

MOCNESS DATA SHEET

Cruise SN484 Location Gulf of Maine Tow # MOC-01-001Date 24 Sept 2010 Wind Speed 22-25 Kts Direction SWYear/Day 267/268 Sea State MODLocal Time 233011 to 0029 Start Lat 42 11.015 Long 67 42.011GMT Time 0330 to 0429 End Lat 42 9.069 Long 67 43.540Net Size 1M Net Condition GoodNet Mesh 335µmProcessed M-01-001.PRD
FilenameRaw Filename M-01-001.RawBatt Voltage at end = 19.4 V
Strobe light present + ON

NET TOW INFORMATION

Time	Depth	Angle	Flow	Volume	MWO	Comments
Open	(m)		Counts	Filtered	Net	

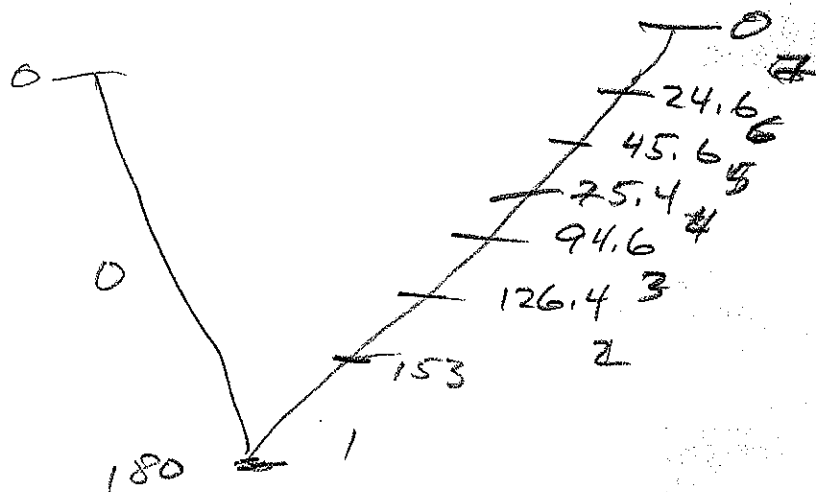
Start	2330	0				See Revised Values
Net 0						
Down		180		397.2	~400	
Net 1	open	180	252	194.3		No Net Response
Net 2	open	150		380.7	378	Res pns
Net 3	open	125		309.3	263	
Net 4	open	100		187.3		
Net 5	open	75		212.2	142	
Net 6	open	50		254.4	99	
Net 7	open	25		324.2	41	
Net 8	closed	0		—	—9	

Net 8 was not used and was left open at the surface

COMMENTS: Bottom Depth ~190m - Tow failed going down - Had to restartOne net left open - But OK only 7 depth
intervals sampledStrobe 2ms pulse 99% amplitude 100ms rate
Wiebe was flying to net

12 min
15 m/min to 180
15
3.0

5-10 m/min to 0 18 min - 36
48



Net 0 Volume: $3198.6 - 2801.4 = 397.2 \text{ m}^3$

Net 1 Volume $3392.9 - 3198.6 = 194.3$

There was a very good catch of Krill in a number of samples beginning close to the bottom and extending up to about 50 m. Above 50 m we caught lots of salps - Some Krill were present too - The net zero catch was put into a zip lock bag & frozen at -80°C

Which could not be hauled in slower than $\sim 15 \text{ m/min}$ so we stopped the winch in most intervals to sample enough water.

Tow: M-01-001 EN484

Date: 24 Sept 2010

Temperature Probe # 5164

Conductivity Probe # 3613

Pressure Probe # 169

Flow Meter Calibration 6.41 (m/count)

MOONNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
0	003.2	182.8	089.0	05.9	50.0	09.5	05.9	50.0	09.5	00.07	34.62	32.63
1	152.1	180.4	165.6	06.8	09.2	08.1	06.8	09.1	08.1	33.24	34.55	33.95
2	126.4	154.7	146.9	06.2	07.0	06.4	06.2	06.9	06.4	32.79	33.32	33.01
3	095.7	125.4	109.5	06.0	06.8	06.2	06.0	06.8	06.2	32.48	32.79	32.60
4	074.3	093.3	082.0	06.9	09.8	07.6	06.9	09.8	07.6	32.12	32.49	32.39
5	045.4	073.1	063.3	10.5	15.4	13.3	10.5	15.4	13.3	31.87	32.15	32.07
6	024.8	046.7	038.6	15.4	16.1	15.7	15.4	16.1	15.7	32.11	32.16	32.15
7	000.1	023.8	012.2	16.1	17.7	16.2	16.1	17.7	16.2	00.30	50.00	31.95

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
0	-11.88	26.78	25.10	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
1	26.07	26.74	26.42	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
2	25.77	26.10	25.93	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
3	25.47	25.77	25.63	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
4	24.74	25.46	25.29	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
5	23.69	24.51	24.07	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
6	23.51	23.70	23.62	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
7	-01.11	36.89	23.37	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0

net#	irrmin	irrmax	irragv
0	0.000000000	0.000000000	0.000000000
1	0.000000000	0.000000000	0.000000000
2	0.000000000	0.000000000	0.000000000
3	0.000000000	0.000000000	0.000000000
4	0.000000000	0.000000000	0.000000000
5	0.000000000	0.000000000	0.000000000
6	0.000000000	0.000000000	0.000000000
7	0.000000000	0.000000000	0.000000000

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
0	37.0	68.0	52.6	01.2	236.0	10.0	-31.6	-04.5	-11.8	00231	04714
1	49.0	58.0	53.5	02.3	03.1	02.8	-01.8	13.8	07.2	00059	00256
2	50.0	63.0	54.6	01.9	03.1	02.6	-06.6	12.4	03.0	00125	00527
3	47.0	62.0	51.3	01.9	03.1	02.5	-10.1	11.8	04.4	00100	00431
4	47.0	54.0	49.9	01.9	03.1	02.4	-05.8	11.6	04.7	00064	00267
5	44.0	57.0	48.7	01.9	03.1	02.4	-04.1	16.9	06.3	00071	00299
6	46.0	57.0	51.0	01.9	03.1	02.5	-03.5	09.0	03.6	00081	00353
7	23.0	79.0	49.2	01.2	03.1	02.3	-04.4	13.6	03.5	00112	00450

net#	Yearday/Time	hh:mm:ss	pmin	pmax	pavg	#obs	vol
		(NetOpenTime)					
0	267.979248	23:30:7	003.2	182.8	089.0	00231	04714
1	267.990799	23:46:45	152.1	180.4	165.6	00059	00256
2	267.993611	23:50:47	126.4	154.7	146.9	00125	00527
3	267.999468	23:59:14	095.7	125.4	109.5	00100	00431
4	268.004248	0:6:7	074.3	093.3	082.0	00064	00267
5	268.007269	0:10:28	045.4	073.1	063.3	00071	00299
6	268.010613	0:15:16	024.8	046.7	038.6	00081	00353
7	268.014421	0:20:45	000.1	023.8	012.2	00112	00450
8	268.019676	0:28:20					

No alert 8 on this tow

PHW
New Volumes 17 Nov 20104714
-3820
= 4094 m³

Environmental Parameters

Net Operation

Time 00:29:16
 Pressure 11.8 m
 Temp 17.96 C
 Salinity 50.0 o/oo
 Density 36.824
 Oxygen
 Fluoresc.
 LightXmis
 Irradiance

Net_Num 7
 OpenTime
 Vol_Filtered
 Angle
 Flow_Counts
 Hor_Vel
 Vert_Vel
 Battery

7
 10 min
 403 m3
 42 deg
 7
 1.4 kts
 -0.2 m/min
 10.4 V

Net - Ship Position

Latitude 42N 9.0694'
 Longitude 67W 43.540
 Net_Dist 64.2 m
 Total_Dist 3151.0 m

Pause Acqui

Baud Rate 2400

Sample Rate 4.0 sec

Printer Off

Reset

Processed

File Name

C:\MOCNESS\MOCDATA\EN484\M_01_001.PRO

Raw File

C:\MOCNESS\MOCDATA\EN484\M_01_001.raw

Name

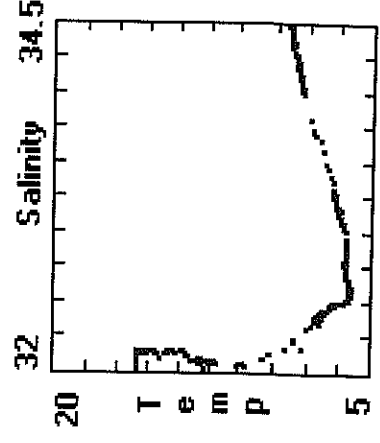
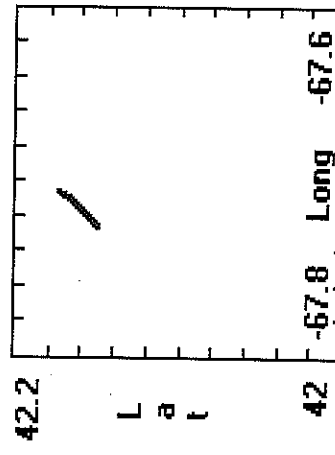
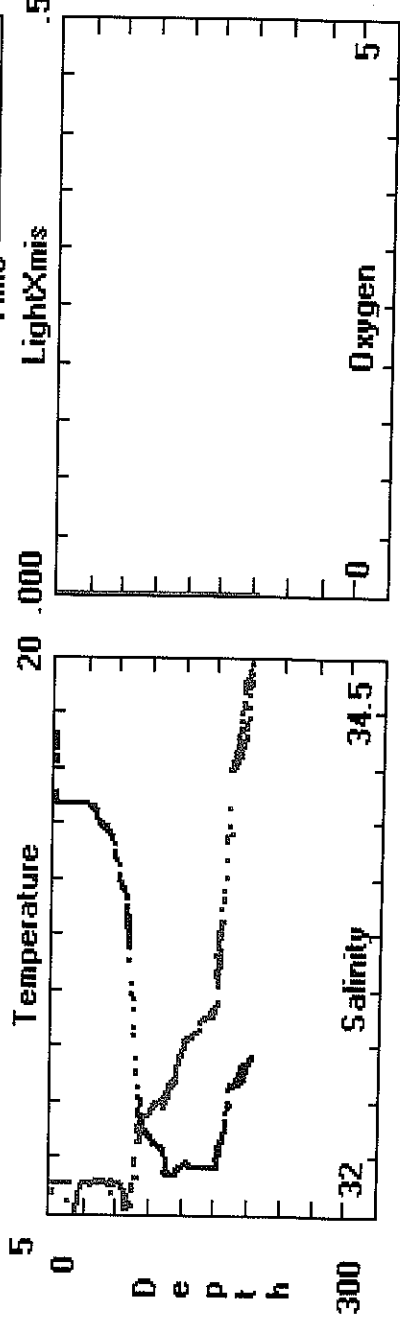
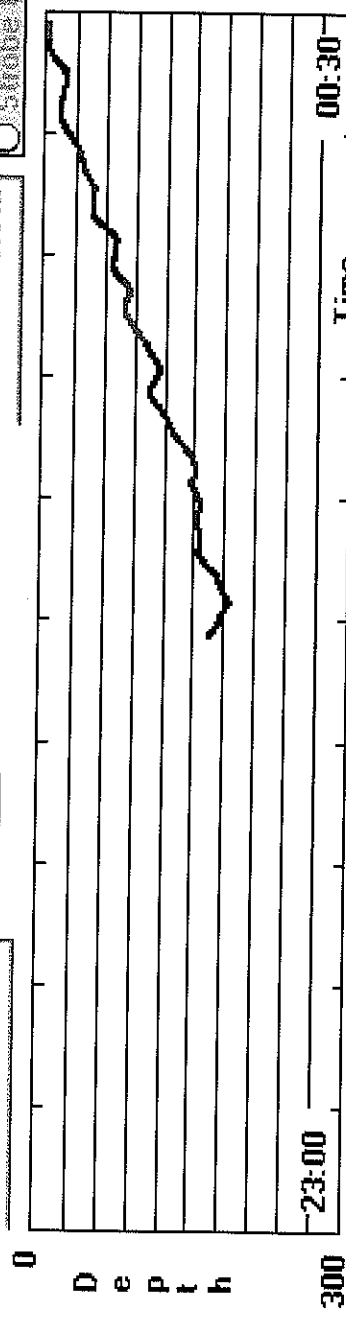
Acquisition Ended. tries = 0

Step Net

Increment Net#

☐ Strobe On
☐ Strobe Off

End Acqui



MOCNESS DATA SHEET

Lawson flying
netCruise EN484 Location Gulf of Maine Tow # MOC-01-002Date 26 Sept 2010 Wind Speed 21.24 km Direction _____Year/Day 269 Sea State MODLocal Time 1509 to 1627 Start Lat 42 13.11 Long 67 44.55GMT Time 1909 to 2027 End Lat 42 17.23 Long 67 42.054Net Size 1 m Net Condition Good
Net Mesh 335 μ mProcessed M_01-002.PRO Raw Filename M_01-002.RAW
FilenameBatt voltage
at stat 19.5
End 19.3

NET TOW INFORMATION

	Time Open	Depth (m)	Angle	Flow Counts	Volume Filtered	MWO Net	Comments
Start	1509	0					
Net 0							
Down		215			2108	768	62' Net Resp m
Net 1	1538	215			437	611m	63° NO N.R.
Net 2	1553	173			252	549	63° NR 1548 Got net response
Net 3	1603	151			486	392	No NR inactivated net
Net 4		124			315	254m	NO NR
Net 5		99			213	165m	NR
Net 6		75			173	91m	NR
Net 7		50.5			154	43m	NR
Net 8		23.7			Mixed	3m	NR
Closed		-1.3					

See Revised data on Back of page

COMMENTS: Stroke 2ms A=99% 100ms rateNet zero: 1/2 frozen SOC 1/2 back in sea (too big a catch mostly seals)

Note: Modified: M_01_002. Raw Guy taking out the "Increment Net" that followed line "269.674051". This ^{command} was entered and then a delayed net response occurred. The raw file was post processed with the modified raw file, and a new pro file "M_1_002. Pro" was generated. The modified raw file is named "M_1_002.raw". It was used to make a new pro file named "M_1_002. Pro".

Time open

+++ 2 → 3	213	269.651424	Net 1 open	False event
+++ 4 → 4 increment → 5	175	269.657604	increment	
+++ 7 → 8	→ 164.	269.658484	2? open	delayed response
	151	269.662025	8	NR
	125.8	269.662312	4	No NR increment
	101.1	269.674051	5	No NR increment
	75.1	269.677164	6	NR
	50.5	269.679768	7	NR
	23.2	269.682187	8	NR
	0	269.684606	9	NR

	Volume Filled		Depth Sampled
	Net 0	2108.48772=1031.2	
Revised data PHW 26 Sep 2010	Net 1	498	213-164
	Net 2	253	164-151
	Net 3	512	151-125
	Net 4	326	125-101
	Net 5	210	101-75
	Net 6	173	75-50
	Net 7	155	50-23
	Net 8	153	23-0

Tow: M-01-002 EN484

Date: 26 Sept 2010

Temperature Probe # 5164 Conductivity Probe # 3613 Pressure Probe # 169

Flow Meter Calibration 6.41 (m/count)

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
0	003.4	215.7	121.7	05.9	16.2	10.0	05.9	16.2	10.0	02.10	34.99	33.29
1	165.5	212.9	191.3	08.5	09.4	09.1	08.5	09.4	09.1	34.11	34.99	34.62
2	150.7	164.3	158.0	07.5	08.6	08.2	07.5	08.6	08.2	33.69	34.11	33.89
3	124.1	150.3	134.1	06.8	07.6	07.0	06.8	07.5	07.0	33.20	33.68	33.34
4	099.9	127.3	112.3	06.2	06.9	06.6	06.2	06.9	06.6	32.87	33.23	33.10
5	075.2	101.7	089.6	05.9	06.4	06.1	05.9	06.4	06.1	32.62	32.88	32.74
6	050.4	074.5	062.4	06.4	11.2	07.9	06.4	11.2	07.9	32.09	32.63	32.38
7	023.9	049.9	035.7	11.3	15.9	14.5	11.3	15.9	14.5	31.81	32.15	32.00
8	-001.2	022.7	012.7	15.0	15.9	15.9	15.0	15.9	15.9	01.30	31.97	30.06

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
0	00.55	27.09	25.57	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
1	26.48	27.09	26.81	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
2	26.30	26.48	26.38	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
3	26.03	26.32	26.11	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
4	25.85	26.04	25.98	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
5	25.63	25.86	25.76	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
6	24.53	25.64	25.22	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
7	23.45	24.51	23.76	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
8	00.10	23.45	21.99	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0

net#	irrmin	irrmax	irragv
0	0.0000000000	0.0000000000	0.0000000000
1	0.0000000000	0.0000000000	0.0000000000
2	0.0000000000	0.0000000000	0.0000000000
3	0.0000000000	0.0000000000	0.0000000000
4	0.0000000000	0.0000000000	0.0000000000
5	0.0000000000	0.0000000000	0.0000000000
6	0.0000000000	0.0000000000	0.0000000000
7	0.0000000000	0.0000000000	0.0000000000
8	0.0000000000	0.0000000000	0.0000000000

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
0	55.0	64.0	59.1	01.6	99.7	04.1	-19.4	03.9	-07.7	00420	02820
1	61.0	68.0	63.5	03.1	03.9	03.6	01.0	07.2	04.7	00151	00697
2	61.0	66.0	62.9	03.1	03.9	03.5	-02.1	08.5	02.9	00075	00350
3	60.0	66.0	62.3	03.1	03.9	03.4	-04.9	07.0	02.6	00156	00708
4	54.0	64.0	58.8	02.7	03.5	03.2	-05.1	10.1	03.7	00100	00454
5	53.0	61.0	55.1	02.7	03.1	02.9	-02.9	11.5	05.5	00065	00295
6	46.0	53.0	50.3	02.3	03.1	02.6	04.1	09.1	06.7	00055	00244
7	42.0	48.0	44.6	01.9	02.7	02.3	-01.1	15.7	07.5	00051	00218
8	00.0	46.0	34.7	01.2	02.3	01.8	01.2	14.0	07.5	00051	00213

net#	Yearday/Time	hh:mm:ss	pmin	pmax	pavg	#obs	vol
		(NetOpenTime)					
0	269.631563	15:9:27	003.4	215.7	121.7	00420	02820
1	269.651470	15:38:7	165.5	212.9	191.3	00151	00697
2	269.658530	15:48:16	150.7	164.3	158.0	00075	00350
3	269.662072	15:53:23	124.1	150.3	134.1	00156	00708
4	269.669410	16:3:57	099.9	127.3	112.3	00100	00454
5	269.674144	16:10:46	075.2	101.7	089.6	00065	00295
6	269.677211	16:15:11	050.4	074.5	062.4	00055	00244
7	269.679815	16:18:56	023.9	049.9	035.7	00051	00218
8	269.682234	16:22:25	-001.2	022.7	012.7	00051	00213
9	269.684653	16:25:54					

2820
- 1196
= 1624 m³



Acquisition Setup Hardware Setup Runtime Options Plot Setup Capture Screen About

ORIGINAL 26 Sept 2010

- [X] [X]
- [5] [X]

Environmental Parameters

Net Operation

Net - Ship Position

Program Settings

Time 16:27:58
Pressure 10 m
Temp 15.24 C
Salinity 50.0 o/oo
Density 37.528
Oxygen
Fluoresc.
LightXmis
Irradiance

Net_Num 10
OpenTime 2.1 min
Vol_Filtered 298.6 m3
Angle 25 deg
Flow_Counts 39
Hor_Vel 8.6 kts
Vert_Vel 0.0 m/min
Battery 100%

Latitude 42N 17.230
Longitude 67W 42.054
Net_Dist 170.8 m
Total_Dist 7464.6 m

Pause Acqui
Reset
Baud Rate 2400
Sample Rate 4.0 sec
Printer Off

Processed File Name C:\MOCNESS\MOCDATA\EN484\M_01_002.PRO
Raw File Name C:\MOCNESS\MOCDATA\EN484\M_01_002.raw

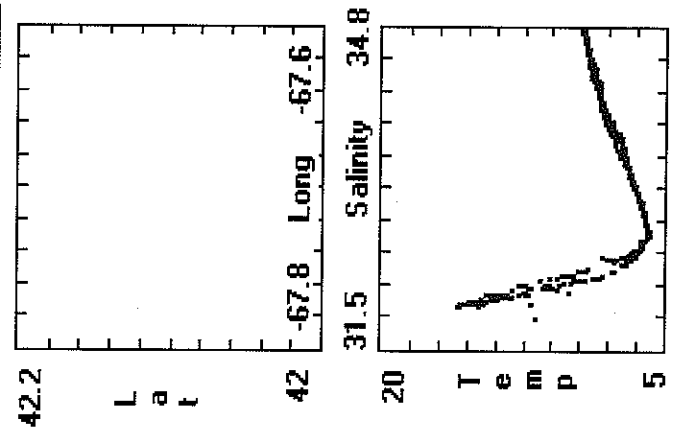
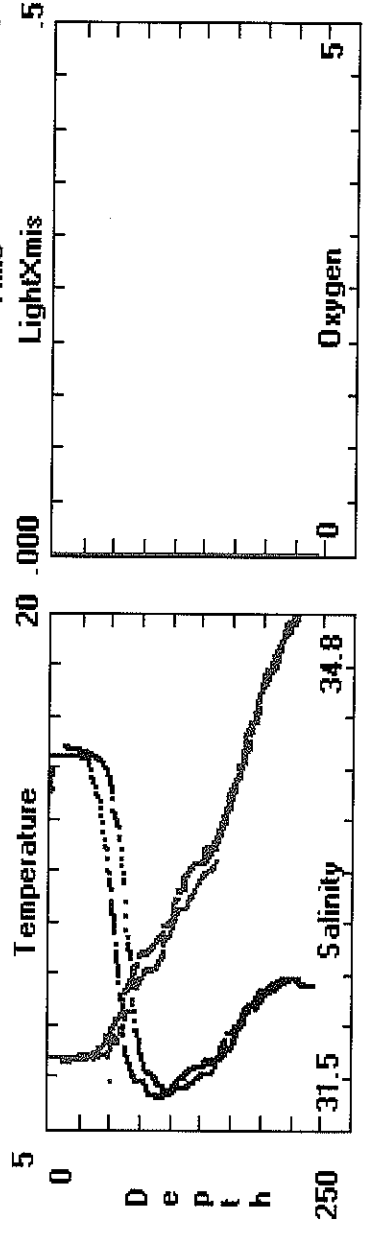
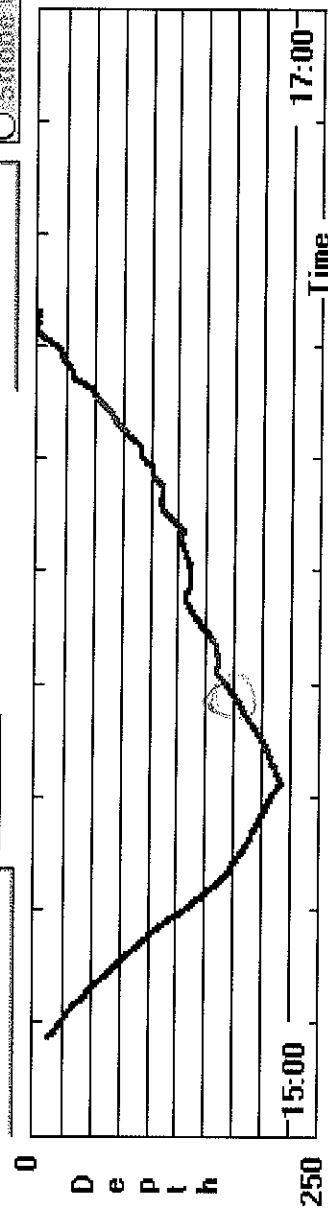
Acquisition Ended. tsys = 0

Step Net

Increment Net

Strobe On
Strobe Off

End Acqui



Revised 26 Sept 2010

Environmental Parameters

Net Operation

Net - Ship Position

Program Settings

Time 16:27:58
Pressure 10.0 m
Temp 15.24 C
Salinity 50.0 o/oo
Density 37.528
Oxygen
Fluoresc.
LightXmis
Irradiance

Net_Num 9
OpenTime 2.1 min
Vol_Filtered 258.6 m3
Angle 25 deg
Flow_Counts 39
Hor_Vel 8.6 kts
Vert_Vel 0.0 m/min
Battery 101.3 V

Latitude 42N 17.230
Longitude 67W 42.054
Net_Dist 170.8 m
Total_Dist 7464.7 m

Pause Acqui
Baud Rate 2400
Sample Rate 4.0 sec
Printer Off

Processed File Name C:\MOCNESS\MOCDATA\EN484\M_1_002.PRO
Raw File Name C:\MOCNESS\MOCDATA\EN484\M_1_002.RAW

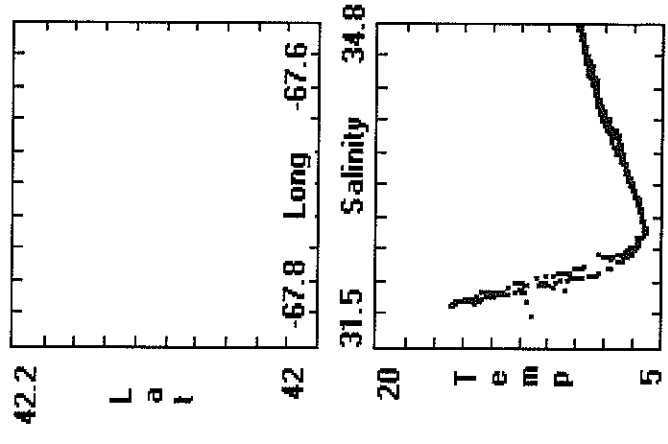
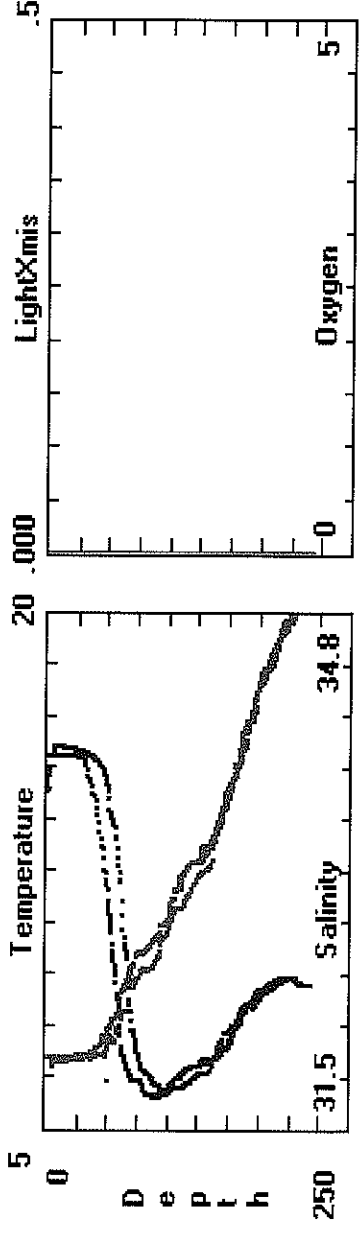
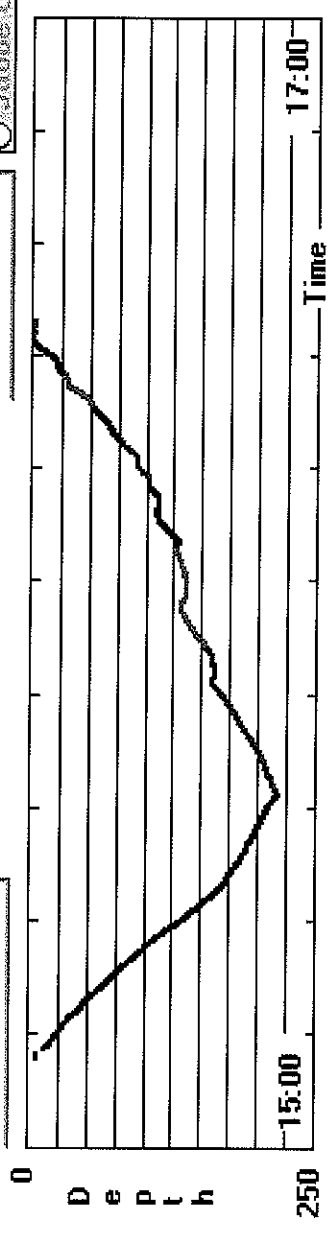
Acquisition Ended. trys = 0

Step Net

Increment Net

Strobe On
Strobe Off

End Acqui



MOCNESS DATA SHEET

PWiebe flow Net

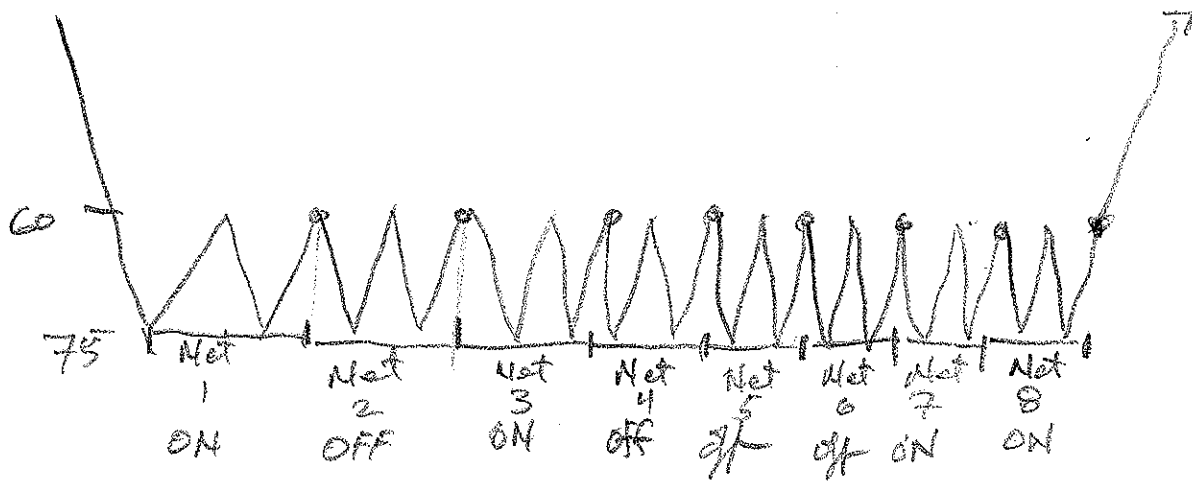
Cruise EN484 Location Gulf of Maine Tow # M-01-003
 Date 22 Sept 2010 Wind Speed 8-10 Kts Direction SE (Nice right now)
 Year/Day 170 Sea State Mod
 Local Time _____ to _____ Start Lat _____ Long _____
 GMT Time _____ to _____ End Lat _____ Long _____
 Net Size 1M Net Condition Good
 Net Mesh 335µm
 Processed M-01-003.Pro Raw Filename M-01-003.raw
 Filename _____

Strobe light Settings PW = 2 A = 90
 FR = 100 ms

NET TOW INFORMATION

	Time Open	Depth (m)	Angle	Flow Counts	Volume Filtered	MWO Net	Comments
Start	0						
Net 0							
Down	~60m		50	63	304	1	See Revised Volumes p11w
Net 1	2124 ON 60m-25		52	78	342.5	180-115	No R down at 13m/min up at 213m/min
Net 2	2133 OFF 60-75		51	84	370.1	102-123	NOR
Net 3	2143 ON 60-25		52	102	447.8	108-125/130	(NR)
Net 4	60-25 OFF		48	93	4103.4	106-129	NOR → Ship made sharp turn to avoid fishy boat
Net 5	2203 OFF 60-25		47	94	415.1	111/106-127	NOR
Net 6	2213 OFF 60-25		46	108	481.3	107/102-129/128	NOR
Net 7	2225 ON 60-25		44	107	491.6	99/105-129/124	NOR
Net 8	2236 ON 60-25		44	90	420.3	102/ 126/121	NOR
Closed	2245 60-						

COMMENTS: Horizontal tow to test Strobe light efficacy
Double up/down for each net. Each net between 60 & 75
Beautiful Tow @ fantastic Results



Tow: M-01-003 EN484

Date: 27 Sept 2010

Temperature Probe # 5164 Conductivity Probe # 3613 Pressure Probe # 169

Flow Meter Calibration 6.41 (m/count)

MOONNESS STATISTICAL SUMMARY

PHW
New Volume 17 Nov 2010

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
0	000.3	066.0	021.6	06.4	17.8	13.9	06.4	17.8	13.9	00.01	50.00	39.42
1	059.6	075.2	067.0	06.2	06.8	06.4	06.2	06.8	06.4	32.46	32.76	32.62
2	059.6	074.9	067.1	06.2	06.8	06.4	06.2	06.8	06.4	32.45	32.76	32.63
3	059.3	076.2	067.4	06.1	07.0	06.4	06.1	07.0	06.4	32.45	32.74	32.60
4	060.2	075.7	067.7	06.1	07.1	06.5	06.1	07.1	06.4	32.43	32.73	32.59
5	060.3	075.4	067.3	06.1	07.2	06.6	06.1	07.2	06.6	32.42	32.69	32.54
6	060.4	075.7	067.3	06.0	07.2	06.6	06.0	07.2	06.6	32.44	32.63	32.52
7	060.1	075.1	067.2	06.1	07.2	06.7	06.1	07.2	06.7	32.43	32.59	32.50
8	060.0	075.0	067.5	06.2	08.0	06.9	06.2	08.0	06.9	32.35	32.56	32.48

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
0	-01.32	36.95	29.50	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
1	25.45	25.76	25.62	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
2	25.45	25.77	25.64	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
3	25.41	25.75	25.60	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
4	25.40	25.74	25.59	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
5	25.37	25.71	25.54	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
6	25.38	25.68	25.51	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
7	25.37	25.63	25.48	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
8	25.21	25.60	25.44	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0

net#	irrmin	irrmax	irragv
0	0.000000000	0.000000000	0.000000000
1	0.000000000	0.000000000	0.000000000
2	0.000000000	0.000000000	0.000000000
3	0.000000000	0.000000000	0.000000000
4	0.000000000	0.000000000	0.000000000
5	0.000000000	0.000000000	0.000000000
6	0.000000000	0.000000000	0.000000000
7	0.000000000	0.000000000	0.000000000
8	0.000000000	0.000000000	0.000000000

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
0	00.0	61.0	40.7	00.4	05.5	02.1	-17.6	09.1	-03.9	00234	00404
1	42.0	58.0	47.5	01.6	02.3	01.8	-12.8	10.6	00.1	00131	00463
2	43.0	56.0	47.6	01.6	02.3	01.9	-09.9	10.5	00.0	00136	00500
3	43.0	55.0	47.9	01.6	02.3	01.9	-09.9	08.7	-00.1	00164	00611
4	43.0	56.0	47.7	01.6	02.3	02.0	-09.9	09.3	00.1	00144	00545
5	40.0	54.0	47.3	01.6	02.3	02.0	-09.5	08.7	00.0	00146	00561
6	43.0	50.0	46.6	01.6	02.3	02.0	-09.9	07.8	-00.1	00165	00651
7	42.0	51.0	45.5	01.6	02.3	02.0	-09.9	08.9	-00.1	00169	00665
8	40.0	47.0	43.6	01.6	02.3	02.0	-10.3	08.5	00.2	00142	00582

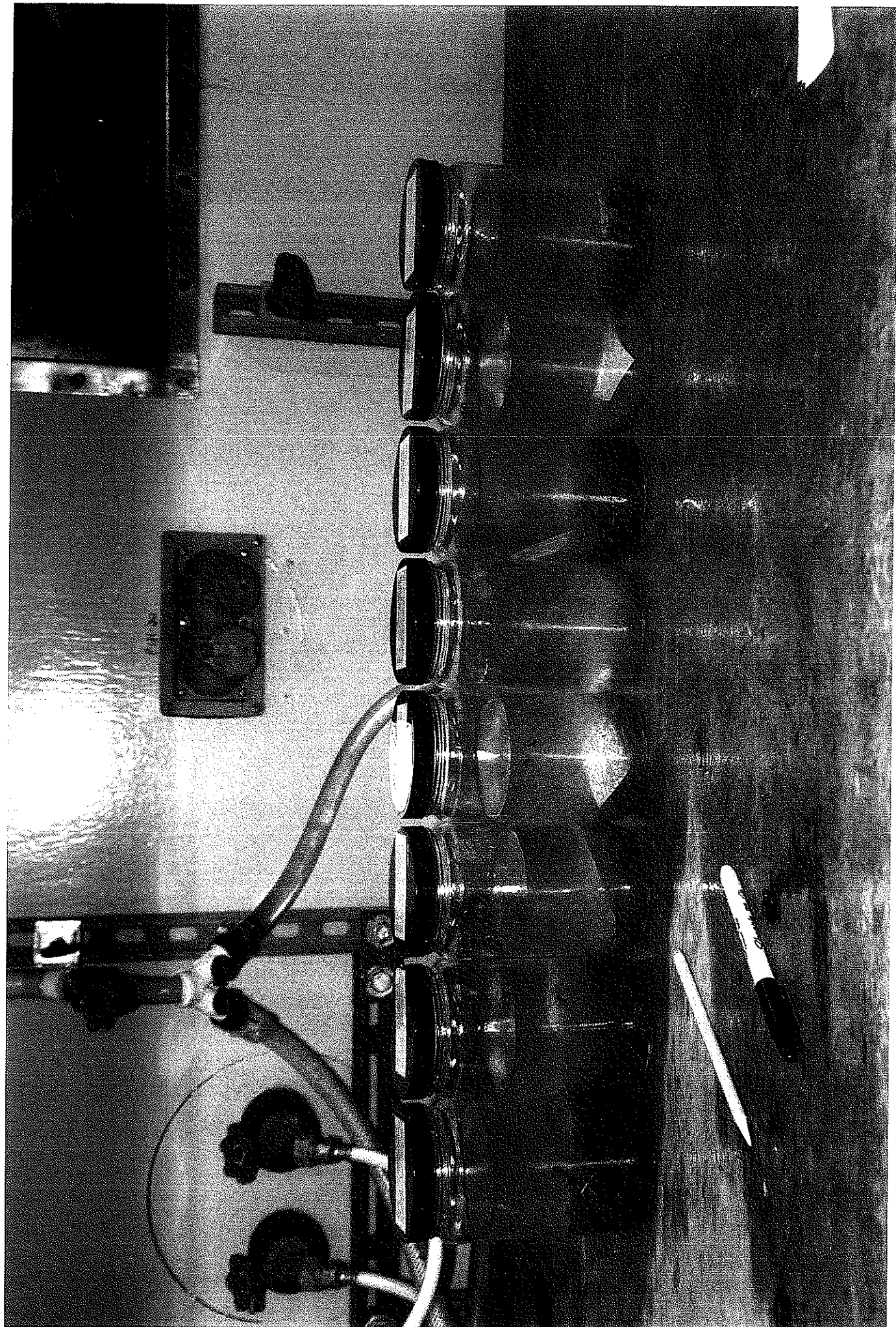
net#	Year/day/Time	hh:mm:ss	pmin	pmax	pavg	#obs	vol
0	270.881458	21:9:17	000.3	066.0	021.6	00234	00404
1	270.892535	21:25:15	059.6	075.2	067.0	00131	00463
2	270.898715	21:34:8	059.6	074.9	067.1	00136	00500
3	270.905081	21:43:19	059.3	076.2	067.4	00164	00611
4	270.912789	21:54:24	060.2	075.7	067.7	00144	00545
5	270.919572	22:4:11	060.3	075.4	067.3	00146	00561
6	270.926447	22:14:5	060.4	075.7	067.3	00165	00651
7	270.934213	22:25:16	060.1	075.1	067.2	00169	00665
8	270.942153	22:36:42	060.0	075.0	067.5	00142	00582
9	270.948854	22:46:20					

Q { strobe
non
strobe
non
non
non
strobe
strobe

0.03478299
0.08117458
0.11042579
0.98513232
0.25481898
0.3841614
0.52216408
0.71403582

Random stabilized
strobe order
within 2 strata
to allow for
potential horizontal
patchiness.

27 Sept 2010



MOCNESS DATA SHEET

Cruise EV 484 Location Gulf of Maine Tow # 4
 Date Sept 29 '10 Wind Speed 15 Direction SSW
 Year/Day 272 Sea State M0A
 Local Time 0928 to 1137 Start Lat 42 15.223 Long 67 44.758
 GMT Time 1328 to 1537 End Lat 42 10.062 Long 67 42.925
 Net Size 335 Net Condition Good
 Processed M-01-004.110 Raw Filename M-01-004.110
 Filename

NET TOW INFORMATION

Time Depth Angle Flow Volume MWO Comments
 Open (m) Counts Filtered Net

Start 0928 161 12 See Revised Volume 1276 441 NR 1280 -120 = 1110
 Net 0
 Down
 Net 1 0955 161 - 187 123 409 494 NO NR 421.2
 Net 2 1004 162 - 189 155 510 474 NO NR 510.6
 Net 3 1015 161 - 190 162 534 459 NO NR 546
 Net 4 1028 161 - 189.6 498 463 NO NR 502
 Net 5 1039 161 - 189.7 458 475 NO NR 457
 Net 6 1049 160 - 189.9 450 506 NO NR 491
 Net 7 1058 160 - 189.9 489 508 NO NR 403
 Net 8 1109 161 - 190.6 489 500 NO NR
 Closed 1118

COMMENTS:

Tested strale on / off when came back
 to surface → Fine. All nets closed
 when came to surface.

Tow: M-01-004 EN484

Date: 29 Sept 2010

Temperature Probe # 5164 Conductivity Probe # 3613 Pressure Probe # 169

Flow Meter Calibration 6.41 (m/count)

MOCNESS STATISTICAL SUMMARY

PHW
New Haven 17 Nov 2010

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
0	000.4	160.7	090.8	06.1	19.2	10.0	06.1	19.2	10.0	00.01	50.00	34.20
1	161.5	186.6	173.7	08.8	09.2	09.0	08.8	09.2	08.9	34.03	34.94	34.75
2	161.0	189.0	173.7	08.9	09.2	08.9	08.8	09.1	08.9	34.60	34.94	34.87
3	160.2	190.0	174.3	08.9	09.1	08.9	08.9	09.0	08.9	34.79	34.93	34.90
4	160.5	189.6	174.0	09.0	09.0	09.0	08.9	09.0	09.0	34.86	34.91	34.88
5	159.8	189.4	173.6	09.0	09.2	09.1	09.0	09.2	09.1	34.79	34.87	34.84
6	159.8	189.9	173.5	09.1	09.3	09.2	09.1	09.2	09.2	34.79	34.87	34.83
7	160.1	189.9	173.7	09.0	09.2	09.1	08.9	09.2	09.1	34.78	34.86	34.83
8	159.4	190.6	174.5	08.9	09.2	09.0	08.8	09.1	09.0	34.77	34.86	34.82

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
0	-01.50	36.67	26.24	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
1	26.37	27.11	26.93	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
2	26.78	27.10	27.03	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
3	26.94	27.08	27.05	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
4	27.01	27.05	27.03	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
5	26.93	27.01	26.98	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
6	26.93	27.01	26.96	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
7	26.93	27.01	26.97	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0
8	26.92	27.03	26.98	00.00	00.00	00.00	00.00	00.00	00.00	00.0	00.0	00.0

net#	irrmin	irrmax	irragv
0	0.0000000000	0.0000000000	0.0000000000
1	0.0000000000	0.0000000000	0.0000000000
2	0.0000000000	0.0000000000	0.0000000000
3	0.0000000000	0.0000000000	0.0000000000
4	0.0000000000	0.0000000000	0.0000000000
5	0.0000000000	0.0000000000	0.0000000000
6	0.0000000000	0.0000000000	0.0000000000
7	0.0000000000	0.0000000000	0.0000000000
8	0.0000000000	0.0000000000	0.0000000000

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
0	00.0	62.0	51.8	00.0	04.7	02.1	-16.7	09.3	-05.6	00424	01710
1	56.0	69.0	59.4	01.9	03.1	02.7	-07.4	10.7	-00.3	00141	00576
2	58.0	64.0	60.7	02.3	03.5	02.9	-07.4	08.5	00.1	00165	00693
3	57.0	65.0	60.1	02.3	03.1	02.8	-09.5	08.7	00.0	00177	00741
4	57.0	65.0	59.4	02.3	03.5	02.8	-08.7	10.3	00.1	00161	00681
5	56.0	65.0	59.0	02.3	03.5	02.8	-08.7	10.3	00.1	00148	00627
6	56.0	68.0	59.4	02.3	03.5	02.9	-08.7	11.9	00.0	00146	00620
7	56.0	68.0	59.5	02.3	03.5	02.9	-07.6	08.5	00.0	00158	00667
8	55.0	69.0	59.1	02.3	03.5	02.9	-10.9	09.3	00.0	00125	00547

net#	YearDay/Time	hh:mm:ss	pmin	pmax	pavg	#obs	vol
		(NetOpenTime)					
0	272.393310	9:26:21	000.4	160.7	090.8	00424	01710
1	272.413414	9:55:18	161.5	186.6	173.7	00141	00576
2	272.420058	10:4:53	161.0	189.0	173.7	00165	00693
3	272.427812	10:16:2	160.2	190.0	174.3	00177	00741
4	272.436134	10:28:1	160.5	189.6	174.0	00161	00681
5	272.443704	10:38:56	159.8	189.4	173.6	00148	00627
6	272.450683	10:48:59	159.8	189.9	173.5	00146	00620
7	272.457558	10:58:53	160.1	189.9	173.7	00158	00667
8	272.464988	11:9:34	159.4	190.6	174.5	00125	00547
9	272.470891	11:18:4					

1710
- 232
= 1478 m³

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	11:39:01	Net_Num	9	Latitude	42N 9.9912°	Pause Acqui	Reset
Pressure	1.00	OpenTime	2.1 min	Longitude	67W 42.919	Baud Rate	2400
Temp	18.37 C	Vol_Filtered	1010.2 m3	Net_Dist	1577.7 m	Sample Rate	4.0 sec
Salinity	50.0 o/oo	Angle	2.00	Total_Dist	10042.6 m	Printer	Off
Density	36.712	Flow_Counts	307	Processed File Name	C:\MOCNESS\MOCDATA\EN484\M_01_004.PRO		
Oxygen		Hor_Vel	4.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\EN484\M_01_004.raw		
Fluoresc.		Vert_Vel	0.0 m/min	Acquisition Ended. trys = 0			
LightXmis		Battery	10.1 V				
Irradiance							

