

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



Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
80	M. Beeson, G. Silver, J. Strickland	11/30/20	9:37	M. Beeson, G. Silver, J. Strickland	12/3/20	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 Notes °C	NIST Notes °C	NIST °C	NIST °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	2	MB 23	n/a		26.3				(11/30) → West NIST: 26.8 (12/3) → West: 26.6	South NIST: 26.5 South: 26.3	
	2	2	n/a			26.5		26.2	(11/30) → West NIST: 26.9 South NIST: 26.5 (12/3) → West: South:		
Salinity			3 months	Std Val	Tap water	Salin Std Avg 24 date 35 ppt	Tap water	Salin Std 8/24 date 35 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	2	11/30/20		0.65	34.9	0.67	5535.1			
	2	3	11/30/20		0.64	34.8	0.67				
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	2	9/8/20		99.6		100.9				
	2	31	9/28/20		97.6						
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	5	11/30/20		7.00	9.98	7.02	9.99			
	2	6	11/30/20		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	Compare to Gel LOW 1-10 Std Calibration value	
	NBBF	n/a	11/30/20		0.06	5.82	0.09	5.77		NTU 5.79	
	1	n/a	11/30/20		0.08	5.73				NTU 5.68	

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

Lab: TMO

Team	R2RS	Samplers (Last Name, 1st Initial)	Gallagher, C Kranberg, J Beeson, M	Meters and Probes ID		
Session	80			HQ40d: 2	2100Q: NBBF	
Date	12/01/2020			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 RNS201201	N	8:17	24.9	35.2	6.82	100.1	8.13	1.02	1.04	1.06	0	10	0
Pohaku RPO201201	N	8:50	^{MB} 34.25.3	34.4	6.76	99.3	8.11	11.76 10.1	11.1	12.3	0	2	0
Kaanapali Shores RKS201201	N	9:14	25.4 35.0	35.0	6.80	100.7	8.15	3.37	3.17	3.18	0	2	0
Kahakili Beach Two RKT201201	N	9:38	25.9	35.1	6.61	98.6	8.16	1.75	2.00	1.82	0	2	0
Canoe Beach RCB201201	N	10:15	26.3	33.3	6.93	103.0	8.18	1.58	1.01	1.27	1	7	0
Wahikuli RWA201201	N	10:21	26.3	34.3	6.61	98.9	8.18	1.42	1.36	1.55	0	0	0

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

Use the back of the form if needed.

1 Yoga babe
1 dude walking } RNS

calm, clear day → all sites

Merman ~~removed~~

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.08	5.79	58.6	593
Pre-sampling	0.08	5.78	58.1	594
Post-sampling	0.08	5.80	58.8	593

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

M Beeson

Printed Name:

Meredith Beeson

Team	R2RS	Samplers (Last Name, 1st Initial)	Gallagher, C. Strickland, J. Kranberg, J. Beeson, M.
Session	80		
Date	12/01/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS201201-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	
RPO201201-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS201201-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:14	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT201201-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:38	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB201201-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA201201-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:21	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
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Team	Polanui	Samplers (Last Name, 1st Initial)	BAYLEY, R HARRIS, K GUND, K	Meters and Probes ID		
Session	80			HQ40d: 2	2100Q: NBBF	
Date	12/02/2020			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 PFF201202	Y	8:21	25.2	34.7	6.68	98.4	8.13	2.89	3.52	2.99	Ø	1+ DOG	Ø
Lindsey Hale PLH201202	N/A	8:45	24.9	34.8	6.69	98.Ø	8.13	14.6	14.4	14.Ø	Ø	Ø	Ø
Lahaina Town PLT201202	N/A	9:Ø2	25.Ø	34.6	6.07	89.Ø	8.Ø8	15.Ø	15.8	15.3	Ø	Ø	Ø
Olowalu Pier OSF201202	N/A	9:31	25.3	35.1	6.49	96.1	8.Ø9	1.75	1.66	1.85	1	4+ DOG	Ø
Camp Oluwalu OCO201202	N/A	9:47	25.8	35.Ø	6.38	95.1	8.1Ø	1.Ø7	1.15	1.Ø6	Ø	Ø	Ø
Papalaua Pali OPP201202	N	1Ø:Ø2	26.4	35.2	6.81	102.5	8.16	8.9Ø	8.52	8.61	Ø	1	Ø

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

Use the back of the form if needed.

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.08	5.79	58.6	593
Pre-sampling	0.07	5.80	58.4	594
Post-sampling	0.09	5.79	58.8	594

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	Ø	TMO	Grace Silver
Nutrients	6	TMO	G. Silver
Bacteria			

Signature (Team Lead):

Grace Silver

Printed Name:

Grace Silver

Team	Polanui	Samplers (Last Name, 1st Initial)	Bayley, R Harris, K Gund, K
Session	80		
Date	12/02/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF201202-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:21	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH201202-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT201202-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OSF201202-N-1	Olowalu Pier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:31	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP201202-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	
OCO201202-N-1	Camp Oluwalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:02	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)	Berg, L. Hutchings, L. Silver, G. Beeson, M.	Meters and Probes ID		
Session	80			HQ40d: 2	2100Q: NBBF	
Date	12/03/2020			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 RHL201203	N	7:56A	24.5	35.2	6.67	97.2	8.10	41.9	42.3	43.5	0	0	0
Oneloa Bay RON201203	N/A	8:30A	25.5	35.4	6.80	101.0	8.15	1.70	1.74	1.72	0	0	0
Kapalua Bay RFS201203	N	8:48a	25.8	35.2	6.86	102.2	8.15	3.51	3.72	3.85	1	5	0
Ka'opala Bay RKO201203	N	9:11a	25.0	34.9	6.66	97.6	8.08	15.7	16.2	15.6	2	0	0
Kahana Village RKV201203	N	9:25A	25.6	35.1	6.90	102.3	8.13	6.65	5.62	6.19	0	0	0

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

RHL - stream area cleared of rocks.
RFS - Very sunny & larger waves than normal
RKO - 4th 16.13 Turbidity
RKV - Debris on the beach, construction on street

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.09	5.79	58.6	593
Pre-sampling	0.08	5.77	57.8	594
Post-sampling	0.09	5.77	58.6	594

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

M. Beeson

Printed Name:

Meredith Beeson

Team	R2RS	Samplers (Last Name, 1st Initial)	Berg, L. Hutchings, L. Silver, G. Bleson, M.
Session	80		
Date	12/03/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL201203-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:56	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON201203-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS201203-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:48	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO201203-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:11	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV201203-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:25	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):

Meredith Bleson

Printed Name:

Meredith Bleson