

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
02	G. Silver & M. Beeson	1/11/21	9:30	G. Silver & J. Strickland	1/14/21	10:30

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	NIST	NIST	NIST	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
					26.1 °C	26.0 °C	24.7 °C	°C			
	2	2	n/a		25.8		24.5				
	2	3	n/a			25.6					
Salinity			3 months	Std Val	Tap water	Salin Std	Tap water	Salin Std	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
						Aug 24 date		Aug 24 date			
						35 ppt		35 ppt			
	2	2	11/30/20		0.04	35.1	0.04	35.4			
	2	3	11/30/20		0.04	35.1					
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	2	9/28/20		101.2		101.1				
	2	1	9/28/20		99.8						
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	
	2	6	1/11/21 MB 12/14/20		7.04	10.00	7.03	10.00			
	2	5	1/11/21 MB 12/14/20		7.00	9.97					
Turbidity			3 months	Std Val	BLANK	LOW 1-10	BLANK	LOW 1-10	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
					<0.1	NTU	<0.1	NTU			
	NBBF	n/a	11/30/20		0.06	5.80	0.08	5.79		Standard: 5.79 NTU	
	1	n/a	11/30/20		0.07	5.72				5.68 NTU	

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

Lab: PKL

Team	R2RS	Samplers (Last Name, 1st Initial)	Gallagher, C. Beeson, M. Strickland, J.	Meters and Probes ID		
Session	82			HQ40d: 2	2100Q: NBBF	
Date	01/12/2021			pH: 6	DO: 2	Salinity: 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 RNS210112	N	8:18	24.9	35.3	6.85	100.7	8.14	2.84	2.85	2.69	10	2	0
Pohaku RPO210112	N	8:45	24.8	34.6	6.88	100.5	8.14	10.3	10.5	9.67	0	5	0
Kaanapali Shores RKS210112	N	9:15	25.6	35.4	6.84	101.6	8.19	3.01	3.00	2.90	3	2	0
Kahekili Beach Two RKT210112	N	9:40	25.3	35.3	6.70	99.0	8.17	4.78	4.95 MB	5.16	2 MB	4	0
Canoe Beach RCB210112	N	10:10	25.8	33.6	6.87	101.4	8.18	1.41	2.00	2.30	5	5	0
Wahikuli RWA210112	N	10:25	25.5	31.7	6.95	101.1	8.18	0.70	0.79 MB	0.71	4	2	0

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

RNS: 1 Paddleboarder
1 turtle

RKS - 2 canoes
2 waka (6 man)

RKT: 4th turbidity 4.95

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.06	5.79	58.6	593
Pre-sampling	0.09	5.79	58.7	595
Post-sampling	0.09	5.83	58.7	592

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

M. Beeson

Printed Name:

Meredith Beeson

Lab: PKL

Team	R2RS	Samplers (Last Name, 1st Initial)	Gallagher, C. Beeson, M. Strickland, J.
Session	82		
Date	01/12/2021		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS210112-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:18	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO210112-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	
RKS210112-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT210112-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB210112-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA210112-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):

MBeeson

Printed Name:

Meredith Beeson

Team	Polanui	Samplers (Last Name, 1st Initial)	M. Beeson K. Harris G. Silver K. Gund	Meters and Probes ID		
Session	82			HQ40d: 2	2100Q: NBBF	
Date	01/13/2021			pH: 6	DO: 2	Salinity: 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
505 Front St PFF210113	Y	8:09	25.1	35.4	6.57	96.7	8.15	2.98	2.96	3.08 3.69	0	0	0
Lindsey Hale PLH210113	N	8:33	25.0	34.8	6.49	95.3 96.3	8.13	9.67	10.5	10.1 9.29	0	1	0
Lahaina Town PLT210113	—	8:55	25.3	34.6	6.21	91.4	8.10	14.2	14.3	14.6	0	2	0
Olowalu Pier OSF210113	—	9:27											
Camp Oluwalu OCO210113	—	9:27	26.0	35.0	6.39	95.3	8.08	4.19	4.61	4.57	0	4	0
Papalaua Pali OPP210113	—	9:43	25.8	35.3	6.79	101.3	8.13	7.26	6.80	7.00	0	0	0

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

Use the back of the form if needed.

It rained earlier this morning. Roads
are still wet.

No more Oluwalu Pier

Fire on south side of Launiapoko
approx. 2pm late afternoon


TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.09	5.79	58.6	593
Pre-sampling	0.09	5.76	58.4	592
Post-sampling	0.07	5.92	58.6	594

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	5	—	—
Nutrients	5	PKL	G. Silver
Bacteria	—	—	—

Signature (Team Lead):



Printed Name:

Grace Silver

Team	Polanui	Samplers (Last Name, 1st Initial)	M. Beeson K. Harris G. Silver K. Gund
Session	82		
Date	01/13/2021		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF210113-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:09	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH210113-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:33	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT210113-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OSF210113-N-1	Olowalu Pier	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP210113-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:27	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO210113-N-1	Camp Oluwalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:43	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:

Grace Silver

Team	R2RN	Samplers (Last Name, 1st Initial)	G. Silver J. Strickland	Meters and Probes ID		
Session	82			HQ40d: 2	2100Q: NBBF	
Date	01/14/2021			pH: 6	DO: 2	Salinity: 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
Honolua Bay RHL210114	N	8:05	24.5	35.2	6.90	100.6	8.16	86.2 83.8	88.1	88.1	0	GS 2	0
Oneloa Bay RON210114	N	8:40	25.3	35.4	6.92	102.4	8.18	2.00	2.37	2.58	0	0	0
Kapalua Bay RFS210114	N	9:02	25.4	35.4	6.88	102.0	8.18	12.2	11.8	11.3	0	6	0
Ka'opala Bay RKO210114	N	9:26	25.0	34.8	6.92	101.5	8.14	40.1	39.7	41.1	0	0	0
Kahana Village RKV210114	N	9:40	25.6	35.3	7.11	105.8	8.22	9.63	10.1	9.30	0	2	0

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

RHL - Large waves & shorebreak (2-3 ft), sunny
 RON - 4-5' waves, sunny
 RFS - Erosion & steps (blocked off)
 RKO - 3' waves

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07	5.79	58.6	593
Pre-sampling	0.07	5.80	58.4	592
Post-sampling	0.08	5.79	58.4	592

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	RKL	G. Silver
Bacteria	-	-	-

Signature (Team Lead):



Printed Name:

Grace Silver

Team	R2RS	Samplers (Last Name, 1st Initial)	G. Silver J. Strickland
Session	82		
Date	01/14/2021		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL210114-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	
RON210114-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS210114-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO210114-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:26	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV210114-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):



Printed Name:

Grace Silver