

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

Hui O Ka Wai Ola

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
112	Liz Yannell	10/17/22	11:05 am 10:45	Liz Yannell	11:45	10/20/22

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 _{ex}	8/17/23		31.7 °C	31.3 °C	33.3 °C	°C			
	4	4 _{ex}	8/17/23		31.5		33.1				
	4	4 _{ex}	8/17/23			31.3		—			
Salinity			3 months	Std Val	Tap water	Salin Std 5/24/22 date 34.0 ppt	Tap water	Salin Std 5/24/22 date 34.0 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	3	3	9/5/22		0.22	34.2	0.22	34.2			
	3	4	9/5/22		0.22	34.0	—	—			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	3	1	2/7/22		100.4 %		99.7 %				
	3	4	8/15/22		103.2 %		—				
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	
	3	7	10/17/22		7.01	9.96	7.02	9.96		7.00 ± 0.02 @ 25°C 10.00 ± 0.02 @ 25°C	
	3	6	10/17/22		7.01	9.96	—	—			
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 5.70 NTU	BLANK <0.1	LOW 1-10 5.70 NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
	1	n/a	10/17/22		0.06	5.70	0.07	5.73		Low 5.70 NTU	
	—	n/a	—		—	—	—	—			

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

Lab: OLP

Team	R2RS	Samplers (Last Name, 1st Initial)	S. Bieser M. Floyd	Meters and Probes ID		
Session	112			HQ2200: 3		2100Q: 1
Date	10/18/2022			pH: 7	DO: 1	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 RNS221018	N	8:17	26.6	36.0	6.49	98.8	8.12	0.80	0.93	0.91	0	2	0
Pohaku RPO221018	N	8:41	26.7	35.2	6.31	95.8	8.13	6.07	6.83	6.56	3	2	0
Kaanapali Shores RKS221018	N	9:00	26.6	36.3	6.37	97.0	8.10	1.29	1.25	1.41	3	3	0
Kahekili Beach Two RKT221018	N	9:25	27.3	36.2	6.31	97.3	8.15	1.05	1.15	1.13	5	7	0
Canoe Beach RCB221018	N	9:46	27.4	36.1	6.38	98.5	8.16	1.36	1.38	1.45	0	2	0
Wahikuli RWA221018	N	10:03	27.4	35.8	6.78	104.6	8.21	2.14	2.18	2.10	0	2	0

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

RNS - 1-2' swells
RPO - minimal swells
RKS - 1' swells
RKT - almost no swell
RCB - almost no swell
RWA - 1-2' swells
overall calmer swells at all beaches.

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	5.70	56.76	614
Pre-sampling	0.06	5.52	56.0	608
Post-sampling	0.05	5.65	56.9	612

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	OLP	Liz Yannell
Bacteria	-	-	-

Signature (Team Lead):

Liz Yannell

Printed Name:

Liz Yannell

Hawaii Kai Wai Ola - Sample Collection Data Sheet

Team	R2RS	Samplers (Last Name, 1st Initial)	S. Bieser M. Floyd
Session	112		
Date	10/18/22		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS221018-N-1	Napili Bay	<input type="checkbox"/>	<input type="checkbox"/>	8:17	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO221018-N-1	Pohaku	<input type="checkbox"/>	<input type="checkbox"/>	8:41	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS221018-N-1	Kaanapali Sh	<input type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT221018-N-1	Kahekili Beach Two	<input type="checkbox"/>	<input type="checkbox"/>	9:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB221018-N-1	Canoe Beach	<input type="checkbox"/>	<input type="checkbox"/>	9:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA221018-N-1	Wahikuli	<input type="checkbox"/>	<input type="checkbox"/>	10:03	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): Liz Yarnell	Printed Name: Liz Yarnell
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Team	Polanui	Samplers (Last Name, 1st Initial) GUND, K HARRIS, K GONZALEZ, T	Meters and Probes ID		
Session	112		HQ2200: 3	2100Q: 1	
Date	10/19/2022		pH: 7	DO: 1	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
505 Front St PFF221019	Y	8:10	26.4	34.4	6.23	94.2	8.08	2.11	2.20	2.42	0	7	0
Lindsey Hale PLH221019	N	8:38	26.3	35.8	6.15	93.3	8.07	11.2	10.7	10.8	0	2	0
Lahaina Town PLT221019	N	8:56	26.8	36.0	6.12	93.7	8.07	7.93	7.82	7.94	0	2	0
Camp Olowalu OCO221019	N	9:28	27.8	36.3	5.98	93.2	8.07	3.86	3.79	3.70	1	1	no people but definitely camping
Papalaua Pali OPP221019	N	9:47	27.5	36.2	6.44	99.9	8.11 5.82 5.82	5.82 6.17 6.17	6.17	6.52	0	0	0

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

PFF We took a 4th turbidity which was 2.14 so I didn't cross out. What do you think. Photo taken

PLH Culvert dug out. Photo taken.

OCO New paddle double hull boating cause minimal parking

P.S. No film pH probe

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	0.05	5.70	57.6	614
Pre-sampling	0.05	5.65	57.3	611
Post-sampling	0.05	5.62	57.0	609

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	OLP	ymayes
Bacteria	-	-	-

Signature (Team Lead):

[Signature]

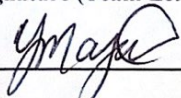
Printed Name:

Ylenia St-Louis

Team	Polanui	Samplers (Last Name, 1st Initial)	Gund. K Harris. K Gonzalez. T
Session	112		
Date	10/19/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF221019-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	Fresh water flowing
PLH221019-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	
PLT221019-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:56	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO221019-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:28	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP221019-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: Ylenia M St-Louis
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Team	R2RN	Samplers (Last Name, 1st Initial)	Berg, Lisa Huthehings, Lyn Hehemann, Cici Erwin, J	Yannell, L.	Meters and Probes ID		
Session	112				HQ2200: 3	2100Q: 1	
Date	10/20/22				pH: 7	DO: 1	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 RHL221020	N	7:50A	25.3	34.7	6.53	97	8.10	32.1 0.85	56.6	54.4	0	0	0
Oneloa Bay RON221020	N	8:35A	26.7	36.3	6.56	100.6	8.16	0.83	0.85	0.82	0	2	0
Kapalua Bay RFS221020	N	9:00A	26.8	35.8	6.55	100.2	8.13	5.53	5.41	5.72	10	28	0
Ka'opala Bay RKO221020	N	9:20A	26.7	35.4	6.49	98.8	8.10	17.6	19.2	18.5	0	0	0
Kahana Village RKV221020	N	9:45A	27.2	36.2	6.61	102.0	8.18	10.5	10.6	11.7	1	3	0

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

RHL - shore break made it dangerous to go in to normal depth. Sample came from shore without much depth.
4m Turb. 54.8
RON - 4m Turbidity 0.82
RKO - 4m Turbidity 19.2
swell & current in each location

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	0.05	5.72	57.6	614
Pre-sampling	0.05	5.64	56.7	609
Post-sampling	0.07	5.73	57.0	613

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	OLP	Liz Yannell
Bacteria	-	-	-

Signature (Team Lead):

Liz Yannell

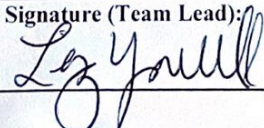
Printed Name:

Liz Yannell

Team	R2RN	Samplers (Last Name, 1st Initial)	Berg, L. Hutchings, L. Heheman, C. Erwin, J. Yannell, L.
Session	112		
Date	10/20/22		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL221020-N-1	Honolua Bay	<input type="checkbox"/>	<input type="checkbox"/>	7:50 am	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON221020-N-1	Oneloa Bay	<input type="checkbox"/>	<input type="checkbox"/>	8:35 am	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS221020-N-1	Kapalua Bay	<input type="checkbox"/>	<input type="checkbox"/>	9:00 am	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO221020-N-1	Ka'opala Bay	<input type="checkbox"/>	<input type="checkbox"/>	9:20 am	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV221020-N-1	Kahana Village	<input type="checkbox"/>	<input type="checkbox"/>	9:45 am	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: Liz Yannell
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