

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:
99	M.Beezon, N.Sampson	1/17/22	11:00	N. Sampson	1/20/22	10:20

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	23.6 °C	23.7 °C	23.6 °C	± 0.6 °C of NIST Compare to NIST Std value in tap water	
	4	4	8/17/23		23.6		23.5		
	4	3	8/17/23		23.7		—		
Salinity			3 months	Std Val	Tap water 6/27/21 date 33.5 ppt	Tap water 6/27/21 date 33.5 ppt	Tap water 6/27/21 date 33.5 ppt	± 1 ppt Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	4	11/29/21		0.38	33.9	0.39	33.9	
	2	3	11/29/21		0.38	33.7	—	—	
Dissolved Oxygen			1 year	Std Val	100%	100%	± 5 %		
	2	4	8/12/21		101.7	101.6			
	2	1	9/28/20		99.3	—		*Warning on parts to calibrate	
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
	2	6	1/17/22		7.01	9.99	7.04	10.02	
	2	7	1/17/22		7.01	10.00	—	—	
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
	NBBF	n/a	1/17/22		0.06	5.79	0.06	5.78	*Low: 5.75 NTU
	1	n/a	1/17/22		0.09	5.64	—	—	*Low: 5.56

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

LAB: KAL

Team	R2RS	Samplers (Last Name, 1st Initial)	FLOYD, M	Beeson, M.			Meters and Probes ID			
Session	99		BIESER, S				HQ40d: 2	2100Q: NBBF		
Date	01/18/2022		MCLAUGHLIN, B				pH: 6	DO: 4	Salinity: 4	
FLEISCHER, T										

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 RNS220118	NA	8:13	23.9	35.7	6.94	100.9	8.15	1.09	1.05	1.18	0	2	NA	
Pohaku RPO220118	NA	8:46	24.4	35.1	6.87	100.4	8.14	3.96	3.94	4.25	NA	3	NA	
Kaanapali Sh RKS220118	NOT FLOWING	9:05	24.4	35.4	6.91	101.2	8.15	1.30	1.49	1.45	3	12	NA	
Kahekili Beach Two RKT220118	NA	9:30	24.6	35.5	6.84	100.9	8.18	2.27	2.02	2.03	∅	∅	∅	
Canoe Beach RCB220118	N	9:52	25.3	35.5	6.66	99.1	8.19	3.87	3.63	3.79	1	∅	∅	
Wahikuli RWA220118	NA	10:16	25.1	33.9	6.85	100.9	8.19	0.89	2.54	1.13	1.04	1	3	∅

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

Use the back of the form if needed.

RPO - Fisherman above 50 yds south of beach.

RKS - RED FLAG Posted on Beach

* - stream not really flowing. small amount of water going back & forth with the tide

- 2ND & 3RD SALINITY WAS 35.7

RKT - went 25 ft to the left bc of rocks sticking out

RCB - 1 FISHERMAN ON BEACH

RCB - 2ND SALINITY 35.4

RWA - sand churning where samples were taken; wave activity too

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	0.04	5.75	58.3	566
Pre-sampling	0.05	5.81	57.9	567
Post-sampling	0.05	5.81	57.8	566

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	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)	Flugd, M.	Freiburg, T.
Session	99		Biester, S.	
Date	01/18/22		McLaughlin, B.	Beezon, M.

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS220118-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:13	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO220118-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS220118-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	
RKT220118-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	
RCB220118-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA220118-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:16	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. Beezon

Printed Name:

Meredith Beezon

Team	Polanui	Samplers (Last Name, 1st Initial)	GONZALEZ, T HARRIS, K GLIND, K MAYEN, Y						Meters and Probes ID			
Session	99								HQ40d:	2	2100Q: NBBF	
Date	01/19/2022		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 PFF220119	Y	8:13	24.1	34.9	5.76	83.6	8.09	4.27	4.16	2.74	4.19	0	5	0
Lindsey Hale PLH220119	N	8:38	24.4	35.2	5.56	81.2	8.08	8.62	8.30	8.54	0	0	0	
Lahaina Town PLT220119	N	8:54	24.8	35.0	5.37	79.1	8.07	7.54	6.88	6.98	0	0	0	
Camp Olowalu OCO220119	N	9:21	25.7	35.7	6.32	94.4	8.17	1.34	1.84	1.30	1.47	0	0	0
Papalaua Pali OPP220119	N	9:40	25.4	35.8	6.79	101.6	8.17	5.87	5.81	5.41	4.89	0	2	0

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

PRE SAMPLING: BLANK 0.11 ON 1ST READ
0.13 ON 2ND READ

CLEANED w/oIL & CLOTH

PFF Steady MODERATE FLOW

ODO Please advise if taking the 4th turbidity was valuable

OPP same as above

*Kristy is submitting photos

THANK YOU FOR INCLUDING RANGES FOR TURBIDITY!
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	5.75	58.3	566
Pre-sampling	0.06	5.74	57.2	567
Post-sampling	0.05	5.77	56.6	565

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	KAL	MBeeson
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:

Meredith Beeson

Team	Polanui	Samplers (Last Name, 1st Initial)	Gonzalez, T. Harris, K. Gund, K. Mayer, Y.			
Session	99					
Date	01/19/22					

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF220119-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	
PLH220119-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	
PLT220119-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:54	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO220119-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:21	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP220119-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:40	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:

Meredith Beeson

Team	R2RN	Samplers (Last Name, 1st Initial)	Kitchings, L Berg, L. Heheman, C.						Meters and Probes ID					
Session	99								HQ40d:		2	2100Q:		NBBF
Date	01/20/2022								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
Honolua Bay RHL220120	N	7:55A	23.2	35.5	6.67	95.9	8.16	5.88	4.29	6.39	0 0 0
Onealoa Bay RON220120	N	8:40A	24.5	35.9	6.93	102.2	8.21	5.61	0.60	0.69	1 2 0
Kapalua Bay RFS220120	N	9:05A	24.6	35.4	6.78	99.9	8.13	2.27	2.00	2.21	3 7 0
Ka'opala Bay RKO220120	N	9:27A	24.3	35.3	6.71	98.6	8.13	11.4	11.1	11.3	0 0 0
Kahana Village RKV220120	N	9:47A	24.7	35.1	6.72	98.8	8.15	5.58	5.95	6.27	2 4 0

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

RHL - 4m turbidity after black cloth

4.61
Read salinity twice @ 35.5

RON - rec'd 1st turbidity reading 2nd = 0.56

RKV - 4m turbidity 6.13

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.05	5.75	58.3	566
Pre-sampling	0.07	5.72	57.9	567
Post-sampling	0.08	5.71	58.1	565

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

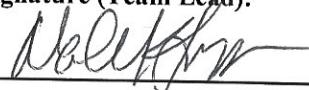
Nalei Sampson

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

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L			
Session	99		Berg, L			
Date	01/20/2022		Hehemann, C			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL220120-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	
RON220120-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	
RFS220120-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO220120-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:27	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV220120-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:42	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