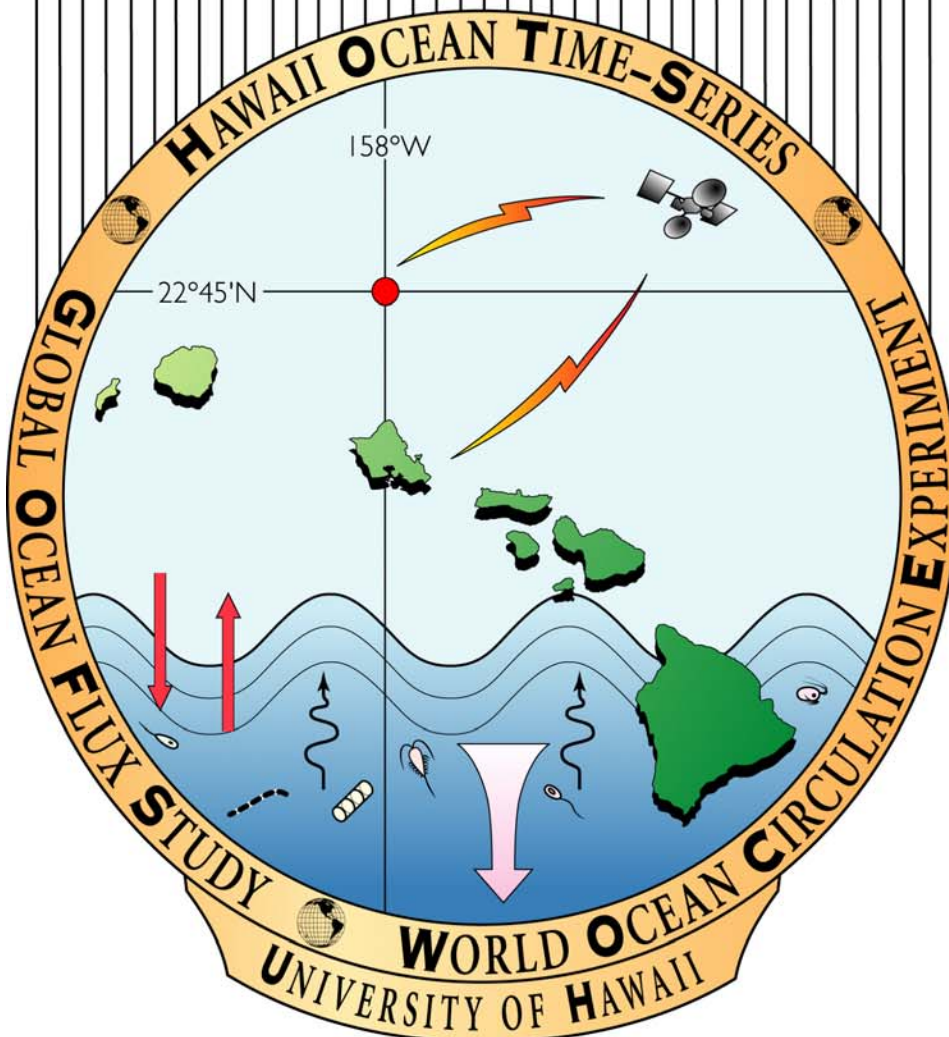


Hawaii Ocean Time-series Program

HOT-202



Hawaiian Ocean Time-Series

HOT-202

KAHE Station Data Sheet

Station # 1
 Cast # 1
 Operator(s): Ah,lf,eg,jw

Date: 6/24/08 (HST)
 Time: 13:10 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nuts	DIC/Alk	pH	DOC	LLN/LLP	Chl <i>a</i>	FCM
1	1000	1	6.0	1						
2	900	2	7.4	2						
3	800	3	7.6	3						
4	750	99,5,100	8.5	4A-B						
5	700	7	8.2	5						
6	600	8	8.6	6						
7	500	9	9.5	7			7			
8	400	10	11.1	8						
9	350	11	12.1	9A-B			9			
10	300	12	13.2	10						
11	250	13	15.1	11						
12	225	14	16.3	12						
13	200	15	17.4	13			13			
14	175	16	18.7	14			14		14	14A-B
15	150	17	20.6	15			15	15	15	15A-B
16	125	18	21.1	16A-B			16		16	16A-B
17	115	19	21.9	17						
18	100	20,21,22	22.1	18			18	18	18A-B	18A-B
19	75	23	23.8	19			19		19	19A-B
20	60	24	24.5	20						
21	45	25	23.2	21	21	1	21	21	21	21A-B
22	25	26	24.1	22	22	2	22		22A-B	22A-B
23	5	27	24.5	23	23	3	23	23	23	23A-B
24	5	QC	24.3							

**Notes: KA sample at 750, 25, 5
 JB piggy back Oxygen/DIC depths**

Hawaiian Ocean Time-series

HOT- 202

OPEN CAST Data Sheet

Station # 2
 Cast # 1
 Operator(s): SC, DS, BU, JW, JY

Date: 06-25-08 (HST)
 Time: 0012 (HST)

Rosette Position	Desired Depth	JW		CMORE			
1	350	X					
2	350	X					
3	350	X					
4	350	X					
5	75			X			
6	75			X			
7	75			X			
8	75			X			
9	75			X			
10	45			X			
11	45			X			
12	45			X			
13	45			X			
14	45			X			
15	30	X					
16	30	X					
17	30	X					
18	30	X					
19	30	X					
20	25			X			
21	25			X			
22	25			X			
23	25			X			
24	25			X			

Notes:

Hawaiian Ocean Time-series

HOT-202

Primary Production Data Sheet

Station # 2
 Cast # 2
 Operator(s): SC, DS, DV

Date: 06-25-08 (HST)
 Time: 0130 (HST)

Rosette Position	Desired Depth	Light Bottle	Chl <i>a</i>	FCM		MB	SW	
1	1000							
2	Sal min							
3	175		3A-B	3A-B		X		
4	150		4A-B	4A-B		X		
5	125	3-1	5	5		X		
6	125	3-2	6	6				
7	125	3-3	7	7				
8	125						X	
9	100	4-1	9	9		X		
10	100	4-2	10	10				
11	100	4-3	11	11				
12	75	5-1	12	12		X		
13	75	5-2	13	13				
14	75	5-3	14	14				
15	45	6-1	15	15		X		
16	45	6-2	16	16				
17	45	6-3	17	17				
18	25	7-1	18	18		X		
19	25	7-2	19	19				
20	25	7-3	20	20				
21	25						x	
22	5	8-1	22	22				
23	5	8-2	23	23				
24	5	8-3	24	24				

Notes: MB will piggy back on all the PP depths. PLEASE SAMPLE PP FIRST and CONSERVE the WATER.

Hawaiian Ocean Time-series

HOT-202

WOCE Deep Data Sheet

Station # 2
 Cast # 3
 Operator(s): AH,LF,JW,EG

Date: 6/25/08 (HST)
 Time: 0500 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nutrient	Refridg. Si	DOC	DIC/Alk	pH	
1	4800	28	4.0	1	1				
2	4600	29	3.8	2	2				
3	4500	30,33, 32	4.0	3A-B	3A-B	3A-B	3A-B	3A-B-C	
4	4400	31	3.7	4	4				
5	4200	34	3.5	5	5				
6	4000	35,36, 37	4.1	6A-B	6A-B	6A-B			
7	3800	38	3.6	7	7				
8	3600	39	3.8	8	8				
9	3400	40	4.4	9	9				
10	3200	41	4.4	10	10				
11	3000	42,43 44	5.4	11A-B	11A-B	11A-B	11	11	
12	2800	45	5.1	12	12				
13	2600	46	5.1	13	13				
14	2400	47	5.2	14	14				
15	2200	48	5.5	15	15				
16	2000	49,50, 51	6.2	16A-B	16A-B	16A-B	16	16	
17	1800	142	5.5	17	17				
18	1600	53	5.7	18	18				
19	1400	54	6.2	19	19				
20	1200	55	6.5	20	20				
21	1000	56	7.2	21					
22	750	57	7.6	22					
23	500	58	9.9	23					
24	5	59	24.5	24					

Notes: JB piggy back all Oxygen/DIC depths

Hawaiian Ocean Time-series

HOT-202

PO Shallow Data Sheet

Station # 2
 Cast # 4
 Operator(s): Ah,lf,eg,jw

Date: 6/25/08 (HST)
 Time: 1120 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nutrient	Refridg Si	DIC/ Alk	pH	DOC	JB
1	1020	60,61, 62	7.3	1A-B	1A-B	1	1	1	X
2	962	63	70.0	2	2				
3	902	64	70.0	3	3				
4	841	65	7.1	4	4				
5	800	66	7.1	5	5				
6	750	67,68, 69	8.3	6	6	6	6	6	X
7	691	70	7.7	7	7				
8	639	71	7.8	8	8				
9	607	72	8.4	9	9	9	9	9	X
10	575	73	8.5	10	10				
11	515	74	9.0	11A-B	11A-B				
12	480	75	10.0	12	12	12	12	12	x
13	421	76,77, 78	11.6	13	13				
14	488	79	11.7	14	14				
15	355	80	12.3	15	15	15A-B	15A-B	15	X
16	296	81	13.7	16	16				
17	264	82	15.0	17	17	17	17	17	X
18	231	83,84, 85	16.8	18	18				
19	187	86	19.2	19	19				X
20	135	87	21.7	20A-B					X
21	102	88	22.8	21					
22	80	89	23.6	22					
23	65	90	24.5	23					
24	5	91	25.1	24					

Notes: JB piggy back all oxygen/DIC depths

Hawaiian Ocean Time-series

HOT- 202

PC/PN Data Sheet

Station # 2 Date: 6/26/08 (HST)
 Cast # 5 Time: 1400 (HST)
 Operator(s): Ah,lf,eg,jw, DS,DV,SC Pre-screen mesh size: 202 um
 Blank #'s B1 B2 B3

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	SW		
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	200				X		
8	175	5	10	8			
9	175				X		
10	150	6	10	10			
11	150				X		
12	130				X		
13	125	7,8	4,4	13A-B			
14	125				X		
15	100	9	4	15			
16	100				X		
17	75	10	4	17			
18	75				X		
19	45	11	4	19			
20	45				X		
21	25	12,13	4,4	21A-B			
22	25				X		
23	5	14	4	23			
24	5				X		

Notes:

Hawaiian Ocean Time-series

HOT- 202

Particulate Phosphorus Data Sheet

Station # 2 Date: 06-25-08 (HST)
 Cast # 6 Time: 1700 (HST)
 Operator(s): SC, DV, DS Pre-screen mesh size: 202 um
 Blank #'s B1 B2 B3

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #	BL	DV	
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	150				X		
10	DCM				X		
11	DCM					X	
12	125	7,8	4,4	12A-B			
13	125				X		
14	100	9	4	14			
15	100				X		
16	75	10	4	16			
17	75				X		
18	45	11	4	18			
19	45				X		
20	25	12,13	4,4	20A-B			
21	25				X		
22	5	14	4	22			
23	5				X		
24	5					X	

Notes: DV, 1@5m and one at DCM =125m

Hawaiian Ocean Time-series

HOT-202

BEACH Shallow Data Sheet

Station # 2
 Cast # 7
 Operator(s): SC, DS, DV

Date: 06-25-08 (HST)
 Time: 2000 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nutrient	Refridg. Si	DOC	LLN	LLP/LLSi
1	1000	92	8.7					
2	O ₂ min	93	9.0					
3	Sal min	94	11.0					
4	200	95	19.1	4	4	4		
5	175	96	19.8	5		5	5	5
6	165	97	20.3				6	
7	150	98	21.1	7		7	7A-B	7
8	130						8	
9	125	99	22.3	9A-B		9	9	9
10	115	100	22.6				10	10
11	110						11	
12	100	101,102, 103	23.1	12		12	12A-B	12
13	90						13	
14	85	104	23.7				14	14
15	75	105	24.5	15		15	15	15
16	60			16		16	16	16
17	45	106	24.8	17A-B		17	17	17
18	35			18		18	18	
19	25	107	25.0	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: JB piggy back all oxygen/DIC depths

Hawaiian Ocean Time-series

HOT-202

BEACH Carbon Data Sheet

Station # 2
 Cast # 7
 Operator(s): SC, DS, DV

Date: 06-25-08 (HST)
 Time: 2000 (HST)

Rosette Position	Desired Depth	DIC/ALK	pH	Quay DIC	Keeling DIC			
1	1000							
2	O ₂ min							
3	Sal min							
4	200	4	1	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	7,8					
23	5			23	23A-B			
24								

Notes: JB piggy back all oxygen/DIC depths
Keeling: 20a=2201, 20b=2203
23a=2201, 23b=2203

Hawaiian Ocean Time-series

HOT-202

PUR Data Sheet

Station # 2
 Cast # 8
 Operator(s): SC, DS, DV

Date: 06-25-08 (HST)
 Time: 2300 (HST)

Rosette Position	Desired Depth	Carboy #	Total Volume	PUR	CMORE			
1	1000				X			
2	1000				X			
3	1000				X			
4	1000				X			
5	1000				X			
6	770				X			
7	770				X			
8	770				X			
9	770				X			
10	770				X			
11	Sal min							
12	500				X			
13	500				X			
14	500				X			
15	500				X			
16	500				X			
17	175	1	10	17				
18	150	2	10	18				
19	125	7,8	4,4	19A-B				
20	100	9	4	20				
21	75	10	4	21				
22	45	11,12	4,4	22A-B				
23	25	3	10	23				
24	5	4	10	24				

Notes: Carboy #4 – tricho puffs on filter

Hawaiian Ocean Time-series

HOT- 202

Gas Array Experiment Data Sheet

Station # 2
 Cast # 9
 Operator(s): SC, DS

Date: 06-26-08 (HST)
 Time: 0200 (HST)

Rosette Position	Desired Depth		15N2	MB			
1	175			X			
2	150			X			
3	125		X				
4	125		X				
5	125			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- 202

OPEN CAST Data Sheet

Station # 2
 Cast # 10
 Operator(s): Ah,eg,lf,jw

Date: 6/26/08 (HST)
 Time: 0500 (HST)

Rosette Position	Desired Depth		CMORE	SW	JB	DV	
1	1000				X		
2	900				X		
3	650				X		
4	Sal min				x		
5	450				X		
6	400				X		
7	300				X		
8	225			X	X		
9	200		X				
10	200		X				
11	200		X				
12	200		X				
13	200		X				
14	150			X			
15	125		X				
16	125		X				
17	125		X				
18	125		X				
19	125		X	X			
20	100			X			
21	75			X			
22	45			X			
23	25			X			
24	5			X		X	

Notes: SW pb on JB's 225, Brett's 125m, and DV's 5m

Hawaiian Ocean Time-series

HOT- 202

Particulate Silica Data Sheet

Station # 2 Date: 6/26/08 (HST)
 Cast # 11 Time: 0800 (HST)
 Operator(s): Ah,lf,eg,jw Pre-screen mesh size: none
 Blank # **B1,B2,B3**

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

Notes: SW(pb) MC 150,175; KA pb MC depths

Hawaiian Ocean Time-series

HOT- 202

MIT Data Sheet

Station # 2
 Cast # 12
 Operator(s): Ah,lf,eg,jw

Date: 6/26/08 (HST)
 Time: 1100 (HST)

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

Notes:

Hawaiian Ocean Time-series

HOT- 202

ATP Data Sheet

Station # 2 Date: 6/26/08 (HST)
 Cast # 13 Time: 1400 (HST)
 Operator(s): Ah lf eg, jw Pre-screen mesh size: 202um
 Blank #'s 28, 29, 30

Rosette Position	Desired Depth	ATP Tube #'s	Volume Filtered	Carboy #	SW	MC	
1	1000						
2	1000				X		
3	900				X		
4	800				X		
5	770					X	
6	700				X		
7	600				X		
8	500					X	
9	500				X		
10	Sal min						
11	400				X		
12	350	1 - 3	3x2	1			
13	300					X	
14	250	4 - 6	3x2	2			
15	200				X		
16	200					X	
17	200				X		
18	150	7 - 9	3x1	7			
19	125	10 - 12	3x1	8			
20	100	13 - 15	3x1	9			
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: Sample #24 –filter went dry

Hawaiian Ocean Time-series

HOT-202

Phycoerythrin Data Sheet

Station # 2 Date: 06-26-08 (HST)
 Cast # 14 Time: 1659 (HST)
 Operator(s): SC, DS, DV Pre-screen mesh size: None

Rosette Position	Desired Depth	Carboy #	Total Volume	10um	5um	.4um	MC	SW
1	1000							
2	Sal min							
3	175	1	10	1	2	3		
4	175						X	X
5	150	2	10	4	5	6		
6	150						X	X
7	125	3	10	7	8	9		
8	125						X	X
9	100	4	10	10	11	12		
10	100						X	X
11	75	5	10	13	14	15		
12	75						X	X
13	75							
14	60	6	10	16	17	18		
15	45	7	10	19	20	21		
16	45						X	X
17	45							
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	12	10	34	35	36		
24	5						X	X
Blanks				37	38	39		

Notes: SW (pb MC)

-TRICHO TUFTS AND PUFFS ON ALMOST ALL 10um filters

Hawaiian Ocean Time-series

HOT-202

HPLC & Chl *a.* Bottle Data Sheet

Station # 2
 Cast # 15
 Operator(s): SC, DV, DS

Date: 06-26-08 (HST)
 Time: 2000 (HST)

Rosette Position	Desired Depth	Carboy #	Total Volume	HPLC	Chl <i>a.</i>	SW	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	125					X	
11	115	10	4	11	11		
12	100	11	4	12	12		
13	100						BW
14	85	12	4	14	14		
15	75	13	4	15	15		
16	75						BW
17	60	14	4	17	17A-B		
18	45	15,16	4,4	18A-B	18		
19	45						BW
20	25	3	10	20	20		
21	25						BW
22	5					X	
23	5	4	10	23	23		
24	5						BW

Notes: DO NOT PRE-SCREEN,

Hawaiian Ocean Time-series

HOT-202

WOCE Deep 2 Data Sheet

Station # 2
 Cast # 16
 Operator(s): AH,JW,BU

Date: 6/27/08 (HST)
 Time: 21:26 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	MC	JW	JB	DV	
1	4800	109	4.6					
2	4700					X		
3	4400					X		
4	4000	110	4.7					
5	4000			X				
6	4000				X			
7	3000	111	4.8					
8	3000			X				
9	2000	112	5.5					
10	2000			X				
11	2000					X		
12	1800					X		
13	1600					X		
14	1400					X		
15	1200					X		
16	1100					X		
17	1000					X		
18	1000			X				
19	O2 min	113	7.5					
20	Sal min	114	9.7					
21	400						X	
22	330						X	
23	O2 max	115	24.0					
24	5	116	25.0					

Notes: JB piggy back oxygen depths

400=FUNNY OXYGEN BLIP IN TRACE PLEASE*

Hawaiian Ocean Time-series

HOT-202

KAENA Data Sheet

Station # 6
 Cast # 1
 Operator(s): SC, DS

Date: 06-27-08 (HST)
 Time: 2120 (HST)

Rosette Position	Desired Depth	Chl <i>a.</i>						
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- 202

STATION 50 Data Sheet

Station # 50
 Cast # 1
 Operator(s): AH,LF,EG,JW

Date: 6-27-08 (HST)
 Time: 1000 (HST)

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

Notes:

Hawaiian Ocean Time-series

HOT- 202

STATION 50 Data Sheet

Station # 50
 Cast # 2
 Operator(s): AH,LF,EG,JW

Date: 6-27-08 (HST)
 Time: 1400 (HST)

Rosette Position	Desired Depth	BC (UCSD)	SW			
1	200					
2	DCM	X				
3	70	X				
4	60		x			
5	50		X			
6	40	X				
7	40		X			
8	30		x			
9	20		X			
10	15	X				
11	10		X			
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Notes:

Hawaiian Ocean Time-series

HOT-202

Sediment Trap Data Sheet

Type of traps: <u>PIT</u>	Date: <u>06-24-08</u>
Operator(s): <u>DS, BU, BW, SC</u>	Wind: _____
Position in: <u>22°46.65'N 158°0.013'W</u>	Sea State: _____

Time in: 150 m <u>X LIVE</u>	Notes: 2337 TRAPS IN WATER
(HST)	2345 Array released

300 m _____	
500 m _____	

Operator(s): <u>BW, JW, EG, AH</u>	Date: <u>06-27-08</u>
Position out: <u>22°59.072'N 158°11.403'W</u>	Wind: _____
Overall sea state: _____	Sea state: _____

Time out: 150 m <u>06:30</u>	Notes:
(HST)	
300 m _____	
500 m _____	

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 & PPO₄ respectively.
- 9) Filter 6 individual traps for PC/PN (A-F) and 3 for PPO₄ (G-I).

Hawaiian Ocean Time-series HOT- 202 In Situ Primary Production Data Sheet

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

Date in: 6/25/08

Time in: 0417 (HST)

Date out: 06-25-08

Time out: 1925 (HST)

Incubation Depth	✓
175	
150	
125	
100	
75	
45	
25	
5	

Insertion Depth	Owner
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Position in: 22 46.185 157 59.920

Position out: 22 51.048'N 158 2.015'W

Average weather condition during incubation: cloudy, east wind

Average sea state during incubation: 5-7ft seas

Notes:

Begin Inoculation _____
Filtration time _____

End Inoculation _____

**Hawaiian Ocean Time-series
HOT-202
In Situ Gas Array Data Sheet**

Operator(s): ah,lf,eg,bw,bu,jw

Date in 6/26/08

Time in 04:30

Position in: 22° 46.094 N 157° 59.911 W

Notes:

Operator(s): ah, bw, jw, lf, eg

Date out: 6/27/08

Time out: 0800

Position out: 22°55.506'N 158°4.764'W

Notes: