

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
79	M. Beeson, G. Silver, J. Strickland	11/9/20	9:13	M. Beeson, G. Silver	11/12/20	10:17

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	
	13	3	6/11/2021		27.7	28.3 °C	28.9 °C	28.3 °C		NIST Exp: 6/2021	
	1	2	n/a			27.9					
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	
	1	3	8/17/20		0.63	34.8	0.64	34.9			
	1	2	8/17/20		0.64	34.8					
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	1	1	9/28/20		99%		97.9%				
	1	2	9/8/20		101.0%						
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	11/09/20		7.00	9.97	7.00	9.95			
	1	6	11/09/20		7.01	9.95					
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	
	1	n/a	8/17/20		0.09	5.57	0.08	5.61		Standard: 5.57 NTU	
	NBBF	n/a	8/17/20		0.08	5.83				Standard: 5.74	

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

Temp of all in tap: pH-27.8°C, DO-28.1°C (11/9/20)
pH-28.4°C, DO-28.3°C
Lab: TMO

Team	R2RS	Samplers (Last Name, 1st Initial)	(Gallagher, C) Strickland, J. Kranberg, J. Beeson, M.	Meters and Probes ID		
Session	79			HQ40d: 1	2100Q: 1	
Date	11/10/2020			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 RNS201110	N	8:16	25.3	34.1	6.56	96.5	8.06	2.28	1.98	2.15	0	3	0
Pohaku RPO201110	N	8:44	25.9	33.0	6.55	96.7	8.15	2.87 3.69	3.87	3.29	2	1	Popo
Kaanapali Sh RKS201110	N	9:10	25.7	34.6	6.74	100.0	8.12	1.67	1.89	1.88	0	5	0
Kahekili Beach Two RKT201110	N	9:37	26.7	35.0	6.71	101.5	8.12	1.44	1.45	1.53	8	4	0
Canoe Beach RCB201110	N	10:00	26.9	34.5	6.77	102.4	8.18	0.82	0.92	0.91	MB # 3	3	0
Wahikuli RWA201110	N	10:17	27.2	34.5	6.43	97.8	8.16	1.91	1.84	1.86	2	1	0

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

Use the back of the form if needed.

Storm water Construction

Napili
Probe Temp DO 25.5
Sal 25.3
PH 24.6*

Pohaku

DO 26.0
Sal
PH 26.0

RKS Temp:
DO: 25.9
Sal: 25.7
PH: 25.8

RKT: temps
DO: 26.8
Sal: 26.7
PH: 26.8

1 SUP
2 ppl paddling
1 hour

RCB Temp:
DO 27.0
Sal 26.9
PH 27.1

RWA: temps
DO: 27.3
Sal:
PH: 27.3

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.09	5.57	57.5	599
Pre-sampling	0.09	5.66	57.4	601
Post-sampling	0.07	5.58	57.5	600

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. Kranburg, J. Beeson, M.
Session	79		
Date	11/10/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS201110-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:16	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO201110-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:44	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS201110-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKT201110-N-1	Kahekili Beach Two	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:37	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB201110-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA201110-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:17	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

Team	Polanui	Samplers (Last Name, 1st Initial)	R. Bayly	G. Silver	Meters and Probes ID		
Session	79		K. Gund		HQ40d: 1	2100Q: 1	
Date	11/11/2020		J. Strickland		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
505 Front St PFF201111	Y	8:11	26.0	32.6	5.66	83.6	7.98	1.18	1.58	1.35	0	12	0
Lindsey Hale PLH201111	N	8:30	26.1	34.2	5.83	86.9	8.03	3.68	3.92	3.96	0	3	0
Lahaina Town PLT201111	N	8:48	26.1	34.2	5.95	88.7	8.05	6.68	6.77	7.23 8.34	1	02	0
Olowalu Pier OSF201111	N	9:15	26.0	35.0	6.53	97.6	8.06	1.32	1.35	1.42	0	1	0
Camp Oluwalu OCO201111	N	9:32	25.7	35.0	6.22	92.6	8.07	1.04	1.02	1.12	4	3	0
Papalaua Pali OPP201111	N	9:46	25.8	34.5	6.62	98.5	8.10	13.5	13.9 14.4	13.9	0	1	0

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

Use the back of the form if needed.

Site	DO Temp.	pH Temp	Notes (Rained last night)
PFF	26.2	26.1	small waves, water calm, small breeze, partly cloudy
PLH	26.3	26.2	Partly cloudy
PLT	26.3	26.2	calm water
OSF	26.2	26.1	Very sunny! Small waves, but bigger than normal.
OCO	25.9	25.8	Partly cloudy, little/no waves 4 divers
OPP	26.0	25.9	Very windy!!!

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Pre-sampling	0.06	5.64	57.5	599
Post-sampling	0.07	5.62	57.5	599

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Grace Silver

Printed Name:

Grace Silver

Team	Polanui	Samplers (Last Name, 1st Initial)	R. Bayly K. Gund J. Strickland	G. Silver
Session	79			
Date	11/11/2020			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF201111-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:11	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH201111-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT201111-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:48	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO201111-N-1	Camp Oluwalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:32	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP201111-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OSF201111-N-1	Oluwalu Pier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:15	125 ml	" " " "	

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):

Grace Silver

Printed Name:

Grace Silver

Team	R2RN	Samplers (Last Name, 1st Initial)	Beeson, M. Silver, G. Hehemann, C.	Meters and Probes ID		
Session	79			HQ40d: 1	2100Q: 1	
Date	11/12/2020			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
Honolua Bay RHL201112	N	7:55	24.9	33.8	6.34	92.3	8.11	0.88	0.99	0.91 1.12	0	0	0
Oneloa Bay RON201112	N	8:25	25.3	34.7	6.72	99.2	8.14	.91	.86	.81	0	2	0
Kapalua Bay RFS201112	N	8:46	25.3	33.6	6.59	96.6	8.07	0.89 1.20	1.2	1.17	0	1	0
Ka'opala Bay RKO201112	N	9:06	25.3	34.2	6.48	95.1	8.08	6.23	6.12	6.30	0	0	0
Kahana Village RKV201112	N	9:24	24.8	34.2	6.55	95.4	8.04	6.96	8.38	6.91	0	0	0

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

Use the back of the form if needed.

Site	DO T°	pH T°	Notes
RHL	25.1	25.0	smells like sulfur
RON	25.5	25.4	dog on beach, medium surf
RFS	25.5	25.5	calm
RKO	25.5	25.4	
RKV	25.0	24.9	calm 4th Turbidity reading = 8.17

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CHAIN OF CUSTODY INFORMATION

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Sediment	-	-	-
Nutrients	5	TMO	J. Strickland
Bacteria	-	-	-

Signature (Team Lead):

M. Beeson

Printed Name:

Meredith Beeson

Team	R2RS	Samplers (Last Name, 1st Initial)	Beeson, M. Silver, G. Hehemann, C.
Session	79		
Date	11/12/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL201112-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON201112-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS201112-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	
RKO201112-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:06	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV201112-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:24	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