



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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
93	N. Sampson, M. Beeson	8/30/21	9:31 am	N. Sampson	9/1/21	10:15 am

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value	POST: Verification Value	Acceptable Range	Comments/ Notes	QA?	
Temperature	<u>NIST</u>	n/a	NIST Exp. Date	Std Val	<u>NIST</u> 26.3 °C	<u>NIST</u> 26.1 °C	<u>NIST</u> 27.0 °C	<u>NIST</u> — °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water
	2	4	10/16/21		26.7		27.9			
	2	3	10/16/21		26.3		—			
Salinity			<u>3 months</u>	Std Val	<u>Tap water</u> <u>09/25 date</u> 35.0 ppt	<u>Tap water</u> <u>09/25 date</u> 35.0 ppt		± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	4	6/28/21		0.43	35.3	0.43	35.3		
	2	3	6/28/21		0.43	35.1	—	—		
Dissolved Oxygen			<u>1 year</u>	Std Val	100%	100%		± 5%		
	2	4	8/12/21		100.3	99.7				
	2	1 ^{MB}	9/28/20		98.0	—				
pH			<u>3 weeks</u>	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	8/30/21		7.00	9.97	7.03	10.00		
	2	5	8/30/21		7.02	9.98	—	—		
Turbidity			<u>3 months</u>	Std Val	<u>BLANK</u> <0.1	<u>LOW 1-10</u> ★ NTU	<u>BLANK</u> <0.1	<u>LOW 1-10</u> NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value
	NBBF	n/a	6/28/21		0.07	6.06	0.07	6.07		★ LOW: 6.05 NTU
	1	n/a	6/28/21		0.07	5.72	—	—		★ LOW: 5.71 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)	Beezon, M. Sampson, N.						Meters and Probes ID		
Session	93								HQ40d:	2	2100Q: NBBF
Date	8/31/2021		pH:	6	DO:	4	Salinity:	4			

Location Name Sample ID	Freshwater 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 RNS210831	N	8:10	26.5	34.3	6.77	102.1	8.11	1.78 4.52	1.93 2.83	1.94 2.75	∅	1	∅
Pohaku RPO210831	N	8:42	26.5	35.4	6.45	98.1	8.18				1	5	∅
Kaanapali Sh RKS210831	N	9:00	26.4	35.6	5.68	86.5	8.10	1.65	1.66	1.51	∅	6	∅
Kahekili Beach Two RKT210831	N	9:15	26.6	35.8	6.71	102.7	8.19	0.84	0.98	0.83	∅	3	∅
Canoe Beach RCB210831	N	9:44	27.1	35.4	6.62	101.7	8.22	1.72	1.89	1.93	∅	∅	∅
Wahikuli RWA210831	N	10:09	27.3	35.4	6.59	101.5	8.20	4.31	4.42	4.24	∅	∅	∅

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

Use the back of the form if needed.

RPO - 2 sups out further (4 ppt), calm
 RKS - very calm + clear
 - break in the sand dune, Water not flowing out to sea, but
 sea water is flowing inland to the canal
 RKT - sample from 100ft to the right than regular site due
 to exposed rock and big wave break on shore
 RCB - ocean kayaker ~50 yd out, large shore
 break, very sandy water in sampling area
 RWA - black sand (new) in sampling area
Sites with potential for freshwater flow: Kaanapali Shores, Canoe Beach

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.07	6.05	60.7	607
Pre-sampling	0.07	6.05	60.9	608
Post-sampling	0.07	6.04	61.1	607

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	KAL	M. Beezon
Bacteria	-	-	-

Signature (Team Lead):

MB

Printed Name:

Meredith Beezon

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	Beeson, M.				
Session	93		Sampson, N.				
Date	8/31/2021						

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS210831-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO210831-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	
RKS210831-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT210831-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB210831-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:44	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA210831-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:09	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):

MDB

Printed Name:

Meredith Beeson

Lab: KAL

Last updated July 2021

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	GUNDO, K HARRIS, K Mayen, Y							Meters and Probes ID		
Session	93									HQ40d: 2	2100Q: NBPF	
Date	9/1/2021									pH: 6	DO: 4	Salinity: 4

Location Name Sample ID	Freshwater 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 PFF210901	Y	8:18	26.8	34.7	5.96	90.7	8.04	1.62	1.97	1.74	2 kayak	3	0
Lindsey Hale PLH210901	N	8:41	26.8	35.4	5.96	91.1	8.07	4.10	4.38	3.72	0	0	0
Lahaina Town PLT210901	N	8:59	27.1	35.2	5.90	90.5	8.06	3.11	3.09	2.88	0	5	0
Camp Olowalu OCO210901	N	9:27	28.6	35.7	6.33	99.8	8.07	1.97	1.88	1.84	0	0	0
Papalaua Pali OPP210901	N	9:48	27.9	35.6	6.63	103.4	8.13	10.2	10.5	11.1	5	1	0

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

Use the back of the form if needed.

PFF stream clear. Unusual erosion pattern
see picture from Kristy
No film on pH probe
OPP shore break was right at ~~the~~
sampling location

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.07	0.05	0.07	0.07
Pre-sampling	0.06	0.06	0.11	0.08
Post-sampling	0.08	0.04	0.11	0.07

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

*WOB**Meredith Beeson*Sites with potential for freshwater flow: 505 Front St.

Team	Polanui	Samplers (Last Name, 1st Initial)	Gund, K. Harris, K. Mayen, Y.			
Session	93					
Date	9/1/2021					

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF210901-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:18	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH210901-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:41	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT210901-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:59	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO210901-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:27	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP210901-N-1	Papalaaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:48	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):

MB

Printed Name:

Meredith Beeson

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, Lyn Hehemann, CiCi Sampson, Nalei						Meters and Probes ID			
Session	93								HQ40d:	2	2100Q:	NBBF
Date	9/2/2021								pH:	6	DO:	4

Location Name Sample ID	Freshwater 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 RHL210902	N	7:50A	25.8	35.2	5.90	89.7	9.15	2.31	1.93 NS	2.00	7	5	0
Oneloa Bay RON210902	N	8:23A	26.2	35.5	6.70	101.4	8.18	1.41	1.57	1.45	0	2	0
Kapalua Bay RFS210902	N	8:47A	26.7	35.5	6.37	97.4	8.10	2.78	2.86	3.15**	12	13	0
Ka'opala Bay RKO210902	N	9:12A	26.7	34.9	5.79	88.3	8.09	8.14	8.01	8.50 NS	0	0	0
Kahana Village RKV210902	N	9:29A	26.8	35.1	5.46	83.4	8.02	6.44 6.08	7.60	7.46	0	2	0
								8.19					

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

Use the back of the form if needed.

RHL - flat, calm water

ROW - shore break

RFS - lots of snorkelers further out, calm, slight swell

RKO - flat, calm, slight swell rolling in, debris floating,
Seemed cloudyRKV - mostly calm, small shore break, cloudy water
1 stand up paddle in water, 2 resting on beach

Sites with potential for freshwater flow: Honolua Bay, Kahana Village

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.08	6.05	60.7	607
Pre-sampling	0.08	6.07	61.0	607
Post-sampling	0.07	6.06	61.2	607

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

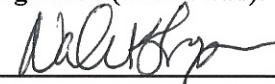
Nalei Sampson

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, Lyn Hehemann, Cici Sampson, Nalei			
Session	93					
Date	9/2/2021					

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL210902-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON210902-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:23	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS210902-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:47	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO210902-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:12	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV210902-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:29	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:

Nalei Sampson