



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

Session No:	Verifiers (pre-sampling):			Pre Date:	Pre Time:	Verifiers (post-sampling):		Post Date:	Post Time:
97	M. Beeson, N. Sampson			11/29/21	9:20	N. Sampson		12/1/21	10:43

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 25.2 °C	NIST 25.2 °C	NIST 24.4 °C	NIST — °C	± 0.6 °C of NIST
	4	4	8/17/23		25.1		24.3		Compare to NIST Std value in tap water
	4	3	8/17/23		25.0		—		
Salinity			3 months	Std Val	Tap water 2/20 date 35.0 ppt	Tap water 2/20 date 35.0 ppt		± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle
	2	4	11/29/21 to 1/8/21		0.41	35.0	0.41	35.0	
	2	3	11/29/21 to 1/8/21		0.40	34.7	—	—	
Dissolved Oxygen			1 year	Std Val	100%	100%		± 5 %	
	2	4	8/12/21		100.9	100.1			
	2	1	9/28/20		98.1	—			
pH			3 weeks	Std Val	pH 7.00	pH 10.00	pH 7.00	pH 10.00	± 0.1 pH of pH std value
	2	6	11/29/21		7.01	9.99	7.03	10.02	
	2	7	11/29/21		7.04	9.93	—	—	New Probe
Turbidity			3 months	Std Val	BLANK <0.1 ★ NTU	LOW 1-10 BLANK <0.1 NTU	LOW 1-10 NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value
	NBBF	n/a	10/8/21		0.05	5.54	0.07	5.49	★ Low: 5.56 NTU
	1	n/a	10/8/21		0.04	5.30	—	—	★ Low: 5.41 NTU

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

LAB: KAL

Team	R2RS	Samplers (Last Name, 1st Initial)	M. Beeson S. Bieser (1st 2 sites) M. Floyd						Meters and Probes ID		
Session	97								HQ40d: 2	2100Q: NBBF	
Date	11/30/2021		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 RNS211130	N	8:10 am	24.9	35.1	6.74	99.5	8.15	1.76	1.75	1.79	0	1	0
Pohaku RPO211130	N	8:42	24.9	33.3	6.70	98.1	8.15	6.20 4.73	6.48	5.30	0	1	0
Kaanapali Sh RKS211130	N	9:05	24.8	35.1	6.94	102.9	8.13	1.68	1.70	1.94	1	0	0
Kahekili Beach Two RKT211130	N	9:36	25.5	35.6	6.75	101.1	8.18	2.24	2.25	2.07	0	0	0
Canoe Beach RCB211130	N	10:04	26.5	35.3	6.67	101.4	8.17	2.14	2.80	2.13	0	0	0
Wahikuli RWA211130	N	10:29	26.3	35.1	6.69	101.6	8.19	1.26	1.35 6.60	0	1	0	0

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

Use the back of the form if needed.

Raining on roff last few days
 RNS - sand is wet
 RPO - 1 SVP, 1 foiler out on the wave
 - sand has filled in against the rocks on shore
 - 1 fisherman on other side of beach

RKT - sand has covered rocky area, but we still walked to the right to sample for consistency
 - 35.5 ppt 2nd reading

RCB - 4th turbidity 2.23 NTU
 - 2nd salinity reading same 36.3

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	0.05	5.56	57.4	612
Pre-sampling	0.05	5.54	57.4	613
Post-sampling	0.08	5.54	57.4	613

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	0	KAL	M. Beeson
Bacteria	-	-	-

Signature (Team Lead):

M. Beeson

Printed Name:

Meredith Beeson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	Beeson, M.			
Session	97		Bieser, S. (1 st 2 sites)			
Date	11/30/2021		Floyd, M.			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS211130-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	
RPO211130-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:42	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS211130-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT211130-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB211130-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:04	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA211130-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:29	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):

M Beeson

Printed Name:

Meredith Beeson

Team	Polanui	Samplers (Last Name, 1st Initial)	Harris, K Holton, T Gund, K							Meters and Probes ID		
Session	97									HQ40d:	2	2100Q: NBBF
Date	12/01/2021									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 PFF211201	Y	8:11	25.7	35.3	5.84	87.6	8.06	2.97	2.33	2.66	0	2	0
Lindsey Hale PLH211201	N	8:39	25.6 25.7	34.8 34.8	5.41 5.37	80.8 80.3	8.06	13.1	15.3	11.3	0	1	0
Lahaina Town PLT211201	N	9:00	25.8	35.0	5.49	82.4	8.07	6.71	5.65	5.29	0	1 ^{dog}	0
Camp Olowalu OCO211201	N	9:27	25.8	35.5	6.35	95.5	8.10	1.44	1.23	1.46	0	0	0
Papalaua Pali OPP211201	N	9:45	25.9	35.8	7.06	106.6	8.20	6.45	6.06	5.79	0	0	0

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

Use the back of the form if needed.

PFF stream flowing straight down
Nalei took a picture

PLH area around drain pipe looks like
it was dug out recently

PLH 4th turbidity 14.4

PLH took 2nd reading because O₂ % so low

PLT lots of limu at water line, sand is back
How much of the turbidity bottle gets filled? All the way
Or to the shoulder? Very calm

OCO - very calm, slight breeze

OPP - slight shorebreak, looks mucky, 4th turbidity 5.56

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	5.54	57.4	612
Pre-sampling	0.08	5.54	57.2	614
Post-sampling	0.07	5.51	57.7	612

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

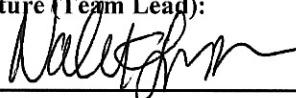
Printed Name:

Nalei Sampson

Team	Polanui	Samplers (Last Name, 1st Initial)	Harris, K Horton, T Gund, K
Session	97		
Date	12/01/2021		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF211201-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	
PLH211201-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	
PLT211201-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO211201-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:27	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP211201-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:45	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:
	Natei Sampson

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L Heinemann, C								Meters and Probes ID		
Session	97										HQ40d: 2	2100Q: NBBF	
Date	12/02/2021										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 RHL211202	Y	7:55A	24.2	34.2	6.59	95.5	8.19	6.02	5.93	6.65	0
Oneloa Bay RON211202	N	8:32	25.6	35.6	6.74	101.1	8.20	0.77	0.67	0.65	0 3 0
Kapalua Bay RFS211202	N	9:00	25.6	35.1	6.67	99.6	8.12	3.32	3.09	3.11	3 8 0
Ka'opala Bay RKO211202	N	9:28	25.1	34.7	6.41	94.7	8.10	5.45	5.10	5.06	0 1 0
Kahana Village RKV211202	N	9:46	25.6	34.9	6.87	102.2	8.14	5.39	5.75	4.38	0 1 0

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

RHL - rained last night, river flowing

RON - 4 dogs on beach, rougher conditions

RFS - smells like sunscreen. pretty calm conditions.

RKO - pretty calm, small waves. looked a little clearer today. Bad smell going down the steps, but beach smelled fine.

RKV - Calm conditions, small waves.

TURBIDITY VERIFICATION

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Post-sampling	0.07	5.51	57.5	613

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Nate Sampson

Sites with potential for freshwater flow: Honolua Bay, Kahana Village

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L , Sampson, N Hehemann, C			
Session	97					
Date	12/02/2021					

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL211202-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON211202-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:32	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS211202-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	
RKO211202-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:28	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV211202-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:46	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:

Nalei Sampson