

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:
91	M. Breson, N. Sampson	7/19/21	9:00	N. Sampson	7/22/21	10:57

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value	POST: Verification Value	Acceptable Range	Comments/ Notes	QA?
Temperature	NIST	n/a	EXP. n/a 7/8/21	Std Val	NIST 27.0 °C	NIST 27.0 °C	NIST 27.5 °C	NIST — °C	± 0.6 °C of NIST
	2	4	n/a		26.8		27.6		Compare to NIST Std value in tap water
	2	3	n/a		26.7		—		
Salinity			3 months	Std Val	Tap water Salin Std 09/25 date 35.0 ppt	Tap water Salin Std 09/25 date 35.0 ppt		± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle
	2	4	6/28/21		0.39	34.9	0.39	34.7	
	2	3	6/28/21		0.39	35.0	—	—	
Dissolved Oxygen			1 year	Std Val	100%	100%		± 5 %	
	2	2	9/28/20		99.2	99.5			switched probe #2 for #1 mid-week
	2	1	9/28/20		97.2	96.7			
pH			3 weeks	Std Val	pH 7.00	pH 10.00	pH 7.00	pH 10.00	± 0.1 pH of pH std value
	2	6	7/19/21		7.01	9.98	7.03	10.02	
	2	5	7/19/21		7.01	9.97	—	—	
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
	NBBF	n/a	6/28/21		0.07	6.04	0.08	6.04	≈ Low: 6.05 NTU
	1	n/a	6/28/21		0.08	5.69	—	—	≈ Low: 5.71 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)	Mayen Y. Beeson, M.	Kranberg, J.				Meters and Probes ID			
Session	91							HQ40d:	2	2100Q: NBBF	
Date	7/20/2021							pH:	6	DO:	2

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 RNS210720	N	0815	25.6	34.0	6.82	100.7	8.15	2.37	2.50	2.82 ^{ym} 3.36	0	2	0
Pohaku RPO210720	N	0845	25.7	34.2	6.48	95.9	8.20	2.70	2.52	2.43	6	0	0
Kaanapali Sh RKS210720	N	0912	25.3	35.0	6.72	99.1	8.15	3.14	3.42	3.41	0	11	0
Kahekili Beach Two RKT210720	N	09:36	25.7	35.1	6.86	102	8.25	0.93	1.04	1.05	∅	4.5	∅
Canoe Beach RCB210720	N	10:00	26.6	34.2	6.99	105	8.21	1.05	1.33	1.44	2	8	∅
Wahikuli RWA210720	N	10:22	27.1	34.8	6.56	99.7	8.20	2.07	2.13	2.12	∅	∅	∅

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

Use the back of the form if needed.

- used the spare blank
- Cloudy, drizzling, some swell } Napili Bay
- light rain, ~~rainy~~ water, clear water, cloudy, people swimming
- Kaanapali Sh:

Small waves, rain (light) cloudy

PFT: small shore break, lots of rocks exposed along shoreline — sampled ~25 ft to the right of normal spot.

RCB: nice & pretty calm

RNA: calm, slightly windy.

Sprinkled in Kahana last 2 days

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07	0.05	0.07	0.07
Pre-sampling	0.08	0.06	0.13	0.07
Post-sampling	0.07	0.04	0.09	0.07

CHAIN OF CUSTODY INFORMATION

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

Meredith Beeson

Meredith Beeson

Team	R2RS	Samplers (Last Name, 1st Initial)	Mayen, Y.		Signature (Team Lead):	Printed Name:
Session	91		Beeson, M.			
Date	7/20/2021		Kranburg, J.			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS210720-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO210720-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS210720-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:12	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT210720-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:36	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB210720-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA210720-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:22	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>	<i>Meredith Beeson</i>

Team	Polanui	Samplers (Last Name, 1st Initial)	HARRIS, K GUND, K Mayen, Y	Meters and Probes ID							
Session	91			HQ40d: 2							
Date	7/21/2021			pH: 6				DO: 21 MB		Salinity: 4	

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 PFF210721	Y	8:17	26.7	34.9	5.44	82.3	8.05	1.03	1.06	1.11	3	2	∅
Lindsey Hale PLH210721	N	8:44	26.9	35.0	5.80	88.0	8.04	1.34	1.56	1.48	∅	∅	∅
Lahaina Town PLT210721	N	9:06	27.0	35.2	5.99	91.2	8.03	1.14	1.07	1.12	∅	∅	∅
Camp Olowalu OCO210721	N	9:35	26.6	34.9	6.19	93.4	8.09	2.40	2.24	2.39	4	2	∅
Papalaua Pali OPP210721	N	9:57	26.5	35.0	6.53 5.48	98.5	8.19	5.48	5.86	5.68	∅	∅	∅

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

Use the back of the form if needed.

PRE-SAMPLE WAS INVERTED ONCE. TESTED @ 0.10 X3
 OILED VIAL TO GET 0.09 READING.
 "LOW" VIAL ARROW NOT ALIGNED @ FIRST READING.
 2ND READING RECORDED

PFF = 6 kayaks, 3 paddle boards

PLT = 4FT READING RECORDED FOR TURBIDITY
 IN 1ST COLUMN (ENSURE IF VIAL WAS
 INVERTED THE FIRST TIME)

OPP = SPARE FILTER USED AFTER DROPPING
 ORIGINAL IN SAND. RINSED & PLACED BACK
 IN CONTAINER. MAY NEED TO DISCARD.
 TURBIDITY READING WRITTEN IN DO COLUMN
 BY MISTAKE → AND CROSSED OUT.

Used DO probe #1, since #2 is having connection problems

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07	6.05	60.7	607
Pre-sampling	0.09	6.19	60.6	608
Post-sampling	0.08	6.03	61.0	607

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Nalei Sampson

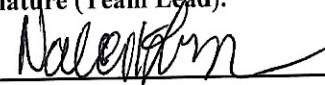
Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Harris, K.
Session	91		Gund, K.
Date	7/21/2021		Mayen, Y.

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF210721-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:17	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH210721-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:44	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT210721-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO210721-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP210721-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:57	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:

Nalei Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	<i>Berg, L Hutchings, L</i>						Meters and Probes ID				
Session	91								HQ40d: 2			2100Q: NBBF	
Date	7/22/2021								pH: 6	DO: 1	Salinity: 4		

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 RHL210722	N	7:50A	25.5	34.3	5.80	85.6	8.12	8.94	11.2	10.4	10	11	9
Onealoa Bay RON210722	N	8:35A	25.9	35.1	6.84	102.2	8.22	1.21	1.12	1.02	0	2	0
Kapalua Bay RFS210722	N	9:00A	26.3	35.5	6.21	93.6	8.09	1.87	1.74	1.85	35	13	0
Ka'opala Bay RKO210722	N	9:25	26.2	31.2	6.40	95.5	8.12	6.72	6.77	6.90	0	1	0
Kahana Village RKV210722	N	9:42	26.1	35.1	6.39	95.7	8.12	5.98	6.28	6.70	0	13	0

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).
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RHL - 4th reading 10.3 Turbidity
RKV - 4th reading 6.11 11

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.08	6.05	60.7	607
Pre-sampling	0.08	6.04	60.8	608
Post-sampling	0.08	6.06	61.0	608

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Nalei Sampson

Printed Name:

Nalei Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RN	Samplers (Last Name, 1st Initial)	Berg, L. Hutchings, L.			
Session	91					
Date	7/22/2020					

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL210722-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON210722-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS210722-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	
RKO210722-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV210722-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