

☐ Temperature of incubator (in)☐ Temperature of incubator (out)**FIELD EQUIPMENT VERIFICATION (PRE/POST A WEEKLY SAMPLING):**

Session No:	Verifiers:	Pre date:	Pre time:	Post Date:	Post time:
14	Sofia / George	05/14/19	9:20	05/18/18	11:00

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value		POST: Verification Value		Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature			n/a	Std	21.2	21.0	28.7		$\pm 1^{\circ}\text{C}$ of NIST	Within 1°C	
	2	1	n/a			21.2					
	2	2	n/a		21.5		28.8				
Salinity				Std	0.13	33.0	0.13	33.1	$\pm 3\%$, blank	33.95 – 36.05	
	2	1	3/19/18		0.12	33.5					
	2	2	3/19/18		0.12	33.2	0.13	33.1			
Dissolved Oxygen				Std	100%		100%		Post-check $\pm 5\%$ of pre-check (0-100%)	80 – 120 %	
	2	1	9/19/17		99.8						
	2	2	9/19/17		100.4		99.2				
pH				Std	7.00	10.01	7.00	10.01	$\pm 3\%$ of calibration solution (6-8)	6.79 – 7.21	
	2	1	4/30/18		7.03	10.07					
	2	2	4/30/18		7.03	10.07	7.03	10.07			

QA: * Are pre- and post within one week?
 * Delay times are ok?
 * Other equipment issues?

Team	Kamaole	Samplers (Last Name, 1st Initial)	SCOTT GRAYES MITCH BROWN DANNA HOWARD	Meters and Probes ID		
Session	14			HQ40d: 2		2100Q: 2
Date	05/15/18			pH: 2	DO: 2	Salinity: 2

Location Name Sample ID	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			Waves (0-3)	Wind (0-6)	People (within 100 ft)			TSS	Nutrient duplicate
				(mg/L)	(%)							water	beach	camp		
Waipuilani Park KWP180515	7:45	24.3	33	5.93	85.5	8.01	5.90	5.42	5.29	1	1	5	5	6	<input type="checkbox"/>	<input type="checkbox"/>
Kihei South KKS180515	8:07	25.5	32.3	5.43	87.5	8.08	5.57	5.56	6.20	0	1	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalama Park KKP180515	8:27	25.4	34.2	6.85	101.3	8.15	5.29	5.64	6.05	1	0	3	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Cove Park KCP180515	8:44	26.0	32.0	7.01	103.4	8.15	2.03	1.99	2.22	1	3	1*	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole I KKO180515	9:00	26.2	33.8	6.66	99.7	8.17	0.72	1.50	.92	2	3	15	20	0	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole III KKT180515	9:23	25.6	34.3	6.70	99.5	8.16	.87	1.65	1.11	2+	4	12	30	0	<input type="checkbox"/>	<input type="checkbox"/>

Waves: 0ft: no waves; 1ft: small waves; 2ft: knee high; 3ft: waist high
Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL CONDITIONS	
Most recent tide time (falling or rising)	Low: 3:34 am High: 9:24 am (falling)
Moon day (from new)	1
Cloud cover (0-8)	2+
Rain conditions (last 24 hrs)	0
Wind direction (Trades/Kona)	Trade 1 mph
Streams flowing? (Y/N)	N

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.
* dozens "outside" @ cove [2 Attempts made on pre-sample of the blank KAMAOLE WAVE 0.11 AND 0.13, BLACK CLOTH NOT USED]

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.05	5.91	54.5	577
Pre-sampling	0.13	5.92	54.7	576
Post-sampling	0.04	5.94	54.5	575

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	0		
Nutrients	6	NAS	George Bennet
Bacteria	0		

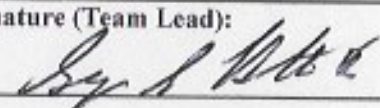
Signature (Team Lead):	Printed Name:
<i>Scott Grayes</i>	George G. Bennet

Team	Kamaole	Samplers (Last Name, 1st Initial)	GRAVE, S Brown, M HOLMAN, D
Session	14		
Date	05/15/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KWP180515-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS180515-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:07	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP180515-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:27	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP180515-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:44	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKO180515-N-1	Kamaole I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKT180515-N-1	Kamaole III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:23	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Sediments							
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):

Printed Name:


 GEORGE C. BROWN

Team	Makena	Samplers (Last Name, 1st Initial) <i>Lowder, L. Dunning, J. Burnette, G.</i>	Meters and Probes ID		
Session	14		HQ40d: 2	2100Q: 2	
Date	05/16/18		pH: 2	DO: 2	Salinity: 2

Location Name Sample ID	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			Waves (0-3)	Wind (0-6)	People (within 100 ft)			TSS	Nutrient duplicate
				(mg/L)	(%)							water	beach	camp		
Makena Landing MML180516	0750	25.2	33.9	6.82	100.2	8.15	2.30	4.84	3.92	1	0	5	1	0	<input type="checkbox"/>	<input type="checkbox"/>
S Maluaka Beach MMB180516	0820	25.6	34.1	6.57	87.4	8.14	1.01	1.14	1.15	1	0	0	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Oneuli MON180516	0840	26.1	34.0	6.43	96.0	8.09	1.66	1.95	2.06	1	1	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Makena Beach MBS180516	0911	NOT SAMPLED DUE TO HIGH SHORE BREAK				8.14	1.80	3.09	2.15	3+					<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau North MAN180516	0926	26.0	34.7	7.41	111.1	8.14	1.80	3.09	2.15	1	1	3	5	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau South MAS180516	0946	26.5	33.8	6.46	97.2	8.05	1.48	1.72	1.78	0	1	2	12	0	<input type="checkbox"/>	<input type="checkbox"/>

Waves: 0ft: no waves; 1ft: small waves; 2ft: knee high; 3ft: waist high
Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL CONDITIONS	
Most recent tide time (falling or rising)	Low: 4:07 am High: 9:58 am (falling)
Moon day (from new)	2
Cloud cover (0-8)	6
Rain conditions (last 24 hrs)	TRADES
Wind direction (Trades/Kona)	K/A
Streams flowing? (Y/N)	

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.04	5.91	54.5	577
Pre-sampling	0.04	5.91	54.8	576
Post-sampling	0.03	5.88	54.7	575

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	0		
Nutrients	5	MAS	GEORGE BURNETTE
Bacteria	0		

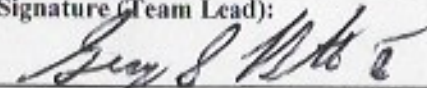
Signature (Team Lead):	Printed Name:
<i>George Burnette</i>	GEORGE B. BURNETTE

Team	Makena	Samplers (Last Name, 1st Initial)	LOWEN, L BURNETT, G DUNN, J
Session	14		
Date	05/16/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
MML180516-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0750	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB180516-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0820	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MON180516-N-1	Oneuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0840	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MBS180516-N-1	Makena Beach Shoreline	<input type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	SAMPLE NOT TAKEN HIGH STONE BREAK
MAN180516-N-1	Ahihi-Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0926	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS180516-N-1	Ahihi-Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0946	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Sediments							
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):

Printed Name:


 GEORGE C. BURNETT

Team	North Kihei	Samplers (Last Name, 1st Initial) <i>Riley, R</i> <i>Thornholme</i>	Meters and Probes ID		
Session	14		HQ40d: 2	2100Q: 2	
Date	05/17/2018		pH: 2	DO: 2	Salinity: 2

Location Name Sample ID	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			Waves (0-3)	Wind (0-6)	People (within 100 ft)			TSS	Nutrient duplicate
				(mg/L)	(%)							water	beach	camp		
Haycraft Park NHP180517	8:15	25.5	34.1	6.69	98.7	8.13	4.92	5.66	5.07	1	1	0	6	0	<input type="checkbox"/>	<input type="checkbox"/>
Kealia Pond NKP180517	8:45	25.7	35.2	6.74	100	8.20	2.16	2.05	1.69	1	2	0	6	0	<input type="checkbox"/>	<input type="checkbox"/>
Sugar Beach NSB180517	9:03	26.1	34.7	6.75	101.1	8.17	2.97	4.88	4.13	1	1	0	9	0	<input type="checkbox"/>	<input type="checkbox"/>
Kihei Canoe Club NKC180517	9:20	26.4	34.0	6.71	100.8	8.13	2.67	4.02	3.17	1	0	0	5	0	<input type="checkbox"/>	<input type="checkbox"/>
Mai Poina Oe Iau NMP180517	9:35	26.7	32.0	6.71	100.2	8.10	3.92	4.78	5.00	1	0	2	8	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalepolepo North NKN180517	9:56	26.6	29.5	6.73 7.95	98.7	8.22 8.22	4.05	4.17	4.34	1	0	0	1	0	<input type="checkbox"/>	<input type="checkbox"/>

Waves: 0ft: no waves; 1ft: small waves; 2ft: knee high; 3ft: waist high
Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL CONDITIONS	
Most recent tide time (falling or rising)	Low: 10:34 am High: 4:40 am (F)
Moon day (from new)	4
Cloud cover (0-8)	6
Rain conditions (last 24 hrs)	0
Wind direction (Trades/Kona)	T
Streams flowing? (Y/N)	N

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.03	5.91	54.5	577
Pre-sampling	0.03	5.79	54.7	576
Post-sampling	0.04	5.87	54.8	575

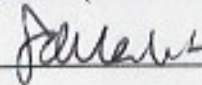
CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	NMS	Sofia
Bacteria	-	-	-

Signature (Team Lead): <i>Jallen H</i>	Printed Name: Sofia de la Sota
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Team	North Kihei	Samplers (Last Name, 1st Initial)	Riley Thunholm
Session	14		
Date	05/17/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NHP180517-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP180517-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NSB180517-N-1	Sugar Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:03	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC180517-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMP180517-N-1	Mai Poina Oe Iau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKN180517-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:56	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Sediments							
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):



Printed Name:

Riley Thunholm

Team	Wailea	Samplers (Last Name, 1st Initial)	Holly, Sofia, Jady, Seraph Hindge Jamie D'Amata wolf, A	Meters and Probes ID		
Session	14			HQ40d: 2		2100Q: 2
Date	05/018/18			pH: 2	DO: 2	Salinity: 2

Location Name Sample ID	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			Waves (0-3)	Wind (0-6)	People (within 100 ft)			TSS	Nutrient duplicate
				(mg/L)	(%)							water	beach	camp		
Kilohana Dr WKD180518	8:10	25.7	35.1	6.60	98.4	8.15	0.84	0.59	0.43	1	1	2	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Keawakapu Beach WKB180518	8:30	25.9	35.1	6.73	100.6	8.19	0.29	0.24	0.27	1	1	8	15	0	<input type="checkbox"/>	<input type="checkbox"/>
Ulua Beach WUL180518	8:55	26.3	34.3	6.76	101.3	8.14	1.20	1.13	1.13	1	1	3	35	0	<input type="checkbox"/>	<input type="checkbox"/>
Wailea Beach WWA180518	9:21	26.4	34.6	6.76	101.7	8.18	0.47	0.59	0.42	1	1	5	14	0	<input type="checkbox"/>	<input type="checkbox"/>
Palauea WPL180518	9:41	26.6	34.8	6.74	101.8	8.20	1.10	1.80	1.14	1	2	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Poolenalena WPO180518	10:01	26.5	34.8	6.71	101.4	8.22	0.66	0.74	0.99	2	2	2	15	0	<input type="checkbox"/>	<input type="checkbox"/>

Waves: 0ft: no waves; 1ft: small waves; 2ft: knee high; 3ft: waist high
Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL CONDITIONS	
Most recent tide time (falling or rising)	Low: 11:13 am High: 5:15 am (F)
Moon day (from new)	5
Cloud cover (0-8)	4
Rain conditions in last 24 hrs (0-4)	0
Wind direction (Trades/Kona)	no wind
Streams flowing? (Y/N)	no

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.
WWA leaf in sample bucket

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.04	5.91	54.5	577
Pre-sampling	0.05	5.94	54.7	57.6
Post-sampling	0.03	5.87	54.8	57.4

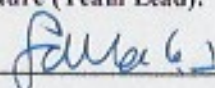
CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	NMS	Sofia
Bacteria	-	-	-

Signature (Team Lead): Jady	Printed Name: Sofia de la Sota
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Team	Wailea	Samplers (Last Name, 1st Initial)	Hindase D'Alester wolf	Jarvic
Session	14			
Date	05/18/2018			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD180518-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB180518-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL180518-N-1	Ulua Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WWA180518-N-1	Wailea Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:21	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPL180518-N-1	Palauca	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:41	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPO180518-N-1	Poolenalena	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Sediments							
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):



Printed Name:

Vofia de la Fita