



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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
101	N. Sampson, M. Beeson	2/28/22	8:58am	M. Beeson	3/3/22	10:40

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	
					24.9°C	25.0°C	23.5°C	— °C			
	4	4	8/17/23		24.9		23.5				
	4	3	8/17/23			24.8		—			
Salinity			3 months	Std Val	Tap water	Salin Std 11/26 date 35.0 ppt	Tap water	Salin Std 11/26 date 35.0 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	4	2/28/22		0.40	34.9	0.41	35.1			
	2	3	2/28/22		0.40	34.9	—	—			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	4	8/12/21		100.5		98.9				
	2	1	2/7/22		100.9		—				
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	
					exp. 3/23	exp. 3/22					
	2	6	2/28/22		7.01	10.00	7.07	10.07		pH 4 buffer we were using up until this wk expired 9/2021	New solution exp. 3/25
	2	7	2/28/22		7.01	9.99	—	—			
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	
	NDF	n/a	2/7/22		0.06	5.73	0.07	5.70		★ LOW: 5.78 NTU	
	1	n/a	2/28/22	exp. 11/22	0.07	5.51	—	—		Recalibrating due to under-range last session	

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) <i>FRC: BCRG, T. Kranberg, J McClanahan, B</i>	Meters and Probes ID		
Session	101		HQ40d: <i>2</i>	2100Q: <i>NBBF</i>	
Date	03/01/2022		pH: <i>6</i>	DO: <i>4</i>	Salinity: <i>4</i>

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 RNS220301	<i>N</i>	<i>8:05</i>	<i>24.3</i>	<i>35.7</i>	<i>6.86</i>	<i>106.3</i>	<i>8.18</i>	<i>1.37</i>	<i>1.36</i>	<i>1.35</i>	<i>0</i>	<i>4</i>	<i>NO</i>
Pohaku RPO220301	<i>N</i>	<i>8:30</i>	<i>24.6</i>	<i>34.6</i>	<i>6.82</i>	<i>99.7</i>	<i>8.16</i>	<i>4.31</i>	<i>3.84</i>	<i>3.07</i>	<i>0</i>	<i>2</i>	<i>NO</i>
Kaanapali Sh RKS220301	<i>NA</i>	<i>8:55</i>	<i>24.5</i>	<i>35.6</i>	<i>6.77</i>	<i>99.4</i>	<i>8.16</i>	<i>1.50</i>	<i>1.75</i>	<i>1.73</i>	<i>0</i>	<i>3</i>	<i>NO</i>
Kahekili Beach Two RKT220301	<i>NA</i>	<i>9:15</i>	<i>24.7</i>	<i>35.3</i>	<i>6.66</i>	<i>98.1</i>	<i>8.18</i>	<i>3.68</i>	<i>3.23</i>	<i>3.15</i>	<i>0</i>	<i>5</i>	<i>NO</i>
Canoe Beach RCB220301	<i>NO</i>	<i>9:40</i>	<i>25.2</i>	<i>35.3</i>	<i>6.64</i>	<i>98.5</i>	<i>8.19</i>	<i>3.84</i>	<i>3.85</i>	<i>4.24</i>	<i>5</i>	<i>8</i>	<i>NA</i>
Wahikuli RWA220301	<i>NO</i>	<i>9:55</i>	<i>24.8</i>	<i>33.8</i>	<i>6.83</i>	<i>99.9</i>	<i>8.20</i>	<i>1.47</i>	<i>1.82</i>	<i>1.77</i>	<i>0</i>	<i>0</i>	<i>NO</i>

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

Use the back of the form if needed.

RNS - SURF!
RPO - SURFS UP!
RKS - SURF
RKT - wait 100' left due to rocks
RCB - CALM

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	<i>0.06</i>	<i>5.78</i>	<i>57.2</i>	<i>567</i>
Pre-sampling	<i>0.10</i>	<i>5.94</i>	<i>57.4</i>	<i>565</i>
Post-sampling	<i>0.06</i>	<i>5.70</i>	<i>58.4</i>	<i>569</i>

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	<i>6</i>	<i>KAL</i>	<i>N. Sampson</i>
Bacteria	-	-	-

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

Signature (Team Lead):

Printed Name:

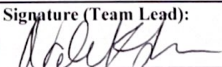
Nate Sampson
Nate Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	Freiberg, T. McLaughlin, B. Kranberg, J.
Session	101		
Date	03/01/22		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS220301-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO220301-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS220301-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT220301-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	
RCB220301-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA220301-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:55	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:
	Naki Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Gund, K Mayen, Y Gonzales, T	Harris, K	Meters and Probes ID		
Session	101				HQ40d: 2	2100Q: NBBF	
Date	03/02/2022				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 PFF220302	Y	8:13	24.5	35.6	6.04	88.6	8.13	3.46	2.76	3.35	0	2	0
Lindsey Hale PLH220302	N	8:39	24.5	35.7	5.83	85.7	8.13	9.51	10.1	8.31	0	1	0
Lahaina Town PLT220302	N	8:58	24.8	35.0	5.88	86.6	8.10	12.4	11.9	12.1	0	0	0
Camp Olowalu OCO220302	N	9:26	24.3	35.7	6.41	97.0	8.12	3.14	3.12	3.35	0	0	0
Papalaua Pali OPP220302	N	9:47	26.0	36.0	6.90	104.2	8.17	10.7	10.7	9.68	0	0	0

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

OPP strong shore break

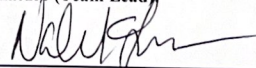
TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.06	5.78	57.2	567
Pre-sampling	0.06	5.77	57.7	568
Post-sampling	0.07	5.72	57.7	567

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead)



Printed Name:

Nalei Sampson

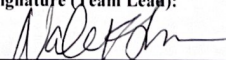
Sites with potential for freshwater flow: 505 Front St.

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Gund, K Harris, K Mayer, Y Gonzales, T
Session	101		
Date	03/02/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF220302-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:13	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH220302-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:39	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT220302-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:58	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO220302-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:26	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP220302-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:47	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:
	Walei Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial) Berg, L. Hutchings, L. Heinemann, C.	Meters and Probes ID		
Session	101		HQ40d: 2	2100Q: NBBF	
Date	03/03/22		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
Honolua Bay RHL220303	N	8:05	23.2	35.3	6.55	94.0	8.20	2.73	1.86	2.53 MB	0	1	0
Oneloa Bay RON220303	N	8:45	24.6	35.8	6.84	101.0	8.19	0.57	0.62	0.71	0	0	0
Kapalua Bay RFS220303	N	9:15	24.7	34.4	6.71	98.5	8.11	2.53	2.25	2.11	6	21	0
Ka'opala Bay RKO220303	N	9:35	24.7	35.2	6.40	94.3	8.10	6.58	6.53	6.56	0	1	0
Kahana Village RKV220303	N	9:53	25.3	35.0	6.70	99.5	8.13	3.51	4.89	4.55	2	10	0

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

RHL - calm condition
Turbidity 2.53 4th, 2.41 5th
↳ using this one [MB]

RON calm wind, surf-small

RKV 4th Turbidity 4.73
↳ using this one [MB]

- Redid nutrient sample since 1st sample
was only ~50ml (used new syringe,
filter, bottle).

post-sampling 2nd Medium turbidity standard reading: 57.2
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	5.78	57.2	567
Pre-sampling	0.09	5.72	57.3	570
Post-sampling	0.07	5.70	55.7	567

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

MBeeson

Meredith Beeson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	Burg, L. Hutchings, L. Hehemann, C.
Session	101		
Date	03/03/22		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL220303-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON220303-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS220303-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO220303-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	
RKV220303-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:53	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:
<i>MB</i>	Meredith Beeson