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

Session No:	Verifiers:	Pre date:	Pre time:	Post: Date:	Post time:
38	Callnan, L., Maxwell, C.	4/23/18	93am	4/27/18	11:35



QA/QC Check	Inst #	Probe #	Last Cal Date		Verificat	RE: ion Value	Verifica	OST: tion Value	Acceptable Range	Comments/ Notes	QA?
Temperature			n/a	Std	(forpholosz) 25.Z	(Sa probe 3) 25.1	(for product) 24.9		± 1°C of NIST	Within 1°C	
	Z	2,	n/a	MISTZ	25	5.1	24.9				
	2	3	n/a	N(5	29	6.0					
Salinity			3 months	Std	1 ap water 0.04	Hach Stal 35.00 12/12/16	0.04	33.0 ppt	± 3%, blank	33.95 – 36.05	
	Z	3	4/23/18		0.03	34.7	0.03	32.8		calibrated both salinuteday, so used tacks dated 12/12/16 for sali	tandar
	Z	3	4/23/18		0.03	34.9				dated 12/12/16 for sali Verification standars	ntly on 4/2
Dissolved Oxygen			1 year	Std	toc	%	(6	Ф%	Post-check ± 5 % of pre-check	80 – 120 %	
	2	Z	8/11/17		100	5.6%	99	.5%			
	2	1	4/2/18		10	00.8%					
pН			3 weeks	Std	7.00	Labchem 10.00	7.00	Labohem 10.00	± 3 % of cal solution (6-8)	6.79 – 7.21	
	Z	3	4/23/18		6.99	[0.00	6.98	10.00	PRETEINP 25.5	10 1 10	ominal
	Z	4	4/23/18		7.00	10.01			PRETEMP 25.3	c did 2 pt calibration pt 7.00 1 10.00 since pt	n with
Turbidity			3 months		∠0.1	5.28	20.1	5.28	Blank < 0.1 ± 3 % of secondary standard	$\begin{array}{c} \text{Low} \pm 0.18 \text{ NTU} \\ \text{Med} \pm 1.8 \text{ NTU} \\ \text{High} \pm 18 \text{ NTU} \end{array}$	
	1	N/A	3/12/18		0.05	5.29	0.06	5,32			
		N/A								12/14	

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

\* Other equipment issues?

Team R2RS	Samplers	Freiberg T., Jarmakani B., Schroeder T	Meters and Pro	bes ID	22/2017
Session 38	(Last Name, 1st Initial)	Schroeder M.	HQ40d: Z	2100	Q:
Date 4/24/18			pH: 3	DO: Z	Salinity: Z

Location		Temp	Salinity	Dissolved	Oxygen		10000	Turbidity	1/2/10	Waves	Wind		People	S. 195 A	3-14-3	Nutrient
Name Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	pН		(NTU)	15.0	(0-3)	(0-6)	water	beach	camp	TSS	duplicate
Napili Bay RNS180424	8:14	24.2	33.4	6.99	100.4	8.12	1.26	1.32	1.49	l	2	l	4	_		<u> </u>
Pohaku RPO180424	8:37	24.5	32.1	6.53	93.3	8.14	1.69	2.03	1.94	1	7	0	5	^	D	
Kaanapali Sh RKS180424	8:56	242	334	7.02	100.8	8.12	2.55	210	2.42	1	0	0	2	j		
Airport Bch RAB180424	9.15	249	33.8	6:76	98.4	8.15	0.66	0.68	0,67	1	2-3	0	10	_	D	
Canoe Beach RCB180424	9:33	25.2	32.6	7.00	6,501	-8.16	1.98	192	1.76	2	3	0	5	_	d	
Wahikuli RWA180424	9:48	25.5	33.3	6.83	106.3	8.17	0.67	0.65	0.76	1	0	0	1	_	CM	

COASTAL AND ENVIRONMENTAL	
Most recent tide time (falling or rising)	Low: 7:06 AM Lahaina Station High: 12:38 PM Lahaina Station
Moon day (from new)	9
Cloud cover (0-8)	7 - dark-all except RCB
Rain conditions (last 24 hrs)	Yes ER
Wind direction (Trades/Kona)	trades
Streams flowing? (Y/N)	B\$6-4

TURBIDITY VE	RIFICATION			
	Blank	Low	Med	High
Standard	0.05	5.28	55.7	627
Pre-sampling	0.07	5.33	56.1	6.28
Post-sampling	0.05	5.11	56.5	627

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).	
Use the back of the form if needed.	
Dark Clouds, Rain-Napili Sprinkling/light rain- Pahaku Lots of Limu floating	
Sprinkling light rain- tohake a Lots of Lime flogtine	Ì
Rainy of Khanapali Shores Raining at Airport Brack-getting windier Sunny and Windy @ Canoe - Several fishern	J
Raining at Airport Black-getting windler	
Sunny and windy Canbe- Several Johern	nl
Calma a tale to feeli	

CHAIN OF CUSTODY INFORMATION						
	# of samples	Relinquished to	Contact			
Sediment	0	LHS	Maxwell			
Nutrients	6	LHS	CMaxweil			
Bacteria	0		CMaxwell			

Signature (Team Lead):	Printed Name:
Catherine Majaweel	Cathy Maxoell

Team:	Notetaker:	Last Name, 1st Initial	Date:
<b>R2RS - 38</b>	Schroeder	, M.	4/24/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RNS180424-N-1	Napili Bay	Ø		8:14	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RPO180424-N-1	Pokahu			8:37	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKS180424-N-1	Kaanapali Sh	er er		8:56	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RAB180424-N-1	Airport Beach	12		9:15	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RCB180424-N-1	Canoe Beach	Ø		9:33	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RWA180424-N-1	Wahikuli			9:48	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
					125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
Sediment - TSS							
RNS180424-S-1	Napili Bay				500		
RPO180424-S-1	Pokahu				500		
RKS180424-S-1	Kaanapali Sh				500		
RAB180424-S-1	Airport Beach				500		
RCB180424-S-1	Canoe Beach				500		
RWA180424-S-1	Wahikuli				500		

Signature (Team Lead):	Print name here:

Team	Polanui	Samplers (Last Name, 1st Initial)	Brown	M.	Maywell	? (Launiepollos)	Mete				
Session	38	THE RESIDENCE OF THE PROPERTY	, , , , , ,	, , , ,		Olowelu Pier)	HQ4	Od: 2		2100Q:	1
Date	4/25/18						pH:	3	DO:	Z	Salinity: 2

Location Name		Temp	Salinity	Dissolved	Oxygen			Turbidity			Wind		People			Nutrient
Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	pН			(0-3)	(0-6)	water	beach	camp	TSS	duplicate	
505 Front St PFF180425	8:20	25.0	34.1	6.66	97.3	8.07	1.05	0.97	1.04	Z	P	Ø	3	Ø		
Lindsey Hale PLH180425	8:45	25.4	33.7	6.60	96,8	8.09	2,21	2.13	2,03	1	0	3	Z	Ø		
Lahaina Town PLT180425	9:10	25,5	34.2	6.73	99.4	8.11	1.56	1.52	1.48	/	0	2	Ø	Ø		
Puamana PPU180425	9:45	25.7	33.4	6,94	1022	8.19	1.73	1.54	1.81	3	B	1	8	8		
Launiupoko OLP180425	10:19	26.3	34.1	6.95	103.9	8.18	5.16	537	4.59	1	J	30	23	ø		
Olowalu Pier OSF180425	i0:50	26.3	33.6	7.30	108.3	8.20	3.0%	2.99	296	0	3	1	0	Ø		

COASTAL AND ENVIRONMENTAL	CONDITIONS
Most recent tide time (falling or rising)	Low: 7:28 AM Lahaina Station High: 1:31 PM Lahaina Station
Moon day (from new)	10
Cloud cover (0-8)	1
Rain conditions (last 24 hrs)	
Wind direction (Trades/Kona)	trades
Streams flowing? (Y/N)	YOS-PFF

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).
Use the back of the form if needed.
PLH - water flowing into tuber out with a pond on the beach but not with the ocean

TURBIDITY VE	RIFICATION			
	Blank	Low	Med	High
Standard	0.05	5.28	55.7	627
Pre-sampling	0.10	5.42	56.9	631
Post-sampling	0.05	5.34	56.7	628

CHAIN OF CUSTODY INFORMATION										
	# of samples	Relinquished to	Contact							
Sediment	0	LHS	CMaxwell							
Nutrients	6	LHS	C Maxwell							
Bacteria	0	_	C Maxwell							

Signature (Team Lead):	Printed Name:
Catherin Maxwell	Catherine Maxwell

Team: Polanui - 38	Samplers:	Date:	Start time:	Finish time:
Polanui - 38	Brown. M	4/25/18	8:20	

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF180425-N-1	505 Front St			8:20	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLH180425-N-1	Lindsey Hale	D.		8:45	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLT180425-N-1	Lahaina Town			9:10	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PPU180425-N-1	Puamana			9:45	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OLP180425-N-1	Launiupoko	₽ P		10:19	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OSF180425-N-1	Olowalu SF	8		10:50	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
					125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
Sediment							
PFF180425-S-1	505 Front St				500		
PLH180425-S-1	Lindsey Hale				500		
PLT180425-S-1	Lahaina Town				500		
PPU180425-S-1	Puamana				500		
OLP180425-S-1	Launiupoko	<del>                                     </del>			500		
OSF180425-S-1	Olowalu SF				500		

Signature (Team Lead):	Printed Name:
Catherin Maxwell	Cotherine Maxwell

Team	Olowalu	Samplers	NODONEN, R	Meters	Meters and Probes ID						
Session	38	(Last Name, 1st Initial)	GRIFFOUL, M	HQ40d:	2		2100Q:	1			
Date	4/26/18		RANIERI, L	pH:	3	DO:	Z	Salinity: Z			

Location Name		Temp	Salinity	Dissolved	Oxygen			Turbidity		Waves	Wind		People			Nutrient
Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	pН		(NTU)		(0-3) (0-6) water beach camp		TSS	duplicate			
Martin Hale OPM180426	7:10	24.7	34.0	5.84	6.850	8.08	1,22	1.47	1.49	0	0	O	0	0		
Camp Olowalu OCO180426	7:30	24.6	33.8	6.52	94.6	8.10	2.50	2.74	2.95	0	1 pm	6	4	0		
Mile Marker 14 OMM180426	7:47	24.4	33.9	6.08	88.0	8.08	159	1.55	1.58	0	0	0	1	7		
Ukumehame OUB180426	8.03	24.6	34.2	6.83	99.2	8.12	4.97	4.87	5.31	2	,	7	3	2		
Papalaua Beach OPB180426	8:20		34.1	6.95	101.7	8.15	3,51	3,03	3,27	2	i	Ö	0	0		
Papalaua Pali OPP180426	8:40	24.7	33.9	7.00	102.4	8.17	1.93	2.22	2.37	2	0	Ø Z	0	4		

COASTAL AND ENVIRONMENTAL CONDITIONS			
Most recent tide time (falling or rising)	Low: 7:50 AM Lahaina Station High: 12:13 PM Lahaina Station		
Moon day (from new)	11		
Cloud cover (0-8)	2		
Rain conditions (last 24 hrs)	0		
Wind direction (Trades/Kona)	NONE - (likely Trades/NOAACM		
Streams flowing? (Y/N)	NIA		

201/	Blank	Low	Med	High
Standard	0.05	5.28	55.7	627
Pre-sampling	0.12	5.36	56.6	629
Post-sampling	0.05	5.33	56.5	627

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).  Use the back of the form if needed.
GOT CLOUDIER FOR LATER SITES (45 WIND BECAME LIGHT ONSHORE AS WELL
WIPS BECAME LIGHT ONSHOPE AS WELL
APPE KILLERO / KIDE-MLOSO OBSERCER
Had a little hearble agetting the right
ATHE RILLERO > RIDE-ALONG OBSERVER  Hod a little howble agetting the right  Connector port on the Hardod to work  Properly. Seems to be failing.
property. Seems to be failing.
, , , ,

CHAIN OF CUSTODY INFORMATION					
	# of samples	Relinquished to	Contact		
Sediment	0	LHS	C. Maxwell		
Nutrients	6	LHS	C. Maxwell		
Bacteria	0	100	C. Maxwell		

Signature (Team Lead):	Printed Name:
Catherine Maxwell (	Catherine Maxwell

Team:	Samplers:	Date:	Start time:	Finish time:
Olowalu - 38	Noponen R	4/26/18	7:10 am	9:00 am

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
OPM180426-N-1	Martin Hale			7:10	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OCO180426-N-1	Camp Olowalu	Ø		7:30	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OMM180426-N-1	Mile Marker 14	<u> </u>		7:47	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OUB180426-N-1	Ukumehame	回		8:03	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPB180426-N-1	Papalaua Beach	₩.		8:20	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPP180426-N-1	Papalaua Pali	Ø		8:40	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
					125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
Sediment							
OPM180426-S-1	Martin Hale				500		
OCO180426-S-1	Camp Olowalu				500		
OMM180426-S-1	Mile Marker 14				500		
OUB180426-S-1	Ukumehame				500		
OPB180426-S-1	Papalaua Beach				500		
OPP180426-S-1	Papalaua Pali				500		

Signature (Team Lead):	Printed Name:
Catheen Maxwell	Catherine Maxwell

Team	R2RN	Samplers	Huthings L	Meters and F	robes ID		0.1
Session	38	(Last Name, 1st Initial)	STATE SA	HQ40d:	2	2100Q:	1
Date	4/27/18		Heremann, C	рН: _З	DO:	2	Salinity: Z

Location		Temp	Salinity	Dissolved	Oxygen		å li	Turbidity		Waves	Wind		People			Nutrient
Name Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	o pH		(NTU)		(0-3)	(0-6)	water	beach	camp	TSS	duplicate
Honolua Bay RHL180427	7:55A	24.1	31.3	6.47	92070	8.14	24.8	25.7	23.5	0	1	0	1	0	<b>₽</b>	<u>-</u>
Fleming Nrth RFN180427	9.30A	24.7	34.1	6.89	100,5	8.16	1.19	1.35	1.23	Î	0	0	2	0		
Oneloa Bay RON180427	9:004	24.9	34.1	6.92	101.4	8.16	0.66	0.46	0.53	2	1	3	3	8		
Kapalua Bay RFS180427	9:25 <sub>A</sub>	24.9	31.1	6.52	93.9	8,05	1.75	0.95	1.69	0	0	16	9	0		
Ka'opala By RKO180427	9:52A	25-0	32.4	6.55	95.1	8.10	5,40	4-98	4.84	0	0	5	3	0		
Kahana Vill RKV180427	10:10A	25.4	32.3	6.72	98.0	8.15	3.49	2.97	3.70	0	0	0	3	0		

COASTAL AND ENVIRONMENTAL	
Most recent tide time (falling or rising)	Low: 8:14 AM Lahaina Station
	High: 2:51 PM Lahaina Station
Moon day (from new)	12
Cloud cover (0-8)	
Rain conditions (last 24 hrs)	Y- main last Z4 hrs
Wind direction (Trades/Kona) Tycolo	
Streams flowing? (Y/N) Y-RHL	notat other sites

RKO-1 dishern	nan (2 Poles	3)	
RHL - muddy	, walky	niver flowing	s who ocean
no nach at an			

TURBIDITY VE	RIFICATION	I 0		100
	Blank	Low	Med	High
Standard	0.05	5.28	55.7	627
Pre-sampling	0.06	5.35	56.3	629
Post-sampling	0.06	5.32 cm	56.3	628

	# of samples	Relinquished to	Contact
Sediment	1	LHS	C.Maxwell
Nutrients	6	LHS	C. Maxwell
Bacteria	0		C. Maxwel

Signature (Team Lead):	Printed Name:
Catherin Marwell	Cotherine Maxwell

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RN - 38	Hutchings	, L	4/27/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL180427-N-1	Honolua Bay	Ø		7:55	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFN180427-N-1	Fleming North	DZ		8:30	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RON180427-N-1	Oneloa Bay	Ø		9:00	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFS180427-N-1	Kapalua Bay	Œ/		9:25	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKO180427-N-1	Ka'opala Bay	ū		9:52	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKV180427-N-1	Kahana Village	Ø		10:10	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
					125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
Sediment - TSS							
RHL180427-S-1	Honolua Bay	<b>P</b>		7:55	500		
RFN180427-S-1	Fleming North				500		
RON180427-S-1	Oneloa Bay				500		
RFS180427-S-1	Kapalua Bay				500		
RKO180427-S-1	Ka'opala Bay				500		
RKV180427-S-1	Kahana Village				500		

Signature (Team Lead):	Print name here:			
Ortherie Maxwell	Catherine Maxwell			