

FIELD EQUIPMENT VERIFICATION (PRE/POST A WEEKLY SAMPLING):

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
89	M. Bleson, N. Sampson	6/7/21	9:27	M. Bleson, N. Sampson	6/10/21	10:35

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value		POST: Verification Value		Acceptable Range	Comments/ Notes	QA?
Temperature	NIST	n/a	NIST Exp. Date	Std Val	NIST	NIST	NIST	NIST	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	2	2	7/8/21		26.4 °C	26.1 °C	27.5 °C	— °C			
	2	3	7/8/21		26.3		27.4				
	2	3	7/8/21			25.8		—			
Salinity			3 months	Std Val	Tap water	Salin Std 09/25 date 35.0 ppt	Tap water	Salin Std 09/25 date 35.0 ppt	± 1 ppt		
	2	2	3/15/21		0.36	34.8	0.39	35.3			
	2	3	3/15/21		0.36	34.7	—	—			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	MB 2	9/28/20		99.7		99.8				
	2	1	9/28/20		97.6		96.9			had to switch to this probe on Tues. due to connection issues w/ probe #1	
pH			3 weeks	Std Val	pH 7.00	pH 10.00	pH 7.00	pH 10.00	± 0.1 pH of pH std value	Compare to Manufacturer pH Std value on bottle	
	2	6	6/7/21		7.02	9.98	7.00	9.95			
	2	5	6/7/21		7.01	9.98	—	—			
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 ★ NTU	BLANK <0.1	LOW 1-10 ★ NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
	NBBF	n/a	3/15/21		0.06	5.72	0.09	5.73		★ Low: 5.75 NTU	
	1	n/a	3/15/21		0.08	5.64	—	—		★ Low: 5.77 NTU	

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

Lab: KAL

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	Beeson, M. Sampson, N. Freiburg, T. DuFord, A. (observing)	Galagher, C Kranberg, J	Meters and Probes ID		
Session	89				HQ40d: 2	2100Q: NBBF	
Date	6/08/2021				pH: 6	DO: 2/1*	Salinity: 2

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C) variable	Salinity (ppt) 30-35 normal	Dissolved Oxygen		pH 8-8.3 normal	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
Napili Bay RNS210608	N	8:14	25.4	34.0	6.48	95.2	8.04	0.99	1.10	1.03	3	12	0
Pohaku RPO210608	N	8:42	25.5	33.8	6.35	93.4	8.12	0.85	0.85	0.82	6	5	0
Kaanapali Sh RKS210608	N	9:01	25.5	34.8	6.62	98.0	8.06	1.30	1.34	1.37	1	7	0
Kahakili Beach Two RKT210608	N	9:23	25.9	35.0	6.49	96.7	8.11	0.96	0.98	1.03	0	0	0
Canoe Beach RCB210608	N	9:51	26.9	34.5	6.53	98.9	8.13	8.28	7.69	7.72	0	1	0
Wahikuli RWA210608	N	10:12	26.7	34.1	6.50	97.9	8.13	2.08	2.08	2.14	0	8	0

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).

Use the back of the form if needed.

RNS - SUPS out further, pretty calm

RKT - Two six-man outriggers

RKT - DO probe switched out for probe #1 - connection problems

RCB - still some construction, jet skis have started up

RWA - very channeled near the shore (shore break) mid-tide

drizzling in Kahana this morning + yesterday evening

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.06	5.75	59.4	605
Pre-sampling	0.07	5.72	58.9	605
Post-sampling	0.08	5.71	59.0	605

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	KAL	N. Sampson
Bacteria	-	-	-

M. Beeson

Meredith Beeson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	Beeson, M. Duford, A. (Gordon) Sampson, N. Gallagher, C. Freiberg, T. Kranberg, J.	Signature (Team Lead):	Printed Name:
Session	88-89				
Date	6/08/2021				

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS210608-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:14	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO210608-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:42	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS210608-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT210608-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:23	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB210608-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:51	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA210608-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:12	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		

Signature (Team Lead):	Printed Name:
Natei Sampson	Natei Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Mayan. Y Harris. Kit Grund. K	Beeson, M. Sampson, N.	Meters and Probes ID		
Session	89				HQ40d: 2	2100Q: NB8F	
Date	6/09/2021				pH: 6	DO: 1	Salinity: 2

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C) variable	Salinity (ppt) 30-35 normal	Dissolved Oxygen		pH 8-8.3 normal	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
505 Front St PFF210609	Y	8:16	25.9	34.6	5.71	84.9	8.02	2.10	2.08	1.95	0	23	0
Lindsey Hale PLH210609	N	8:38	26.5	34.7	5.10	76.7	8.03	1.29	1.25	1.49	2	1	0
Lahaina Town PLT210609	N	9:00	27.0	34.1	5.37	81.1	8.02	6.35	5.55	5.91	6	3	0
Olowalu Pier OPP210609	N	9:29	26.1	35.0	6.24	93.2	8.03	1.33	1.30	1.23	0	0	0
Papalaua Pali OPP210609	N	9:49	25.7	34.7	6.78	100.5	8.10	3.66	3.58	3.69	0	0	1

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

- flat water, calm, low tide no people in water. (PFF)
- (PLH) Calm, flat water, low tide, no people
- (PLT) low tide, two dogs playing in water 2 snorkelers, no wind. (very low tide)
- (OCO) Calm waters, low tide,
- (OPP) small swell, light wind


TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.08	5.75	59.4	605
Pre-sampling	0.07	5.72	59.0	606
Post-sampling	0.08	5.71	58.1	604

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	KAL	M. Beeson
Bacteria	-	-	-

Signature (Team Lead):



Printed Name:

Meredith Beeson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Beeson, M. Grund, K. Sampson, N. Mayer, Y. Itarnis, K.
Session	89		
Date	6/09/2021		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF210609-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:16	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH210609-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:38	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT210609-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OSP 210609-N-1	Olowalu Pier Camp	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:29	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP210609-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:49	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		

Signature (Team Lead):



Printed Name:

Meredith Beeson

Hut O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L. Sampson, N. Cramer, J. Benson, M.	Meters and Probes ID		
Session	89			HQ40d: 2	2100Q: NBBF	
Date	6/10/2021			pH: 6	DO: 1	Salinity: 2

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C) variable	Salinity (ppt) 30-35 normal	Dissolved Oxygen		pH 8-8.3 normal	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
Honolua Bay RHL210610	N	8:00A	24.8	33.8	6.16	89.3	8.10	5.44 2.30	3.73 3.06	3.73	15	10	0
Oneloa Bay RON210610	N	8:40A	25.2	34.8	6.82	100.2	8.17	0.87	0.78	0.84	2	1	0
Kapalua Bay RFS210610	N	9:00A	25.5	34.4	6.04	89.0	8.05	1.02	1.09	0.92	25	27	0
Ka'opala Bay RKO210610	N	9:30A	26.0	34.3	5.92	87.8	8.05	4.46	4.68	4.82	0	4	0
Kahana Village RKV210610	N	9:50A	26.0	34.0	5.77	85.5	8.05	4.83	4.86	5.16	5	9	0

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

RHL - turbidity - lots of particles in turbidity sample bottle
RON - small waves, wind

RHL : Turbidity
1st reading: 2.30
2nd : 3.06
3rd : 3.73
4th : 5.44
] keeping these

calm day
Sprinkling last night - ground wet

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.08	5.75	59.4	605
Pre-sampling	0.09	5.71	58.8	606
Post-sampling	0.09	5.73	59.0	604

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	KAL	N. Sampson
Bacteria	-	-	-

Signature (Team Lead):

Natei Sampson

Printed Name:

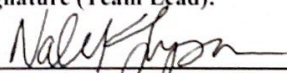
Natei Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2R N	Samplers (Last Name, 1st Initial)	Hutchings, L. Sampson, N. Cramer, S. Beeson, M.
Session	89		
Date	6/10/2021		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL210610-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON210610-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS210610-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO210610-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV210610-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:50	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		

Signature (Team Lead): 	Printed Name: Natei Sampson
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