB16B	289592	10996.6	61039.1	18666.3
11:50/12:00	88581			18801.4
CB16 910 1	88630	11321.3	61371.0	29912.5
10:19 12	89230	11683.6	61707.2	29065.9
B50 1	92040	13321.0	63414.7	29792.8
TH-1 9:33	92439	13655.3	63761.6	10828.8
16:55	93040	14028.7	64084.2	11225.2

			TSK	SG2	SG1	SG3
SIN			93040	140287	64084.2	11225.2
TU2	4.17	1		14409.9	64477.2	11626.4
		2	93730	148278	648460	118355
			94335			120254
Cap	10	1:50 1	94695	152641	652243	
						124553
	<20°	2:10 2	95170	157041	656035	
			95180			12788.8
CB10S		13:23 1	95730	16036.9	65690.1	~~23889.9~~
		13:36 5°	95740	16358.4	66039.5	13122.4
CB15	1		96318	166993	66359.4	132794
	2		96760	170188	66732	135507
						13551.9
PP7	5°	18:02 1	97336	173435	66997.0	14902.7
		18:15 2	97705	176939	67340.3	14293.2
PP6		12:15 1	98050	176939	67 6602	145195
	<20°	12:40 2	98640	176939	22219	137416



STN	TSK	SG2	SG1	SG3
CB40 6:50	98641	170939	33310	137429
7:05	99220	180481	~~134438~~	126686
			~~144189~~	
			335388	
	99525	193821	339791	151809
			~~44044~~	
CB50 13:44	100702	187087	34331 3	13317.5
2- 13:56	01370	190755	34680.6	135894