

OCEAN SCIENCES STRICKLAND EVENT LOG

VESSEL: Strickland

Collected By: Timin

Date: June 12th, 2012

Consecutive Stn #: 1

Station Name: S1

Notes: (temperature, wind, barometer, weather, sea-state, etc)
 Temp: 16°C
 sea state: small 2-3cm high ripples
 barometer: 30.01
 wind: partially cloudy (~40-50%) sunny
100%
Light Airs calm sea
 SST 13.1°C visibility 20mils

EVENT NUMBER	EVENT TYPE	TIME	LAT.	LONG.	BOTTOM DEPTH (m)	CAST DEPTH (m)	NOTES (e.g. CTD file names, bottle depths, flow meter readings, etc)
1	CTD	9:15	48 30.959	123 32.376	152m	148	20120612 - S1
2	Niskin	9:42	48 30.921	123 32.409	"	145m	Bottle depths: 145m 130m 125m 120m 115m 110m 105m 100m (8)
3	Zooplankton	missed 10:00	48 30.952	123 32.424	150	100-53m 100m 100-53m	02625 start 02645 end Not quantitative cod end glue gone.
4	Zooplankton	10:19	48 30.957	123 32.418	"	50-0m	02645 start. huge crab zoëa bloom - large jelly (wk) → uneven split. some stuck to so removed cod end - 02800
5	Niskin	10:44	48 30.931	123 32.408	"	→	Depths (m) 75, 40, 25, 10, 5, 0 (6) 35 15 10 5

OCEAN SCIENCES STRICKLAND EVENT LOG

ESSEL: Strickland

Collected By: Shannon

Date: 12 June 2012

Consecutive Stn #: 2

Station Name: S2

Notes: (temperature, wind, barometer, weather, sea-state, etc)
 30 inches Hg 13.6°C H₂O temp 100% clouds sea rippled
 15°C air temp 20 miles visibility wind NE @ 5 knots

EVENT NUMBER	EVENT TYPE	TIME	LAT.	LONG.	BOTTOM DEPTH (m)	CAST DEPTH (m)	NOTES (e.g. CTD file names, bottle depths, flow meter readings, etc)
6	CTD	11:19	48°N 33.151'	123°W 32.046'	214	204	
7	Niskin	11:56	48°N 33.184'	123°W 32.008'	215	/	1. 200 - 20 2. 180 - 25 3. 155 - 20 4. 135 - 5 5. 130 - 5 6. 125 - 5 7. 120 - 10 8. 110
8	Zoop	12:23	49°N 33.092'	123°W 32.036'	214	100m	Flow meter: start: 02898 end: 03130 Tow depth: 100 - 52 m
9	Zoop	12:38	48°N 33.118'	123°W 32.034'	214	50m	Flow meter: start: 03130 end: 03416 Tow depth: 50 - 0m only
10	Niskin	13:01	48°N 33.171'	123°W 32.207'	214	/	1. 2 3 4 5 6 7 100 80 50 40 25 10 0 -20 -30 -10 -15 -15 -10

- bottle # 2 slid, likely only @ surface

OCEAN SCIENCES STRICKLAND EVENT LOG

VESSEL: Strickland

Date: June 12, 2012

Consecutive Stn #: 3

Station Name: 54

Collected By: Tim

Notes: (temperature, wind, barometer, weather, sea-state, etc)
 wind- 1 Knot
 barometer 29.96 inches Hg (dropping)
 0300 cast - 100% cover
 no rain 140C
 calm seas

EVENT NUMBER	EVENT TYPE	TIME	LAT.	LONG.	BOTTOM DEPTH (m)	CAST DEPTH (m)	NOTES (e.g. CTD file names, bottle depths, flow meter readings, etc)
11	CTD	1:53:30	48° 38.279N	123° 30.037W	200 m	190 m	3 minute soak 20120612-54
12	Bottle Cast	2:32:17				190-100 190-100 m	15 20 10 5 5 190, 175, 155, 145, 140, 135, 125, 100 m depths. 8 bottles total 5 knots wind
13	ZOOB	2:50:39	48° 38.353	123° 29.843		100-51 m 100-51 m	Flow meter: 03415 initial 03700 final
14	ZOOB	3:05:31	48° 38.339	123° 29.947		50-0 m	Flow meter: 03700 initial 04005 final
15	Bottle Cast	3:33:57				80-0 m	20 20 15 15 80 m, 60 m, 40 m, 25 m 10 m, 0 5 6 bottles total

OCEAN SCIENCES STRICKLAND EVENT LOG

VESSEL: Strickland

Collected By: Eleanor Broward-John

Date: 12 June 2012

Consecutive Stn #: 4

Station Name: SS

Notes: (temperature, wind, barometer, weather, sea-state, etc) VIS 20 nautical miles
 Air temp: 13°C barom.: 29.97 water temp 12.2° wind NE 4 knots
100% cloud cover sea rippled

EVENT NUMBER	EVENT TYPE	TIME	LAT.	LONG.	BOTTOM DEPTH (m)	CAST DEPTH (m)	NOTES (e.g. CTD file names, bottle depths, flow meter readings, etc)
16	Niskin	16:19	42° 42.965' N	123° 27.650' W	115	70-0	0, 5, 10, 25, 40, 50, 70
17	CTD	16:43	42° 42.954' N	123° 27.657' W	112	100	20120612 - SS
18	Zoop net	16:54	42° 42.983' N	123° 27.649' W	114	100-50	flowmeter: 04008 - 04300
19	Zoop net	17:10	42° 42.969' N	123° 27.629' W	109	50-0	flowmeter: 04300 - 04618

Local
Time: 17:35

NH₄

Bottle #

	(51)	(54)	(52)
15 μ m	A118 ✓	A142 ✓	A122 ✓
10 μ m	A112 ✓	A119 ✓	A143 ✓
5 μ m	A58 ✓	A121 ✓	A131 ✓
3 μ m	A117 ✓	A120 ✓	A141 ✓
1 μ m	A139 ✓	A132 ✓	A140 ✓
0 μ m	A81	A84 A39	A82 A82

Water Chemistry Sampling

University of Victoria

Cruise: OSM JUNE 2012

201206

Station Name: SL

Date: June 12 2012

Time: 9:50 am

Cast #: 1 Event #: 2

Sampler Names: Tiffany, Tim, Ashley, Rebecca (Group B)

Niskin Bottle	Target Depth (m)	Oxygen Bottle #'s	DIC Bottle#	NH4 Vial#	NO3	NO2	PO4	Mn (N when acid spiked)	(NO3) (PO4) SiO4	CHL filtered vol (mL)
8	100			A104 ✓	✓	✓	✓	✓	✓	
7	105	25.0 ✓ 26.0 ✓		A105 ✓	✓	✓	✓	✓	✓	
6	110	27.0 ✓ 28.0 ✓		A106 ✓	✓	✓	✓	✓	✓	
5	115	29.0 ✓ 30.0 ✓		A107 ✓	✓	✓	✓	✓	✓	
4	120	31.0 ✓ 32.0 ✓		A108 ✓	✓	✓	✓	✓	✓	
3	125			A109 ✓	✓	✓	✓	✓	✓	less sulfur
2	130			A110 ✓	✓	✓	✓	✓	✓	sulfur
1	145			A111 ✓	✓	✓	✓	✓	✓	sulfur

NOTES:

NH4 Spiked with Working Reagent: ~~yes~~ no Time Spiked? 18:51

NH4 Stds Vial# 0uM = A139 2.5uM = A117 5uM = A58 10uM = A112 15uM = A118 Time spiked? 18:51

Water Chemistry Sampling

University of Victoria

Cruise: OSM JUNE 2012

201206

Station Name: 51

Date: June 12 2012

Time: 10:47

Cast #: 2 Event #: 5

Sampler Names: Tiffany, Tim, Ashley, Rebecca (Group B)

Niskin Bottle	Target Depth (m)	Oxygen Bottle #'s	DIC Bottle#	NH4 Vial#	NO3	NO2	PO4	Mn (N when acid spiked)	SiO4	CHL filtered vol (mL)
8										
7										
CHL, P, O, DIC										
6	0	33.0 ✓ 34.0 ✓	C-01 ✓	A-01 ✓	✓	✓	✓	✓	✓	✓
P, O, DIC										
5	5	35.0 ✓ 36.0 ✓	C-02 ✓	A-02 ✓	✓	✓	✓	✓	✓	✓
CHL, P, O, DIC										
4	10	37.0 ✓ 38.0 ✓	C-03 ✓	A-03 ✓	✓	✓	✓	✓	✓	✓
O, DIC										
3	25	39.0 ✓ 40.0 ✓	C-05 ✓	A-04 ✓	✓	✓	✓	✓	✓	✓
CHL, P,										
2	40			A-05 ✓	✓	✓	✓	✓	✓	✓
P, O, DIC										
1	75	41.0 ✓ 42.0 ✓	C-06 ✓	A-06 ✓	✓	✓	✓	✓	✓	✓

NOTES:

NH4 Spiked with Working Reagent: yes no Time Spiked? 18:51

NH4 Stds Vial# 0uM = A-131 2.5uM = A-117 5uM = A-58 10uM = A-12 15uM = A-118 Time spiked? 18:51

NOTE: All PO4 labeled Brest 2, should be Brest 5

Station Checklist - Chemical Samples

Station: S1
 Samplers: Tiffany, Tim, Ashley
Rebecca

Cruise: _____
 Date: June 12 2012

Mark when completed:

✓	CTD cast downloaded and saved	Preparation
✓	Final sampling depths planned	
✓	Log Sheets prepared (choose OXY / DIC / NH4 bottle numbers)	
✓	MN/NO3/PO4/NO2/Si labels: depths written in	
✓	NO3/PO4/MN: bottles labeled, organized by cast in carry-tote	
✓	nutrient tubes labeled and placed in rack (1 each tube for each sample depth): , Si = Yellow, , 	
✓	Oxygen sampled in duplicate, pickled, bottle #'s checked	Sampling
✓	Carbon sampled, poisoned, sealed, bottle #'s checked	
✓	MN bottles sampled, samples in box	
✓	NO3 tubes (50ml) sampled, samples in cooler	
✓	NH4 tubes sampled, re-check # on log sheet. Samples into red cooler (in racks).	
✓	PO4 bottles sampled	
✓	NO2 (15ml) tubes sampled	
✓	Si, PO4, NO3 (15 ml) tubes sampled	
✓	CHL bottles filled	
✓	NO3/PO4/Si 15ml tubes into freezer in rack <i>PO4 ...</i>	Post-sampling
✓	NO3 bottle samples into freezer, <i>PO4 large in freezer</i>	
✓	NO2 samples into cooler in rack	
✓	MN samples spiked with 2.5mL 6M HCl (put check mark on label when complete)	
✓	CHL filtrations completed, filters frozen	
✓	Oxygen bottles shaken, tops filled with water	
✓	NH4 samples spiked with Working Reagent time? <u>18:51</u>	

Water Chemistry Sampling University of Victoria

Cruise: OSM JUNE 2012

201206

Station Name: S2

Date: June 12, 2012

Time: 12:10

Cast #: 1 Event #: 7

Sampler Names: Sara, Eleanor, Steven, Angie

Niskin Bottle	Target Depth (m)	Oxygen Bottle #'s	DIC Bottle#	NH4 Vial#	NO3	NO2	PO4	Mn (✓ when acid spiked)	SiO4	CHL filtered vol (mL)
8	110			✓ A-07	✓	✓	✓	✓	✓	
7	120	083C 043C 044C		✓ A-08	✓	✓	✓	✓	✓	
6	125			✓ A-09	✓	✓	✓	✓	✓	
5	130	045C 046C		✓ A-10	✓	✓	✓	✓	✓	
4	135			✓ A-11	✓	✓	✓	✓	✓	
3	155			✓ A-12	✓	✓	✓	✓	✓	
2	140							✓		
1	200			✓ A-13	✓	✓	✓	✓	✓	

NOTES:

NH4 Spiked with Working Reagent: yes no Time Spiked? 18:51

NH4 Stds Vial# 0uM = A140 2.5uM = A141 5uM = A131 10uM = A143 15uM = A122 Time spiked? 18:51

Water Chemistry Sampling

University of Victoria

Cruise: OSM JUNE 2012

201206

Station Name: S2

Date: June 12, 2012 Time: 2:10

Cast #: 2 Event #: 10

Sampler Names: Sarah, Eleanor, Steven, Angie

Niskin Bottle	Target Depth (m)	Oxygen Bottle #'s	DIC Bottle#	NH4 Vial#	NO3	NO2	PO4	Mn (✓ when acid spiked)	SiO4	CHL filtered vol (mL)
8										
7	0	0617C ✓ 048C ✓	007 ✓	A-14 ✓	✓	✓	✓	✓	✓	✓ 208 mL
6	10	073C ✓ 074C ✓	008 ✓	A-15 ✓	✓	✓	✓	✓	✓	✓ 249 mL
5	25	075C ✓ 076C ✓	009 ✓	A-16 ✓	✓	✓	✓	✓	✓	✓ 255 mL
4	40	077C ✓ 078C ✓		A-13 ✓	✓	✓	✓	✓	✓	✓ 235 mL
3	50	079C ✓ 080C ✓	010 ✓	A-14 ✓	✓	✓	✓	✓	✓	
2	80			A-15 ✓	✓	✓	✓	✓	✓	
1	100	081C ✓ 082C ✓	011 ✓	A-16 ✓	✓	✓	✓	✓	✓	

NOTES:

NH4 Spiked with Working Reagent: yes no Time Spiked? 18:51

NH4 Stds Vial# 0uM = A140 2.5uM = A141 5uM = A131 10uM = A143 15uM = A122

Time spiked 18:51

Station Checklist - Chemical Samples

Station: S2

Cruise: _____

Samplers: Sarah, Flinae, Steven, Angie

Date: June 12, 2012

Mark when completed:

✓	CTD cast downloaded and saved	Preparation
✓	Final sampling depths planned	
✓	Log Sheets prepared (choose OXY / DIC / NH4 bottle numbers)	
✓	MN/NO3/PO4/NO2/Si labels: depths written in	
✓	NO3/PO4/MN: bottles labeled, organized by cast in carry-tote	
✓	nutrient tubes labeled and placed in rack (1 each tube for each sample depth): , Si = Yellow, , 	
✓	Oxygen sampled in duplicate, pickled, bottle #'s checked	Sampling
✓	Carbon sampled, poisoned, sealed, bottle #'s checked	
✓	MN bottles sampled, samples in box	
✓	NO3 tubes (50ml) sampled, samples in cooler	
✓	NH4 tubes sampled, re-check # on log sheet. Samples into red cooler (in racks).	
✓	PO4 bottles sampled	
✓	NO2 (15ml) tubes sampled	
✓	Si, PO4, NO3 (15 ml) tubes sampled	
✓	CHL bottles filled	
✓	NO3/PO4/Si 15ml tubes into freezer in rack	Post-sampling
✓	NO3 bottle samples into freezer	
✓	NO2 samples into cooler in rack	
✓	MN samples spiked with 2.5mL 6M HCl (put check mark on label when complete)	
✓	CHL filtrations completed, filters frozen	
✓	Oxygen bottles shaken, tops filled with water	
✓	NH4 samples spiked with Working Reagent time? <u>18:51</u>	

Water Chemistry Sampling

University of Victoria

Cruise: OSM JUNE 2012

201206

Station Name: 54

Date: 12-Jun-2012

Time: 14:32.17

Cast #: 1 Event #: 12

Sampler Names: Shannon, Lucas, Jasmin

Niskin Bottle	Target Depth (m)	Oxygen Bottle #'s	DIC Bottle#	NH4 Vial#	NO3	NO2	PO4	Mn (N when acid spiked)	SiO4	CHL filtered vol (mL)
8	100	X	X	A40 ✓	✓	✓	✓	X	✓	X
7	125	842 ✓ 852 ✓	C12 ✓ head space 10 mL	A41 ✓	✓	✓	X	✓	X	X
6	135	862 ✓ 872 ✓	X	A42 ✓	✓	✓	✓	✓	✓	X
5	140	882 ✓ 892 ✓	X	A43 ✓	✓	✓	✓	✓	✓	X
4	145	902 ✓ 912 ✓	X	A44 ✓	✓	✓	✓	✓	✓	X
3	155	922 ✓ 932 ✓	X	A45 ✓	✓	✓	X	✓	X	X
2	175	X	X	A46 ✓	✓	✓	✓	✓	✓	X
1	190	X	X	A47 ✓	✓	✓	X	✓	X	X

NOTES:

NH4 Spiked with Working Reagent: yes no Time Spiked? 19:05

NH4 Stds Vial# 0uM A132 2.5uM = A120 5uM = A121 10uM = A119 15uM = A142 Time spiked? 19:05

some
small

some
small

Water Chemistry Sampling

University of Victoria

Station Name: 54
 Cast #: 2 Event #: 15

Cruise: OSM JUNE 2012

201206

Date: 12-Jun-2012 Time: 15:33:57

Sampler Names: Shannon, Kara, Lucas, Jason

Niskin Bottle	Target Depth (m)	Oxygen Bottle #'s	DIC Bottle#	NH4 Vial#	NO3 <i>Big (green, purple)</i>	NO2 <i>Stump, bottle</i>	PO4 <i>Blue</i>	Mn (N when acid spiked)	SiO4 <i>yellow</i>	CHL filtered vol (mL)
8										
7										
6	0	94C ✓ 95C ✓	C13 ✓	A48 ✓	✓	✓	✓	X	✓	260
5	10	96C ✓ 001C ✓	C14 ✓	A49 ✓	✓	✓	✓	✓	✓	245
4	25	X	X	A50 ✓	✓	✓	✓	X	✓	250
3	40	002C ✓ 003C ✓	C15 ✓	A51 ✓	✓	✓	✓	✓	✓	250
2	60	X	X	A52 ✓	✓	✓	✓	X	✓	X
1	80	004C ✓ 005C ✓	C16 ✓	A53 ✓	✓	✓	X	✓	X	X

NOTES:

NH4 Spiked with Working Reagent: yes no Time Spiked? 19:05

NH4 Stds Vial# 0uM A132 2.5uM = A120 5uM = A121 10uM = A119 15uM = A142 Time spiked? 19:05

Station Checklist - Chemical Samples

Station: S4
 Samplers: Shannon, Kara, Lucas, Jason

Cruise: _____
 Date: 12-Jun-2012

Mark when completed:

☒	CTD cast downloaded and saved	Preparation
☒	Final sampling depths planned	
☒	Log Sheets prepared (choose OXY / DIC / NH4 bottle numbers)	
☒	MN/NO3/PO4/NO2/Si labels: depths written in	
☒	NO3/PO4/MN: bottles labeled, organized by cast in carry-tote	
☒	nutrient tubes labeled and placed in rack (1 each tube for each sample depth): , Si = Yellow, , 	
☒		Sampling
☒	Oxygen sampled in duplicate, pickled, bottle #'s checked	
☒	Carbon sampled, poisoned, sealed, bottle #'s checked	
☒	MN bottles sampled, samples in box	
☒	NO3 tubes (50ml) sampled, samples in cooler	
☒	NH4 tubes sampled, re-check # on log sheet. Samples into red cooler (in racks).	
☒	PO4 bottles sampled	
☒	NO2 (15ml) tubes sampled	
☒	Si, PO4, NO3 (15-ml) tubes sampled	
☒	CHL bottles filled	Post-sampling
☒		
☒	NO3/PO4/Si 15ml tubes into freezer in rack	
☒	NO3 bottle samples into freezer	
☒	NO2 samples into cooler in rack	
☒	MN samples spiked with 2.5mL 6M HCl (put check mark on label when complete)	
☒	CHL filtrations completed, filters frozen	
☒	Oxygen bottles shaken, tops filled with water	
	NH4 samples spiked with Working Reagent time? <u>19:05</u>	

Water Chemistry Sampling

University of Victoria

Cruise: OSM JUNE 2012

201206

Station Name: S5

Date: 12 June 2012 Time: 16:37

Cast #: 1 Event #: 16

Sampler Names: Kara, Stephen, Ashly

Niskin Bottle	Target Depth (m)	Oxygen Bottle #'s	DIC Bottle#	NH4 Vial#	NO3	NO2	PO4	Mn (✓ when acid spiked)	SiO4	CHL filtered vol (mL)
8										
7	0	6C, 7C	C-17	A-17	✓	✓	✓	X	✓	245
6	5	8C, 9C	X	A-18	✓	✓	✓	X	✓	X
5	10	X	X	A-19	✓	✓	✓	X	✓	250
4	25	X	X	A-54	✓	✓	✓	X	✓	258
3	40	X	X	A-55	✓	✓	✓	X	✓	245
2	50	X	X	A-56	✓	✓	✓	X	✓	X
1	70	10C, 11C	C-18	A-57	✓	✓	✓	X	✓	X

NOTES:

NH4 Spiked with Working Reagent: yes no Time Spiked? 18:55

NH4 Stds Vial# 0uM = 2.5uM = 5uM = 10uM = 15uM = Time spiked?

Station Checklist - Chemical Samples

Station: S5
 Samplers: Kern, Ashley, Stephen

Cruise: _____
 Date: June 12 2012

Mark when completed:

✓	CTD cast downloaded and saved	Preparation
✓	Final sampling depths planned	
✓	Log Sheets prepared (choose OXY / DIC / NH4 bottle numbers)	
✓	MN/NO3/PO4/NO2/Si labels: depths written in	
✓	NO3/PO4/MN: bottles labeled, organized by cast in carry-tote	
✓	nutrient tubes labeled and placed in rack (1 each tube for each sample depth): XXXXXXXXXX , Si = Yellow, XXXXXXXXXX , XXXXXXXXXX	
✓	Oxygen sampled in duplicate, pickled, bottle #'s checked	Sampling
✓	Carbon sampled, poisoned, sealed, bottle #'s checked	
NA	MN bottles sampled, samples in box	
✓	NO3 tubes (50ml) sampled, samples in cooler	
✓	NH4 tubes sampled, re-check # on log sheet. Samples into red cooler (in racks).	
✓	PO4 bottles sampled	
✓	NO2 (15ml) tubes sampled	
✓	Si, PO4, NO3 (15 ml) tubes sampled	
✓	CHL bottles filled	
✓	NO3/PO4/Si 15ml tubes into freezer in rack	Post-sampling
✓	NO3 bottle samples into freezer	
✓	NO2 samples into cooler in rack	
NA	MN samples spiked with 2.5mL 6M HCl (put check mark on label when complete)	
✓	CHL filtrations completed, filters frozen	
✓	Oxygen bottles shaken, tops filled with water	
✓	NH4 samples spiked with Working Reagent time? <u>18:55</u>	