

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
98	N. Sampson	12/27/21	11:30	N. Sampson	12/30/21	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 23.6 °C	NIST 23.6 °C	NIST 23.9 °C	NIST — °C	± 0.6 °C of NIST Compare to NIST Std value in tap water
	4	3	8/17/23		23.5		23.8		
	4	4	8/17/23		23.6		—		
Salinity			3 months	Std Val	Tap water 0/27/21 date 33.5 ppt	Tap water 0/27/21 date 33.5 ppt	Salin Std 33.5 ppt	± 1 ppt Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	1	3	11/29/21		0.38	33.7	0.38	33.6	
	1	4	11/29/21		0.38	33.8	—	—	
Dissolved Oxygen			1 year	Std Val	100%	100%	100%	± 5%	
	1	4	8/12/21		101.6	101.0	101.0		* Needs kit for calibration
	1	1	9/28/20		99.1	—	—		
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
	1	7	12/27/21		6.99	9.97	6.98	9.96	
	1	6	12/27/21		7.00	9.97	—	—	
Turbidity			3 months	Std Val	BLANK <0.1 NTU	LOW 1-10 5.49	BLANK <0.1 NTU	LOW 1-10 5.46	± 0.18 NTU Low 1-10 Compare to Gel LOW 1-10 Std Calibration value
	1	n/a	10/8/21		0.06	5.49	0.08	5.46	* Low: 5.41
	NBBF	n/a	10/8/21		0.05	5.48	—	—	* Low: 5.56

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)	B. McLaughlin S. Biesen M. Floyd							Meters and Probes ID			
Session	98									HQ40d:	1	2100Q:	1
Date	12/28/2021									pH:	7	DO:	4
												Salinity: 3	

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 RNS211228	N	8:25	23.1	35.1	6.93	99.4	8.06	1.07	1.02	1.06	0	5	0
Pohaku RPO211228	N	9:22	23.7	33.7	7.05	101.3	8.13	6.68	7.53	6.93	0	5	0
Kaanapali Sh RKS211228	N	9:47	23.9	35.2	6.96	101.4	8.13	3.64	3.79	3.99	0	4	0
Kahekili Beach Two RKT211228	N	10:17	24.5	35.4	6.99	103.0	8.14	2.54	2.32	2.17	0	2	0
Canoe Beach RCB211228	N	10:37	25.1	34.7	6.95	103.3	8.15	1.51	1.44	1.49	0	8	0
Wahikuli RWA211228	N	10:55	25.2	34.8	6.82	101.5	8.15	4.89	5.82	5.56	0	0	0

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

Use the back of the form if needed.

RNS - high shore breaks. DO probe is taking a long time to stabilize. Replaced batteries in meter. Never affected SAL probe

RPO - Surfers out a way. High swell. Wind picking up.

RKS - 2 guys Fishing nearby. Decent break on the waves. River not flowing into ocean but high swells seep into river. River water looks clear.

RILT - Sand is back so we could go straight out.

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	0.06	5.41	56.1	625
Pre-sampling	0.08	5.44	55.6	627
Post-sampling	0.08	5.44	56.0	627

## CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Nalei Sampson

## Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	McLaughlin, B			
Session	98		Bieser, S			
Date	12/28/2021		Floyd, M			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
RNS211228-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO211228-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:22	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS211228-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:47	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT211228-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:17	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB211228-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:37	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA211228-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

<b>Sediments</b>							
		<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

## Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	HARRIS, K GUNO, K HOLTON GONZALEZ, T								Meters and Probes ID				
Session	98										HQ40d:	1	2100Q:	1	
Date	12/29/2021										pH:	7	DO:	4	Salinity:

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 PFF211229	Y	8:10	23.9	33.2	6.50	93.8	7.97	2.79	2.71	2.41			
Lindsey Hale PLH211229	N	8:34	23.8	35.1	6.42	93.5	8.02	4.07	4.59	4.06			
Lahaina Town PLT211229	N	8:55	23.9	35.2	6.38	93.1	8.03	4.13	4.54	4.63 <sup>+/-1</sup>	2	5	Ø
Camp Olowalu OCO211229	N	9:25	23.6	35.3	6.53	94.7	8.05	2.98	2.74	2.83 <sup>+/-1</sup>	4	8	Ø
Papalaau Pali OPP211229	N	9:46	24.0	35.3	6.83	99.7	8.07	7.20	7.16	7.02			

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

Use the back of the form if needed.

PFF Several surf/Kayakers, walkers Kristy submitting streamflow photos  
PFF ~~overcast~~ ~~overcast~~ ~~overcast~~

PLT Not too many people, lots of tree debris.

PLT 2 surfers in water of site, 5  
 People on beach, lots of tree debris  
 4<sup>th</sup> reading(NTU) 4.63.91  
 Camp 0 - 8 beach goers, 4 snorkelers, 4<sup>th</sup> NTU 2.83

OPP - 2 ppl 1 dog, strong waves

Sites with potential for freshwater flow: 505 Front St.  
(NTU cap chipped)

Note by Meredith: Tabetha was data recording + didn't realize she was supposed to put the #'s in the right columns.

## TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.08	5.41	56.1	625
Pre-sampling	0.08	5.42	56.2	627
Post-sampling	0.08	5.37	55.9	626

## CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

MBeezn

Printed Name:

Meredith Beeson

## Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Harris, K. Gund, K. Holton Gonzalez, T.			
Session	98					
Date	12/29/2021					

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
PFF211229-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH211229-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:34	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT211229-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO211229-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP211229-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

<b>Sediments</b>							
		<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):

*M. Beeson*

Printed Name:

*Meredith Beeson*

## Hui O Ka Wai Ola - Sample Collection Datasheet

rTeam	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L. Sampson, N.								Meters and Probes ID		
Session	98		HQ40d: 1				2100Q: 1						
Date	12/30/2021		pH: 7				DO: 4		Salinity: 3				

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 RHL211230	Y	7:58A	22.9	24.3	7.18	96.6	8.13	3.54	4.02	4.22	0	0	0
Onealoa Bay RON211230	N	8:35	24.0	35.5	6.96	102.0	8.13	0.75	0.66	0.65	0	0	0
Kapalua Bay RFS211230	N	9:00	24.0	34.4	6.87	100.3	8.07	2.72	2.25	2.43	10	9	0
Ka'opala Bay RKO211230	N	9:25	24.0	34.5	6.85	99.8	8.09	10.7	10.3	9.72	0	0	0
Kahana Village RKV211230	Y	9:45	24.2	34.9	7.18	105.2	8.14	6.82	6.99	6.36	0	0	0

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

Use the back of the form if needed.

RHL - calm, debris still on beach & in water  
4<sup>th</sup> turb. 4.20

RON - Started lightly raining on way back to car, rough  
shore break, surfers further out

RFS - sun trying to come out

RKO - little swell

RKV - Slight swell rolling in, river is very brown

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

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Pre-sampling	0.08	5.42	55.8	627
Post-sampling	0.08	5.46	55.7	626

## CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Naki Sampson

## Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L Sampson, N			
Session	98					
Date	12/30/2021					

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
RHL211230-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:58	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON211230-N-1	Onealoa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS211230-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	
RKO211230-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV211230-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

<b>Sediments</b>							
		<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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