

Station  
Tow

BONGO TOWS									
EXPEDITION	Ship	STANO	Sample Date	Start time	Event No.	Tow Type	Max Depth	Vol H2O filtered	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT1 -1	06/19/11	2138	16	Vertical	99.03	76.17	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT1 -2	06/19/11	2303	23	Vertical	97.44	72.81	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT1 -3	06/20/11	0013	30	Vertical	98.16	66.69	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT1 -4	06/20/11	0129	36	Vertical	99.25	67.28	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT1 -5	06/20/11	0244	42	Vertical	99.98	81.93	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT1 -6	06/20/11	0408	48	Vertical	100.00	68.86	
CCE-LTER-P1106	R/V MELVILLE	Cycle 1	06/24/11	1035	78	Oblique	232.95	453.69	
CCE-LTER-P1106	R/V MELVILLE	Cycle 1	06/25/11	0106	96	Oblique	220.83	527.64	
CCE-LTER-P1106	R/V MELVILLE	Cycle 1	06/25/11	0918	105	Oblique	207.64	450.27	
CCE-LTER-P1106	R/V MELVILLE	Cycle 1	06/26/11	0012	123	Oblique	192.57	557.25	
CCE-LTER-P1106	R/V MELVILLE	Cycle 2	06/27/11	1732	176	Oblique	212.40	505.91	
CCE-LTER-P1106	R/V MELVILLE	Cycle 2	06/27/11	2158	183	Oblique	215.32	448.93	
CCE-LTER-P1106	R/V MELVILLE	Cycle 2	06/28/11	1019	198	Oblique	215.80	438.86	
CCE-LTER-P1106	R/V MELVILLE	Cycle 2	06/28/11	2055	207	Oblique	221.02	423.88	
CCE-LTER-P1106	R/V MELVILLE	Cycle 3	06/30/11	0926	247	Oblique	223.41	439.08	
CCE-LTER-P1106	R/V MELVILLE	Cycle 3	06/30/11	2125	258	Oblique	215.56	460.30	
CCE-LTER-P1106	R/V MELVILLE	Cycle 3	07/01/11	0938	282	Oblique	221.07	445.28	
CCE-LTER-P1106	R/V MELVILLE	Cycle 3	07/01/11	2055	298	Oblique	225.35	458.23	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -1	07/02/11	2005	313	Vertical	98.48	57.14	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -2	07/02/11	2106	320	Vertical	99.62	62.52	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -3	07/02/11	2205	325	Vertical	99.25	63.26	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -4	07/02/11	2309	331	Vertical	97.81	59.34	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -5	07/02/11	0010	337	Vertical	99.76	61.06	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -6	07/03/11	0116	343	Vertical	100.00	57.43	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -7	07/03/11	0223	349	Vertical	100.00	53.49	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -8	07/03/11	0331	355	Vertical	100.00	60.02	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -9	07/03/11	0432	361	Vertical	100.00	52.43	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT2 -10	07/03/11	0534	367	Vertical	100.00	55.62	
CCE-LTER-P1106	R/V MELVILLE	Cycle 4	07/07/11	1003	396	Oblique	221.62	393.49	
CCE-LTER-P1106	R/V MELVILLE	Cycle 4	07/07/11	2139	411	Oblique	223.64	409.38	
CCE-LTER-P1106	R/V MELVILLE	Cycle 4	07/08/11	0931	437	Oblique	221.77	427.88	
CCE-LTER-P1106	R/V MELVILLE	Cycle 4	07/08/11	2108	448	Oblique	227.78	381.80	
CCE-LTER-P1106	R/V MELVILLE	Cycle 5	07/10/11	0944	480	Oblique	213.12	495.43	
CCE-LTER-P1106	R/V MELVILLE	Cycle 5	07/10/11	2120	494	Oblique	214.10	449.01	
CCE-LTER-P1106	R/V MELVILLE	Cycle 5	07/11/11	0953	519	Oblique	225.43	460.02	
CCE-LTER-P1106	R/V MELVILLE	Cycle 5	07/11/11	2108	528	Oblique	218.38	440.57	
CCE-LTER-P1106	R/V MELVILLE	Cycle 6	07/13/11	0853	555	Oblique	212.98	501.79	
CCE-LTER-P1106	R/V MELVILLE	Cycle 6	07/13/11	2123	560	Oblique	220.77	466.70	
CCE-LTER-P1106	R/V MELVILLE	Cycle 6	07/14/11	0945	582	Oblique	216.04	426.33	
CCE-LTER-P1106	R/V MELVILLE	Cycle 6	07/14/11	2109	592	Oblique	216.58	408.61	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -1	07/15/11	2115	613	Vertical	99.94	46.20	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -2	07/15/11	2220	619	Vertical	99.98	45.55	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -3	07/15/11	2313	625	Vertical	99.98	45.62	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -4	07/16/11	0008	631	Vertical	99.98	44.00	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -5	07/16/11	0111	637	Vertical	99.62	51.85	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -6	07/16/11	0213	643	Vertical	100.00	40.03	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -7	07/16/11	0318	649	Vertical	99.94	47.49	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -8	07/16/11	0422	655	Vertical	99.98	43.90	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -9	07/16/11	0525	661	Vertical	99.45	53.69	
CCE-LTER-P1106	R/V MELVILLE	UPFRONT3 -10	07/16/11	0633	667	Vertical	100.00	51.20	

### NET TOW DATA SHEET

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)	
						BEGIN TOW	END TOW
CCE-P1106	MV	upfront1	1	16	2011-6-19	2138	2146

TIME	Min.	Sec.		PORT	STB.	TOW TYPE: Vertical Tow
SINKING (descend)	3	43	"	NET NO. LTR #5	LTR #2	TOW NO. 1 OF 1
TOWING (at depth)		38	"	METER NO. 08786		SEA (Conditions): Calm (Circle one) <b>Moderate</b> Rough
Total (ascend)	3	56	"	FINAL 092747		WIND: 20 knots
				INITIAL 086000		
				DIFF. 6747		
				MESH SIZE 202 m	202 m	

AMT. OF WIRE OUT: 100 meters	OBSERVERS: CN
TOTAL NO. OF ANGLES: 7	

ANGLES															
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES						2°	—	12°	13°	13°	15°	—	12°	—	18°
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10

	PORT		STB.						
No. OF JARS				1	NET CLOGGING	none or slight	moderate	heavy	very heavy
SIZE OF JAR (Circle One)	P	Q	(P)	Q		X			
FORMALIN & BORATE ADDED			CN		NET WASHING	none	rinsed	washed	
ALCOHOL ADDED			X			X			
COLLECTORS INITS.			CN		RIPS AND HOLES IN NET	none	location	when mended: (Circle one)	Before station After station
					X				

REMARKS: down at 30 meters/m rate

**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)																																																																				
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CCE-P1106	MV	upfront1	2	23	2011-6-19	2303	2314																																																																			
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**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)	
						BEGIN TOW	END TOW
CCE-P1106	MV	upfront1	3	30	2011-6-20	0013	0021

TIME	Min.	Sec.		PORT	STB.	TOW TYPE: Vertical Tow	
SINKING (descend)	3	36	"	NET NO. LTR #5	LTR #2	TOW NO. 1 OF 1	
TOWING (at depth)		36	"	METER NO. 08786	/	SEA (Conditions): Calm (Circle one) <u>Moderate</u> Rough	
Total (ascend)	3	43	"	FINAL 105025		INITIAL 099177	WIND: 18 knots
				DIFF. 5848		MESH SIZE 202m	202m

AMT. OF WIRE OUT: 100 meters	OBSERVERS: CN
TOTAL NO. OF ANGLES: 2 down 5 up	

ANGLES	_____														
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES	_____														
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10

	PORT		STB.						
No. OF JARS			1		NET CLOGGING	none or slight	moderate	heavy	very heavy
SIZE OF JAR (Circle One)	P	Q	(P)	Q		X			
FORMALIN & BORATE ADDED			CN		NET WASHING	none	rinsed	washed	
ALCOHOL ADDED			/			X			
COLLECTORS INITS.			CN		RIPS AND HOLES IN NET	none	location high on Sboard net	when mended: (Circle one)	Before station After station

REMARKS: down + up at 30 meters/minute  
smallest hole up high on Sboard net

### NET TOW DATA SHEET

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)	
						BEGIN TOW	END TOW
CCE-P1106	MV	4 print 1	4	36	2011-6-20	0129	0139

TIME	Min.	Sec.	NET NO.	PORT	STB.	TOW TYPE: <i>Vertical Tow</i>
SINKING (descend)	5	11		LTPR #5	LTPR #2	TOW NO. 1 OF 1
TOWING (at depth)		42	METER NO. 08786			SEA (Conditions): <u>Calm</u> (Circle one) <u>Moderate</u> Rough
Total (ascend)	3	42	FINAL 110906			WIND: 16 knots
			INITIAL 105015			
			DIFF. 5891			
			MESH SIZE 202m	202m		

AMT. OF WIRE OUT: 100 meters	OBSERVERS: CN
TOTAL NO. OF ANGLES: 3 down 5 up	

ANGLES	[Hand-drawn line graph showing depth vs. wire out]														
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
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No. OF JARS			1	NET CLOGGING	none or slight	moderate	heavy	very heavy
SIZE OF JAR (Circle One)	P	Q	<u>P</u> Q		X			
FORMALIN & BORATE ADDED			CN	NET WASHING	none	rinsed	washed	
ALCOHOL ADDED			X			X		
COLLECTORS INITS.			CN	RIPS AND HOLES IN NET	none	location <i>Agdon station net</i>	when mended: (Circle one)	Before station After station

REMARKS: down at 20 meters/minute  
up at 30 meters/minute

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CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)																																																																
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CCE-P1106	MV	upfront1	5	42	2011-6-20	0244	0254																																																															
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REMARKS: down at 20 meters/minute up at 30 meters/minute																																																																						

**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)																																																																																														
						BEGIN TOW	END TOW																																																																																													
CCE-P1106	MV	upshot 1	6	48	2011-6-20	0408	0418																																																																																													
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REMARKS: down at 20 meters/minute up at 30 meters/minute																																																																																																				

**NET TOW DATA SHEET**

*STATION*

CRUISE	SHIP	CYCLE	<del>ORDER OCCUPIED</del>	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)	
						BEGIN TOW	END TOW
CCE-P1106	MV	<i>up 2</i>	<i>1</i>	313	2011-7-2	20 05	2013 <i>12</i>

TIME	Min.	Sec.		PORT	STB.	TOW TYPE: <i>Vertical</i>
SINKING (descend)	<i>3</i>	<i>41</i>	"	NET NO. <i>LTER # 5</i>	<i>LTER # 2</i>	TOW NO. 1 OF 1
				METER NO. <i>08786</i>	<i>—</i>	SEA (Conditions): <i>Calm</i>
TOWING (at depth)	<i>39</i>	<i>34</i>	"	FINAL <i>688791</i>	<i>/</i>	(Circle one) <i>Moderate</i>
				INITIAL <i>679417</i>	<i>/</i>	<i>Rough</i>
Total (ascend)	<i>4</i>	<i>10</i>	"	DIFF.	<i>/</i>	WIND: <i>knots</i>
				MESH SIZE <i>202 μm</i>	<i>202 μm</i>	

AMT. OF WIRE OUT: <i>100</i> meters	OBSERVERS:
TOTAL NO. OF ANGLES: <i>5</i>	

ANGLES	<i>[Handwritten lines]</i>														
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES	<i>[Handwritten lines]</i>														
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10

	PORT		STB.						
No. OF JARS			<i>1</i>		NET CLOGGING	none or slight	moderate	heavy	very heavy
SIZE OF JAR (Circle One)	P	Q	<i>(P)</i>	Q					
FORMALIN & BORATE ADDED					NET WASHING	none	rinsed	washed	
ALCOHOL ADDED									
COLLECTORS INITS.					RIPS AND HOLES IN NET	none	location	when mended: (Circle one)	Before station After station

REMARKS: *slow meta few wheeling*



**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)	
						BEGIN TOW	END TOW
CCE-P1106	MV	WP 2	SIC 2	320	2011-7-2	21.06	21.15

TIME	Min.	Sec.		PORT	STB.	TOW TYPE: Vertical
SINKING (descend)	3	46	"	NET NO. LTER #5	LTER #2	TOW NO. 1 OF 1
TOWING (at depth)		35	"	METER NO. 08786		SEA (Conditions): (Circle one) Calm Moderate Rough
				FINAL 692237		
Total (ascend)	3	39	"	INITIAL 686790		
				DIFF. 5447		
				MESH SIZE 202µm	202µm	320°

AMT. OF WIRE OUT: 100 meters	OBSERVERS:
TOTAL NO. OF ANGLES: 0	

ANGLES															
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES															
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10

	PORT		STB.						
No. OF JARS				1	NET CLOGGING	none or slight	moderate	heavy	very heavy
SIZE OF JAR (Circle One)	P	Q	(P)	Q		NET WASHING	none	rinsed	washed
FORMALIN & BORATE ADDED					RIPS AND HOLES IN NET		none	location	when mended: (Circle one)
ALCOHOL ADDED									After station
COLLECTORS INITS.									

REMARKS: *Starboard side net wrapped over top - little sample starboard side*

**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)									
						BEGIN TOW	END TOW								
CCE-P1106	MV	Up 2	Sta 3	325	2011-7-2	22:05	22:17								
TIME	Min.	Sec.		PORT	STB.	TOW TYPE: Vertical									
SINKING (descend)	5	11	NET NO.	LER # 5	LER # 2	TOW NO. 1 OF 1									
			METER NO.	08780		SEA (Conditions): Calm									
TOWING (at depth)	35		FINAL	697791	/	(Circle one) Moderate									
			INITIAL	692238		Rough									
Total (ascend)	3	29	DIFF.	5553	/	WIND: knots									
			MESH SIZE	202mm		202mm									
AMT. OF WIRE OUT: 100 meters			OBSERVERS:												
TOTAL NO. OF ANGLES: 5															
ANGLES	-----														
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES	-----														
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10
		PORT		STB.											
No. OF JARS															
SIZE OF JAR (Circle One)	P	Q	P	Q	NET CLOGGING	none or slight	moderate	heavy	very heavy						
FORMALIN & BORATE ADDED					NET WASHING	none	rinsed	washed							
ALCOHOL ADDED					RIPS AND HOLES IN NET	none	location	when mended: (Circle one)	Before station	After station					
COLLECTORS INITS.															
REMARKS: <i>Drawn at 20m per minute</i>															

**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)																																																										
						BEGIN TOW	END TOW																																																									
CCE-P1106	MV	Up 2	Sta 4	331	2011-7-2	23:09	23:19																																																									
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TIME	Min.	Sec.		PORT	STB.	TOW TYPE: Vertical																																																										
SINKING (descend)	5	01	"	NET NO. LTER #5	LTER #2	TOW NO. 1 OF 1																																																										
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				MESH SIZE 202mm	202mm																																																											
AMT. OF WIRE OUT: 100 meters				OBSERVERS:																																																												
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**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)									
						BEGIN TOW	END TOW								
CCE-P1106	MV	WP 2	5	337	2011-7-3	00:10	00:21								
TIME	Min.	Sec.		PORT	STB.	TOW TYPE: Vertical									
SINKING (descend)	4	47	"	NET NO.	LTER # 5	LTER # 2	TOW NO. 1 OF 1								
				METER NO.	08786		SEA (Conditions): Calm								
TOWING (at depth)		37	"	FINAL	708057	/	(Circle one) Moderate								
				INITIAL	702867		Rough								
Total (ascend)	4	12	"	DIFF.	5190	/	WIND: knots								
				MESH SIZE	202 μm		202 μm								
AMT. OF WIRE OUT: 100 meters			OBSERVERS:												
TOTAL NO. OF ANGLES: 5															
ANGLES	_____														
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES	_____														
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10
PORT STB.															
No. OF JARS															
SIZE OF JAR (Circle One)	P	Q	(P)	Q	NET CLOGGING	none or slight	moderate	heavy	very heavy						
FORMALIN & BORATE ADDED					NET WASHING	none	rinsed	washed							
ALCOHOL ADDED					RIPS AND HOLES IN NET	none	location	when mended: (Circle one)	Before station						
COLLECTORS INITS.									After station						
REMARKS:															

**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)									
						BEGIN TOW	END TOW								
CCE-P1106	MV	up 2	Stab	343	2011-7-3	01:16	01:26								
TIME	Min.	Sec.		PORT	STB.	TOW TYPE: Vertical Beryll									
SINKING (descend)	5	11	NET NO.	LTR#5	LTR#2	TOW NO. 1 OF 1									
			METER NO.	08587		SEA (Conditions): <u>Calm</u> (Circle one) Moderate Rough									
TOWING (at depth)		38	FINAL	712827											
			INITIAL	708060		WIND: 16.5 knots									
Total (ascend)	4	30	DIFF.	4767											
			MESH SIZE	2027m	2027m										
AMT. OF WIRE OUT: 100 meters			OBSERVERS: (N)												
TOTAL NO. OF ANGLES: 5															
ANGLES	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----														
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----														
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10
No. OF JARS		PORT	STB.	NET CLOGGING	none or slight	moderate	heavy	very heavy							
SIZE OF JAR (Circle One)		P	Q		X										
FORMALIN & BORATE ADDED			(N)	NET WASHING	none	rinsed	washed								
ALCOHOL ADDED			/		X										
COLLECTORS INITS.			(N)	RIPS AND HOLES IN NET	none	location	when mended: (Circle one)	Before station After station							
REMARKS:		down at 20 meters/minute up at 30 meters per minute													

**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)																																																																																											
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CCE-P1106	MV	yp/anta	Station 7	349	2011-7-3	02:23	02:33																																																																																										
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**NET TOW DATA SHEET**

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CCE-P1106	MV	4610/A2	station 2	355	2011-7-3	03:31	03:41																																																																
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						BEGIN TOW	END TOW
CCE-P1106	MV	4/10/11	station 10	367	2011-7-3	05:34	05:44

TIME	Min.	Sec.		PORT	STB.	TOW TYPE: Vertical Benthic
SINKING (descend)	5	16	"	NET NO. LTER #5	LTER #2	TOW NO. 1 OF 1
TOWING (at depth)		35	"	METER NO. 08786		SEA (Conditions): <u>Calm</u> (Circle one) Moderate Rough
Total (ascend)	3	26	"	FINAL 731546		WIND: 14.0 knots
				INITIAL 726748		
				DIFF. 4798		
				MESH SIZE 2027m	2027m	

AMT. OF WIRE OUT: 100 meters      OBSERVERS: CN

TOTAL NO. OF ANGLES: 5

ANGLES	[Blank grid]														
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES	[Blank grid]														
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10

		PORT	STB.					
No. OF JARS			1	NET CLOGGING	none or slight	moderate	heavy	very heavy
SIZE OF JAR (Circle One)	P	Q	(P) Q		X			
FORMALIN & BORATE ADDED			CN	NET WASHING	none	rinsed	washed	
ALCOHOL ADDED			/		X			
COLLECTORS INITS.			CN	RIPS AND HOLES IN NET	none	location	when mended: (Circle one)	Before station After station
				X				

REMARKS: Sun rose over tow

### NET TOW DATA SHEET

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)																																																																	
						BEGIN TOW	END TOW																																																																
CCE-P1106	MV	Up 3	Sta 1	613	2011-07-15	2115	2124																																																																
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TOTAL NO. OF ANGLES: 4				EU																																																																			
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REMARKS: down at 30m/min up at 30m/min																																																																							

**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)																																																																
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CCE-P1106	MV	Up 3	Sta 2	619	2011-07-15	2220	2228																																																															
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**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)									
						BEGIN TOW	END TOW								
CCE-P1106	MV	Up3	Sta. 3	625	2011-07-15	23:13	23:21								
TIME	Min.	Sec.	"	PORT	STB.	TOW TYPE: Vertical Bongo									
SINKING (descend)	3	26	"	NET NO.	LER #5	LER #2	TOW NO. 1 OF 1								
				METER NO.	08786		SEA (Conditions): Calm								
TOWING (at depth)		32	"	FINAL	233877		(Circle one) Moderate								
				INITIAL	230079		Rough								
Total (ascend)	3	29	"	DIFF.	3798		WIND: knots								
				MESH SIZE	202µm	202µm									
AMT. OF WIRE OUT: 100 meters			OBSERVERS:												
TOTAL NO. OF ANGLES: 4															
ANGLES	_____														
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES	_____														
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10
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No. OF JARS				NET CLOGGING	none or slight	moderate	heavy	very heavy							
SIZE OF JAR (Circle One)	(P) Q	(P) Q													
FORMALIN & BORATE ADDED				NET WASHING	none	rinsed	washed								
ALCOHOL ADDED															
COLLECTORS INITS.			DP	RIPS AND HOLES IN NET	none	location	when mended: (Circle one)	Before station After station							
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CCE-P1106	MV	Vp3	2-1-4	631	2011-07-16	00:55	00:19																																																															
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CCE-P1106	MV	U3	S65	637	2011-07-16	01:11	01:19																																																														
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REMARKS:																																																																					

### NET TOW DATA SHEET

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)																																													
						BEGIN TOW	END TOW																																												
CCE-P1106	MV	Up3	stab	643	2011-07-16	02:13	02:20																																												
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						BEGIN TOW	END TOW								
CCE-P1106	MV	4 <sup>front</sup> 3	Station 7	649	2011-7-16	03:18	03:26								
TIME	Min.	Sec.		PORT	STB.	TOW TYPE: Vertical Bongo									
SINKING (descend)	3	49	NET NO.	LTR#5	LTR#2	TOW NO. 1 OF 1									
			METER NO.	07786		SEA (Conditions): <u>Calm</u> (Circle one) Moderate Rough									
TOWING (at depth)		37	FINAL	242980		WIND: knots									
			INITIAL	245020											
Total (ascend)	3	32	DIFF.	3960											
			MESH SIZE	202mm	202mm										
AMT. OF WIRE OUT: 100			meters	OBSERVERS: CN											
TOTAL NO. OF ANGLES: 5															
ANGLES															
WIRE OUT	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160
ANGLES															
WIRE OUT	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10
PORT		STB.													
No. OF JARS			1	NET CLOGGING	none or slight	moderate	heavy	very heavy							
SIZE OF JAR (Circle One)	P	Q	<u>P</u> Q		X										
FORMALIN & BORATE ADDED			CN	NET WASHING	none	rinsed	washed								
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CCE-P1106	MV	upfront 3	8	655	2011-7-16	04:22	04:29																																																																
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**NET TOW DATA SHEET**

CRUISE	SHIP	CYCLE	ORDER OCCUPIED	EVENT # (Deployed)	DATE YR MO DY	HOUR (PDT)																																																																
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CCE-P1106	MV	48 Cont 3	Station 10	667	2011-7-16	06:33	06:40																																																															
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