IOS
Institute of Ocean Sciences
Sidney, B.C., Canada

Plankton Net Tow Log Sheet

Cruise #: 2021-030 **Vessel:** TULLY **Page:** 1

Project(s): SEAMOUNTS **Contact:** CHELSEA

TSK Serial #: **RBR serial #:**

Time offset = + hrs = UTC (please record local time for samples)

Date: 17 JUNE 21	Station: SE01		Time: 2328	LOCAL
Net Event # 2	CTD # 4			
Latitude: 49 deg	45.588 N min.dec	Longitude: 129 deg	51.442 W min.dec	
Wire out: 1500	Wire angle: 0		Bottom Depth: 1678	
Net Type: BONGO	Tow Type: VNH			
Flow start 51691	Flow end 62078		Flow = frozen	
			Non-flow = pickled	

Notes: FLOW → ETOH ⇒ 1 eurinarid & 1 viper fish in separate jar of ETOH
NON-FLOW → FORM

Date: 18 JUNE 21	Station: SE01		Time: 0018	LOCAL
Net Event # 3	CTD # 4			
Latitude: 49 deg	45.776 N min.dec	Longitude: 129 deg	51.225 W min.dec	
Wire out: 250	Wire angle: 0		Bottom Depth: 1663	
Net Type: BONGO	Tow Type: VNH			
Flow start 62078	Flow end 63194		Flow = frozen	
			Non-flow = pickled	

Notes: NON-FLOW ⇒ 22 Suspen ⇒ frozen for DNA

Date: 18 JUN 21	Station: DS39		Time: 1233	LOCAL
Net Event # 08	CTD # 08			
Latitude: 50 deg	53.226 N min.dec	Longitude: 131 deg	01.786 W min.dec	
Wire out: 250	Wire angle: 15		Bottom Depth: 2574	
Net Type: BONGO	Tow Type: VNH			
Flow start 63194	Flow end 65179		Flow = frozen	
			Non-flow = pickled	

Notes: NON-FLOW ⇒ 100 Salpa sp. frozen
446 Salpa sp. released, 16 gammarids, 15 THEPA, 4 CLIONE, 16 LIMHE, 1 zoea ⇒ ETOH Cancer

Date: 18 JUN 21	Station: DS24		Time: 2103	LOCAL
Net Event # 12	CTD # 13			
Latitude: 50 deg	45.256 N min.dec	Longitude: 130 deg	58.877 W min.dec	
Wire out: 250	Wire angle:		Bottom Depth: 2016	
Net Type: BONGO	Tow Type: VNH			
Flow start 65179	Flow end 67453		Flow = frozen	
			Non-flow = pickled	

Notes:
Non-flow ⇒ Released 125 S. aspera

IOS
Institute of Ocean Sciences
Sidney, B.C., Canada

Plankton Net Tow Log Sheet

Cruise #: 2021-002 **Vessel:** Tully **Page:** 2
Project(s): SEAMOUNTS **Contact:** CHELSEA
TSK Serial #: **RBR serial #:**
Time offset = + hrs = UTC (please record local time for samples)

Date: 18 JUN 21	Station: DS46	Time: 2334	LOCAL
Net Event # 14	CTD # 15		
Latitude: 50 deg 44.559 min.dec N		Longitude: 130 deg 53.488 min.dec W	
Wire out: 570	Wire angle:	Bottom Depth: 582	
Net Type: BONGO	Tow Type: VNH		
Flow start 70036	Flow end 73770	Flow = frozen	
		Non-flow = pickled	

Notes: Non-flow => ~~132~~ Removed 132 salps => ~86 S. fusiformis; ~46 S. aspera => 12 S. fusiformis => frozen
16 LIMHE, 9 THPA, 3 mysids, 11 gammarids, 1 Plero, 1 ctenophore (unknown) few copepods

Flow side ↓ iomussa left in wet-lab overnight ~12hr.

Date: 19 JUN 21	Station: DS16	Time: 1854	LOCAL
Net Event # 20	CTD # 22		
Latitude: 50 deg 43.693 min.dec N		Longitude: 130 deg 49.585 min.dec W	
Wire out: 250	Wire angle: 0	Bottom Depth: 1680	
Net Type: BONGO	Tow Type: VNH		
Flow start 76321	Flow end 78439	Flow = frozen	
		Non-flow = pickled	

Notes: Removed 12 S. Aspera from NON-FLOW SIDE

Date: 19 JUN 21	Station: DS27	Time: 2213	LOCAL
Net Event # 24	CTD # 26		
Latitude: 50 deg 35.857 min.dec N		Longitude: 130 deg 45.303 min.dec W	
Wire out: 260	Wire angle: 0	Bottom Depth: 1362	
Net Type: BONGO	Tow Type: VNH		
Flow start 78439	Flow end 80530	Flow = frozen	
		Non-flow = pickled	

Notes:

Date: 19 JUN 21	Station: DS27	Time: 2314	LOCAL
Net Event # 25	CTD # 26		
Latitude: 50 deg 35.931 min.dec N		Longitude: 130 deg 45.386 min.dec W	
Wire out: 350	Wire angle:	Bottom Depth: 1366	
Net Type: BONGO	Tow Type: VNH		
Flow start 80530	Flow end 91404	Flow = frozen	
		Non-flow = pickled	

Notes: Non-flow => Phronema to EtOH (flow side)
56 S. aspera + 2 S. fusiformis => frozen for DNA
Released 1 S. sp. + 1 solmissus
flow => EtOH => released a bunch of salps.

IOS
Institute of Ocean Sciences
Sidney, B.C., Canada

Plankton Net Tow Log Sheet

Cruise #: 2021-032 **Vessel:** Tully **Page:** 3

Project(s): SEAMOUNTS **Contact:** CHELSEA

TSK Serial #: **RBR serial #:**

Time offset = + hrs = UTC (please record local time for samples)

Date: 20 JUN 21	Station: TW01		Time: 1851	LOCAL
Net Event # 30	CTD # 32			
Latitude: 51 deg	27.455 N min.dec	Longitude: 130 deg	50.529W min.dec	
Wire out: 250	Wire angle: 0		Bottom Depth: 1352	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
91405	93236		Non-flow = pickled	

Notes: Non-flow => 10 'large' S. aspera + 64 'tiny' S. aspera => frozen for DNA
+35 'medium' S. aspera

Date: 2021 JUN 20	Station: TW06		Time: 2212	LOCAL
Net Event # 34	CTD # 35			
Latitude: 51 deg	35.521 N min.dec	Longitude: 130 deg	41.187 W min.dec	
Wire out: 250	Wire angle: 7		Bottom Depth: 1086	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end 0		Flow = frozen	
93236	95078		Non-flow = pickled	

Notes:

Date: 2021 JUN 21	Station: TW09		Time: 0116	LOCAL
Net Event # 36	CTD # 37			
Latitude: 51 deg	35.784 N min.dec	Longitude: 131 deg	00.803 W min.dec	
Wire out: 250	Wire angle: 10		Bottom Depth: 2171	
Net Type: BONGO	Tow Type: VNH			
Flow start 95332	Flow end 97394		Flow = frozen	
			Non-flow = pickled	

Notes: Non-flow => Released 45 S. aspera; froze 6 S. fusiformis;
1 plero, 6 LIMHE, 6 Clione, 1 fish larva, 1 hyperiid, 7 THECA => EtOH!

AEQUOREA

Date: 21 JUNE 2021	Station: TW05		Time: 2134	LOCAL
Net Event # 41	CTD # 40			
Latitude: 51 deg	27.198 N min.dec	Longitude: 130 deg	58.793 W min.dec	
Wire out: 250	Wire angle: 25		Bottom Depth:	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
02542	04310		Non-flow = pickled	

Notes: NON-FLOW → removed 4 S. aspera

FLOW → Removed 1 AEQ → put a chunk in EtOH

IOS
Institute of Ocean Sciences
Sidney, B.C., Canada

Plankton Net Tow Log Sheet

Cruise #: 2021-036 **Vessel:** Tully **Page:** 4

Project(s): SEAMOUNTS **Contact:** CAMPANA

TSK Serial #: **RBR serial #:**

Time offset = + **hrs = UTC (please record local time for samples)**

Date: 23 JUNE 21	Station: STD1		Time: 1956		LOCAL
Net Event # 46	CTD # 49				
Latitude: 49 07.037 N		Longitude: 132 16.492 W			
deg min.dec		deg min.dec			
Wire out: 250	Wire angle: 6		Bottom Depth: 1754		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
34215	35885		Non-flow = pickled		

Notes: NON-FLOW - REMOVED 1 S. ASPERA
FLOW - REMOVED 2 S. ASPERA

Date: 23 JUNE 21	Station: STD1		Time: 2120		LOCAL
Net Event # 47	CTD # 49				
Latitude: 49 07.008 N		Longitude: 132 16.554 W			
deg min.dec		deg min.dec			
Wire out: 1500	Wire angle:		Bottom Depth: 1750		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
35885	49342		Non-flow = pickled		

Notes: NON-FLOW => MOVED 1 MYSID, 1 ATOLLA TO FLOW SIDE & RELEASED 1 S. ASPERA.
FLOW => ALL IN ETOH W/ ONE CRAZY AMPHIPOD WE NEED TO DO BOTH DNA & TAXONOMY ON.

Date: 24 JUNE 2021	Station: STD8		Time: 0113		LOCAL
Net Event # 51	CTD # 52				
Latitude: 48 59.679 N		Longitude: 132 26.177 W			
deg min.dec		deg min.dec			
Wire out: 250	Wire angle: 10		Bottom Depth: 3128		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
45391	47299		Non-flow = pickled		

Notes: NON-FLOW => RELEASED 2 S. ASPERA
FLOW => 9 THEPA + 1 CYPHOCARIS => ETOH

Date: 2021 JUNE 24	Station: UNI3-10		Time: 2021		LOCAL
Net Event # 54	CTD # 56				
Latitude: 49 37.365 N		Longitude: 132 21.521 W			
deg min.dec		deg min.dec			
Wire out: 250	Wire angle:		Bottom Depth: 3162		
Net Type: BONGO	Tow Type: VNH				
Flow start	Flow end		Flow = frozen		
47300	49789		Non-flow = pickled		

Notes: REMOVED 2 S. ASPERA FROM NON-FLOW

IOS
Institute of Ocean Sciences
Sidney, B.C., Canada

Plankton Net Tow Log Sheet

Cruise #: 2021-08 **Vessel:** TULLY **Page:** 5

Project(s): SEAMOUNTS **Contact:** CHELSEA

TSK Serial #: **RBR serial #:**

Time offset = + **hrs = UTC (please record local time for samples)**

Date: 2021 JUNE 25	Station: VN13_06		Time: 0037	LOCAL
Net Event # 58	CTD # 59			
Latitude: 49 deg 34.374 min.dec N	Longitude: 132 deg 17.386 min.dec W			
Wire out: 250	Wire angle: 4		Bottom Depth: 2166	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
49189	51159		Non-flow = pickled	

Notes: Released 3 S. aspera ; put 13THEPA, 3orchomonella, 3LIMHE => EtOH] Non-fl

Date: 25 JUNE 21	Station: VN13_01		Time: 0337	LOCAL
Net Event # 60	CTD # 62			
Latitude: 49 deg 29.657 min.dec N	Longitude: 132 deg 10.987 min.dec W			
Wire out: 250	Wire angle: 0		Bottom Depth: 210	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
51198	53198		Non-flow = pickled	

Notes: Non-flow => 37 S.aspera + 9 S. fusiformis => frozen ; Released 4 Salpa sp. + 7 Solmi, 3 Sens // Flow => 7THEPA, 1 Liliane, 3LIMHE, 2 gammarids, 2 gastropod sp., 1 pd. cha

Date: 2021 JUNE 25	Station: VN13-01		Time:	LOCAL
Net Event # 64	CTD # 6			
Latitude: deg min.dec N	Longitude: deg min.dec W			
Wire out: 2000	Wire angle:		Bottom Depth: 2104	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
53702	63024		Non-flow = pickled	

Notes:

Date: 2021 JUNE 26	Station: VN01		Time: 1625	LOCAL
Net Event # 66	CTD # 67			
Latitude: 48 deg 17.948 min.dec N	Longitude: 129 deg 02.622 min.dec W			
Wire out: 250	Wire angle:		Bottom Depth: 1613	
Net Type: BONGO	Tow Type: VNH			
Flow start	Flow end		Flow = frozen	
68025	70244		Non-flow = pickled	

Notes: Non-flow => Released 7 Salpa aspera, 1 Salpa sp.
20 THPA, 5 gammarids => EtOH

IOS
Institute of Ocean Sciences
Sidney, B.C., Canada

Plankton Net Tow Log Sheet

Cruise #: **Vessel:** **Page:**

Project(s): **Contact:**

TSK Serial #: **RBR serial #:**

Time offset = + **hrs = UTC (please record local time for samples)**

Date: 2021 JUNE 26	Station: ENO7	Time: 1853	**LOCAL**
Net Event # 68	CTD # 70		
Latitude: 48 deg 18.196 min.dec N	Longitude: 128 deg 54.918 min.dec W		
Wire out: 250	Wire angle: 0	Bottom Depth: 255	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
70243	72178	Non-flow = pickled	

Notes:

Date: 2021 JUN 26	Station: ENO2	Time: 1949	**LOCAL**
Net Event # 69	CTD # 71		
Latitude: 48 deg 18.172 min.dec N	Longitude: 128 deg 54.916 min.dec W		
Wire out: 1200	Wire angle: 0	Bottom Depth: 250	
Net Type: BONGO	Tow Type: VNH		
Flow start	Flow end	Flow = frozen	
72178	81111	Non-flow = pickled	

Notes: Non-flow => 1 fish larva, 1 dragon fish larva, 1 Hetero stylifer => flow side
flow => EtOH

Date:	Station:	Time:	**LOCAL**
Net Event #	CTD #		
Latitude: deg min.dec N	Longitude: deg min.dec W		
Wire out:	Wire angle:	Bottom Depth:	
Net Type:	Tow Type:		
Flow start	Flow end	Flow = frozen	
		Non-flow = pickled	

Notes:

Date:	Station:	Time:	**LOCAL**
Net Event #	CTD #		
Latitude: deg min.dec N	Longitude: deg min.dec W		
Wire out:	Wire angle:	Bottom Depth:	
Net Type:	Tow Type:		
Flow start	Flow end	Flow = frozen	
		Non-flow = pickled	

Notes:

STN	DEPTH	TOW	Start Flow	end Flow	∠°
SE01	1600	1500	51691	62078	0
SE01	1663	200	62078	63794	0
DS39	2575	250	63794	65779	15°
DS24		250	65779		8°
DS16		76321			
DS27		250 78439→			5
TW01	1638	1250	91405		<5
TW06	1086	250	93236	95078	7
TW09	2160	250	95332	97394	10
TW05	2120	250	02542	04310	<5
ST01	1750	250	34295	35885	0
ST11	1754	1500	35885	45340	
ST08	3063	250	45341	47209	10
UN10		250	47300	49189	0
UN06		250	49189	51159	4
UN01		250	51158	53198	0
UN07	2095	200	53702	63504	0
	1860	250	68025	70244	0
		250	70243	72178	0
		1200	72178	81111	0

DS27	250	78439		5
	~~1200~~			
	1350	80438		<5

0-1500
1500-370
370-250
250-150
150-0

MULTINET Log Sheet

Cruise: 2021-036 Station: TWMPS Date: 21 June 2021

Event #: 39 Local Time: 16:39 Area: Tuzo Wilson Seamount

CTD #: _____ Bottom Depth: 1992 Project: Seamounts

NET	Time	Depth Range (m)	Latitude (°N)	Longitude (°W)	Flow (m^3)	Comments
1	16:39	0-1500	51°24.235	131°01.095	144	
2	17:19	1500-370	51°25.156	131°00.565	227	
3	18:04	370-250 320-250	51°25.861	131°01.342	48	Tokyo 370→250→ 320→250
4	18:13	150←200 250-150	51°25.950	131°01.530	40	Tokyo 250→150→ 200→150
5	18:19	150-0	51°26.042	131°01.731	37	

Comments:

Cruise: _____ Station: _____ Date: _____

Event #: _____ Local Time: _____ Area: _____

CTD #: _____ Bottom Depth: _____ Project: _____

NET	Time	Depth Range (m)	Latitude (°N)	Longitude (°W)	Flow (m^3)	Comments

Comments: