Salinity Std. - 1/29/18 33. Oppt

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

Session No: Verifiers: Pre date: Pre time: Post: Date: Post time: 39 Reed, D. Maxwell, C. 5/14/18 11:00am 5/18/18 11:30am

Hui O Ka Wai Ola

QA/QC Check	Inst #	Probe #	Last Cal Date		PR Verificati	on Value	Verificat	ST: ion Value	Acceptable Range	Comments/ Notes	QA
Temperature			n/a	Std	25.8°C	25.8°C	25,2°C		± 1°C of NIST	Within 1°C	
	- 1	3	n/a	73	25,	68	25.00				
	1	2	n/a	N IST 2	25.	82					
Salinity			3 months	Std	Tap HO0	Bally Std.	14pH20 0.04	Salona stal	± 3%, blank	33.95 – 36.05	
	1	3	4/23/18		0.04	32.9pt		33.1 ppt			
	1	2	4/23/18		0.04	32.9pt					
Dissolved Oxygen			1 year	Std	100	90	100	70	Post-check ± 5 % of pre-check	80 – 120 %	
	1	1	8/1/17		100	,4%	100.	9%			
	1	2	4/2/18		100.	690					
pН			3 weeks	Std	7.00	10.0	7.00	10.0	± 3 % of cal solution (6-8)	6.79 – 7.21	
	/	4	5/14/18		7.00	10.01	7.02	10.01	PRETEMP 26.2°C		
	/	3	5/14/18						PRETEMP 26.18		
Turbidity			3 months		<0.1	6.14	20.1	6.14	Blank < 0.1 ± 3 % of secondary standard	Low ± 0.18 NTU Med ± 1.8 NTU High ± 18 NTU	
	3	N/A	5/14/8		0.05	6.14	0.05	6.18		, , , , , , , , , , , , , , , , , , ,	
		N/A									

QA:

^{*} Are pre- and post within one week?

^{*} Delay times are ok?

^{*} Other equipment issues?

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	R2RS	Samplers	terpera T		Meters and Prol	oes ID		9
Session	39	(Last Name, 1st Initial)	Maxwell, C		HQ40d:		2100Q:	3
Date	5/15/18		Schroeder, M	Schroeder, T.	рн: 4	DO:	}	Salinity: 3

Location		Temp	Salinity	Dissolved	Oxygen			Γurbidity		Waves	Wind		People			Nutrient
Name Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	pН		(NTU)		(0-3)	(0-6)	water	beach	camp	TSS	duplicate
Napili Bay RNS180515	8:13	25,0	33.8	6.88	100.9	8.17	1.58	1.56	1.63	ŀ	3	2	20+	_		
Pohaku RPO180515	8.35	25.8	31.3	6.94	100.4	8,19	2.20	2.53	290	0-1	3	0	1 (_		
Kaanapali Sh RKS180515	8:54	23.2	13:78	7.79	988	8:23	9.40	9.27	9.60	1	3	0	10	_		
Airport Bch RAB180515	9.20	25.7	33.6	6.83	101.5	8.21	2.90	2.75	3.62	- 0-	4	5	aot	,		
Canoe Beach RCB180515	9.38	25.6	33.0	6.75	99.8	8.19	2.12	2.03	2.14	١	3	3	20	-		
Wahikuli RWA180515	9:54	25.4	33.1	6.82	-1003	8.22	1.75	1.79	1.78	ì	3	0	3	_		

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

Med

55.7

55.6 55.6 High

596

595

COASTAL AND ENVIRONMENTAL	CONDITIONS	
Most recent tide time (falling or rising)	Low: 9:06 AM High: 3:00 AM	Lahaina Station Lahaina Station
Moon day (from new)		1 ,
Cloud cover (0-8)	NS 4 RPQ. 1	W-6
Rain conditions (last 24 hrs)	NS SAMPLION RA	0 W- D
Wind direction (Trades/Kona)	UNS. TI RAP	strades
Streams flowing? (Y)N) ILPS	RKS	•

	# of samples	Relinquished to	Contact
Sediment	0	LHS	CarlyMax
Nutrients	6	LHS (Dath Ma
ther Bacteria	0	(Lathy May

TURBIDITY VERIFICATION

Standard

Pre-sampling

Post-sampling

Blank

0.05

0.06

0.05

Low

6.14

6.14

6.15

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).
Use the back of the form if needed.
RPO-Particular ly big "churches attributing to variability
RPD-Particularly big "churks attributing to variability in turbidity readings RKO. Brown Water - Cathy ckild stream-running? muddy Southerly Swell-So diff-hard to get enough Notrical Sumple - last 10 mm new filter DCB - brown water be about 101 out 12 fishing poles.
RKO. Brown Water - Cathy child stream-running injudy
Southerly Swell-So dity-hard to get enough Natrick
Sumple - last 10 mm new filter
DCB - When water blow 101 out 12 fishing poles.
3 fisher man chiers sping by
IN C STATE OF O
VV. Candle

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RS - 39	Schroeder,	M	5/15/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RNS180515-N-1	Napili Bay	□Z′		8:13	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RPO180515-N-1	Pokahu	Ū/		8:35	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKS180515-N-1	Kaanapali Sh			8:54	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RAB180515-N-1	Airport Beach	₽ P		9:20	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RCB180515-N-1	Canoe Beach	□ □		9:38	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RWA180515-N-1	Wahikuli			9:54	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							
RNS180515-S-1	Napili Bay				500		
RPO180515-S-1	Pokahu				500		
RKS180515-S-1	Kaanapali Sh				500		
RAB180515-S-1	Airport Beach				500		
RCB180515-S-1	Canoe Beach				500		
RWA180515-S-1	Wahikuli				500		

Signature (Team Lead):	Print name here:
Conferme Marcol	Catherine Maxwell
Co., co. co. co. co.	

Team Polanui	Samplers Maxwell, J.	Meters and Probes ID	
Session 39	(Last Name, Bayly, R. 1st Initial)	HQ40d:	2100Q: 3
Date 5/16/18	Reed, D-	pH: 4 DO: 1	Salinity: 3

Location Name		Temp	Salinity	Dissolved	Oxygen			Turbidity		Waves	Wind		People			Nutrient
Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	рH		(NTU)		(0-3)	(0-6)	water	beach	camp	TSS	duplicate
505 Front St PFF180516	8:20	25:7	34.0	6.52	96.6	8.12	3.32	2.75	3.15	ø	ф	Φ	ф	ф		
Lindsey Hale PLH180516	8:43	26.5	34.1	6.77	101.4	8.07	1.09	1.24	1.18	φ	ф	5	7	ф		
Lahaina Town PLT180516	9:03	27.0	343	7.05	五岁8	8.10	1.70	2.28	2.12	ф	ф	2	3	ϕ		0
Launiupoko OLP180516	9:33	283	34.4	7.16	111,0	8.19	1.99	2.11	1.86		b	11 Stres	15.	Ø	0	
Olowalu Pier OSF180516	91.59	27.6	34.4	7.04	107.9	8.15	3,04	3.61	3.41	P	ϕ_{t}	Day D	Ø	Ø		

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: 9:40 AM Lahaina Station High: 3:33 AM Lahaina Station						
Moon day (from new)	3						
Cloud cover (0-8)	3						
Rain conditions (last 24 hrs)							
Wind direction (Trades/Kona)	Still						
Streams flowing? (Y/N)							

FURBIDITY VERIFICATION								
	Blank	Low	Med	High				
Standard	0,05	6.14	55.7	596				
Pre-sampling	0.09	6,14	55.6	596				
Post-sampling	0.06	6.18	56.0	594				

Use the back	D COMMENTS (trends, e c of the form if needed.			
PFF-	moderate flow		storm dr	wing hin
PLH-	moderate flour dogin water that be unlk our 2 dogo- I in wat	t /2 uzu be	area buoy +	
81.P- A	2 doge - 1 in wat	er airtimes	,	
OSF-	2 doge-1 in wat 1 do lessaro too 1 cry low tide s	ohard to	Sample	
	and lots of so	ediment	Kicked up in)

CHAIN OF CUSTODY INFORMATION							
	# of samples	# of samples Relinquished to					
Sediment	Φ	-6HS					
Nutrients	5	LHS	D. Reed				
Bacteria	D						

Signature (Team Lead):	Printed Name:
Jan Berl	Dana Reed

Team:	Notetaker:	Date:
Polanui - 39		5/16/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF180516-N-1	505 Front St	X		8:20	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLH180516-N-1	Lindsey Hale	+3		8:43	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLT180516-N-1	Lahaina Town	À		9:03	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OLP180516-N-1	Launiupoko	₽X		9:33	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OSF180516-N-1	Olowalu SF	Ø		9:59	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	数量的特殊						
PFF180516-S-1	505 Front St			A CONTRACTOR OF THE CONTRACTOR	500		
PLH180516-S-1	Lindsey Hale				500		
PLT180516-S-1	Lahaina Town				500		
OLP180516-S-1	Launiupoko				500		
OSF180516-S-1	Olowalu SF				500		
					500		

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

Team Olowalu	Samplers Noponen R.	Meters and Probes ID	
Session 39	(Last Name, 1st Initial) Rood	HQ40d:	2100Q: 3
Date 5/17/18		pH: 4 DO:	(Salinity: 3

Location Name		Temp	Salinity	Dissolve	d Oxygen			Turbidity		Waves	Wind		People			
Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	рH		(NTU)		(0-3)	(0-6)	water	beach	camp	TSS	Nutrient duplicate
Martin Hale OPM180517	7:16	25.7	34.3	5.7	84.6	8.06	1.81	1.99	1.88	φ	ф	ø	ø	ф		0
Camp Olowalu OCO180517	7:41	26.7	34,2	6.25	94.5	8.08	3.79	3.98	3.73	φ	ф	1	Z	ф		
Mile Marker 14 OMM180517	8:01	27.2	34.2	5.89	89.7	8.03	2024	2.21	2.36	Φ	ф	ф	2	l		
Ukumehame OUB180517	8:26	27.1	34.4	6.61	100.3	8.12	5.54	5.52	5.98	ф	φ	8	2	φ		0
Papalaua Beach OPB180517	8:44	27.5	34.5	6.96	106.2	8.20	3.42	3.49	3,28	6	0	ф	Ф	6		
Papalaua Pali OPP180517	9:04	27.(34.5	6.78	1033	8.15	3.65	3.67	3.31	1	1	1	ф	η		

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: 10:16 AM Lahaina Station High: 4:06 AM Lahaina Station					
Moon day (from new)	4					
Cloud cover (0-8)	8-Hazy (VOG)					
Rain conditions (last 24 hrs)	8-Hazy (VOG)					
Wind direction (Trades/Kona)	still - voe					
Streams flowing? (Y/N)						

۸0 D .	- I dinho	amana) of	month of us	
OUB	- * Tu	b 5,52	DR DR	

TURBIDITY VERIFICATION								
	Blank	Low	Med	High				
Standard	0.06	6.14	55,7	596				
Pre-sampling	0.08	6.13	55.4	595				
Post-sampling	0.04	6.20	55.9	594				

CHAIN OF CU	STODY INFORMAT	ION	
	# of samples	Relinquished to	Contact
Sediment	Φ		
Nutrients	6	LHS	DReed
Bacteria	φ		

Signature (Team Lead):	Printed Name:
Dan Ren	Dana Reed

Team:	Notetaker:	Date:
Olowalu - 39		5/17/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients						国际通过的国际国际国际	
OPM180517-N-1	Martin Hale	M		7:16	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OCO180517-N-1	Camp Olowalu	À		7:41	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OMM180517-N-1	Mile Marker 14	Ø		8:01	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OUB180517-N-1	Ukumehame	À		8:26	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPB180517-N-1	Papalaua Beach	A		8:44	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPP180517-N-1	Papalaua Pali	A		9:04	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							
OPM180517-S-1	Martin Hale				500		
OCO180517-S-1	Camp Olowalu				500		
OMM180517-S-1	Mile Marker 14				500		
OUB180517-S-1	Ukumehame				500		
OPB180517-S-1	Papalaua Beach				500		
OPP180517-S-1	Papalaua Pali				500		

Signature (Team Lead):	Printed Name:	

Team	R2RN	Samplers B. Benker, L. Hutchings, C. Moxmell	Meters and Probes ID	000
Session	39	(Last Name, 1st Initial)	HQ40d:	2100Q: 3
Date	5/18/18		рН: 4 DO:	1 Salinity: 3

Location		Temp	Salinity	Dissolved	Oxygen			Turbidity	0	Waves	Wind		People			Nutrient
Name Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	pН		(NTU)	0	(0-3)	(0-6)	water	beach	camp	TSS	duplicate
Honolua Bay RHL180518	8:051	25.3	33.6	6.22	91.2	8.13	7.08	7.20	7.49	0	2	5	9	0	i⊠∕	
Fleming Nrth RFN180518	8:40%	25.3	33.8	6.83	100.3	8.19	0.72	0:72	0.69	2	4	Ø	2	ϕ		
Oneloa Bay RON180518	9:11A	25.7	34.3	7.09	105.3	8.22	041	0.37	0.34	2	4	ϕ	8	ϕ		
Kapalua Bay RFS180518	9:37A	26.5	31.7	6.59	97.8	807	1.69	1.16	1.07	φ	3	5ϕ	80	Ø		
Ka'opala By RKO180518	10:04A	26.4	33.6	6.72	100.6	8.17	4.70	5.0Z	4.68	Ø	Ø	Ø	3	ø		
Kahana Vill RKV180518	10:23A	26.4	33.5	6.52	97.5	8.16	1.73	2.27	1.99	Φ	1	\$13	4	ϕ		

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: 10:55 AM Lahaina Station High: 4:41 AM Lahaina Station
Moon day (from new)	4
Cloud cover (0-8)	See bolow
Rain conditions (last 24 hrs)	PHL YES, Stream Flow into oce
Wind direction (Trades/Kona)	Trades
Streams flowing? (Y/N)	RHL-YES

FURBIDITY VE	RIFICATION			
	Blank	Low	Med	High
Standard	0.04	6.14	55.7	596
Pre-sampling	0.05	6.49	55 .1	595
Post-sampling	0.05	6.18	55.8	594

NOTES AND COMMENTS (trends, equipment problems, errors,	concerns).
Use the back of the form if needed.	
- 1: 1 0 1 . 1 - 1 7 1	

	# of samples	Relinquished to	Contact
Sediment	1	LHS	atty Maxiel
Nutrients	6	LHS	Cothy Maxwe
Bacteria	0		Pathy Maxu

PHL- 6, Sprinkling while there RFN- Checked stream; not flowing - Sourcooke RON- 2 dogs on beach-cloud cover-4

Signature (Team Lead): **Printed Name:** Votherine Maxwell atherine Maxwell

BFS - doud cover 4

RKO-nothing flowing-ie: outfall, etc cloud coner=2 RKV-cloud cover=2

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RN - 39	Hutchings	L	5/18/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL180518-N-1	Honolua Bay	Ū∕		8:05	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFN180518-N-1	Fleming North	02/		8:40	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RON180518-N-1	Oneloa Bay	R		9:11	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFS180518-N-1	Kapalua Bay	Œ/		9:37	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKO180518-N-1	Ka'opala Bay	□Z/		10:04	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKV180518-N-1	Kahana Village			10:23	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							
RHL180518-S-1	Honolua Bay	Q			500		
RFN180518-S-1	Fleming North				500		
RON180518-S-1	Oneloa Bay				500		
RFS180518-S-1	Kapalua Bay				500		
RKO180518-S-1	Ka'opala Bay				500		
RKV180518-S-1	Kahana Village				500		. 0

Signature (Team Lead):	Print name here:	
Catheren DI	axwell	Catherine Maxwell	