

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
108	M. Beeson	7/25/22	8:55am	L. Yannell	7/28/22	

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	NIST	NIST	NIST	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
					27.7 °C	27.7 °C	27.6 °C	27.2 °C			
	4	3	8/17/23		27.6	27.5	27.5	27.2			
	4	4	8/17/23			27.6		27.2			
Salinity			3 months	Std Val	Tap water	Salin Std 1/17/22 date 33.9 ppt	Tap water	Salin Std 1/17/22 date 33.9 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	3	3	5/23/22		0.03	33.7	0.45	33.9		0.03 ppt is 12.5 tap H ₂ O from home lab tap read 0.48 ppt	
	3	4	5/23/22		0.03	33.8	0.45	33.8			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	3	1	2/7/22		105.6 % *		102.7			Finally got broken shroud off #4 reading high so sending #4 into field	
	3	4	8/12/21		98.6 %		97.3			#4 sensor cap expires in 12 days	
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	
	3	7	7/25/22		7.01	9.97	7.04	9.99			
	3	6	7/25/22		7.00	9.97	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		0.08	5.69	0.06	5.70			
	—	n/a	—		—	—	—	—		NBBF retired for now	

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

Lab: KML-2

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	FLOYD, M BIESER, S	Meters and Probes ID			
Session	108			HQ2200:	3	2100Q:	1
Date	07/26/2022			pH:	7	DO:	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 RNS220726	N	8:06	25.7	33.6	6.98	103.6	8.10	3.74	3.82	3.59	4	6	0
Pohaku RPO220726	N	8:35	25.3	33.2	6.87	100.9	8.23	2.63	3.19	2.93	1	10	0
Kaanapali Sh RKS220726	N	9:03	25.4	35.7	6.84	102.0	8.18	2.06	2.22	1.87	0	2	0
Kahekili Beach Two RKT220726	N	9:30	26.4	35.6	6.67	101.0	8.23	2.48	2.36	1.98	0	2	0
Canoe Beach RCB220726	N	9:57	27.1	35.5	6.49	99.4	8.22	4.13	4.29	4.55	0	5	0
Wahikuli RWA220726	N	10:12	26.5	34.9	6.62	100.1	8.22	7.70	8.73	8.46	0	0	0

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

RNS- 0-1' swells
RPO - Did 4th turb. Reading: 3.10
RKS- Beach restoration & construction going on in front of sampling area.
RKT- 4th turb. Reading: 2.45
RCB- 3' surf, lots of whitewater
RWA 4' surf, large shorebreak, 4th turb. reading: 8.42

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	5.72	57.0	598
Pre-sampling	0.08	5.78	56.3	598
Post-sampling	0.07	5.74	57.0	598

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

m. Bieser

Printed Name:

Meredith Bieser

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	Floyd, M. Bieser, S.
Session	108		
Date	07/26/22		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS220726-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:06	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO220726-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	
RKS220726-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:03	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT220726-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	
RCB220726-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:57	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA220726-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	

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):

MBeson

Printed Name:

Meredith Beeson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	HARRIS, K CORCORAN, Y GUND, K	Yannell, L.	Meters and Probes ID		
Session	108				HQ2200: 3	2100Q: 1	
Date	07/27/2022				pH: 7	DO: 4	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 PFF220727	Y	8:16am	35.3 26.0	35.3	6.25	93.8	8.10	2.12	2.36	2.25	0	5	0
Lindsey Hale PLH220727	N	8:53 am	26.2	35.1	5.84	87.9	8.12	1.02	1.18	1.16	2	1	0
Lahaina Town PLT220727	N	9:23	26.6	35.7	6.34	96.6	8.09	0.86	0.76	0.79	11	0	0
Camp Olowalu OCO220727	N												
Papalaua Pali OPP220727	N												

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

KRISTY GUND ONLY PARTICIPATED AT PFF.
• PLT-Beach goer/local said sediment cleared up
out through channel after last swell. Site seemed
clearer.
Canoe paddled through site ~5 min before sample
M4 SUP yoga class w/ 4 ppl ~30 ft from site
Calm waters. Monk seal resting ~200 ft out
~~Bad accident~~
Bad accident and backed up traffic
prevented us from getting to the final
two sites (OCO + OPP)

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	0.07	5.72	57.0	598
Pre-sampling	0.07	5.75	56.6	599
Post-sampling	0.07	5.73	57.6	596

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	3	KAL-2	Liz Yannell
Bacteria	-	-	-

Signature (Team Lead):

Liz Yannell

Printed Name:

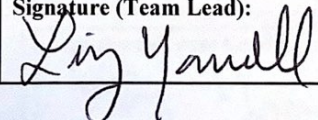
Liz Yannell

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Harris, K. Corcoran, K. Gund, K. Yannell, L.
Session	108		
Date	07/27/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF220727-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:16	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH220727-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:53	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT220727-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:23	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO220727-N-1	Camp Olowalu	<input type="checkbox"/>	<input type="checkbox"/>	/	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	Hwy road accident. Could not access
OPP220727-N-1	Papalaua Pali	<input type="checkbox"/>	<input type="checkbox"/>	/	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	last two sites.

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 Yannell
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Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L. Sharpe, M. Gund, B. Yannell, L.	Meters and Probes ID		
Session	108			HQ2200: 3	2100Q: 1	
Date	07/28/22			pH: 7	DO: 4	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
Honolua Bay RHL220728	N	8:05	25.1	34.8	5.69	84%	8.08	3.78	3.82	4.17 ^{KG} 4.32	5	11	Ø
Oneloa Bay RON220728	N	8:47	25.9	35.4	6.82	102.7	8.18	0.73	0.93	0.81	Ø	2	Ø
Kapalua Bay RFS220728	N	9:16	26.4	32.2	6.56	97.7	8.08	1.90	2.24	1.70	24	45	Ø
Ka'opala Bay RKO220728	N	10:25	25.9	34.4	6.75	100.9	8.18	7.82	7.64	8.26	Ø	2	Ø
Kahana Village RKV220728	N	10:30	26.0	34.7	6.49	97.2	8.07	4.45	4.42	4.83 ^{KG} 3.65	5	2	Ø

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

RHL: 2nd READ FOR DO WAS SIMILAR
calm waters
RON: some shorebreak (small), sunny
RKO: water appeared brown at the wave
break out on the reef

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	5.72	57.0	598
Pre-sampling	0.05	5.74 5.60 ^{KG}	56.7	601
Post-sampling	0.06	5.70	56.8	597

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	KAL-2	Liz Yannell
Bacteria	-	-	-

Signature (Team Lead):

Liz Yannell

Printed Name:

Liz Yannell

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L. Sharpe, M. Gund, K. Yannell, L.
Session	108		
Date	07/28/22		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL220728-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON220728-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:47	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS220728-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:16	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO220728-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV220728-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:30	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): <i>Liz Yannell</i>	Printed Name: Liz Yannell
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