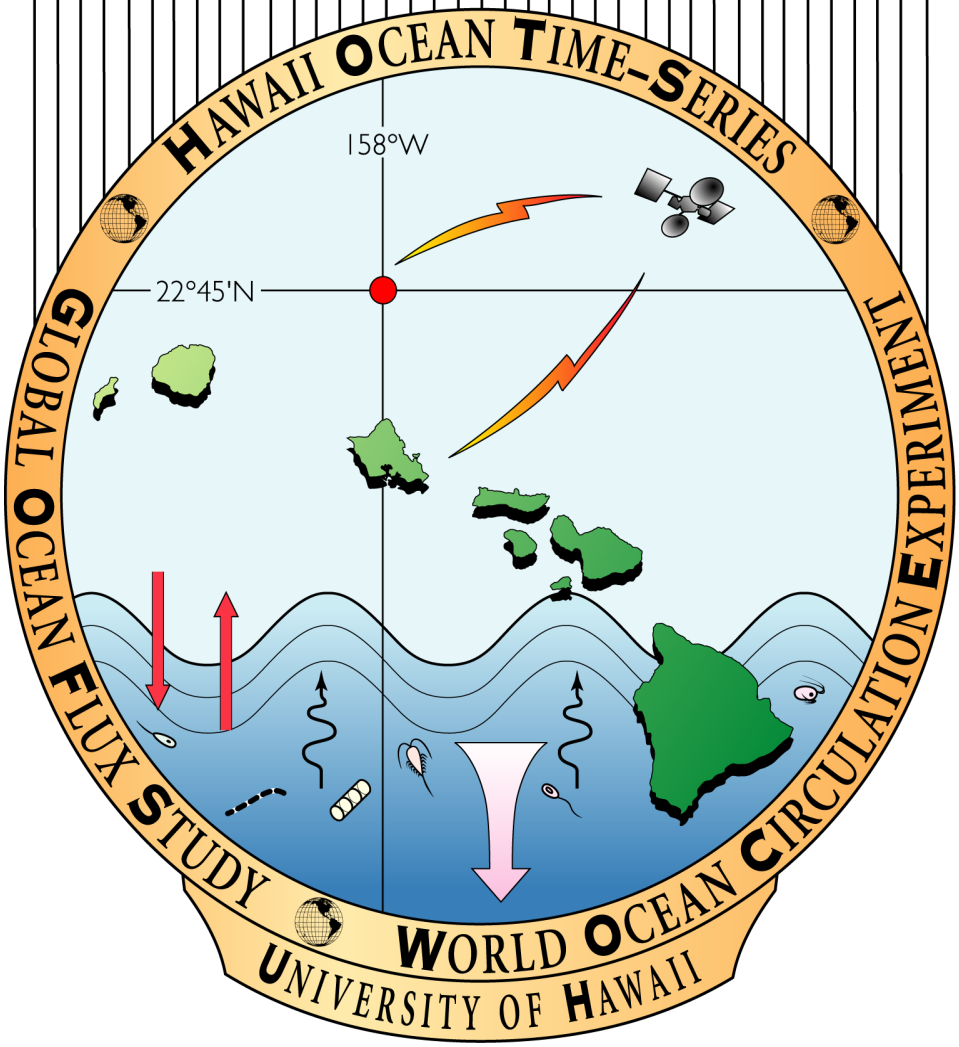
Hawaii Ocean Time-series Program

HOT-197



Hawaiian Ocean Time-Series

HOT-**197**

KAHE Station Data Sheet

Station # 1 Date: 11-30-07 (HST)

Cast # 1 Time: 1310 (HST)

Operator(s): SC, KB, TC

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nuts	DIC/ Alk	pH	DOC	LLN/ LLP	Chl *a*	FCM
1	**1000**	1	6.9	1						
2	**900**	2	7.2	2						
3	**800**	3	7.3	3						
4	**750**	4,5,6	7.8	4A-B						
5	**700**	7	7.9	5						
6	**600**	8	8.3	6						
7	**500**	9	9.1	7			7			
8	**400**	10	10.2	8						
9	**350**	11	11.1	9A-B			9			
10	**300**	12	12.0	10						
11	**250**	13	13.7	11						
12	**225**	14	15.5	12						
13	**200**	15	16.1	13			13			
14	**175**	16	18.6	14			14		14	14A-B
15	**150**	17	19.5	15			15	15	15	15A-B
16	**125**	18	20.6	16A-B			16		16	16A-B
17	**115**	19	20.7	17						
18	**100**	**20,21 ,22**	21.5	18			18	18	18A-B	18A-B
19	**75**	23	23.5	19			19		19	19A-B
20	**60**	24	24.0	20						
21	**45**	25	24.1	21	21	2	21	21	21	21A-B
22	**25**	26	24.2	22	22	5	22		22A-B	22A-B
23	**5**	27	24.3	23	23	4	23	23	23	23A-B
24	**5**	QC	24.2							

Notes: #7 vent open

Hawaiian Ocean Time-series

HOT- **197**

OPEN CAST Data Sheet

Station # 2 Date: 12-01-07 (HST)

Cast # 1 Time: 00:15 (HST)

Operator(s): SC, KB, TC

Rosette Position	Desired Depth	SW		CMORE	MR	RF	
1	**175**	X					
2	**150**	X					
3	**125**	X					
4	**100**	X					
5	**75**	X					
6	**45**			X			
7	**45**			X			
8	**45**			X			
9	**45**			X			
10	**45**			X			
11	**45**	X					
12	**45**				X		
13	**45**				X		
14	**25**			X			
15	**25**			X			
16	**25**			X			
17	**25**			X			
18	**25**			X			
19	**25**	X					
20	**10**					X	
21	**10**					X	
22	**10**					X	
23	**10**					X	
24	**5**	X					

Notes:

Hawaiian Ocean Time-series

HOT-**197**

Primary Production Data Sheet

Station # 2 Date: 12-01-07 (HST)

Cast # 2 Time: 0155 (HST)

Operator(s): SC,KB,TC

Rosette Position	Desired Depth	Light Bottle	Chl *a*	FCM			
1	**1000**						
2	**Sal min**						
3	**125**	3-1	5	5			
4	**125**	3-2	6	6			
5	**125**	3-3	7	7			
6	**100**	4-1	8	8			
7	**100**	4-2	9	9			
8	**100**	4-3	10	10			
9	**75**	5-1	11	11			
10	**75**	5-2	12	12			
11	**75**	5-3	13	13			
12	**45**	6-1	14	14			
13	**45**	6-2	15	15			
14	**45**	6-3	16	16			
15	**25**	7-1	17	17			
16	**25**	7-2	18	18			
17	**25**	7-3	19	19			
18	**5**	8-1	22	22			
19	**5**	8-2	23	23			
20	**5**	8-3	24	24			
21							
22							
23							
24							

Notes: SW pb 5-75m

Niskin from depths 175 and 150 were not fired. Labels for Chlorophyll and FCM do not correspond to niskin bottle number but were sampled from the right depth.

Hawaiian Ocean Time-series

HOT-**197**

WOCE Deep Data Sheet

Station # 2 Date: 12-01-07 (HST)

Cast # 3 Time: 0645 (HST)

Operator(s): Ah,lf,bu

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nutrient	Refridg. Si	DOC	DIC/ Alk	pH	
1	**4800**	28	4.2	1	1				
2	**4600**	29	4.2	2	2				
3	**4500**	30,31, 32	4.5	3A-B	3A-B	3A-B	3A-B	3A-B-C	
4	**4400**	33	4.6	4	4				
5	**4200**	34	4.5	5	5				
6	**4000**	35,36, 37	4.7	6A-B	6A-B	6A-B			
7	**3800**	38	4.7	7	7				
8	**3600**	39	4.7	8	8				
9	**3400**	40	4.8	9	9				
10	**3200**	41	4.9	10	10				
11	**3000**	42,43 44	5.3	11A-B	11A-B	11A-B	11	11	
12	**2800**	45	5.3	12	12				
13	**2600**	46	5.1	13	13				
14	**2400**	47	5.2	14	14				
15	**2200**	48	5.3	15	15				
16	**2000**	49,50, 51	6	16A-B	16A-B	16A-B	16	16	
17	**1800**	52	5.9	17	17				
18	**1600**	53	6.1	18	18				
19	**1400**	54	6.3	19	19				
20	**1200**	55	6.8	20	20				
21	**1000**	56	7.6	21					
22	**750**	57	10.2	22					
23	**500**	58	25.0	23					
24	**5**	59		24					

Notes: Niskin number 25 was not tripped.

Hawaiian Ocean Time-series

HOT-**197**

PO Shallow Data Sheet

Station # 2 Date: 12-01-07 (HST)

Cast # 4 Time: 12:35 (HST)

Operator(s): AH, LF, BU, BW

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nutrient	Refridg. Si	DIC/ Alk	pH	DOC	Quay DIC
1	**1020**	60,61, 62	6.5	1A-B	1A-B	1	1	1	1
2	**985**	63	6.6	2	2				
3	**944**	64	6.4	3	3				
4	**900**	65	6.7	4	4				
5	**860**	66	6.7	5	5				
6	**820**	67,68, 69	7.1	6	6				
7	**752**	70	7.0	7	7	7	7	7	7
8	**715**	71	7.2	8	8				
9	**675**	72	7.3	9	9				
10	**630**	73	7.6	10	10	10	10	10	10
11	**585**	74	7.7	11A-B	11A-B				
12	**535**	75	8.3	12	12				
13	**490**	76,77, 78	8.7	13	13	13	13	13	
14	**460**	79	9.1	14	14				
15	**425**	80	9.9	15	15				
16	**388**	81	10.3	16	16				
17	**330**	82	11.6	17	17	17A-B	17A-B	17	17
18	**290**	83,84, 85	13.0	18	18				
19	**220**	86	16.0	19	19	19	19	19	19
20	**165**	87	20.0	20A-B					
21	**125**	88	21.6	21					
22	**60**	89	25.0	22					
23	**26**	90	25.0	23					
24	**10**	91	25.1	24					

Hawaiian Ocean Time-series

HOT- **197**

PC/PN Data Sheet

Station # 2 Date: 12-01-07 (HST)

Cast # 5 Time: 03:20 (HST)

Operator(s): SC, KB, TC Pre-screen mesh size: 202 um

Blank #'s **___B1___ ___B2___ ___B3___**

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	**CMORE**		
1	**1000**						
2	**Sal min**						
3	**350**	1	10	3			
4	**350**	2	10	4			
5	**250**	3	10	5			
6	**200**	4	10	6			
7	**175**	5	10	7			
8	**150**	6	10	8			
9	**125**	7,8	4,4	9A-B			
10	**125**				X		
11	**125**				X		
12	**125**				X		
13	**125**				X		
14	**125**				X		
15	**100**	9	4	15			
16	**75**	10	4	16			
17	**75**				X		
18	**75**				X		
19	**75**				X		
20	**75**				X		
21	**75**				X		
22	**45**	11	4	22			
23	**25**	12,13	4,4	23A-B			
24	**5**	14	4	24			

Notes: Carboy #14 bad filter holder leaky – small sample volume lost

Hawaiian Ocean Time-series

HOT- **197**

Particulate Phosphorus Data Sheet

Station # 2 Date: 12-01-07 (HST)

Cast # 6 Time: 18:33 (HST)

Operator(s): SC, KB, TC Pre-screen mesh size: 202 um

Blank #'s **___B1___ ___B2___ ___B3___**

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	RF	**DV**	BL
1	**1000**						
2	**Sal min**						
3	**350**	1	10	3			
4	**350**	2	10	4			
5	**250**	3	10	5			
6	**200**	4	10	6			
7	**175**	5	10	7			
8	**150**	6	10	8			
9	**125**	7,8	4,4	9A-B			
10	**100**	9	4	10			
11	**75**	10	4	11			
12	**45**	11	4	12			
13	**40**				X		
14	**25**	12,13	4,4	14A-B			
15	**25**						X
16	**25**						X
17	**20**				X		
18	**10**					X	
19	**10**					X	
20	**10**					X	
21	**5**	14	4	21			
22	**5**				X		
23							
24							

Notes: SAMPLE 21 AND 14B = TRICHO TUFTS

Hawaiian Ocean Time-series

HOT-**197**

HPLC & Chl *a*. Bottle Data Sheet

Station # 2 Date: 12-01-07 (HST)

Cast # 7 Time: 21:15 (HST)

Operator(s): SC, KB, TC

Rosette Position	Desired Depth	Carboy #	Total Volume	HPLC	Chl *a*.	SLIDES
1	**1000**					
2	**Sal min**					
3	**175**	1	10	3	3	
4	**175**					BW
5	**150**	2	10	5	5	
6	**150**					BW
7	**135**	7	4	7	7A-B	
8	**125**	8,9	4,4	8A-B	8	
9	**125**					BW
10	**115**	10	4	10	10	
11	**100**	11	4	11	11	
12	**100**					BW
13	**85**	12	4	13	13	
14	**75**	13	4	14	14	
15	**75**					BW
16	**60**	14	4	16	16A-B	
17	**45**	15,16	4,4	17A-B	17	
18	**45**					BW
19	**25**	3	10	19	19	
20	**25**					BW
21	**5**	4	10	21	21	
22	**5**					BW
23						
24						

Notes: DO NOT PRE-SCREEN,

Hawaiian Ocean Time-series

HOT-**197**

BEACH Shallow Data Sheet

Station # 2 Date: 12-01-07 (HST)

Cast # 8 Time: 23:55 (HST)

Operator(s): SC, KB, TC

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nutrient	Refridg. Si	DOC	LLN	LLP/ LLSi
1	**1000**	92	8.8					
2	**O_2 min**	93	9.0					
3	**Sal min**	94	10.1					
4	**200**	95	18.1	4	4	4		
5	**175**	96	20.1	5		5	5	5
6	**165**	97	20.5				6	
7	**150**	98	20.8	7		7	7A-B	7
8	**130**						8	
9	**125**	99	22.2	9A-B		9	9	9
10	**115**	100	22.4				10	10
11	**110**						11	
12	**100**	101,102, 103	23.1	12		12	12A-B	12
13	**90**						13	
14	**85**	104	24.5				14	14
15	**75**	105	24.8	15		15	15	15
16	**60**			16		16	16	16
17	**45**	106	25.2	17A-B		17	17	17
18	**35**			18		18	18	
19	**25**	107	25.1	19		19	19	19
20	**25**							
21	**15**			21		21	21	
22	**5**	108	25.0	22		22	22A-B	22
23	**5**							
24								

Notes:

Hawaiian Ocean Time-series

HOT-**197**

BEACH Carbon Data Sheet

Station # 2 Date: 12-01-07 (HST)

Cast # 8 Time: 23:55 (HST)

Operator(s): SC, KB, TC

Rosette Position	Desired Depth	DIC/ ALK	pH	Quay DIC	Keeling DIC			
1	**1000**							
2	**O_2 min**							
3	**Sal min**							
4	**200**	4	8	4				
5	**175**							
6	**165**							
7	**150**	7	2	7				
8	**130**							
9	**125**							
10	**115**							
11	**110**							
12	**100**	12	3	12				
13	**90**							
14	**85**							
15	**75**	15	4	15				
16	**60**							
17	**45**	17	5					
18	**35**							
19	**25**	19	6					
20	**25**			20	20A-B			
21	**15**							
22	**5**	22A-B	7					
23	**5**			23	23A-B			
24	**5**							

Notes:

Keeling sample Times: 20A- 0153, 20B- 0156

23A- 0156, 23B- 0157

Hawaiian Ocean Time-series

HOT- **197**

Gas Array Experiment Data Sheet

Station # 2 Date: 12-02-07 (HST)

Cast # 9 Time: 2:49 (HST)

Operator(s): SC, KB, TC

Rosette Position	Desired Depth		15N2				
1	**125**		X				
2	**125**		X				
3	**125**		X				
4	**125**		X				
5	**100**		X				
6	**100**		X				
7	**100**		X				
8	**100**		X				
9	**75**		X				
10	**75**		X				
11	**75**		X				
12	**75**		X				
13	**45**		X				
14	**45**		X				
15	**45**		X				
16	**45**		X				
17	**25**		X				
18	**25**		X				
19	**25**		X				
20	**25**		X				
21	**5**		X				
22	**5**		X				
23	**5**		X				
24	**5**		X				

Notes:

Hawaiian Ocean Time-series

HOT- **197**

OPEN CAST Data Sheet

Station # 2 Date: 12-2-07 (HST)

Cast # 10 Time: 540 (HST)

Operator(s): Ah,bl,lf,bu

Rosette Position	Desired Depth	MR		CMORE	Ben		
1	**1000**	X					
2	**800**	X					
3	**770**			X			
4	**770**			X			
5	**770**			X			
6	**770**			X			
7	**770**			X			
8	**600**	X					
9	**Sal min**						
10	**400**	X					
11	**200**	X					
12	**175**	X					
13	**150**	X					
14	**125**	X					
15	**100**	X					
16	**100**				X		
17	**100**				X		
18	**75**	X					
19	**75**				X		
20	**75**				X		
21	**45**	X					
22	**45**				X		
23	**45**				X		
24	**10**	X					

Notes:

Hawaiian Ocean Time-series

HOT- **197**

Particulate Silica Data Sheet

Station # 2 Date: 12-2-07 (HST)

Cast # 11 Time: 0820 (HST)

Operator(s): AH,LF,BU Pre-screen mesh size: none

Blank # **B1,B2,B3**

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	MC	RF	DV
1	**1000**						
2	**Sal min**						
3	**175**	7	4	3			
4	**175**				X		
5	**150**	8	4	5			
6	**150**				X		
7	**125**	9,10	4,4	7A-B			
8	**125**				X		
9	**100**	11	4	9			
10	**100**				X		
11	**75**	12	4	11			
12	**75**				X		
13	**45**	13	4	13			
14	**45**				X		
15	**40**					X	
16	**25**	14,15	4,4	16A-B			
17	**25**				X		
18	**20**					X	
19	**5**	16	4	19			
20	**5**				X		
21	**5**					X	
22	**5**						X
23	**5**						X
24	**5**					X	

Notes:

Hawaiian Ocean Time-series

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MIT Data Sheet

Station # 2 Date: 12-2-07 (HST)

Cast # 12 Time: 10:45 (HST)

Operator(s): Ah,lf, bl,bu

Rosette Position	Desired Depth	MIT	**CMORE**	Ben			
1	**1000**						
2	**500**		X				
3	**500**		X				
4	**500**		X				
5	**500**		X				
6	**500**		X				
7	**Sal Min**						
8	**250**	1					
9	**225**	2					
10	**200**	3					
11	**175**	4					
12	**150**	5					
13	**125**	6					
14	**125**			X			
15	**125**			X			
16	**115**	7					
17	**100**	8					
18	**85**	9					
19	**75**	10					
20	**60**	11					
21	**45**	12					
22	**25**	13					
23	**5**	14					
24							

Notes:

Hawaiian Ocean Time-series

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ATP Data Sheet

Station # 2 Date: 12-2-07 (HST)

Cast # 13 Time: 14:50 (HST)

Operator(s): SC, KB, TC Pre-screen mesh size: 202um

Blank #'s 28, 29, 30

Rosette Position	Desired Depth	ATP Tube #'s	Volume Filtered	Carboy #	QUAY	MC	MR
1	**1000**						
2	**1000**						X
3	**1000**						X
4	**770**					X	
5	**Sal min**						
6	**500**					X	
7	**500**						X
8	**500**						X
9	**350**	1 - 3	3x2	1			
10	**300**				X		
11	**300**					X	
12	**250**	4 - 6	3x2	2			
13	**200**					X	
14	**200**				X		
15	**150**	7 - 9	3x1	7			
16	**150**				X		
17	**125**	10 - 12	3x1	8			
18	**125**				X		
19	**100**	13 - 15	3x1	9			
20	**100**				X		
21	**75**	16 - 18	3x1	10			
22	**45**	19 - 21	3x1	11			
23	**25**	22 - 24	3x1	12			
24	**5**	25 - 27	3x1	13			

Notes:

Hawaiian Ocean Time-series

HOT-**197**

Phycoerythrin Data Sheet

Station #	2	Date:	12-02-07 (HST)
Cast #	14	Time:	1730 (HST)
Operator(s):	SC, KB, TC	Pre-screen mesh size:	None

Rosette Position	Desired Depth	Carboy #	Total Volume	10um	5um	.4um	MC	qu ay
1	**1000**							
2	**Sal min**							
3	**175**	1	10	1	2	3		
4	**175**						X	
5	**150**	2	10	4	5	6		
6	**150**						X	
7	**125**	3	10	7	8	9		
8	**125**						X	
9	**100**	4	10	10	11	12		
10	**100**						X	
11	**75**	5	10	13	14	15		
12	**75**						X	
13	**75**							X
14	**60**	6	10	16	17	18		
15	**45**	7	10	19	20	21		
16	**45**							X
17	**45**						X	
18	**35**	8	10	22	23	24		
19	**35**	9	10	25	26	27		
20	**25**	10	10	28	29	30		
21	**25**						X	X
22	**15**	11	10	31	32	33		
23	**5**						X	X
24	**5**	12	10	34	35	36		
Blanks				37	38	39		

Notes:

Hawaiian Ocean Time-series

HOT-**197**

PUR Data Sheet

Station # 2 Date: 12-02-07 (HST)

Cast # 15 Time: 2037 (HST)

Operator(s): SC, KB, TC

Rosette Position	Desired Depth	Carboy #	Total Volume	PUR	CMORE			
1	**1000**							
2	**1000**				X			
3	**1000**				X			
4	**1000**				X			
5	**1000**				X			
6	**1000**				X			
7	**Sal min**							
8	**200**				X			
9	**200**				X			
10	**200**				X			
11	**200**				X			
12	**200**				X			
13	**175**	1	10	13				
14	**150**	2	10	14				
15	**135**	7	4	15				
16	**125**	8,9	4,4	16A-B				
17	**115**	10	4	17				
18	**100**	11	4	18				
19	**85**	12	4	19				
20	**75**	13	4	20				
21	**60**	14	4	21				
22	**45**	15,16	4,4	22A-B				
23	**25**	3	10	23				
24	**5**	4	10	24				

Notes: Sample # 10, 13, 14, 15 filters busted.

Hawaiian Ocean Time-series

HOT-**197**

WOCE Deep 2 Data Sheet

Station # 2 Date: 12-02-07 (HST)

Cast # 16 Time: 0:15 (HST)

Operator(s): SC, KB, TC

Rosette Position	Desired Depth	Oxygen	Sample Temp.	MC	MR			
1	**4800**	109						
2	**4000**	110						
3	**4000**			X				
4	**4000**				X			
5	**3000**	111						
6	**3000**			X				
7	**3000**				X			
8	**2000**	112						
9	**2000**			X				
10	**2000**				X			
11	**1000**			X				
12	**1000**				X			
13	**800**				X			
14	**O2 min**	113						
15	**600**				X			
16	**Sal min**	114						
17	**400**				X			
18	**175**				X			
19	**125**				X			
20	**100**				X			
21	**O2 max**	115						
22	**75**				X			
23	**10**				X			
24	**5**	116						

Notes:

Hawaiian Ocean Time-series

HOT- **197**

STATION 52 Data Sheet

Station # 52 Date: 12-3-07 (HST)

Cast # 1 Time: 9:10 (HST)

Operator(s): Ah,lf,bu

Rosette Position	Desired Depth	RF	SS	KB	SW	BL
1	**1000**		X			
2	**1000**		X			
3	**1000**		X			
4	**1000**		X			
5	**1000**		X			
6	**1000**		X			
7	**45**					
8	**45**				X	
9	**45**				X	
10	**30**			X		
11	**20**				X	
12	**20**				X	
13	**20**				X	
14	**15**					X
15	**15**					X
16	**15**					X
17	**15**					X
18	**15**					X
19	**15**					X
20	**10**	X				
21	**10**	X				
22	**10**	X				
23	**10**	X				
24	**10**	X				

Notes:

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STATION 52 Data Sheet

Station # 52 Date: 12-3-07 (HST)

Cast # 2 Time: 1400 (HST)

Operator(s): Ah,lf,bu

Rosette Position	Desired Depth	RF	JE			
1	**200**					
2	**75**	X				
3	**45**	X				
4	**40**	X				
5	**25**	X				
6	**20**	X				
7	**15**		X			
8	**15**		X			
9	**15**		X			
10	**15**		X			
11	**15**		X			
12	**15**		X			
13	**5**	X				
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Notes:

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KAENA Data Sheet

Station # 6 Date: 12-03-07 (HST)
Cast # 1 Time: 2115 (HST)
Operator(s): SC, KB, TC

Rosette Position	Desired Depth	Chl *a*.						
1	**2500**							
2	**2000**							
3	**1500**							
4	**1000**							
5	**500**							
6	**175**	6						
7	**150**	7						
8	**125**	8						
9	**100**	9						
10	**75**	10						
11	**45**	11						
12	**25**	12						
13	**5**	13						
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Notes:

Hawaiian Ocean Time-series

HOT-197 ____

Sediment Trap Data Sheet

Type of traps:	PIT	Date:	11-30-07
Operator(s):	SC, KB,TC, BW	Wind:	17.5 kts, 2220 true dir.
Position in:	22 44.841 N 158 2.375 W	Sea State:	

Time in: (HST)

150 m	X LIVE	
	X DEAD	
300 m		
500 m		

Notes: 11:50pm traps in water
00:02 am 12-01-07 array released

Operator(s):	AH,LF,BW,BU	Date:	12-3-07
Position out:	22 48.570 N 158 10.772	Wind:	5-10 knots
Overall sea state:	15-20FT	Sea state:	

Time out: (HST)

150 m	06:00
300 m	
500 m	

Notes:

General processing procedure:

1) Cap traps immediately upon retrieval.
2) Mark interface and 2 inches above.
3) Remove baffles.
4) Aspirate overlying sea water to 2 inch interface mark.
5) Prescreen all traps at a given depth through a single screen and save screened material in trap blank solution.
6) Pour the contents of 9 individual screened traps into separate filtration bottles (do not combine trap solutions) marked A-I.
7) Pour the contents of 3 screened traps back into respective traps (do not combine trap solutions) for mass flux analysis (J,K,L).
8) Filter 3 two liter and 3 one liter time zero blanks for PC/PN & PPO_4 respectively.
9) Filter 6 individual traps for PC/PN (A-F) and 3 for PPO_4 (G-I).

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In Situ Primary Production Data Sheet

Operator(s): AH,LF,BW,BU

Date in: 12-01-07 Time in: 05:20 (HST)

Date out: 12-01-07 Time out: 1817 (HST)

Incubation Depth	✓	Insertion Depth	Owner
175			
150			
125	X		
100	X		
75	X		
45	X		
25	X		
5	X		

Position in: 22 46.015 N 157 59.997 W

Position out: 22 48.316N 158 0.654 W

Average weather condition during incubation:

Average sea state during incubation:

Notes:

Begin Inoculation _____ End Inoculation _____

Filtration time _____

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In Situ Gas Array Data Sheet

Operator(s): AH,LF,BW,BU

Date in: 12-2-07

Time in: 05:15 (HST)

Position in: 22 46.065 N 158 0.253 W

Notes:

Operator(s): AH,LF,BW,BU

Date out: 12-3-07

Time out: 0705 (HST)

Position out: 22 46.065 N 158 0.253 W

Notes: