

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

Hui O Ka Wai Ola

Session No:	Verifiers:	Pre date:	Pre time:	Post Date:	Post time:
11	2 BURGER L. OTAW	4/2/18	9:20	4/6/18	12:10

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	(Probe 1) 23.0	(Probe 2) 22.7	26.6		± 1°C of NIST	Within 1°C	
	1	1	n/a		23.1		27.0				
	1	2	n/a		22.8		—				
Salinity				Std	0.13	33.0 ppt	0.13	33.0 ppt	± 3%, blank	33.95 – 36.05	
	1	1	3/14/18		0.14	33.7	0.13	33.5			
	1	2	3/14/18		0.14	33.5	—	—			
Dissolved Oxygen				Std	100%		100%		Post-check ± 5 % of pre-check (0-100%)	80 – 120 %	
	1	1	9/19/17		98.4		100.1%				
	1	2	9/19/17		99.7		—				
pH				Std	7.00	10.01	7.00	10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
	1	1	4/2/18		7.03	10.06	7.05	10.08			
	1	2	4/2/18		7.04	10.06	—	—			

QA:

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

Team	Kamaole	Samplers (Last Name, 1st Initial) <i>Brown M. Paselle S. Quinn A</i>	Meters and Probes ID		
Session	11		HQ40d: 1		2100Q: 1
Date	04/3/18		pH: 1	DO: 1	Salinity: 1

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 KWP180403	8:00	25.2	33.9	6.40	94.6	8.08	13.0	13.8	13.7	1	2	0	20	3	<input type="checkbox"/>	<input type="checkbox"/>
Kihei South KKS180403	8:24	25.2	32.6	6.35	93.1	8.10	6.79	6.18	6.46	1	2	0	15	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalama Park KKP180403	8:41	25.5	34.4	6.66	99.0	8.16	5.53	5.75	5.87	2	2	0	10	0	<input type="checkbox"/>	<input type="checkbox"/>
Cove Park KCP180403	9:02	25.8	31.7	6.67	98.2	8.13	2.63	2.80	2.87	2	2	42	5	0	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole I KKO180403	9:23	26.3	34.3	6.62	99.3	8.18	1.07	1.47	1.48	2	2	10	80	0	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole III KKT180403	9:44	25.8	34.5	6.59	98.8	8.17	1.28	1.59	1.61	2	2	35	80	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: 11:14 am High: 5:29 am (falling)
Moon day (from new)	Full moon 18
Cloud cover (0-8)	4
Rain conditions (last 24 hrs)	heavy rain last night
Wind direction (Trades/Kona)	
Streams flowing? (Y/N)	Y Not flowing now

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

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.084	6.06	56.6	588
Pre-sampling	0.10	5.99	57.0	588
Post-sampling	0.06	6.02	57.1	588

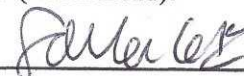
CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	—	—	—
Nutrients	6	NMS	Sofia
Bacteria	—	—	—

Signature (Team Lead): <i>M. Brown</i> M. Brown	Printed Name: M. Brown Sofia de la Rosa
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Team	Kamaole	Samplers (Last Name, 1st Initial) Brown, M Raeik, S Quinn, A
Session	11	
Date	04/03/18	

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KWP180403-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS180403-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:24	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP180403-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:41	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP180403-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKO180403-N-1	Kamaole I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:23	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKT180403-N-1	Kamaole III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:44	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:

Sofia de la Bria

Team	Makena	Samplers (Last Name, 1st Initial) <i>LOWDER, L. Dunning, J. Sharpe, M.</i>	Meters and Probes ID		
Session	11		HQ40d: 1	2100Q: 1	
Date	04/04/18		pH: 1	DO: 1	Salinity: 1

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 MML180404	8:05	25.2	34.7	6.64	98.5	8.15	2.45	3.01	2.78	1	2	3	0	0	<input type="checkbox"/>	<input type="checkbox"/>
S Maluaka Beach MMB180404	8:35	25.3	34.7	6.65	98.8	8.14	0.51	0.55	0.43	2	1	2	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Oneuli MON180404	9:00									2	0	0	5	0	<input type="checkbox"/>	<input type="checkbox"/>
Makena Beach MBS180404	9:00	25.0	35.3	6.75	100.1	8.19	0.43	0.49	0.48	2	0	0	5	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau North MAN180404															<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau South MAS180404															<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: 11:39 pm High: 5:45 am (falling)
Moon day (from new)	19
Cloud cover (0-8)	8
Rain conditions (last 24 hrs)	scattered showers
Wind direction (Trades/Kona)	trade Kona
Streams flowing? (Y/N)	N

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed. <i>MON + MAN + MAS closed due to sharks + rain</i>
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TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.06	6.06	56.6	588
Pre-sampling	0.03	6.15	57.0	587
Post-sampling	0.05	5.97	57.1	588

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	—	—	—
Nutrients	3	NMS	Sofia
Bacteria	—	—	—

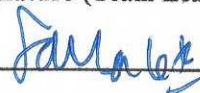
Signature (Team Lead): <i>[Signature]</i>	Printed Name: <i>Sofia de la Rosa</i>
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Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Makena	Samplers (Last Name, 1st Initial)	Wanda L Whiting D Sherrill M
Session	11		
Date	04/04/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
MML180404-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB180404-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MON180404-N-1	Oneuli	<input type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MBS180404-N-1	Makena Beach Shoreline	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN180404-N-1	Ahihi-Kinau North	<input type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS180404-N-1	Ahihi-Kinau South	<input type="checkbox"/>	<input type="checkbox"/>		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:

Janna de la Jota

Team	North Kihei	Samplers (Last Name, 1st Initial) <i>Greene N</i> <i>Piley R</i> <i>Bahr F</i>	Meters and Probes ID	
Session	11		HQ40d: 1	2100Q: 1
Date	04/05/18		pH: 1	DO: 1

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 NHP180405	8:13	25.4	32.7	6.53 7.87	95.5	8.04	6.73	5.14	6.09	1	6	3	7	0	<input type="checkbox"/>	<input type="checkbox"/>
Kealia Pond NKP180405	8:42	25.7	33.9	6.74	99.8	8.14	5.38	6.18	5.72	2	5	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Sugar Beach NSB180405	9:00	26.0	34.38 33.4	6.67	99.6	8.14	5.69	5.70	5.87	2	4	0	1	0	<input type="checkbox"/>	<input type="checkbox"/>
Kihei Canoe Club NKC180405	9:22	26.3	34.0	6.69	100.3	8.15	5.40	5.97	5.77	3	4	4	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Mai Poina Oe Iau NMP180405	9:35	26.8	32.8	6.61	99.3	8.12	28.5	28.8	27.6	2	3	0	9	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalepolepo North NKN180405	9:51	27.0	32.5	6.32	95.0	8.12	34.8 32.3	32.4	32.0	2	3	6	2	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: 11:39 am 6:08 12:04 pm High: 5:45 am (F) 5:55 am
Moon day (from new)	19
Cloud cover (0-8)	8
Rain conditions (last 24 hrs)	yes
Wind direction (Trades/Kona)	Kona
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	0.06	6.06	56.6	588
Pre-sampling	1.08	5.98	57.1	588
Post-sampling	0.06	5.97	57.0	586

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

Signature (Team Lead):	Printed Name:
<i>Fahner</i>	Sofia de la Rosa

Team	North Kihei	Samplers (Last Name, 1st Initial)	Greene N Riley R Sahr F	Thunholm K
Session	11			
Date	04/05/18			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NHP180405-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:13	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP180405-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:42	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NSB180405-N-1	Sugar Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC180405-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:22	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMP180405-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	
NKN180405-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:51	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):

J. M. Lee

Printed Name:

J. M. Lee

Team	Wailea	Samplers (Last Name, 1st Initial)	HECH, H BURWELL, G. WOLF, A, July PANUKOA, K JANUSE, J	Meters and Probes ID		
Session	11			HQ40d: 1		2100Q: 1
Date	04/06/18			pH: 1	DO: 1	Salinity: 1

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 WKD180406	7:55	25.6	35.0	6.75	100.3	8.18	0.80	0.45	0.78	1	2	1	4	0	<input type="checkbox"/>	<input type="checkbox"/>
Keawakapu Beach WKB180406	8:20	25.7	35.1	6.72	100.1	8.18	0.65	0.57	0.60	1	1	2	20	0	<input type="checkbox"/>	<input type="checkbox"/>
Ulua Beach WUL180406	8:45	25.7	34.9	6.77	100.8	8.17	0.64	0.74	0.66	1	0	20	20	0	<input type="checkbox"/>	<input type="checkbox"/>
Wailea Beach WWA180406	9:08	26.1	34.2	6.70	100.6	8.19	0.47	0.50	0.54	2	3	20	20+	0	<input type="checkbox"/>	<input type="checkbox"/>
Palauca WPL180406	9:32	26.1	35.1	6.72	100.7	8.18	1.02	1.18	1.84	2	1	8	20	0	<input type="checkbox"/>	<input type="checkbox"/>
Poolenalena WPO180406	9:52	26.1	35.0	6.76	101.4	8.10	0.44	0.41	0.73	2	2	10	20	2	<input type="checkbox"/>	<input type="checkbox"/>

8.20

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: 12:33 pm High: 5:38 am (F)
Moon day (from new)	20
Cloud cover (0-8)	1
Rain conditions (last 24 hrs)	yes
Wind direction (Trades/Kona)	Trade
Streams flowing? (Y/N)	N/A

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.06	6.06	56.6	588
Pre-sampling	0.06	6.13	57.1	588
Post-sampling	0.05	6.17	57.1	588

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

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

Signature (Team Lead):	Printed Name:
<i>[Signature]</i>	GEORGE G. BURWELL

Team	Wailea	Samplers (Last Name, 1st Initial)	HECHT, H. BURNETT, G. WOLF, A. PAHUKOA, K. JAMES, J.
Session	11		
Date	04/06/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD180406-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB180406-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL180406-N-1	Ulua Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WWA180406-N-1	Wailea Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:08	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPL180406-N-1	Palauea	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:32	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPO180406-N-1	Poolenalena	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:52	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:

 GENE G. BURNETT
 