

Team	R2RS	Samplers (Last Name, 1st Initial)	Abronaitis, A Freiberg, T Maxwell, C						Meters and Probes ID				
Session	50								HQ40d: 2		2100Q: 3		
Date	1/8/2019				pH: 6		DO: 2		Salinity: 2				

Location Name Sample ID	Streams Flowing (Y/N)	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
Napili Bay RNS190108	N	8:07	23.8	34.6	6.88	98.5	8.17	1.11	0.86	0.87	0	15	0
Pohaku RPO190108	N	8:31	23.8	34.3	6.81	97.3	8.16	9.30	8.57	9.03	6	6	0
Kaanapali Sh RKS190108	-	8:52	23.6	34.4	6.92	98.8	8.15	3.88	3.26	2.90	2	2	0
Canoe Beach RCB190108	-	9:11	25.0	33.6	6.88	100.1	8.21	1.27	1.17	1.18	3	0	0
Wahikuli RWA190108	-	9:28	24.8	34.1	6.67	97.1	8.23	1.76	1.85	1.88	0	0	0

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

Use the back of the form if needed.

RNS - 1 ft waves, no wind, sunny
 RPO - 2-3 ft waves, no wind, sunny
 RCB - 1/2 ft wave
 RWA - 4 ft wave - nearly flat

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.06	6.27	56.2	605
Pre-sampling	0.07 AA 0.07	6.29	56.4	605
Post-sampling	0.03	6.32	56.6	606

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	0		Cathy Maxwell
Nutrients	5	LLTS	Cathy Maxwell
Bacteria	0		Cathy Maxwell

Signature (Team Lead):

Catherine Maxwell *Catherine Maxwell*

Printed Name:

Team	R2RS	Samplers (Last Name, 1st Initial)	Abromaitis, A			
Session	50		Freiberg, T			
Date	1/8/2019		Maxwell, C			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS190108-N-1	Napili Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:07	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO190108-N-1	Pohaku	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:31	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS190108-N-1	Kaanapali Sh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB190108-N-1	Canoe Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:11	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA190108-N-1	Wahikuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:28	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Sediments							
RNS190108-S-1	Napili Bay	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
RPO190108-S-1	Pohaku	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
RKS190108-S-1	Kaanapali Sh	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
RCB190108-S-1	Canoe Beach	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
RWA190108-S-1	Wahikuli	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):

Catherine Maxwell

Printed Name:

Catherine Maxwell

Team	Polanui	Samplers (Last Name, 1st Initial)	Maxwell, J Bayley, R Harris, K						Meters and Probes ID				
Session	50								HQ40d:	2	2100Q: 3		
Date	1/9/2019								pH:	6	DO:	2	Salinity:

Location Name Sample ID	Streams Flowing (Y/N)	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
505 Front St PFF190109	Y	8:13	24.5	34.6	6.74	97.6	8.19	3.38	3.38	3.47	0	3	0
Lindsey Hale PLH190109	N	8:35	24.2	34.1	6.74	97.0	8.16	10.6 _{KH}	10.6	10.6	0	0	0
Lahaina Town PLT190109		8:52	23.8	33.7	6.34	90.4	8.08	14.3	14.6	13.7	0	5	0
Olowalu Pier OSF190109		9:20	23.9	34.4	6.28	90.0	8.08	3.48	3.46	3.56	0	0	0

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	0.03	6.27	56.2	605
Pre-sampling	0.08	6.31	56.4	606
Post-sampling	0.03	6.31	56.5	605

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment			
Nutrients	4	LHS	J. Strickland
Bacteria			

Signature (Team Lead):

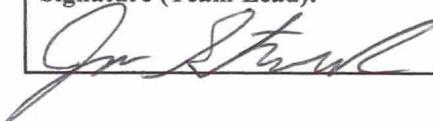
Printed Name:

J. Strickland

Team	Polanui	Samplers (Last Name, 1st Initial)	Maxwell, J			
Session	50		Boyle, R Harris, K			
Date	1/9/2019					

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
PFF190109-N-1	505 Front St	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:13	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLH190109-N-1	Lindsey Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
PLT190109-N-1	Lahaina Town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OSF190109-N-1	Olowalu Pier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:20	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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):



Printed Name:

James Strickland

Team	Olowalu	Samplers (Last Name, 1st Initial)	Ranieri, Lindsay Otomo, Layne Strickland, James							Meters and Probes ID			
Session	50									HQ40d:	2	2100Q:	3
Date	1/10/2019									pH:	6	DO:	2
										Salinity:			

Location Name Sample ID	Streams Flowing (Y/N)	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)		People (within 100 ft)			
					(mg/L)	(%)				water	beach	camp	
Martin Hale OPM190110		7:18	23.9	34.6	6.05	97.0	8.04	6.16	6.47	0	0	0	
Camp Olowalu OCO190110		7:30	24.4	34.9	6.58	95.3	8.10	3.54	3.60	3.77	4 KAYAK	10	
Ukumehame OUB190110		7:50	24.3	34.7	6.55	94.8	8.18	13.9	14.5	14.1	0	2	0
Papalaua Beach OPB190110		8:06	24.5	34.7	6.40	93.0	8.13	2.02	2.95	2.60	0	0	0
Papalaua Pali OPP190110		8:13	24.5	34.4	6.75	97.8	8.18	4.31	3.78	4.01	0	2	0
											to		

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

Use the back of the form if needed.

Kayak tour group at OCO.

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.03	6.27	56.2	605
Pre-sampling	0.12	6.36	56.3	606
Post-sampling	0.06	6.39	57.1	605

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

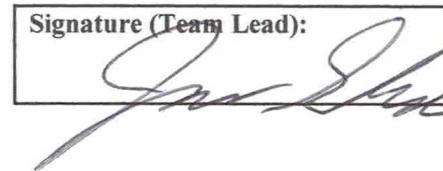
1-10-2019

Team	Olowalu	Samplers (Last Name, 1st Initial)
Session	50	
Date	1/10/2019	

Ranieri, L
OTOMO, L
Strickland, J

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
OPM190110-N-1	Martin Hale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:18	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OCO190110-N-1	Camp Olowalu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:32	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OUN190110-N-1	Ukumehame	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPB190110-N-1	Papalaua Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
OPP190110-N-1	Papalaua Pali	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:13	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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):



Printed Name:

James Strickland

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L. Bunker, B Hehemann, C						Meters and Probes ID				
Session	50								HQ40d: 2		2100Q: 3		
Date	1/11/2019		pH:	6	DO:	2	Salinity:	2					

Location Name Sample ID	Streams Flowing (Y/N)	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
Honolua Bay RHL190111	Y	7:45A	22.5	33.0	6.67 6.70	93.2	8.11	100	101	99.7	0	0	0
Oneloa Bay RON190111	N	8:35	24.0	34.8	6.93	99.9	8.18	1.46	158	1.57	0	7	0
Kapalua Bay RFS190111	N	09:05	24.4	34.6	6.87	99.9	8.16	3.45	3.97	3.27	10	30	0
Ka'opala Bay RKO190111	N	9:30	24.0	34.3	6.95	99.8	8.14	15.0	15.6	15.4	0	10	0
Kahana Village RKV190111	N	9:55	24.6	34.6	6.93	100.9	8.21	9.57	9.95	10.01	0	2	0

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

Use the back of the form if needed.

RHL - Surf breaking outside
RON - Big surf

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.06	6.27	56.2	605
Pre-sampling	0.06	6.58	56.2	606
Post-sampling	0.04	6.33	56.6	606

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Team	R2RN	Samplers (Last Name, 1st Initial)	Hutchings, L
Session	50		Bunker, B
Date	1/11/2019		Hehemann, C

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RHL190111-N-1	Honolua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON190111-N-1	Oneloa Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RFS190111-N-1	Kapalua Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO190111-N-1	Ka'opala Bay	<input checked="" type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV190111-N-1	Kahana Village	<input checked="" type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Sediments							
RHL190111-S-1	Honolua Bay	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
RON190111-S-1	Oneloa Bay	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
RFS190111-S-1	Kapalua Bay	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
RKO190111-S-1	Ka'opala Bay	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
RKV190111-S-1	Kahana Village	<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):

Printed Name:

James Strickland

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
50	Strickland, J., Maxwell, C	1/7/19	9:40am	Strickland, J., Maxwell, C		

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value	POST: Verification Value	Acceptable Range	Comments/ Notes	QA?
Temperature	NIST Z	n/a	n/a	Std Val	NIST 21.5 °C	NIST 21.3 °C	NIST 21.2 °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water
	Z	Z	n/a		21.4		21.0		
	Z	3	n/a			21.2			
Salinity			3 months	Std Val	Tap water Salin Std 8/28/18 date 32.6 ppt	Tap water Salin Std 8/29/18 date 32.6 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	Z	Z	11/26/18		0.04	33.2	0.04	33.1	
	Z	3	11/26/18		0.04	32.9			
Dissolved Oxygen			1 year	Std Val	100%	100%	± 5 %		
	Z	Z	8/6/18		99.0	100.5			
	Z	1	4/2/18		99.1				
pH			3 weeks	Std Val	pH 7.00	pH 10.00	pH 7.00	± 0.1 pH of pH std value	Compare to Manufacturer pH Std value on bottle
	Z	6	1/7/19		7.00	10.01	7.02	10.06	
	Z	5	1/7/19		7.00	10.01			
Turbidity			3 months	Std Val	BLANK <0.1 6.27 NTU	LOW 1-10 <0.1	LOW 1-10 6.87 NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value
	Z	n/a	11/26/18		0.06	6.32	0.04	6.34	
		n/a							

QA: * Are pre- and post within one week?

* Delay times are ok?

* Other equipment issues?