



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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
96	M. Besson	11/1/21	9:35	M. Besson	11/4/21	11:00

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	
	4	3	8/17/23		25.7 °C	25.5 °C	25.5 °C	°C			
	4	4	8/17/23		25.5		25.2				
						25.4		—			
Salinity			3 months	Std Val	Tap water	Salin Std 6/23/24 date 33.5 ppt	Tap water	Salin Std 6/23/24 date 33.5 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	1	3	10/8/21		0.41	34.9	0.43	34.8		Is Cathys standard really 33.5?	
	1	4	10/8/21		0.42	35.2	—	—		Is SM having the same readings?	
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	1	4	8/12/21		101.0 %		99.9 %				
	1	1	9/28/20		98.7 %		—			Need to find battery piece to replace.	
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	6	11/1/21		7.04	9.99	7.04	10.07		got 10.07 3 times	
	1	5	11/1/21		7.04	9.97	—	—		used new blue bottle (10.01) solution	
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	
	1	n/a	10/8/21		0.06	5.38	0.06	5.47		★ low: 5.41 NTU	
	NB&F	n/a	10/8/21		0.06	5.55	—	—		★ low: 5.56 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.	Meters and Probes ID		
Session	96			HQ40d: 1	2100Q: 1	
Date	11/2/2021			pH: 0	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 RNS211102	N	8:10	26.2	36.8	6.65	101.5	8.22	1.33	1.54	1.40	1	3	0
Pohaku RPO211102	N	8:44	26.0	34.8	6.72	101.1	8.20	7.44	7.64	7.99	1	6	0
Kaanapali Sh RKS211102	N	9:08	26.8	37.0	6.64	102.3	8.21	3.25	3.98	3.22	2	9	0
Kahekili Beach Two RKT211102	N	9:34	26.5	36.8	6.65	102.1	8.20	7.92	7.81	7.15	0	3	0
Canoe Beach RCB211102	N	10:00	26.5	36.2	6.68	101.9	8.21	2.67	2.69	3.19	0	4	0
Wahikuli RWA211102	N	10:22	26.7	35.8	6.51	100.4	8.19	2.67	2.72	2.60	0	5	0

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

RNS - large shore break, 8.22 X3 for pH

RPO - dog on beach, lots of surfers, big swell; sand was filled in the beach - higher level than last sampling session, 8.20 X3 for pH

RKS - medium wave action, freshwater blocked by sand dune, but relatively clear, can see fish inside. Second salinity reading 36.9, 8.20 X2 for pH

RKT - continuing to sample off to the right due to rock exposure; pH: 8.20 x3 times

RCB - calmer conditions, pH 8.21 X2

Sites with potential for freshwater flow: Kaanapali Shores, Canoe Beach

RWA - calm, pH 8.20 X2

## TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.00	5.41	56.1	625
Pre-sampling	0.07	5.38	55.9	625
Post-sampling	0.07	5.46	56.1	623

## CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

*M. Beeson*

Printed Name:

Meredith Beeson

Last updated July 2021



## Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	Beeson, M. Sampson, N.
Session	96		
Date	11/2/2021		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
RNS211102-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	
RPO211102-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:44	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS211102-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:08	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT211102-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:34	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB211102-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA211102-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:22	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:
<i>M Beeson</i>	Meredith Beeson

## Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Mayen, I Harris, K	Meters and Probes ID			
Session	96			HQ40d:	1	2100Q:	1
Date	11/3/2021			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
505 Front St PFF211103	Y	8:15	26.2	35.9 7.58	6.18 7.58	93.4	8.07	.85 1.21	.84	.82	0	0	0
Lindsey Hale PLH211103	N	8:42	26.4	36.5	6.02	91.7	8.12	3.56	3.10	2.90	0	0	0
Lahaina Town PLT211103	N	9:01	26.5	36.6	6.17	94.1	8.13	2.23	2.51	2.84	0	1	0
Camp Olowalu OCO211103	N	9:36	28.8	36.8	6.23	97.2	8.10	.98	.96	.98	2	2	0
Papalaua Pali OPP211103	N	9:54	27.6	36.9	6.59	102.5	8.16	2.96	3.15	3.06	0	0	0

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

PFF - Kit put PH probe in by mistake on 1st read  
Took 4th read on turbidity  
PLT 2 monk seals south 1st reef  
No tape on KCL  
KCL tipped so we added some (too much?)

Sites with potential for freshwater flow: 505 Front St.

## TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.07	5.41	56.1	625
Pre-sampling	0.09	5.39	55.7	626
Post-sampling	0.06	5.41	56.0	628

## 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	Polanui	Samplers (Last Name, 1st Initial)	Mayen, Y. Hams, K.
Session	96		
Date	11/3/2021		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
PFF211103-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH211103-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:42	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT211103-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO211103-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:36	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP211103-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:54	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
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## Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial) <i>Hutchings, L; Hehemann, C; Beeson, M.                  Floyd, M. Bleser, S.                  observing</i>	Meters and Probes ID		
Session	96		HQ40d: \      2100Q: \		
Date	11/4/2021		pH: 6	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 RHL211104	N	8:00A	24.9	36.2	6.59	98.0	8.16	17.2	15.8	10.9	0	7	0
Oneloa Bay RON211104	-	8:40A	26.1	36.9	6.69	102.1	8.20	1.23	1.63	1.29	0	0	0
Kapalua Bay RFS211104	N	9:05A	26.3	36.5	6.71	102.7	8.17	3.43	3.26	4.01	4	9	0
Ka'opala Bay RKO211104	N	9:35A	25.7	36.3	6.70	101.3	8.14	17.4	17.0	16.8	0	0	0
Kahana Village RKV211104	N	9:55A	26.3	36.8	7.16	109.5	8.26	4.01	3.97	4.25	1	4	1

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

RHL - Rain sprinkles high surf on outer break  
salinity 2nd reading 36.2.  
PH 2nd reading 8.16

RON - Salinity tested twice at 36.9  
RFS - Salinity 2nd reading 36.5

RKO - 2nd ~~raw~~ salinity 36.2 ppt

RKV - 2nd reading DO % 109.4  
- water in stream, but not flowing to ocean

Rained last night in Kahana; drizzled throughout the morning  
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	0.07	5.41	56.1	625
Pre-sampling	0.06	5.43	55.7	627
Post-sampling	0.06	5.47	56.0	624

## CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

*M. Beeson*

Meredith Beeson




## Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L. Hehemann, C. Beeson, M.	observing: Floyd, M. Bieser, J.
Session	96			
Date	11/4/2021			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
RHL211104-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	
RON211104-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	
RFS211104-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO211104-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV211104-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:55	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:
	Meredith Beeson