

MOCNESS TOWS- CCE-P1208

HAUL	CYCLE	TOW	DATE (Time)	EVENT No. Start Stop	DEPTH Intervals	FIXATIVE 50% Formalin	FIXATIVE 95% EtOH	COMMENTS
1	Test	n/a	29-Jul-12 (1101-1207)	13 15	25m (225-0m)	nets 0-9 100%		236 m MAX Test-SB Basin No options module
2	1	1	6-Aug-12 (1301-1446)	181 182	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	439 m MAX
3	1	2	6-7-Aug-12 (2337-0109)	193 194	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	433 m MAX
4	1	3	8-Aug-12 (1417-1459)	240 241	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	421 m MAX
5	1	4	8-Aug-12 (2246-0002)	245 246	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	441 m MAX
6	3	1	13-Aug-12 (1223-1356)	347 348	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	414 m MAX <i>Nina</i>
7	3	2	13-14-Aug-12 (2331-0053)	358 359	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	418 m MAX
8	3	3	14-Aug-12 (1229-1338)	376 377	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	420 m MAX
9	3	4	14-15-Aug-12 (2350-0107)	385 386	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	424 m MAX
10	4	1	16-Aug-12 (1221-1347)	418 419	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	424 m MAX <i>Nina</i>
11	4	2	16-17-Aug-12 (2251-0017)	426 427	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	427 m MAX <i>Nina</i>
12	4	3	17-Aug-12 (1234-1401)	444 445	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	410 m MAX
13	4	4	17-18-Aug-12 (2254-0019)	453 454	100m (400-300m) 50m (300-100) 25m (100-0)	nets 0-9 50%	nets 0-9 50%	409 m MAX

Oxygen values for all hauls too high

MOCNESS Data Sheet

Cruise P1208 Date 6 Aug. 2012 Haul # 02 Cycle # 1 Tow # 1

Wind Speed ~15-18 (kts.) Direction 330 (°) Sea State 2-3 (ft.)

File Name: Processed HAUL-02. Raw _____

Start Time 13:01 (PDT) End Time 14:46 (PDT)

Lat 34.3708 (34 22 248) Lat 34.385 (34.3850)

Long 122.8499 (122 50.994) Long 122.9205 (122.9205) Net Mesh .202 μm

Event deploy # 181 Event rec. # 182 Frame Size 1 m²

Bottom Depth 4200 (m) Console Operator MID

Pre-deployment checks:	
<input checked="" type="checkbox"/>	Flow Meter
<input checked="" type="checkbox"/>	Net Response
<input type="checkbox"/>	Stepping Motor
<input checked="" type="checkbox"/>	Clean Optical Surface
<input checked="" type="checkbox"/>	Transmissometer
<input type="checkbox"/>	Fluorometer

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	13:01		214*	1480.2	439	0	1/2	5% Form.	1/2	95% EtOH
1	13:36		164	1015.5	400	300		5% Form.		95% EtOH
2	13:52		156	917.2	300	249		5% Form.		95% EtOH
3	14:04		103	589.8	249	200		5% Form.		95% EtOH
4	14:12		106	601.2	200	151		5% Form.		95% EtOH
5	14:19		108	617.2	151	100		5% Form.		95% EtOH
6	14:27		64	363.0	100	76		5% Form.		95% EtOH
7	14:32		89	539.7	76	50		5% Form.		95% EtOH
8	14:39		42	271.8	50	25		5% Form.		95% EtOH
9	14:42		34	223.6	25	0	↓	5% Form.	↓	95% EtOH
Closed	14:46									

Net Conf.

✓
No (manual incr.)
No
No
No
No
No
No
No

At Depth Data

wire out 439 (m)
Time 13:31 (PDT)

Surface Data

Pressure 1.0 (m)
Temp. 14.44 (°C)
Salinity 33.4 (‰)
O₂ 11.42 (ml/l)
Fluoresc. 0.0008 (V)
Trans 0.9897 (m)
Battery 19.4 (v)
24.86 ✓

Notes: Oxygen values too high.

Descent wire angles ~10-12° (!). Suspect inclinometer is off.
[Add +25° to wire angle to correct angle of wire]

At nadir, 52.2° angle of wire 64.7° @ 230 m.

298 m - wire crossed on drum; stopped winch ran wire out

Stopped @ 304 m.

13:57 - 298 m back in.

Ship speed ~2.5 kts on ascent

① Winch stopped & reversed during net 2 ascent to undo crossed wire on winch.

272
- 58
214

* Corrected for free-wheeling in air

MOCNESS Data Sheet

Cruise P1208 Date 6-7 Aug 2012 Haul # 03 Cycle # 1 Tow # 2

Wind Speed 21 (kts.) Direction 331 (°) Sea State 4-6 (ft.)

File Name: Processed Haul-03 Raw _____

Start Time 23:37 (PDT) End Time 01:09 (PDT)

Lat 34° 12.86' (34.2083) Lat 34.2278 (34.2278)

Long 122 52.15' (122.8653) Long 122.9317 (122.9315) Net Mesh 202 μ m

Event deploy # 193 Event rec. # 194 Frame Size 1 m²

Bottom Depth 4209 (m) Console Operator MDE

Pre-deployment checks:	
<input checked="" type="checkbox"/>	Flow Meter
<input checked="" type="checkbox"/>	Net Response
<input checked="" type="checkbox"/>	Stepping Motor
<input checked="" type="checkbox"/>	Clean Optical Surface
<input checked="" type="checkbox"/>	Transmissometer
<input checked="" type="checkbox"/>	Fluorometer

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	23:37		257*	1,190.1	433	0	1/2	5% Form.	1/2	95% EtOH
1	00:12		151	619.2	400	299		5% Form.		95% EtOH
2	00:25		60	272.2	299	250		5% Form.		95% EtOH
3	00:30		122	436.0	250	200		5% Form.		95% EtOH
4	00:39		98	364.0	200	150		5% Form.		95% EtOH
5	00:46		124	493.8	150	100		5% Form.		95% EtOH
6	00:56		34	197.4	100	75		5% Form.		95% EtOH
7	00:59		34	136.1	75	50		5% Form.		95% EtOH
8	01:01		52	230.1	50	25		5% Form.		95% EtOH
9	01:05		42	159.1	25	0	↓	5% Form.	↓	95% EtOH
Closed	01:09									

Net conf.
 ✓
 ✓
 No (manual inc.)
 ✓
 No
 ✓
 No
 No
 No

At Depth Data

wire out 792 (m)
 Time 00:09 (PDT)

Surface Data

429 m Pressure 1.3 (m)
 5.88° Temp. 15.73 (°C)
 34.14 Salinity 33.53 (‰)
 3.32 O₂ 10.44 (ml/l)
 0.0086 Fluoresc. 0.1082 (V)
 0.3648 Trans 0.6605 (m)
 19.4 Battery 19.4 (V)

Notes: Angle at rest on frame: 67° (adjusted inclinometer after last haul)

278
-21
257* corr. for free-wheeling in air.

MOCNESS Data Sheet

Cruise P1208 Date 8 Aug. 2012 Haul # 04 Cycle # 1 Tow # 3

Wind Speed 17-18 (kts.) Direction 330 (°) Sea State 6-8 (ft.)

File Name: Processed HAUL-04. Raw _____

Start Time 14:17 (PDT) End Time 14:59 (PDT)

Lat 33° 40.6' (33.6766) Lat 33° 41.7' (33.6936)

Long 122° 53.2' (122.8866) Long 122 57.2' (122.946)

Net Mesh .202 μ m

Event deploy # 240

Event rec. # 241

Frame Size 1 m²

Bottom Depth 4342 (m)

Console Operator Brian Smithers

Pre-deployment checks:	
<input checked="" type="checkbox"/>	Flow Meter
<input checked="" type="checkbox"/>	Net Response
<input checked="" type="checkbox"/>	Stepping Motor
<input checked="" type="checkbox"/>	Clean Optical Surface
<input checked="" type="checkbox"/>	Transmissometer
<input checked="" type="checkbox"/>	Fluorometer

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative	Net Resp.
0	14:17		229*	1186.1	421	0	1/2	5% Form.	1/2	95% EtOH	✓
1	14:49		169	700.6	400	298		5% Form.		95% EtOH	NO manual inverter
2	15:04		40	167.2	298	249		5% Form.		95% EtOH	NO
3	15:07		83	310.8	249	201		5% Form.		95% EtOH	NO
4	15:14		115	418.0	201	150		5% Form.		95% EtOH	NO
5	15:23		91	327.9	150	100		5% Form.		95% EtOH	NO
6	15:29		91	391.3	100	75		5% Form.		95% EtOH	NO
7	15:36		56	223.0	75	50		5% Form.		95% EtOH	NO
8	15:41		38	154.8	50	26		5% Form.		95% EtOH	✓
9	15:44		60	285.0	26	0	↓	5% Form.	↓	95% EtOH	
Closed	15:49										

At Depth Data

wire out 755 (m)

Time 14:47 (PDT)

Surface Data

4.12 Pressure 4.4 (m)

5.86 Temp. 15.75 (°C)

34.08 Salinity 33.54 (‰)

3.80 O₂ 10.54 (ml/l)

0.0080 Fluoresc. 0.0016 (V)

0.3615 Trans 0.6780 (m)

19.6 Battery 19.7 (V)

Notes: Angle in cruise = 66°

On deck: reported L = 44°, head inclinometer = 42°

Raised net to ~38° + tested net response; adjusted net response level position

278

- 49

229* Corrected for freeheading in air

MOCNESS Data Sheet

Cruise P1208 Date 8-Aug-2012 Haul # 05 Cycle # 1 Tow # 4

Wind Speed 22-24 (kts.) Direction 329 (°) Sea State 6-8 (ft.)

File Name: Processed HAUL-05 Raw _____

Start Time 22:46 (PDT) End Time 00:02 (PDT)

Lat 33° 35.52 (33.597) Lat _____ (33.6039)

Long 122° 52.98 (122.8824) Long _____ (122.915)

Event deploy # 245 Event rec. # 246 Frame Size 1 m²

Bottom Depth 4203 (m) Console Operator DJENSEN

Pre-deployment checks:	
<input checked="" type="checkbox"/>	Flow Meter
<input checked="" type="checkbox"/>	Net Response
<input checked="" type="checkbox"/>	Stepping Motor
<input checked="" type="checkbox"/>	Clean Optical Surface
<input checked="" type="checkbox"/>	Transmissometer
<input checked="" type="checkbox"/>	Fluorometer

Net Mesh .202 μm

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	22:46		107*	799.2	441	400	1/2	5% Form.	1/2	95% EtOH
1	23:13		76	426.4	400	299		5% Form.		95% EtOH
2	23:24		36	190.2	299	249		5% Form.		95% EtOH
3	23:28		50	245.9	249	199		5% Form.		95% EtOH
4	23:33		57	266.7	199	150		5% Form.		95% EtOH
5	23:38		97	469.4	150	97		5% Form.		95% EtOH
6	23:47		22	108.3	97	74		5% Form.		95% EtOH
7	23:49		48	204.0	74	51		5% Form.		95% EtOH
8	23:53		51	193.5	51	24		5% Form.		95% EtOH
9	23:57		71	231.3	24	0	↓	5% Form.	↓	95% EtOH
Closed	00:02									

NET RESPONSE
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 NO
 ✓
 NO
 NO

At Depth Data

wire out 540 (m)
 Time 23:08 (PDT)

Surface Data

4386 Pressure 1.2 (m)
 575 Temp. 15.37 (°C)
 34.09 Salinity 33.5 (‰)
 3.76 O₂ 10.75 (ml/l)
 0.00 Fluoresc. 0.2266 (V)
 0.3598 Trans 0.9302 (m)
 Battery 10.7 (v)

Notes: Using flow meter calibration from July 2011
MOCNESS Frame = 1 m²; all previous
casts used different values.
Down at 35 mpm

- When Flipped, Net 0 Formalin accidentally
Flipped to EtOH, then back to Formalin. Mistake
not caught until Net 4, so, Nets 1-4 came
in contact with formalin filter

166
 -59
107 * corrected for free-whirling in air

MOCNESS Data Sheet

Cruise P1208 Date 13 Aug 2012 Haul # 06 Cycle # 3 Tow # 1

Wind Speed 12 (kts.) Direction 328 (°) Sea State 2-3 (ft.)

File Name: Processed HAUL-06 Raw _____

Start Time 12:23 (PDT) End Time 13:56 (PDT)

Lat 34° 30.1' (34.5015) Lat _____ (34.5281)

Long 122° 28.8' (122.4777) Long _____ (122.5365) Net Mesh .202 μ m

Event deploy # 347 Event rec. # 348 Frame Size 1 m²

Bottom Depth 4006 (m) Console Operator JAB^{enwi} Brandon

Pre-deployment checks:	
<input checked="" type="checkbox"/>	Flow Meter
<input checked="" type="checkbox"/>	Net Response <i>responded after 1st trip</i>
<input checked="" type="checkbox"/>	Stepping Motor
<input checked="" type="checkbox"/>	Clean Optical Surface
<input checked="" type="checkbox"/>	Transmissometer
<input checked="" type="checkbox"/>	Fluorometer

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative	Net Response
0	12:23		154*	785.8	414	0	1/2	5% Form.	1/2	95% EtOH	<input checked="" type="checkbox"/>
1	12:49		133	553.8	398	299		5% Form.		95% EtOH	<input checked="" type="checkbox"/>
2	13:00		90	366.6	299	250		5% Form.		95% EtOH	<input checked="" type="checkbox"/>
3	13:07		132	525.6	250	200		5% Form.		95% EtOH	<input checked="" type="checkbox"/>
4	13:17		148	575.6	200	150		5% Form.		95% EtOH	<input checked="" type="checkbox"/>
5	13:29		106	371.7	150	100		5% Form.		95% EtOH	<input checked="" type="checkbox"/>
6	13:37		108	430.0	100	74		5% Form.		95% EtOH	<input checked="" type="checkbox"/>
7	13:45		47	182.8	74	50		5% Form.		95% EtOH	<input checked="" type="checkbox"/>
8	13:48		51	212.4	50	25		5% Form.		95% EtOH	<input checked="" type="checkbox"/>
9	13:52		41	145.6	25	0	↓	5% Form.	↓	95% EtOH	<input checked="" type="checkbox"/>
Closed	13:56										

At Depth Data

wire out 723.3 (m)
Time 12:47 (PDT)

Surface Data

409 Pressure 1.1 (m)
6.13 Temp. 15.53 (°C)
34.14 Salinity 33.52 (‰)
3.44 O₂ 10.09 (ml/l)
0.0084 Fluoresc. 0.0984 (V)
0.3636 Trans 0.7123 (m)
20.1 Battery 20.4 (V)

Notes:

Card loosened net response bolts prior to deployment; obtained confirmations on all nets this time.
- Ethanol samples may have used dead plankton sock

180
- 26
154 → corrected for free-wheeling in air

MOCNESS Data Sheet

Cruise P1208 Date 13⁻¹⁴ Aug 2012 Haul # 07 Cycle # 3 Tow # 2

Wind Speed 11-12 (kts.) Direction 317° (°) Sea State 1-2 (ft.)

File Name: Processed HAUL_07 Raw _____

Start Time 23:31 (PDT) End Time 00:53 (PDT)

Lat 34° 28.5' (34.4742) Lat 34° 29.8' (34.4964)

Long 122° 27.7' (122.4617) Long 122° 30.8' (122.5119)

Pre-deployment checks:	
<input checked="" type="checkbox"/>	Flow Meter
<input checked="" type="checkbox"/>	Net Response
<input checked="" type="checkbox"/>	Stepping Motor
<input checked="" type="checkbox"/>	Clean Optical Surface
<input checked="" type="checkbox"/>	Transmissometer
<input checked="" type="checkbox"/>	Fluorometer

Net Mesh .202 μm

Event deploy # 358 Event rec. # 359 Frame Size 1 m²

Bottom Depth 4028 (m) Console Operator Patrick Thomas

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	23:31		177	818.1	418	0	1/2	5% Form.	1/2	95% EtOH
1	2356		109	463.6	399	300	1	5% Form.	1	95% EtOH
2	0006		91	383.1	300	250	1	5% Form.	1	95% EtOH
3	0013		146	646.8	250	199	1	5% Form.	1	95% EtOH
4	0025		158	229.5	199	150	1	5% Form.	1	95% EtOH
5	0030		115	504.7	150	101	1	5% Form.	1	95% EtOH
6	0038		52	257.0	101	75	1	5% Form.	1	95% EtOH
7	0043		39	177.8	75	50	1	5% Form.	1	95% EtOH
8	0046		38	183.8	50	26	1	5% Form.	1	95% EtOH
9	0049		41	186.7	26	0	↓	5% Form.	↓	95% EtOH
Closed	0053									

Net response

✓

✓

✓

No - manual increase

No - manual increase

✓

NO

✓

NO

At Depth Data

wire out 690.1 (m)

Time 2354 (PDT)

Surface Data

412 Pressure 0.4 (m)

6.11 Temp. 15.48 (°C)

34.14 Salinity 33.53 (‰)

3.35 O₂ 10.37 (ml/l)

0.0090 Fluoresc. 0.1036 (V)

0.3623 Trans 0.653 (m)

19.7 Battery 19.8 (v)

Notes: - Ethanol samples may have used dead plankton
socks. Plankton sock changed around Net 5.1

MOCNESS Data Sheet

Cruise P1208 Date 14 Aug. 2012 Haul # 08 Cycle # 3 Tow # 3

Wind Speed 5-6 (kts.) Direction 303 (°) Sea State 1-2 (ft.)

File Name: Processed HAUL-08 Raw _____

Start Time 12:29 (PDT) End Time 13:38 (PDT)

Lat 34° 29.6' (34.4937) Lat (34.4906)

Long 122° 24.5' (122.4066) Long (122.4493)

Event deploy # 376 Event rec. # 377

Bottom Depth 3885 (m) Console Operator MDO

Pre-deployment checks:	
<input checked="" type="checkbox"/>	Flow Meter
<input checked="" type="checkbox"/>	Net Response
<input checked="" type="checkbox"/>	Stepping Motor
<input checked="" type="checkbox"/>	Clean Optical Surface
<input checked="" type="checkbox"/>	Transmissometer
<input checked="" type="checkbox"/>	Fluorometer

Net Mesh .202 μm

Frame Size 1 m²

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	12:29		102*	586.2	420	0	1/2	5% Form.	1/2	95% EtOH
1	12:51		102	501.5	399	300	↓	5% Form.	↓	95% EtOH
2	13:02		69	339.3	300	250	↓	5% Form.	↓	95% EtOH
3	13:09		50	249.7	250	200	↓	5% Form.	↓	95% EtOH
4	13:14		50	238.0	200	150	↓	5% Form.	↓	95% EtOH
5	13:19		65	309.4	150	100	↓	5% Form.	↓	95% EtOH
6	13:25		39	182.5	100	76	↓	5% Form.	↓	95% EtOH
7	13:28		40	187.1	76	50	↓	5% Form.	↓	95% EtOH
8	13:32		35	160.9	50	25	↓	5% Form.	↓	95% EtOH
9	13:35		39	196.5	25	0	↓	5% Form.	↓	95% EtOH
Closed	13:38									

Net trip

At Depth Data

wire out 615 (m)

Time 12:48 (PDT)

Surface Data

420 Pressure 20.5 (m)

6.17 Temp. 15.29 (°C)

34.16 Salinity 33.52 (‰)

3.17 O₂ 10.42 (ml/l)

0.0082 Fluoresc. 0.0910 (V)

0.363¹ Trans 0.5978 (m)

19.2 Battery 19.5 (V)

Notes: _____

110
-8
102* (Corrected for free-wheeling in air)

MOCNESS Data Sheet

Cruise P1208 Date 14-15 Aug 2012 Haul # 09 Cycle # 3 Tow # 4

Wind Speed 7 (kts.) Direction 307 (°) Sea State 1-2 (ft.)

File Name: Processed HAUL-09 Raw _____

Start Time 23:50 (PDT) End Time 0107 (PDT)

Lat 34°29.5'(34.4912) Lat _____ (34.5040)

Long 122°25.1'(122.3854) Long _____ (122.4425)

Event deploy # 385 Event rec. # 386 Frame Size 1 m²

Bottom Depth 3889 (m) Console Operator BVS

Pre-deployment checks:

- Flow Meter
- Net Response
- Stepping Motor
- Clean Optical Surface
- Transmissometer
- Fluorometer

Net Mesh .202 μm

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	23:50		120*	693.6	424	0	1/2	5% Form.	1/2	95% EtOH
1	00:14		102	473.4	399	300		5% Form.		95% EtOH
2	00:24		52	221.2	300	250		5% Form.		95% EtOH
3	00:28		67	260.6	250	200		5% Form.		95% EtOH
4	00:33		83	315.0	200	150		5% Form.		95% EtOH
5	00:39		107	385.6	150	100		5% Form.		95% EtOH
6	00:47		56	185.3	100	76		5% Form.		95% EtOH
7	00:50		93	344.1	76	51		5% Form.		95% EtOH
8	00:57		79	292.3	51	25		5% Form.		95% EtOH
9	01:02		67	283.9	25	0		5% Form.		95% EtOH
Closed	01:07									

Net Confirm.

✓
✓
✓
✓
✓
✓
✓
✓
✓
✓

At Depth Data

wire out 679 (m)
Time 00:12 (PDT)

Surface Data

418 Pressure 1.0 (m)
6.11 Temp. 15.4 (°C)
34.15 Salinity 33.52 (‰)
3.28 O₂ 10.19 (ml/l)
0.0080 Fluoresc. 0.0544 (V)
0.3640 Trans 0.5113 (m)
19.1V Battery 19.5 (v)

Notes: During flipping, Ethanol Nets 9-5 and 3 were filtered with a 505 μm filter, so smaller biomass was lost.

144
-24
120* (corrected for free-wheeling in air)

MOCNESS Data Sheet

Cruise P1208 Date 16 Aug. 2012 Haul # 10 Cycle # 4 Tow # 1

Wind Speed 6-8 (kts.) Direction 333 (°) Sea State 2-3 (ft.)

File Name: Processed HAUL-10 Raw _____

Start Time 12:21 (PDT) End Time 13:47 (PDT)

Lat 34° 26.0 N (34.4336) Lat _____ (34.432)

Long 123° 18.1 W (122.2981) Long _____ (123.3611)

Event deploy # 418 Event rec. # 419

Bottom Depth 4157.8 (m) Console Operator JAB

Pre-deployment checks:	
<input checked="" type="checkbox"/>	Flow Meter
<input checked="" type="checkbox"/>	Net Response
<input checked="" type="checkbox"/>	Stepping Motor
<input checked="" type="checkbox"/>	Clean Optical Surface
<input checked="" type="checkbox"/>	Transmissometer
<input checked="" type="checkbox"/>	Fluorometer

Net Mesh .202 μm

Frame Size 1 m²

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	12:21		131*	677.4	424	0	1/2	5% Form.	1/2	95% EtOH
1	12:46		165	744.6	399	300	1	5% Form.	1	95% EtOH
2	13:01		67	279.0	300	248	1	5% Form.	1	95% EtOH
3	13:06		86	350.3	248	200	1	5% Form.	1	95% EtOH
4	13:12		106	382.0	200	149	1	5% Form.	1	95% EtOH
5	13:21		111	400.0	149	100	1	5% Form.	1	95% EtOH
6	13:29		71	302.0	100	75	1	5% Form.	1	95% EtOH
7	13:34		56	228.1	75	50	1	5% Form.	1	95% EtOH
8	13:38		60	285.6	50	25	1	5% Form.	1	95% EtOH
9	13:43		32	171.5	25	0	1	5% Form.	1	95% EtOH
Closed	13:47									

Net Confirmation
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓

At Depth Data

wire out 689 (m)
 Time 12:44 (PDT)

Surface Data

4.21 Pressure 1.7 (m)
 6.12 Temp. 17.03 (°C)
 34.08 Salinity 33.11 (‰)
 3.84 O₂ 9.71 (ml/l)
 0.0080 Fluoresc. 0.0008 (V)
 0.3676 Trans 0.1184 (m)
 19.1 Battery 19.4 (V)

Notes: _____

136
 -5

 131 * Corrected for free-wheeling in air

MOCNESS Data Sheet

Cruise P1208 Date 16-17 Aug 2012 Haul # 11 Cycle # 4 Tow # 2

Wind Speed 5 (kts.) Direction 303 (°) Sea State 1-2 (ft.)

File Name: Processed HAUL-11.PRO Raw _____

Start Time 22:51 (PDT) End Time 00:17 (PDT)

Lat 34°18.7'N (34.3113) Lat _____ (34.3067)

Long 123°24.9'W (123.4154) Long _____ (123.4845)

Event deploy # 426 Event rec. # 427 Frame Size 1 m²

Bottom Depth 4367 (m) Console Operator BVS

Pre-deployment checks:

- Flow Meter
- Net Response
- Stepping Motor
- Clean Optical Surface
- Transmissometer
- Fluorometer

Net Mesh .202 μm

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	22:51		194	953.1	427	0		5% Form.		95% EtOH
1	23:20		127	505.7	400	300		5% Form.		95% EtOH
2	23:30		88	342.2	300	251		5% Form.		95% EtOH
3	23:37		114	453.9	251	201		5% Form.		95% EtOH
4	23:45		107	426.1	201	150		5% Form.		95% EtOH
5	23:53		107	464.5	150	100		5% Form.		95% EtOH
6	00:01		45	199.2	100	75		5% Form.		95% EtOH
7	00:05		56	262.0	75	50		5% Form.		95% EtOH
8	00:10		42	185.9	50	25		5% Form.		95% EtOH
9	00:13		42	170.8	25	0		5% Form.		95% EtOH
Closed	00:17									

Net Cap. ✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓

At Depth Data

wire out 770 (m)
Time 23:17 (PDT)

Notes: _____

Surface Data

424 Pressure 1.3 (m)
6.31 Temp. 12.17 (°C)
34.11 Salinity 33.1 (‰)
3.62 O₂ 9.99 (ml/l)
0.0078 Fluoresc. 0.0162 (V)
0.3619 Trans 0.4246 (m)
18.9 Battery 19.14 (V)

222
-28
194* Corrected for free-wheeling in air.

MOCNESS Data Sheet

Cruise P1208 Date 17 Aug. 2012 Haul # 12 Cycle # 4 Tow # 3

Wind Speed 11-12 (kts.) Direction 328 (°) Sea State 1-2 (ft.)

File Name: Processed HAUL-12 Raw _____

Start Time 12:34 (PDT) End Time 14:01 (PDT)

Lat 34° 12.0' N (34.200) Lat (34.2165)

Long 123° 31.0' W (123.5166) Long (123.5786) Net Mesh .202 μm

Event deploy # 444 Event rec. # 445 Frame Size 1 m²

Bottom Depth 421 (m) Console Operator JATB

Pre-deployment checks:

- Flow Meter
- Net Response
- Stepping Motor
- Clean Optical Surface
- Transmissometer
- Fluorometer

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	12:34		171*	873.6	410	0	1/2	5% Form.	1/2	95% EtOH
1	13:02		162	689.0	398	300	1	5% Form.	1	95% EtOH
2	13:15		79	321.8	300	249	1	5% Form.	1	95% EtOH
3	13:21		89	346.1	249	200	1	5% Form.	1	95% EtOH
4	13:28		127	528.8	200	151	1	5% Form.	1	95% EtOH
5	13:37		96	399.7	151	99	1	5% Form.	1	95% EtOH
6	13:44		47	199.9	99	75	1	5% Form.	1	95% EtOH
7	13:48		55	233.9	75	49	1	5% Form.	1	95% EtOH
8	13:52		57	262.0	49	25	1	5% Form.	1	95% EtOH
9	13:57		40	124.7	25	0	1	5% Form.	1	95% EtOH
Closed	14:01									

Net Response ✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓

At Depth Data

wire out 769 (m)
Time 13:01 (PDT)

Surface Data

4.05 Pressure 1.3 (m)
6.46 Temp. 16.72 (°C)
34.08 Salinity 33.62 (‰)
3.91 O₂ 9.93 (ml/l)
0.0082 Fluoresc. 0.0010 (V)
0.3629 Trans 0.4603 (m)
19.1 Battery 19.3 (V)

Notes: _____

191
-20

171* Corra for air

MOCNESS Data Sheet

Cruise P1208 Date 17-18 Aug. 2012 Haul # 13 Cycle # 4 Tow # 4

Wind Speed 15-18 (kts.) Direction 348 (°) Sea State 3-4 (ft.)

File Name: Processed HAUL-13 Raw _____

Start Time 22:54 (PDT) End Time 00:19 (PDT)

Lat 34° 49.5' (34.0825) Lat 34° 5.37' (34.0887)

Long 123° 37.26' (123.6210) Long 123° 41.24' (123.6874) Net Mesh 202 μ m

Event deploy # 453 Event rec. # 454 Frame Size 1 m²

Bottom Depth 4323 (m) Console Operator Patrick Thomas

Pre-deployment checks:	
<input checked="" type="checkbox"/>	Flow Meter
<input checked="" type="checkbox"/>	Net Response
<input checked="" type="checkbox"/>	Stepping Motor
<input checked="" type="checkbox"/>	Clean Optical Surface
<input checked="" type="checkbox"/>	Transmissometer
<input checked="" type="checkbox"/>	Fluorometer

Net Tow Information

Net	Time Open	Angle	Flow Counts	Volume Filtered (m3)	Max Depth (m)	Min Depth (m)	Split	Fixative	Split	Fixative
0	22:54		208	832.9	408	0		5% Form.		95% EtOH
1	23:22		141	548.4	400	299		5% Form.		95% EtOH
2	23:34		82	318.9	299	251		5% Form.		95% EtOH
3	23:40		114	474.7	251	200		5% Form.		95% EtOH
4	23:49		72	266.4	200	150		5% Form.		95% EtOH
5	23:54		125	509.2	150	100		5% Form.		95% EtOH
6	00:03		41	159.5	100	75		5% Form.		95% EtOH
7	00:06		61	270.1	75	51		5% Form.		95% EtOH
8	00:11		48	208.4	51	25		5% Form.		95% EtOH
9	00:15		50	198.2	25	0		5% Form.		95% EtOH
Closed	00:19									

Net response

- ✓
- ✓
- ✓
- ✓
- ✓
- ✓
- ✓
- ✓
- ✓

At Depth Data

wire out 836 (m)
Time 2322 (PDT)

Surface Data

397 Pressure 1.1 (m)
6.34 Temp. 16.91 (°C)
34.01 Salinity 33.09 (‰)
4.71 O₂ 9.80 (ml/l)
0.0076 Fluoresc. 0.0250 (V)
0.3642 Trans 0.4379 (m)
18.7 Battery 18.8 (v)

Notes: _____
