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:
105	M. Beeson, N. Sampson, L. Yannell	5/23/22	10:30	L. Yannell, M. Beeson	5/26/22	11:22 AM

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 25.8 °C	NIST 25.5 °C	NIST 25.7 °C	NIST — °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	4	4	8/17/23		25.5		25.6				
	4	3	8/17/23			25.2		—			
Salinity			3 months	Std Val	Tap water	Salin Std 11/26 date 35.0 ppt	Tap water	Salin Std 11/26 date 35.0 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	1	4	5/23/22		0.43	34.9	0.43	35.1			
	1	3	5/23/22		0.43	34.8	—	—			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	1	4	8/12/22		99.4 %		99.1 %				
	1	1	2/7/22		99.8 %		—				
pH			3 weeks	Std Val	pH 7.00 exp. 3/23	pH 10.00 exp. 3/22	pH 7.00	pH 10.00	± 0.1 pH of pH std value	Compare to Manufacturer pH Std value on bottle	
	1	6	5/23/22		7.02	10.00	7.07	10.07		can't get pH 7 to read lower on 5/26	
	1	7	5/23/22		7.02	10.01	—	—		same w/ pH 10	
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	
	NBSF	n/a	5/23/22		0.05	5.99	~~0.06~~ 0.08 ey	~~5.93~~ 5.97 ey		☆ 5.92 NTU	
	1	n/a	5/23/22		0.08	5.52	—	—		☆ 5.55 NTU	

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

LAB: KAL

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS
Session	105
Date	05/24/2022

Samplers (Last Name, 1st Initial): TY FREIBERG, MARK FLOYD, SUZANNE BIESER

Meters and Probes ID

HQ40d: 1 | 2100Q: NBBF | 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 (mg/L)	Dissolved Oxygen (%) 85-105 normal	pH 8-8.3 normal	Turbidity (NTU)			People (within 100 ft) water	people (within 100 ft) beach	people (within 100 ft) camp
Napili Bay RNS220524	NO	8:09	24.0	32.4	6.85	92.7	8.14	1.87	2.41	2.16	0	0	0
Pohaku RPO220524	NO	8:31	24.8	31.9	6.68	96.2	8.21	1.68	1.81	1.83	0	2	0
Kaanapali Sh RKS220524	NO	8:52	24.7	35.2	6.62	97.2	8.13	1.88	1.82	2.01	8	5	0
Kahekili Beach Two RKT220524	NO	9:15	25.6	35.4	6.94	103.8	8.19	0.73	0.62	0.62	0	8	0
Canoe Beach RCB220524	NO	9:30	26.1	34.3	6.85	100.5	8.22	7.91	8.18	7.57	0	3	0
Wahikuli RWA220524	NO	9:56	26.3	~~34.5~~ NS ~~34.5~~	6.64	99.8	8.19	2.18	2.13	2.36	0	0	0

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

RNS - RAINING - FLAT WATER
RPP - TE. SHEETMAN - NO RAIN, FLAT WATER
RKT - SAMPLE AT MAIN SPOT - FLAT WATER
RCB - 2 SUP

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	5.92	59.1	582
Pre-sampling	0.09	6.03	60.5	585
Post-sampling	0.06	5.93	58.4	577

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	KAL	N. Sampson
Bacteria	-	-	-

Signature (Team Lead): [signature] **Printed Name:** Nalei Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS
Session	105
Date	05/24/22

Samplers (Last Name, 1st Initial): Freibug, T; Floyd, M; Biesar, S

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS220524-N-1	Napili Bay	☑	☐	8:09	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO220524-N-1	Pohaku	☑	☐	8:31	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS220524-N-1	Kaanapali Sh	☑	☐	8:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT220524-N-1	Kahekili Beach Two	☑	☐	9:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB220524-N-1	Canoe Beach	☑	☐	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA220524-N-1	Wahikuli	☑	☐	9:56	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Sediments							
		☐	☐		500 ml		
		☐	☐		500 ml		
		☐	☐		500 ml		
		☐	☐		500 ml		

Signature (Team Lead): [signature]

Printed Name: Nalei Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui
Session	105
Date	05/25/2022

Samplers (Last Name, 1st Initial): Harris, K; Gund, K; Corcoran, K

Meters and Probes ID

HQ40d: 1 | 2100Q: N88F | 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 (mg/L)	Dissolved Oxygen (%) 85-105 normal	pH 8-8.3 normal	Turbidity (NTU)			People (within 100 ft) water	People (within 100 ft) beach	People (within 100 ft) camp
505 Front St PFF220525	Y	8:16	25.3	35.1	5.74	85.0	8.08	2.87	2.58	2.81 ~~3.03~~	0	7	0
Lindsey Hale PLH220525	N	8:46	25.5	34.9	5.66	84.3	8.05	2.18	2.25	2.48	0	1	0
Lahaina Town PLT220525	N	9:05	26.1	35.4	6.12	92.5	8.06	1.48	1.44	1.42	0	0	0
Camp Olowalu OCO220525	N	9:44	25.8	35.4	6.58	99.0	8.08	5.96	5.65	5.37	0	0	0
Papalaua Pali OPP220525	N	10:10	26.6	35.7	6.69	102.1	8.18	9.85	8.39	8.95	0	2	0

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

HQ40D-2 battery a little over half
Also, it kept reconnecting at OCO

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	0.06	5.92	59.1	582
Pre-sampling	0.05	5.92	59.9	584
Post-sampling	0.05	5.95	59.2	577

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead): [signature]

Printed Name: Nalei Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui
Session	105
Date	05/25/2022

Samplers (Last Name, 1st Initial): Harris, K; Gund, K; Corcoran, K

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF220525-N-1	505 Front St	☑	☐	8:16	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH220525-N-1	Lindsey Hale	☑	☐	8:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT220525-N-1	Lahaina Town	☑	☐	9:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO220525-N-1	Camp Olowalu	☑	☐	9:44	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP220525-N-1	Papalaua Pali	☑	☐	10:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Sediments							
		☐	☐		500 ml		
		☐	☐		500 ml		
		☐	☐		500 ml		
		☐	☐		500 ml		

Signature (Team Lead): [signature]

Printed Name: Nalei Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN
Session	105
Date	05/26/22

Samplers (Last Name, 1st Initial): Hutchings, L; Berg, L.

Meters and Probes ID

HQ40d: 1 | 2100Q: NB8F | 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 (mg/L)	Dissolved Oxygen (%) 85-105 normal	pH 8-8.3 normal	Turbidity (NTU)			People (within 100 ft) water	beach	camp
Honolua Bay RHL220526	N	7:55	23.8	33.3	6.12	87.8	8.13	9.07	9.62	~~12.7~~ 9.01 LH	2	10	0
Oneloa Bay RON220526	N	8:35	24.3	35.7	6.83	100.2	8.22	0.69	0.62	0.60	2 LH	0	0
Kapalua Bay RFS220526	N	9:00	24.6	35.5	6.33	93.2	8.15	1.76	2.04	2.20	20	39	0
Ka'opala Bay RKO220526	N	9:30	24.8	34.6	6.48	95.3	8.15	8.08	8.18	8.82	0	2	0
Kahana Village RKV220526	N	9:45	24.4	34.9	5.78	~~84.5~~ 81.7 LH	8.08	6.22	5.46	5.26	0	0	0

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

RHL - calm conditions, no waves, lots of rocks at shoreline

RON - small waves

RFS - 4th NTU 1.88 small shore break, swimmers near test site HQ40D - turned on went blank, turned on again asked for time/date 1each 2100Q read button collapsing - hard to press

RKV - 4th NTU 4.78 5th 4.89 D/O o/o jaw took two readings

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	0.05	5.92	59.1	582
Pre-sampling	0.06	5.99	59.5	583
Post-sampling	0.08	5.97	57.2	576

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead): [signature] **Printed Name:** Nalei Sampson

low turbidity standard was reading really low in post lab, but cleaned + got it up to 5.97 NTU (was reading ~5.45 NTU)

Team	R2RN
Session	105
Date	05/26/22
Samplers (Last Name, 1st Initial)	Hutchings, L. Berg, L.

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL220526-N-1	Honolua Bay	☑	☐	7:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON220526-N-1	Oneloa Bay	☑	☐	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS220526-N-1	Kapalua Bay	☑	☐	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO220526-N-1	Ka'opala Bay	☑	☐	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV220526-N-1	Kahana Village	☑	☐	9:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Sediments							
		☐	☐		500 ml		
		☐	☐		500 ml		
		☐	☐		500 ml		
		☐	☐		500 ml		

Signature (Team Lead): [signature] **Printed Name:** Nalei Sampson