

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



Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
75	J. Strickland, G. Silver, M. Beeson	8/17/20	10:17	G. Silver, M. Beeson	8/20/20	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	
	3	2	n/a		28.8 °C	28.9 °C	28.8 °C	°C			
	3	3	n/a		28.4		28.3				
	3	3	n/a			28.3					
Salinity			3 months	Std Val	Tap water	Salin Std date	Tap water	Salin Std date	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	2	8/17/20		0.57	34.8	0.59	35.0		June 11, 2021 NIST expires	
	2		8/17/20		0.56	34.9					
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	2	8/17/20		96.8		96.8				
	2	1	8/17/20		101.3						
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	8/17/20		7.00	9.96	7.03	9.98			
	2	5	8/17/20		7.00	9.95					
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10	BLANK <0.1	LOW 1-10	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
						5.74 NTU		5.74 NTU			
	NBBF	n/a	8/17/20		0.08	5.75	0.07	5.76			
	1	n/a	8/17/20		0.07	5.59					

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

5.57 NTU

Team	R2RS	Samplers (Last Name, 1st Initial)	Miller, T Strickland, J Kronberg, J Hehemann, C	Meters and Probes ID		
Session	75			HQ40d: 2	2100Q: NBBF	
Date	8/18/2020			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 RNS200818	N	8:10	26.2	33.2	6.20	92.3%	7.57	2.51	2.72	2.34	Ø	Ø	Ø
Pohaku RPO200818	N	8:35	26.2	31.8	6.20	91.7%	8.16	0.89	0.75	0.94	Ø	Ø	Ø
Kaanapali Sh RKS200818	N	9:02	26.7	34.7	6.32	95.5%	8.14 8.17	1.28	1.52	1.19	Ø	Ø	Ø
Kahekili Beach Two RKT200818	N	9:30	26.5	34.6	6.40	96.6	8.14	1.25	1.71	1.21	Ø	Ø	Ø
Canoe Beach RCB200818	N	9:55	27.4	34.2	6.49	99.2	8.18	5.92	5.59	5.87	Ø	Ø	Ø
Wahikuli RWA200818	N	10:15	26.9	33.2	6.45	97.2	8.18	1.25	1.20	1.25	Ø	Ø	Ø

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

* Tried several times to calibrate but would not get in range.
* RPO - pohaku - very clear, calm
△ used brand new distilled bought water

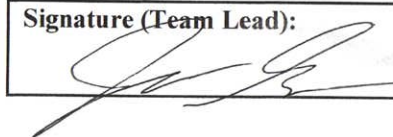
TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.08	5.74	58.0	584
Pre-sampling	* 0.13	5.74	58.2	586
Post-sampling	Δ 0.08	5.76	58.7	585

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	LHS	J. Strickland
Bacteria	-	-	-

Signature (Team Lead):



Printed Name:

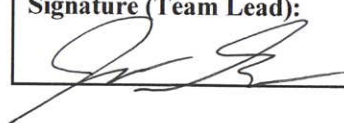
James Strickland

Team	R2RS	Samplers (Last Name, 1st Initial)	Miller, T Strickland, J Kronberg, J Hehemann, C
Session	75		
Date	8/18/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS200818-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO200818-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS200818-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT200818-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB200818-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA200818-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:15	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:

James Strickland

Bailey, R Harris K, Kristy G, Meredith, B Grace S.

Team	Polanui	Samplers (Last Name, 1st Initial)	Bailey, R GUND, K Silver, G Harris, K Beeson, M	Meters and Probes ID		
Session	75			HQ40d: 2	2100Q: ~BBF	
Date	8/19/2020			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 PFF200819	Y	8:22	26.7	34.8	5.65	85.3	8.04	3.09	2.90	3.17	3	3	∅
Lindsey Hale PLH200819	N	8:42	26.9	34.5	5.53	83.8	8.04	3.93	4.01	3.93	0	2	∅
Lahaina Town PLT200819	-	8:59	26.9	34.8	5.79	88.1	8.05	1.73	1.85	1.61	2	2	∅
Camp Oluwalu OCO160819	N -	9:34	26.6	34.6	6.37	96.1	8.09	4.55	4.91	4.63	∅	∅	∅
Papalaua Pali OPP160819	-	9:50	26.2	34.8	6.66	99.9	8.18	2.68 3.13	2.66	2.42	0	0	0

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

Use the back of the form if needed.

PLH culvert completely covered w/sand

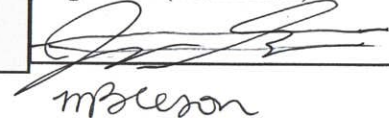
TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.08	5.74	58.0	584
Pre-sampling	0.09	5.77	58.4	588
Post-sampling	0.06	5.80	58.7	586

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment			
Nutrients	5	LHS	J. Strickland
Bacteria			

Signature (Team Lead):



mbeeson

Printed Name:

Meredith Beeson

Team	Polanui	Samplers (Last Name, 1st Initial)	Meredith Beeson, Grace Silver, Kristy G Kit Harris, Rich Bailey
Session	75		
Date	8/19/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF200818-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:22	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH200819-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:42	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT200819-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:59	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO160819-N-1	Camp Oluwalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:34	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP160819-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:50	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:
Meredith Beeson	Meredith Beeson

Team	R2RN	Samplers (Last Name, 1st Initial)	Lyn Hutchings, Meredith Beeson, Grace Silver	Meters and Probes ID		
Session	75			HQ40d: 2	2100Q: NBBF	
Date	8/20/2020			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 RHL200820	N	7:54	25.7	33.9	5.86	86.8	8.11	2.28	2.47	2.34	∅	∅	∅
Oneloa Bay RON200820	N	8:29	26.1	34.9	6.46	96.8	8.14	0.78	0.81	0.80	∅	∅	∅
Kapalua Bay RFS200820	N	8:49	25.9	31.1	6.56	96.0	8.07	3.09	3.74	2.93	1	∅	∅
Ka'opala Bay RKO200820	N	9:20	26.1	34.0	6.24	93.0	8.08	9.16	9.19	9.79	∅	∅	∅
Kahana Village RKV200820	N	9:36	26.1	33.7	5.42	80.7	8.05	5.03	5.65	5.06	∅	∅	∅

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

RHL - smell of sulphur sulfur

RFS - 4th reading 4.52 Turbidity

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	MB 0.07 0.08	5.74	58	584
Pre-sampling	0.07	5.76	58.5	587
Post-sampling	0.07	5.76	58.6	587

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	LHS	J. Strickland
Bacteria	-	-	-

Signature (Team Lead):

Meredith Beeson

Printed Name:

Meredith Beeson

Team	R2RS	Samplers (Last Name, 1st Initial)	Hutchings, L Beeson, M Silver, G
Session	75		
Date	8/20/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL200820-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	
RON200820-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:29	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS200820-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:49	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO200820-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV200820-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:36	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