

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
90	M. Beeson, N. Sampson	6/28/21	9:10	M. Beeson, N. Sampson	7/1/21	10:45

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value	POST: Verification Value	Acceptable Range	Comments/ Notes	QA?
Temperature	NIST	n/a	n/a	Std Val	NIST 26.5 °C	NIST 26.5 °C	NIST 28.7 °C	NIST — °C	± 0.6 °C of NIST Compare to NIST Std value in tap water
	1	3	n/a		26.1		28.2		
	1	4	n/a		26.2		—		
Salinity			3 months	Std Val	Tap water 9/25 date 35.0 ppt	Tap water 9/25 date 35.0 ppt		± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle
	1	3	6/28/21		0.38	34.9	0.37	34.7	Sal probe #2 retired (#4 new)
	1	4	6/28/21		0.38	35.0	—	—	Cathy's standard reads 33.5 ppt on probe #3
Dissolved Oxygen			1 year	Std Val	100%	100%		± 5 %	
	1	1	9/28/20		98.0	97.1			
	1	2	9/28/20		99.7	—			
pH			3 weeks	Std Val	pH 7.00	pH 10.00	pH 7.00	pH 10.00	± 0.1 pH of pH std value Compare to Manufacturer pH Std value on bottle
	1	5	6/28/21		7.01	9.99	7.03	10.00	
	1	6	6/28/21		7.03	10.00	—	—	
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	6/28/21		0.09	5.71	0.08	5.77	★ Low: 5.71 NTU
	NBOF	n/a	6/28/21		0.08	6.04	—	—	★ Low: 6.05 NTU

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

Lab: KAL

Team	R2RS	Samplers (Last Name, 1st Initial)	FREIBERG, T; KIZAMBORG, J; Sampson, N.						Meters and Probes ID			
Session	90								HQ40d:	1	2100Q:	1
Date	6/29/2021					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 RNS210629	N	8:01	25.4	34.1	6.78	100.3	8.09	1.22	1.17	1.27	0	5	NA
Pohaku RPO210629	N	8:25	25.9	34.4	6.36	95.0	8.12	1.49	1.50	1.31	0	1	NA
Kaanapali Sh RKS210629	N	8:45	26.0	35.0	6.27	94.4	8.04	7.41	7.42	7.12	10	10	NA
Kahekili Beach Two RKT210629	N	9:08	26.4	34.8	6.52	98.5	8.11	1.64	1.84	1.54	0	3	NA
Canoe Beach RCB210629	N	9:40	26.9	34.3	6.58	100.0	8.16	1.88	1.94	1.66	0	2	NA
Wahikuli RWA210629	N	10:02	26.8	34.3	6.43	97.6	8.15	2.43	2.49	2.53	0	9	NA

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

Use the back of the form if needed.

RNS - SMALL WAVES, CALM SURF

RPO - SAME.

RKS - LOTS OF PEOPLE CLOSE TO SAMPLE

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.09	5.71	59.1	632
Pre-sampling	0.09	5.66	58.9	639
Post-sampling	0.01	5.65	59.0	644

CHAIN OF CUSTODY INFORMATION

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

Team	R2RS	Samplers (Last Name, 1st Initial)	Freiberg, T Kranzberg, J. Sampson, N.	Signature (Team Lead): <i>Nate K Sampson</i>	Printed Name: Nate K Sampson
Session	90				
Date	6/29/2021				

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS210629-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<i>* forgot to use filter tip so filtered @ lab</i>
RPO210629-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS210629-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT210629-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:08	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB210629-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA210629-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Sediments					500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				

Signature (Team Lead):
Nate K Sampson

Printed Name:
Nate Sampson

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Polanui	Samplers (Last Name, 1st Initial)	Gund, K.; Mayon, Y.; Hams, K.; Sampson, N.						Meters and Probes ID			
Session	90								HQ40d: \			2100Q: \
Date	6/30/2021		pH: 5			DO: \		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 PFF210630	Y	8:14	26.2	33.5	5.92	88.4	8.03	5.47	5.92	5.83	0	10	0
Lindsey Hale PLH210630	N	8:40	26.8	35.1	6.21	94.4	8.07	6.04	6.08	5.86	0	4	0
Lahaina Town PLT210630	N	8:57	27.2	34.5	5.67	86.5	8.06	30.3 NS 24.7	31.5	27.9	1	1	0
Camp Olowalu OCO210630	N	9:30	27.7	35.2	6.25	96.5	8.06	4.84	5.10	4.91	0	0	0
Papalaua Pali OPP210630	N	9:46	28.3	34.54	6.34	99.1	8.10	5.21	5.70	6.21	0	1	0

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

PLT - very silty - high turbidity - Should we go further out
to clearer water when this happens?
took several readings

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07	5.71	59.1	632
Pre-sampling	0.06	5.60	59.0	637
Post-sampling	0.08	5.77	58.9	645

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	Polanui	Samplers (Last Name, 1st Initial)	Gund, K.; Mayen, Y.; Harris, K.; Sampson, N.				
Session	90						
Date	6/30/2021						

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF210630-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:14	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH210630-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	
PLT210630-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:57	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO210630-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP210630-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:48	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)	Berg, L, Hutchings, L, Cramer, S Sampson, N						Meters and Probes ID				
Session	90								HQ40d: 1			2100Q: 1	
Date	7/01/2021								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 RHL210701	N	7:54	25.2	34.7	5.93	87.7	8.10	8.92 8.82	1.09	1.93	5
Onealoa Bay RON210701	N	8:36	25.4	35.3	6.60	98.2	8.14	1.43 1.47	1.47	1.43	19
Kapalua Bay RFS210701	N	8:46	25.3	34.5	6.32	93.6	8.06	2.83 3.24	2.73	9.10	5
Ka'opala Bay RKO210701	N	9:15	25.8	34.2	6.27	93.3	8.06	14.6 14.5	14.5	14.1	24
Kahana Village RKV210701	N	9:29	25.5	34.7	6.13	91.0	7.99	13.6 13.6	13.6	12.5	2
											0
											0

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

RHL - 2 snorkel boats were further out.

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.08	5.71	59.1	632
Pre-sampling	0.10	5.74	58.8	634
Post-sampling	0.08	5.77	58.7	630

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	R2RN	Samplers (Last Name, 1st Initial)	Berg, L.; Hutchings, L.; Cramer, S.; Sampson, N.				
Session	90						
Date	7/01/2021						

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL210701-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:54	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON210701-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	
RFS210701-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO210701-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV210701-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:29	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