

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
88	M. Beeson	5/17/21	2:33pm	M. Beeson	5/20/21	11:00

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	
	1	3	7/8/21		26.8 °C	26.7 °C	26.3 °C	— °C			
	1	2	7/8/21		26.6		25.9	—			
Salinity			3 months	Std Val	Tap water	Salin Std 9/25 date 35.0 ppt	Tap water	Salin Std 9/25 date 35.0 ppt	± 1 ppt		
	1	3	3/15/21		0.34	34.6	0.34	34.4			
	1	2	3/15/21		0.34	34.6	—	—			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	1	1	9/28/20		97.7		98.8				
	1	2	9/28/20		100.2		—				
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	
	1	5	5/17/21		7.00	9.96	7.03	10.02			
	1	6	5/17/21		7.01	9.98	—	—			
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	
	1	n/a	3/15/21		0.06	5.68	0.07	5.78		★ low: 5.77 NTU	
	NBBF	n/a	3/15/21		0.06	5.72	—	—		★ low: 5.75 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	Samplers (Last Name, 1st Initial)	Beeson, M. Freiberg, T. Kranberg, J	Meters and Probes ID		
Session	88			HQ40d: 1	2100Q: 1	
Date	5/18/2021			pH: 5	DO: 1	Salinity: 3

Location Name Sample ID	Streams 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 RNS210518	N	8:17	24.3	34.4	6.79	98.6	8.14	1.72	1.58	1.58	0	1	0
Pohaku RPO210518	N	8:42	24.7	31.6	6.62	95.3	8.15	1.52	1.62	1.56	0	6	0
Kaanapali Sh RKS210518	N	9:05	24.3	34.5	6.80	98.8	8.13	2.04	2.28	2.09	0 ^{MB}	0	0
Kahekili Beach Two RKT210518	N	9:28	24.8	34.8	6.59	96.8	8.14	2.24	2.08	2.09	1	1	0
Canoe Beach RCB210518	N	10:03	25.4	33.2	6.98	102.8	8.18	0.61	0.72	0.72	0	0	0
Wahikuli RWA210518	N	10:25	25.9	32.7	6.58	97.5	8.15	1.03	1.04	1.02	5	3	0

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

RYS - very clear

RCB - still construction going on

RWA - onshore 8-10kts, 0.5-1ft shorebreak, High tide,
clear water

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.06	5.77	58.6	628
Pre-sampling	0.08	5.65	58.3	628
Post-sampling	0.07	5.68	58.5	627

CHAIN OF CUSTODY INFORMATION

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

TL Signature:

MBear

Printed name:

Meredith Beeson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers (Last Name, 1st Initial)	Beeson, M. Freiberg, T. Kranberg, J.	Signature (Team Lead):	Printed Name:
Session	88				
Date	5/18/2021				

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS210518-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:17	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO210518-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	
RKS210518-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	
RKT210518-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:28	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB210518-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:03	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA210518-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:25	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:
M Beeson	Meredith Beeson

Hui O ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Gund, K. Beeson, M.	Meters and Probes ID		
Session	88			HQ40d: 1	2100Q: 1	
Date	5/19/2021			pH: 5	DO: 1	Salinity: 3

Location Name Sample ID	Streams 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 PFF210519	Y	8:12	24.4	33.5	6.06	87.6	8.03	2.18	1.82	1.88 ^{MB} 2.28	1	0	0
Lindsey Hale PLH210519	N	8:37	24.6	34.4	5.71	83.1	8.05	4.08	3.96	3.98	0	0	0
Lahaina Town PLT210519	N	8:56	24.8	34.1	5.62	82.1	8.05	2.35	2.38	2.29	0	0	0
^{camp} Olowalu Pier MB OPP210519	N	9:26	25.4	34.9	6.35	94.3	8.08	1.82	1.86	1.88	0	0	0
Papalaua Pali OPP210519	N	9:47	24.8	34.5	6.66	97.6	8.10	3.32	3.31	3.16	0	0	0

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

PFF: garage water outflow flowing in S shape
- probably human-shaped

PLH: little to no waves

PLT: kayakers further offshore (2 kayakers, ~6 ppl)

@ OLOWALU: WATER IS VERY STILL
(DOCO)?

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07	5.77	58.6	628
Pre-sampling	0.09	5.68	58.3	629
Post-sampling	0.07	5.64	58.5	627

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Meredith Beeson

Printed Name:

Meredith Beeson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Gundel, K. Beeson, M.
Session	88		
Date	5/19/2021		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF210519-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:12	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH210519-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:37	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT210519-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:56	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCF ^{OCF MB} 210519-N-1	OCF ^{OCF MB} Olowalu Pier MB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:26	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP210519-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:47	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:
<i>MBeeson</i>	Meredith Beeson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	Beeson, M. Cramer, S. Hutchings, L. Berg, L. Hohemann, C.	Meters and Probes ID			
Session	88			HQ40d:	1	2100Q:	1
Date	5/20/2021			pH:	5	DO:	1

Location Name Sample ID	Streams 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 RHL210520	N	8:01A	23.8	33.7	6.36	91.1	8.11	1.40	1.47	2.01	0	7	0
Oneloa Bay RON210520	N	8:36A	24.6	34.8	6.80	99.5	8.15	1.51	1.56	1.56	1	0	0
Kapalua Bay RFS210520	N	9:00	24.1	34.2	6.44	94.5	8.01	1.00	0.91	1.00	10	16	0
Ka'opala Bay RKO210520	N	9:22	25.1	34.2	6.24	91.7	8.07	5.04	5.25	5.13	0	0	0
Kahana Village RKV210520	N	9:40	25.1	34.1	6.24	91.5	8.07	8.95	12.1	16.2	0	3	0

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

RHL- 4th turbidity 1.43
Raining
RFS: construction work in parking lot,
dune restoration
RKV- 4th turbidity: 10.4
5th turbidity: 12.3
water in "stream" under bridge on Lower Rd,
but not flowing into water
Rained until we got to Kapalua

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07 MB	5.77	58.6	628
Pre-sampling	0.09	5.68	58.1	629
Post-sampling	0.07	5.78	58.4	627

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	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. Cramer, S. Hutchings, L. Berg, L.	Hehemann, C.
Session	88			
Date	5/20/2021			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL210520-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON210520-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:36	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS210520-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	
RKO210520-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:22	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV210520-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:40	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>M Beeson</i>	Printed Name: Meredith Beeson
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