

Hui O Ka Wai Ola

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
110	M. Beeson	9/5/22	10:00am	V. Mayen	9/8/22	—

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 28.5 °C	NIST 28.4 °C	NIST 28.0 °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	4	3	8/17/23		28.3		28.0			
	4	4	8/17/23		28.4		—			
Salinity			3 months	Std Val	Tap water 11/16 date 35.0 ppt	Tap water 11/16 date 35.0 ppt	Tap water 11/16 date 35.0 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	3	3	9/5/22		0.03	38.0 ^{34.9}	0.45	34.2	wrote in wrong spot. 34.9 ppt read tapwater 2x came	
	3	4	9/5/22		0.03	35.0	—	—	out same 0.45	
Dissolved Oxygen			1 year	Std Val	100%	100%	± 5 %			
	3	1	2/7/22		99.4	95.3			This is the one that roared w/ broken shroud.	
	3	4	8/15/22		104.7	—			1st reading: 104.7%. 2nd reading: 105.1%	
pH			3 weeks	Std Val	pH 7.00	pH 10.00	pH 7.00	pH 10.00	± 0.1 pH of pH std value	
	3	7	9/5/22		7.01	9.94	7.01	9.97		
	3	6	9/5/22		7.00	9.96	—	—		
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 5.72 NTU	BLANK <0.1	LOW 1-10 5.72 NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value
	1	n/a	7/4/22		0.04	5.72	0.29	5.73		Did 3x reading & rinse came same value
	—	n/a	—		—	—	—	—		

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

* Delay times are ok?

* Other equipment issues?

Lab: KAL-2

Team	R2RS	Samplers (Last Name, 1st Initial)	FLOYD, M BIESER, S						Meters and Probes ID			
Session	110								HQ2200:	3	2100Q:	1
Date	09/06/2022		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 RNS220906	N	8:10	26.3	34.4	6.94	104.3	8.11	1.14	1.31	1.35	2
Pohaku RPO220906	N	8:40	26.7	34.1	6.24	94.4	8.13	4.71	4.61	4.23	0
Kaanapali Sh RKS220906	N	9:07	26.6	35.8	6.16	93.9	8.06	2.48	1.93	2.19	0
Kahekili Beach Two RKT220906	N	9:30	27.5	36.0	6.54	101.1	8.17	1.44	1.71	1.51	1
Canoe Beach RCB220906	N	9:55	27.8	35.4	6.55	101.5	8.17	2.05	3.01	2.95	0
Wahikuli RWA220906	N	10:12	28.2	35.4	6.39	99.6	8.23	3.05	3.00	3.00	0

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

RNS - High tide. Small swell

RPO - 4 ft turbidity noted above - Larger swells
RKS - minimal swell

RKT - small swells

RCB - 1-2' shore pounders

RWA - small swells - Large Holes on BEACH

RCB - forgot to use filter tip on syringe. Got new water, but used same syringe + nutrient bottle.

Sites with potential for freshwater flow: Kaanapali Shores, Canoe Beach

*post-sampling low standard read 5.62, 5.82, 5.58

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.06	5.72	57.0	598
Pre-sampling	0.06	5.66	56.7	599
Post-sampling	0.08	5.62*	56.9	594

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	KAL-2	M. Beeson
Bacteria	-	-	-

Signature (Team Lead):

MB

Printed Name:

Meredith Beeson

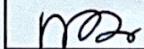
Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	Floyd, M. Bieser, S.			
Session	110					
Date	09/06/22					

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS220906-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	
RPO220906-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	
RKS220906-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:07	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT220906-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	
RCB220906-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA220906-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:12	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	Polanui	Samplers (Last Name, 1st Initial)	HARRIS, K GUINO, K						Meters and Probes ID			
Session	110								HQ2200:	3	2100Q:	1
Date	09/07/2022								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 PFF220907	Y	8:09	27.3	35.8	5.29	81.4	8.02	④ 2.18 KG ⑤ 2.07 KG +6.00 +7.79 2.80	1	3	0
Lindsey Hale PLH220907	N	8:40	27.4	35.2	5.59	85.9	8.05	4.95 4.93 4.56	0	2	0
Lahaina Town PLT220907	N	9:01	27.9	35.3	5.56	86.1	8.03	2.83 3.44 3.19	0	0	0
Camp Olowalu OCO220907	N	9:32	27.4	36.0	6.19	95.5	8.07	3.25 3.62 3.44 KG ④ 8.23 KG 7.02 8.33 4.26	0	4	0*
Papalaua Pali OPP220907	N	9:55	27.2	35.9	6.59	101.6	8.19	④ 8.23 KG 7.02 8.33 8.18	0	2	0

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

PFF - Low pre sample readings: 5.61 and 5.63

PFF - Five turbidity readings

Forgot to invert for 1st reading.

OCO - * Large camp site but no people in sight (those on the beach?!)

Need business cards please

OPP - TURBIDITY SAMPLE CAUGHT ON INCOMING WAVE - SHOREBREAK IS CLOSE TO KEEPER LEVEL GRAB SPOT.

Fourth read entered in first slot

* low turb. standard read lower after being cleaned

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	5.72	57.0	598
Pre-sampling	0.08	5.63	56.5	597
Post-sampling	0.09	5.61 *	56.9	599

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	KAL-2	M. Besson
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:

Meredith Besson

Hon O Ka Wai Oia - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Harris, K. Gund, K.			
Session	110					
Date	09/07/2022					

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF220907-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:09	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH220907-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT220907-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO220907-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:32	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP220907-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:55	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:

Meredith Beeson

Hawaii Water Quality Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, Jr. Berg, L C.C. Heineann						Meters and Probes ID		
Session	110								HQ2200:	3	2100Q:
Date	09/08/22								pH:	7	DO:

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 RHL220908	N	8:05	25.2	34.4	6.02	89.0	8.1	1.31	1.34 1.32	1.47	2 9 0
Oneloa Bay RON220908	N	8:40	26.4	35.9	6.59	100.3	8.16	0.92	0.88	0.78	0 0 0
Kapalua Bay RFS220908	N	9:05	27.3	35.7	5.82	89.5	8.07	1.47	1.64	1.58	10 35 6
Ka'opala Bay RKO220908	N	9:29	27.2	35.1	6.33	97.2	8.11	7.07	7.25	7.06	0 0 0
Kahana Village RKV220908	un.know	9:54	27.5	35.3	6.07	93.7	8.13	6.0	7.14 8.70	6.70	0 0 0

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

Standard: 1st 0.15, 2nd 0.17 wiped with cloth

Spore: 1st 0.24, 2nd 0.27

RHL - calm conditions, Then rain

Turbity: 1st 1.87, 2nd

RON: small waves

RFS - Covet Beach. Visitor invaded space while collecting samples while rinsing self.

RKO - No Stream Flow

RKV - Parridge/Road still closed so

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

can't tell if there's water in stream.
4th Turbidity 7.14

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.09	5.72	57.0	598
Pre-sampling	0.15	5.57	56.6	543
Post-sampling	0.29	5.873	56.8	596

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	KAL-2	Ylenia St-Louis
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:

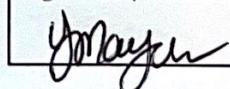
Ylenia St-Louis

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchines, L			
Session	110		Cici			
Date	09/08/22		Berg. L			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL220908-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0805	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON220908-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0840	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS220908-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	905	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO220908-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	929	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV220908-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	954	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:

Ylenia St-Louis