

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
113	Li Yammell, Meredith Beeson	11/7/22	10:55 am	M. Beeson, Y. St. Louis	11/10/22	10:45

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	4	8/17/23		30.6 °C	30.5 °C	30.7 °C	— °C			
	4	3	8/17/23			30.3		—			
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	
	4	4	9/5/22		0.23	33.9	0.24	34.0			
	4	3	9/5/22		0.23	34.2	—	—			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	4	4	8/15/22		101.6		100.1				
	4	1	2/7/22		100.1		—				
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	
	4	6	11/7/22		6.99 7.01	9.96	6.94	9.98		- had to calibrate twice bc of temp issues	
	4	7	11/7/22		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	
	24	n/a	11/4/22		0.08	6.43	0.09	6.42		new meter ★ low: 6.43 NTU	
	1	n/a	10/17/22		0.07	5.54	—	—		★ low: 5.72 NTU	

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

Lab: OLP

Team	R2RS	Samplers (Last Name, 1st Initial)	Floyd, M Bieser, S Kranberg, J	Meters and Probes ID		
Session	113			HQ2200: 4	2100Q: 74 Ey	
Date	11/08/2022			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
Napili Bay RNS221108	N	8:10am	25.7	35.6	6.68	99.1	8.15	1.14 JK 0.93	JK 0.89	2.34	8	11	Ø
Pohaku RPO221108	N	8:38	25.7	34.3	6.57	96.7	8.14	5.69	4.67	5.19	0	1	Ø
Kaanapali Shores RKS221108	N	9:00	25.7	35.7	6.58	97.9	8.16	1.75	1.69	2.02 1.89	2	2	Ø
Kahekili Beach Two RKT221108	N	9:22	26.1	36.0	6.55	98.3	8.17	1.81	1.57	1.55	12	15	Ø
Canoe Beach RCB221108	N	9:47	27.0	35.3	6.70	101.6	8.19	29.8	30.4	29.9	1	Ø	Ø
Wahikuli RWA221108	N	10:05	26.9	35.1	6.51	98.5	8.18	1.46	1.74 1.62	1.29	Ø	Ø	Ø

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

RNS: ~1/2 ft surf, shady, outgoing tide, slight trades
• Turbidity readings varied a lot - took 5 readings
• 2100Q felt "tighter"; possibly something inside machine?

RPO - small swells

RKT - Offshore winds, ~2ft rolling swell/shorebreak

RCB ~ 1-2 ft swells; very churned up by shorebreak

RWA - Sunny, rolling shorebreak

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	0.08	6.43	64.9	597
Pre-sampling	0.08	6.37	64.3	599
Post-sampling	0.08	6.38	64.8	595

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

Team	R2RS	Samplers (Last Name, 1st Initial)	Floyd, M. Bieser, S. Kranberg, J.
Session	113		
Date	11/08/22		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS221108-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	
RPO221108-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:38	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS221108-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	
RKT221108-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:22	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB221108-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:47	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA221108-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:05	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>Liz Yannell</i>	Liz Yannell

Team	Polanui	Samplers (Last Name, 1st Initial) GUND, K SHARPE, M	Meters and Probes ID		
Session	113		HQ2200: 4	2100Q: 74 Ey	
Date	11/09/2022		pH: 6	DO: 2	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 PFF221109	Y	8:10	26.0	35.9	6.11	91.6	8.07	2.74	3.23	3.17	5 Kayaks	2	0
Lindsey Hale PLH221109	N	8:38	25.7	35.2	6.55	97.3	8.07	24.6 Ey 23.5	25.3	25.6	0	0	0
Lahaina Town PLT221109	N	9:07	26.3	35.1	5.75	86.2	8.04	16.6 Ey 19.2	17.2	15.9	0	2	0
Camp Olowalu OCO221109	N	9:46	26.0	36.0	6.68	100.1	8.10	2.19	2.02	2.03	0	0	0
Papalaua Pali OPP221109	N	10:16	25.9	35.6	7.12	106.2	8.15	5.69 5.24 Ey 6.6	5.58		0	0	0

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

FIRE IN KAUAI VALLEY 11/8/22. 850+ ACRES

PLH: shallow, calm and sediment very visible silty;
4th reading turb 24.6 (photo of water flow at entrance)

PLT: neighbor reports pool w/ chlorine drained
into storm drain - approx monthly - flowing
toward reef: 4th reading turb 16.6
distance from shoreline increased for
collection - to knee level - (further than
usual collection zone)

OCO: noticed pipe extending from shore, exposed by
erosion? (photo taken)

OPP: 4th turbidity taken; 2nd DO taken *confirmed

Sites with potential for freshwater flow: 505 Front St.

- some algae on rocks near sample site

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.08	6.43	64.9	597
Pre-sampling	0.07	6.40	64.5	599
Post-sampling	0.07	6.40	65.1	597

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Liz Yannell

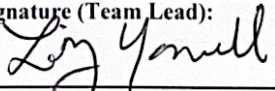
Printed Name:

Liz Yannell

Team	Polanui	Samplers (Last Name, 1st Initial)	Gund, K. Sharpe, M.
Session	113		
Date	11/09/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF221109-N-1	505 Front St	<input type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH221109-N-1	Lindsey Hale	<input type="checkbox"/>	<input type="checkbox"/>	8:38	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT221109-N-1	Lahaina Town	<input type="checkbox"/>	<input type="checkbox"/>	9:07	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO221109-N-1	Camp Olowalu	<input type="checkbox"/>	<input type="checkbox"/>	9:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP221109-N-1	Papalaua Pali	<input type="checkbox"/>	<input type="checkbox"/>	10:10	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 Yarnell
---	------------------------------

Team	R2RN	Samplers (Last Name, 1st Initial)	Barg, L Hutchings, L Erwin, J	Itchemann, C Beeson, M	Meters and Probes ID		
Session	113				HQ2200: 4	2100Q: 74 E8	
Date	11/10/22				pH: 6	DO: 2	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 RHL221110	N	8:03	24.9	35.6	6.43	94.3	8.19	1.69	1.30	1.90	3	4	0
Oneloa Bay RON221110	N	8:40	25.6	36.0	6.85	102.2	8.2	0.44	0.53	0.60	0	2	0
Kapalua Bay RFS221110	N	9:08	25.8	36.0	6.71	100.6 ^{LH}	8.14	1.79	1.74	2.01	23	25	0
Ka'opala Bay RKO221110	N	9:38	25.3	35.3	6.55	97.0	8.07	0.84	0.98	0.936	0	0	0
Kahana Village RKV221110	N	10:04	25.9	35.5	6.99	104.3	8.18	4.54	5.34 ^W	4.32	0	9	0

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

RHL - 2nd Salinity - 35.5
RFS - 2nd Salinity - 35.9
RKO - low tide
RKV - Re-read Salinity 300
6.98 104.2
Turb 5.34

Fire still going. Spread north a bit, but not all
the way to Ka'anapali/Kahana
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	6.43	64.9	597
Pre-sampling	0.08	6.43	64.9 ^W	599
Post-sampling	0.09	6.42	64.9	600

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

mbeeson

Printed Name:

Meredith Beeson

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutzings, L. Berg, L. Hehemann, C.	Ervin, J. Beeson, M.
Session	113			
Date	11/10/22			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL221110-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:03	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON221110-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	
RFS221110-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:08	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO221110-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:38	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV221110-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:04	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):

MBeeson

Printed Name:

Meredith Beeson