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



Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
44	Maxwell C. Reed D.	8 27 18	10:00	Otomo, L., Maxwell, C.	8/31/18	10:45 am

QA/QC Check	Inst#	Probe #	Last Cal Date			RE: ion Value		ST: tion Value	Acceptable Range	Comments/ Notes	QA?
Temperature	NIST 2	n/a	n/a	Std Val	<u>NIST</u> 26.4 <sub>°C</sub>	NIST 25.6 °C	NIST 22.7°C	<u>NIST</u> <u>°C</u>	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	Z	2	n/a		26.4		22,6				
	2	3	n/a			25.3					
Salinity			3 months	Std Val	Tap water	Salin Std 4/9/18 date 33.0 ppt	Tap water	Salin Std 4/9/18 date 33.0 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	2	8/6/18		0.02	32.7	0.03	32.7		- Alexander	
	Z	3	8/6/18		0.02	32.g				1	
Dissolved Oxygen			1 year	Std Val	10	0%	10	00%	± 5 %		
	2	2	8/6/18		160	7.2%	100	57.			
d.	2	1	4/2/18		100	0-0%					
рН			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	6	8 27 18		7.00	10.01	7.01	10.02			
	Z	5	8/27/18		7.00	10.01					
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 &37 <sub>NTU</sub>	BLANK <0.1	LOW 1-10 5-37 NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
	1	n/a	6/4/18		0.05	5.41 0.06 cm	0.06	5.43			
		n/a									

QA:

<sup>\*</sup> Are pre- and post within one week?
\* Delay times are ok?
\* Other equipment issues?

Team	R2RS	Samplers	FRG'BLRG, T
Session	44	(Last Name, 1st Initial)	JARMAKANI, 13
Date	8/28/18		ABAOMAITIS, A

Meters and Pr	obes ID		
HQ40d: 2		2100Q:	I
nH· /a	DO:	)	Salinity: 2

Location	100	Tomn	Salinity	Dissolved	Oxygen			Turbidity	2	Waves	Wind		People	4		Northina
Name Sample ID	Time	Temp (°C)	(ppt)	(mg/L)	(%)	pН	n H		(NTU)		(0-6)	water	beach	camp	TSS	Nutrient duplicate
Napili Bay RNS180828	8:12	26.4	33.2	6.65	995	8.13	162	1.46	1.69	0	1	4	И	_		
Pohaku RPO180828	8:35	26.8	31.8	6.49	96.9	8.19	2.23	3,18	2,58	0	2	0	0	_		
Kaanapali Sh RKS180828	8:55	26.7	29.7	664	979	8,19	13.6	15.6	GX XX	40	3	0	0	_		
Canoe Beach RCB180828	9:14	27.5	32.6	650	993	8.17	63.4	63.9	65.1		0	0	2	_		
Wahikuli RWA180828	9:32	27.5	32.6	6.62	100.6	8.24	1.32	1,57	1.46	0	0	0	0	_		
	V						•	(								D D

Waves: 0ft: no waves; 1ft: small waves; 2ft: knee high; 3ft: waist high Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL	CONDITIONS
Most recent tide time (falling or rising)	Low: 10:12 AM Lahaina Station High: 4:31 AM Lahaina Station
Moon day (from new)	200 875 879 889
Cloud cover (0-8)	7.6,4.4.4
Rain conditions (last 24 hrs)	705.
Wind direction (Trades/Kona)	T
Streams flowing? (Y/N)	N-don't report on that

	Blank	Low	Med	High
Standard	0.05	5.37	56.7	641
Pre-sampling	0.07	5.42	56.7	642
Post-sampling	0.06	5.38	56.8	640

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.	
E45-BROWN WATER 100 YAPDS.	
PLB BROWN WHAR , LITS OF DESN'S KAKUINUTS.	
no soot from times reportedy-CM or observed	

CHAIN OF CUSTODY INFORMATION								
	# of samples	Relinquished to	Contact					
Sediment	0	LHS	Maxwell					
Nutrients	5	LHS	CMaxwell					
Bacteria	0		Cmaxwell					

Signature (Team Lead	):	Printed Name:
Carline M	xxwell	Catherine Maxwell

Team:	Samplers:	Last Name, 1st Initial	Date:
R2RS - 44	Freiber, T., Jarn	nalani, B. Abromaitis, A	8/28/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RNS180828-N-1	Napili Bay			8:12	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RPO180828-N-1	Pokahu	Ø		8:35	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKS180828-N-1	Kaanapali Sh	Ø		8:53	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RCB180828-N-1	Canoe Beach			9:14	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RWA180828-N-1	Wahikuli			9:32	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	
					125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
Sediment - TSS							
RNS180828-S-1	Napili Bay				500		
RPO180828-S-1	Pokahu				500		
RKS180828-S-1	Kaanapali Sh				500	-	
RCB180828-S-1	Canoe Beach				500		
RWA180828-S-1	Wahikuli				500		
					500		

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

Team Polanui	Samplers STRICKLA NO, J.	Meters and Probes ID
Session 44	(Last Name, Maxwell, J.  1st Initial) Harris, K.	HQ40d: Z 2100Q: 1
Date 8/29/18		pH: 6 DO: Z Salinity: Z

Location Name		Temp	Salinity	Dissolved	Oxygen			Turbidity		Waves	Wind		People			
Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	pН		(NTU)		(0-3)	(0-6)	water	beach	camp	TSS	Nutrient duplicate
505 Front St PFF180829	8:10	27.5	32.5	6.10	92.3	8.09	4.06	3.90	4.73	0	۵	D	1	0		0
Lindsey Hale PLH180829	8:43	27.6	33.5	5.87	89.6	2.09	4.38	* 29.95	11.1	FPRO	٥	0	j	٥		
Lahaina Town PLT180829		27.8	33.b	6.05	92.9	8.11	4.03	3.81	3.90	٥	6	1	D	۵		
Olowalu Pier OSF180829	9:45	27.9	34.0	665	102.3	3.16	3,49	3.76	3.31	10	5	B	6	0		
			,													

Waves: 0fl: no waves; 1fl: small waves; 2fl: knee high; 3fl: waist high Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL CONDITIONS						
Most recent tide time (falling or rising)	Low: 10:44 AM Lahaina Station High: 5:09 AM Lahaina Station					
Moon day (from new)	19					
Cloud cover (0-8)	D					
Rain conditions (last 24 hrs)						
Wind direction (Trades/Kona)	K? Trades					
Streams flowing? (Y/N)	Y light					

sample	d wa	>~9	.5
	sample	sample a wa	sampled was ng

TURBIDITY VE	RIFICATION			
	Blank	Low	Med	High
Standard	0.06	5.37	56.7	641
Pre-sampling	0.11	5,37	56.8	642
Post-sampling	0.07	5.36	56.7	640

CHAIN OF CUSTODY INFORMATION								
	# of samples	Relinquished to	Contact					
Sediment	Ф							
Nutrients	4	LH5	D. Reed					
Bacteria								

Signature (Team Lead):	Printed Name:
Amen Jew	Dana Reed

Team:	Notetaker:	Date:
Polanui - 44	Kit Harris	8/29/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF180829-N-1	505 Front St	754		8:10	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLH180829-N-1	Lindsey Hale	¥		8143	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLT180829-N-1	Lahaina Town	×		9:10	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OSF180829-N-1	Olowalu SF	M		9:45	. 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	
					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							
PFF180829-S-1	505 Front St				500		
PLH180829-S-1	Lindsey Hale				500		
PLT180829-S-1	Lahaina Town				500		
OSF180829-S-1	Olowalu SF				500		
					500		
					500		

Signature (Team Lead):	Printed Name:
Alm Rand	Dana Reed

Team Olowalu	Samplers Otomo, L	Meters and Probes ID	
Session 44	(Last Name, Ranieri, 18)  1st Initial) Greiffoul, M	HQ40d: <b>2</b>	2100Q:
Date 8/30/18	OKY, OW, PC	pH: 6 DO:	2 Salinity: 2

Location Name		Temp	Salinity	Dissolve	l Oxygen			Turbidity		Waves	Wind		People			Nutrient												
Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	рН		(NTU)				- 1		- 1						가는 가능한 보고 있는 그 얼마나 가는 그를 가는 것 같아요?		(0-3)	2.896.2.0.001		beach	camp	TSS	duplicate
Martin Hale OPM180830	0715	25.8	34.3	6.20	92.3	8.13	11.4	12,7	11.2	0	0	0	0	0	0													
Camp Olowalu OCO180830	0728	26.0	343	6.21	92.8	8.11	3.62	3.31	3.42	L	0	0	O	0														
Ukumehame OUB180830	0750	24.8	34.5	6.77	99.2	S. No	18.6	18.1	20.0	Z	2	0	0	0														
Papalaua Beach OPB180830	0803	25,0	34.3	6.77	99.6	8.17	5.79	5,30	5.20	2	3	0	O	Ø														
Papalaua Pali OPP180830	0815	25.6	34.1	647	95.8	8.15	14:0	13.7	12.6	2	3	0	0	0														

Waves: 0ft: no waves; 1ft: small waves; 2ft: knee high; 3ft: waist high Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL	CONDITIONS
Most recent tide time (falling or rising)	Low: 11:19 AM Lahaina Station High: 5:51 AM Lahaina Station
Moon day (from new)	20
Cloud cover (0-8)	3
Rain conditions (last 24 hrs)	light rain puperish
Wind direction (Trades/Kona)	None
Streams flowing? (Y/N)	N

Use the back	O COMMENTS (trends, equipment problems, errors, concerns). of the form if needed.
LAHAII	UP FIRE 5 DAYS PROVIOUS OF DATE
BLANK F	PRE-SAMPLE A LITTLE HIGH (TESTED TWICE)
stight d	FIRE-SAMPLE A LITTLE HIGH (TESTED TWICE)
DO disp	lay on weter intermitant

TURBIDITY VE	RIFICATION			
	Blank	Low	Med	High
Standard	0.06	5.37	56.7	641
Pre-sampling	0.20	5.445.3	56.8	641
Post-sampling	0.15	5.35	56.7	641

CHAIN OF CUSTODY INFORMATION								
	# of samples	Relinquished to	Contact					
Sediment								
Nutrients	5	LHS	D. Reed					
Bacteria								

Signature (Team Lead):	Printed Name:
Han Lead	Dana Reed

Team:	Notetaker:		Date:
Olowalu - 44	Layne	Otomo	8/30/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4						
OPM180830-N-1	Martin Hale	Q		7:15	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OCO180830-N-1	Camp Olowalu	A		7:28	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OUB180830-N-1	Ukumehame	×		7:50	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPB180830-N-1	Papalaua Beach	Ø		8:03	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPP180830-N-1	Papalaua Pali	×		8:15	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	
					125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
Sediment							
OPM180830-S-1	Martin Hale				500		
OCO180830-S-1	Camp Olowalu				500		
OUB180830-S-1	Ukumehame				500		
OPB180830-S-1	Papalaua Beach				500		
OPP180830-S-1	Papalaua Pali				500		
THE REPORT OF THE PARTY OF THE					500		

Signature (Team Lead):	Printed Name:
Am Lend	Dana Reed

Team	R2RN	Samplers	Hulchings, L}	STRICKLAND, J	Mete	rs and Prob	es ID			
Session	44	(Last Name, 1st Initial)	Henemonn, c'		HQ40	d: Z		2100Q:	l	
Date	8/31/18				pH:	6	DO:	Z	Salinity:	2

Location	V	T	Callada.	Dissolved	Oxygen		,	Turbidity		Waves	Wind		People			Nutrient
Name Sample ID	Time	Temp (°C)	Salinity (ppt)	(mg/L)	(%)	pН	pH (NTU)		(0-3)	(0-6)	water	beach	camp	TSS	duplicate	
	7500	25.3	33.5	6.3	93.9	8.15	2.50	9.Se	P.61	0	0	2	0	0		
Oneloa Bay RON180831	8.45x	≥ 2.9	34-3	6-73	100.5	06.8	•78	.71	<u>ر</u>	2	3	2	2	0		0
Kapalua Bay RFS180831	8:50A	26.6	39.5	6.47	96.9	8.13	1.28	1.23	1.43	0	1	10	-18/	$\Diamond$		0
Ka'opala By RKO180831	9:35	26.7	33 A	6.26	94.6	8.14	6.85	7:155	?	0	0	0	2	$\mathcal{O}$		
Kahana Vill RKV180831	9:50	2te,8	33.8	6-21	94.1	8,13	13.5	1524	14,4	D	1	0	0	0		

Waves: 0ft: no waves; 1ft: small waves; 2ft: knee high; 3ft: waist high Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL	CONDITIONS						
Most recent tide time (falling or rising)	Low: 12:00 PM Lahaina Station High: 6:43 AM Lahaina Station						
Moon day (from new)	21						
Cloud cover (0-8)	7-RHL						
Rain conditions (last 24 hrs)	Ý						
Wind direction (Trades/Kona)	<b>一</b>						
Streams flowing? (Y/N)	Y RHI_						

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).  Use the back of the form if needed.
we did fourn turbidity reading at RKV due
to variaboring of resolings Also large
in the same of the same
portioles in somple rained at 1st 3 sites-
rained at 1" 3 sites-

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.00	5.37	56-7	641
Pre-sampling	0.05	5.41	56.7	649
Post-sampling	0.06	5.43	56.7	639

CHAIN OF CUSTODY INFORMATION				
	# of samples	Relinquished to	Contact	
Sediment	0	LHS	CMaxwell	
Nutrients	5	LHS	Cmaxwell	
Bacteria	0		CMaxwell	

Signature (Team Lead):	Printed Name:
Carhun Marwell	Cotherne Maxwell

Team:	Samplers:	Last Name, 1st Initial	Date:
R2RN - 44	Hatcheros L	Hehmann, C.	8/31/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL180831-N-1	Honolua Bay			7.50am	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RON180831-N-1	Oneloa Bay			8:25am	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFS180831-N-1	Kapalua Bay	₽ P		8:50am	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKO180831-N-1	Ka'opala Bay	₽.		9:35am	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKV180831-N-1	Kahana Village	□Z		9:50am	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	
					125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
Sediment - TSS							
RHL180831-S-1	Honolua Bay				500		
RON180831-S-1	Oneloa Bay				500		
RFS180831-S-1	Kapalua Bay				500		
RKO180831-S-1	Ka'opala Bay				500		
RKV180831-S-1	Kahana Village				500		
					500		

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