


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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
118	J.Erin E.Johnson	02/27/23	2:00 PM	J.Erin L.Yannell	03/02/23	11:30am

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 27.9 °C	NIST 27.9 °C	NIST 28.2 °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water
	4	6	8/17/23		28.5		28.1		
	3	7	8/17/23		28.4				
Salinity			3 months	Std Val	Tap water 9/29/22 date 33.7 ppt	Tap water 9/29/22 date 33.7 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	4	6	2/27/23		0.04	34.3	0.09	34.4	
	3	7	2/27/23		0.04	34.5			
Dissolved Oxygen			1 year	Std Val	100%	100%	± 5 %		
	4	6	8/15/22		103.9 %	100.9 %			
	3	7	2/6/23		100.1 %				
pH			3 weeks	Std Val	pH 7.00	pH 10.00	pH 7.00	± 0.1 pH of pH std value	Compare to Manufacturer pH Std value on bottle
	4	6	2/27/23		6.99	9.94	7.01	9.94	pH expire this month
	3	7	2/27/23		7.02	9.96			
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 6.43 NTU	BLANK <0.1	LOW 1-10 6.43 NTU	± 0.18 NTU Low 1-10
	4	n/a	1/16/23		0.08	6.46	0.08	6.43	LOW 6.43 NTU → standard
	1	n/a	2/6/23		0.05	5.44			LOW 5.23 NTU

QA: * Are pre- and post within one week?

* Delay times are ok?

* Other equipment issues?

OLP Lab

Team	R2RS	Samplers (Last Name, 1st Initial)	S. Bieser, M. Floyd J. Kranberg						Meters and Probes ID		
Session	118								HQ2200: 4	2100Q: 4	
Date	2/28/2023								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 RNS230228	N	8:15	23.0	36.2	7.14	101.5	8.24	2.41	2.96	2.77	2
Pohaku RPO230228	N	8:35	23.0	34.7	7.17	100.9	8.20	22.2	24.7	25.1	0
Kaanapali Shores RKS230228	N	8:55	22.9	35.9	7.12	100.7	8.20	5.80 102 NTU	5.90	5.83	0
Kahekili Beach Two RKT230228	N	9:23	23.3	35.8	7.12	101.2	8.19	4.44	4.19	4.16	1 Canoe
Canoe Beach RCB230228	N	9:43	24.0	35.5	7.02	100.8	8.20	3.68 NTU	3.93	3.30	0
Wahikuli RWA230228	N	9:57	24.3	35.2	6.97	100.9	8.22	4.10 4.42	4.92	4.75	0

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

Use the back of the form if needed.

RNS: ~3-4' North swell, light off shore wind, intermittent rain;

mid tide; rainbows galore; Molokai in shrouds

RPO - murky water, lightly raining. 1' swells at beach but bigger swells out further. Light trade winds. 4th Turb ~ 21.3

RKS: 2-3' N swell - 4th turbidity = 5.80
4-6 OFF shore

RKT: 1-2' shorebreak, no wind, rain (heavy), raising tide during collection

RCB: 2' swells off shore - Light rain on & off.
Sites with potential for freshwater flow: Kaanapali Shores, Canoe Beach

RWA: 0-1' swells - Murky waters at shore
4th turbidity reading

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	6.45	64.1	601
Post-sampling	0.08	6.43	64.6	599

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	OLP	JESS EMUR
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:

JESSICA EMUR

Team	R2RS
Session	118
Date	02/28/23

Samplers
(Last Name,
1st Initial)

S. Beiser, M. Floyd, J. Kranberg

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS230228-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO230228-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS230228-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	
RKT230228-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:23	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB230228-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:43	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA230228-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:57	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:

Jessica Enwin

Team	Polanui	Samplers (Last Name, 1st Initial)							Meters and Probes ID		
Session	118		Gund, K Gonzalez, T Harris, K						HQ2200: 4	2100Q: 4	
Date	3/01/2023								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 PFF230301	Y	8:11	23.5	34.6	6.65	94.5	8.14	1.23	1,14	1,32	Ø Ø Ø
Lindsey Hale PLH230301	N	8:34	23.4	35.6	6.58	94.8	8.16	2.88	2.22	2.38	1 ^{KG} 2 Ø
Lahaina Town PLT230301	N	8:53	23.5	35.5	6.48	92.7	8.15	2.58	2.68	2.41	Ø Ø Ø
Camp Olowalu OCO230301	N	9:25	22.7	35.9	7.07	99.9	8.13	7.48 ^{KG} 10.7	8.12	7.97	Ø Ø Ø
Papalaua Pali OPP230301	N	9:49	23.1	36.1	7.18	101.2	8.18	4.24 ^{KG} 5.38	4.66	4.76	Ø Ø Ø

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

PFF, PLH + PLT Sprinkling rain
DCO - NEWLY BARACADED BEACH ACCESS
WE PARKED BY CAMP OLOWALU EXIT
GATE.
- SUSPENDED GREEN "STUFF" IN
SURF + SILT
OPP - WINDY! SAMPLES GRABBED
VERY CLOSE TO SHORE BREAK

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	0.08	6.43	64.9	597
Pre-sampling	0.08	6.48	64.2	681
Post-sampling	0.08	6.49	65.1	600

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Liz Yannell

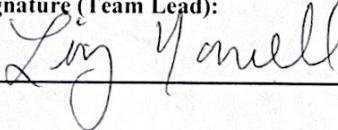
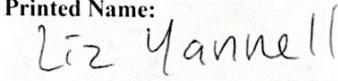
Printed Name:

Liz Yannell

Team	Polanui	Samplers (Last Name, 1st Initial)	Gund, K. Gonzalez, T. Harris, K.			
Session	118					
Date	3/01/2023					

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF230301-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:11	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH230301-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	
PLT230301-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:53	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO230301-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	
OPP230301-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:49	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: 

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L Berg, L Hurley, C						Meters and Probes ID		
Session	118								HQ2200: 4	2100Q: 4	
Date	03/02/23								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 RHL230302	Y	8:10A	21.6	26.6	7.38	97.4	8.17	47.5 59.0 52.0	0	1	0
Oneoia Bay RON230302	N	8:410A	23.0	36.2	7.16	102.0	8.20	1.28 1.27 1.44	0	0	0
Kapalua Bay RFS230302	N	9:00A	22.9	35.3	7.08	100.5	8.14	3.92 4.08 4.56	1	3	0
Ka'opala Bay RKO230302	N	9:25A	22.4	35.2	7.11	99.7	8.14	9.73 10.2 10.3	0	0	0
Kahana Village RKV230302	N	9:45A	22.8	35.0	7.50	105.7	8.17	7.86 8.07 6.85 8.04	0	9	0

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

Use the back of the form if needed.

RAL - calm, stream flowing swiftly, raining
 4th turb. many particles 41.6
 " Did not notice salinity off until
 5th 59.8, after leaving HNL, sorry CH.
 RON - High Surf
 RFS - 4th turb. 4.98
 5th turb. 4.08

RKV - 4th turb. 8.04 (SE); Streets surrounding Kahana are flooded.
 Sprinkling on/off at all sites. Very Windy.
 Sites with potential for freshwater flow: Honolua Bay, Kahana Village

TURBIDITY VERIFICATION

	Blank (must be < 10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.08	6.43	64.9	597
Pre-sampling	0.07	6.44	64.4	600
Post-sampling	0.07	6.45	64.8	600

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Jessica Ewin

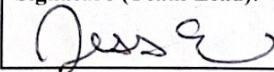
Team	R2RN	Samplers (Last Name, 1st Initial)				
Session	118					
Date	03/02/23					

Hutchings, L.
Berg, L.
Hurley, C.

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL230302-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON230302-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	
RFS230302-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	
RKO230302-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	
RKV230302-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	

		<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:

Jessica Rawlin