

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
76	G. Silver, M. Beeson	9/8/20	10:20 9:10 JS	G. Silver, M. Beeson	9/11/20	10:20

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	
					28.9 °C	28.8 °C	30.0 °C	°C			
	1	3	n/a		28.3		29.5			NIST: expires 6/11/21	
	1	2	n/a			28.4					
Salinity			3 months	Std Val	Tap water	Salin Std 8/24 date 35.0 ppt	Tap water	Salin Std 8/24 date 35.0 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	1	3	8/17/20		0.58	34.8	0.59	34.8		used HACH standard	
	1	2	8/17/20		0.59	34.9					
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	1	1	5/13/19		99.7		101.2 ^{GS}			couldn't unscrew probe cap	
	1	2	9/8/20		100		101.2			calibrated today; using this probe this us	
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	9/8/20		7.02	9.96	7.02	9.96			
	1	6	9/8/20		7.01	9.96					
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 5.57 NTU	BLANK <0.1	LOW 1-10 5.57 NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
	1	n/a	8/17/20		0.07	5.60	0.07	5.60			
	NBBF	n/a	8/17/20		0.05	5.81				5.74 NTU from calibration	

QA:

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

Team	R2RS	Samplers (Last Name, 1st Initial)	Silver, G. Strickland, J. Beeson, M.	Meters and Probes ID		
Session	76			HQ40d: 1	2100Q: NBBF	
Date	9/09/2020			pH: 5	DO: 2	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 RNS200909	N	8:25	26.1	34.4	6.38	95.7	8.10	2.75	2.44	2.78	0	3	0
Pohaku RPO200909	N	8:53	26.5	34.2	6.45	97.2	8.14	3.61 2.43	3.48 4.08	3.57	0	0	0
Kaanapali Sh RKS200909	N	9:15	26.1	34.8	6.05	91.0	8.03	2.88	2.78	2.74 3.16	0	1	0
Kahekili Beach Two RKT200909	N	9:38	26.6	34.9	6.66	101.0	8.18	0.61	0.54	0.59	0	0	0
Canoe Beach RCB200909	N	10:02	27.2	34.6	6.92	105.9	8.19	5.34	5.69	5.62	0	0	0
Wahikuli RWA200909	N	10:18	27.5	34.8	6.57	101.1	8.17	1.01	0.98	1.02 0.91	0	0	0

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

changed batteries in HQ40d1 @ Napili Bay
RPO - Two turtles in water

TMO: lab name (Tara Miller's Ohana)

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07	5.57	57.5	599
Pre-sampling	0.07	5.56	57.2	601
Post-sampling	0.09	5.58	57.4	600

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

MBeeson

Printed Name:

Meredith Beeson

Team	R2RS	Samplers (Last Name, 1st Initial)	Silver, G. Strickland, J. Beeson, M.
Session	76		
Date	9/09/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS200909-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO200909-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:53	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS200909-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	
RKT200909-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	
RCB200909-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA200909-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:18	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)	G, Silver K. Gund	Meters and Probes ID		
Session	76		M. Beeson	HQ40d: 1	2100Q: NBBF	
Date	9/10/2020		K. Harris	pH: 5	DO: 2	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 PFF200910	Y	8:20	27.0	33.8	6.29	95.3	8.03	5.99	6.09	5.84 ^{KLH} 5.32	0	3	0
Lindsey Hale PLH200910	N	8:46	27.3	34.8	6.28	96.2	8.03	15.2	16.0	15.8	0	2	0
Lahaina Town PLT200910	N	9:02	27.4	34.3	5.89	90.1	8.03	34.4	34.7	35.9 ^{KJG} 36.2	0	0	0
Camp Oluwalu OCO160910	N	9:30	26.5	35.2	6.43	97.5	8.06	5.80	5.63	5.58	0	0	0
Papalaua Pali OPP160910	N	9:47	26.5	35.1	6.64	100.5	8.14 ^{KLH} 8.15	7.53	7.39	7.67	0	0	0

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

LAHAINA TOWN COLLECTION NEAR
SHORE VS. ^{closer} ~~far~~ TO BUOY - SAME
AS OTHER SITES (HIGHER TIDE)

- Post-sampling vial had scratch, new vial² will
use tomorrow 9/11 (new vial read ~~0.10~~).
0.06

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.09	5.58	57.4	600
Pre-sampling	0.08	5.58	57.4	600
Post-sampling	0.11 0.06 ^{GS*}	5.67	57.5	598

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	Polanui	Samplers (Last Name, 1st Initial)	G. Silver	K. Gund
Session	76		M. Beeson	
Date	9/10/2020		K. Harris	

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF200910-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH200910-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT200910-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	
OCO160910-N-1	Camp Oluwalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP160910-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	

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 M. Beeson L. Hutchings Cici Hehemann	Meters and Probes ID		
Session	76			HQ40d:	2100Q:	
Date	9/11/2020			pH:	DO:	Salinity:

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 RHL200911	N	8:02A	26.0	34.7	6.18	92.6	8.11	0.84	0.69	0.73	0	1	0
Oneloa Bay RON200911	N	8:35A	26.2	35.0	6.72	101.2	8.14	0.70	0.85	0.69	0	1	0
Kapalua Bay RFS200911	N	8:55A	26.7	34.4	6.66	100.8	8.10	3.57 GS 4.40	3.25	3.32	1	0	0
Ka'opala Bay RKO200911	N	9:26	26.6	34.1	6.37	95.7	8.05	13.2	13.2	12.9	0	2	0
Kahana Village RKV200911	N	9:42	26.8	34.8	6.65	100.9	8.09	21.8 24.3	29.3	29.3	0	0	0

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

RHL - sailboat in bay, 4th turbidity reading is 1.10

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.06 0.10 *	5.57	57.5	599
Pre-sampling	0.07	5.62	57.4	600
Post-sampling	0.07	5.60	57.5	599

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)	G. Silver K. Bond	
Session	76		M. Beeson L. Hutchings	
Date	9/11/2020		K. Harris C. Hehemann	

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL200911-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON200911-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	
RFS200911-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO200911-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	
RKV200911-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):

M. Beeson

Printed Name:

Meredith Beeson