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



Session No:	Ve	erifiers:	Pre	date:	Pre time:	Post: Date:	Post time:
35	D. Reed	L. Otomo	211	6/18	9:45	2/23/18	11:45am

QA/QC Check	Inst #	Probe #	Last Cal Date		PR Verificati		PO: Verificati	ion Value	Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature	ature n/a Std 23.6 23.6		23.6	(puber) 22.7		± 1°C of NIST	Within 1°C				
	2	2	n/a					23.1			
	2	3	n/a		23.8	24.0					
Salinity	and the later of the parameter of the later			Std	33.2	0.04	33.217	0.64	± 3%, blank	33.95 – 36.05	
	2	2	1/8/18	44	33.0	0.04	33.(0.04		Temp 24.0	
	2	3	1/8/18		33.2	0.04				Temp 23.9	
Dissolved Oxygen				Std	100		100		Post-check ± 5 % of pre-check (0- 100%)	80 – 120 %	
	2	2	8/1/17	Std	100.4	t	100.		of pre-check (0-	80 – 120 %	
	2	2	8/1/17 3/28/17						of pre-check (0-	80 – 120 %	
		2	5 1		100.4				of pre-check (0-	80 – 120 % 6.79 – 7.21	
Oxygen		2 1	5 1	Std	100.4	1	100.	2	of pre-check (0-100%) ± 3 % of calibration		

QA:

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

Team	R2RS	Samplers	vieblig 11.	Meters and Probe	Meters and Probes ID					
Session	25	(Last Name, 1st Initial)	Frieberg, T.	HQ40d: - Z	2100Q:	-3				
Date	2/20/18		Schroder M.	рН: 3	DO: 2	Salinity: 2				

Location		Tomp	Salinity	Dissolved	Oxygen		Turbidity W		Waves	Wind		People			Nutrient	
Name Sample ID	Time	Temp (°C)	(ppt)	(mg/L)	(%)	pН		(NTU)		(0-3)	(0-6)	water	beach	camp	TSS	duplicate
Napili Bay RNS180220	8:20	23.5	34.2	7.01	100.2	8.08	1.19	1.27	1.27	1	0	4	10	-		
Pohaku RPO180220	8:45	24.0	34.1	6.65	95.8	8.13	2.45	2.74	2.81	0	0	1	4	_		
Kaanapali Sh RKS180220	9:05	23.3	328	7.09	100.7	- 8.15	290	297	2.95	1	0	0	4	_		
Airport Bch RAB180220	9.23	24.3	34.2	6.90	99.9	8017	1.75	1.92	1.75	0	1	10+	20+	_		
Canoe Beach RCB180220	9:41	24.7	34-3	6.85	99.8	8,18	1.73	1.76	1.76	0	0	6	15 r	-		
Wahikuli RWA180220	9:58	24.4	32.5	6.99	1004	8.19	1.25	1.33	1.39		1	8	10+	-		Officerate high

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

Med

High

Most recent tide time (falling or rising)	Low: 12:33 pm Falling High: 6:10 am
Moon day (from new)	6
Cloud cover (0-8)	0-1
Rain conditions (last 24 hrs)	
Wind direction (Trades/Kona)	Kona
Streams flowing? (Y/N)	N

Standard	0.06	6.14	55.2	581
Pre-sampling	0.00	6.01	54.0	581
Post-sampling	0,06	6.07	55.2	581

Low

TURBIDITY VERIFICATION

Blank

	NOTES AND COMMENTS (trends, equipment problems, errors, concerns).
	Use the back of the form if needed.
	- Very calm, day for wind & tains waves.
	was very rainy until yesterday.
(21	162's at Kajanapali Shares & Airport Beach
	Hife grand ? < at Canol
	Tarked suggester analyti
	Rows at going ? how is the water?
	- Nistors asking what the team was doing

	# of samples	Relinquished to	Contact
Sediment	6	LHS.	Cothy Maxio
Nutrients	6	LHS	Cathy Maxwa
Bacteria	0		Oath, Maxu

Signature (Team Lead):	Printed Name:
Cootheren Maxwel	Cathy Maxwell

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RS - 35	FIZEBERE	6,T	2/20/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RNS180220-N-1	Napili Bay			8=20	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RPO180220-N-1	Pokahu	Ø		8:42	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKS180220-N-1	Kaanapali Sh			9:05	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RAB180220-N-1	Airport Beach			9:23	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RCB180220-N-1	Canoe Beach	Ø		9:41	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RWA180220-N-1	Wahikuli	¥		10:01	125 CM	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							
RNS180220-S-1	Napili Bay				500		
RPO180220-S-1	Pokahu				500		
RKS180220-S-1	Kaanapali Sh				500		
RAB180220-S-1	Airport Beach				500		
RCB180220-S-1	Canoe Beach				500		
RWA180220-S-1	Wahikuli				500		

Signature (Team L	ead):	Print name here:	
Catherin	aswell	Cathy Maxwell	
	1		

Team Polanui	Samplers Harris, Kit	Meters and Probes ID	
Session 35	(Last Name, Maxwell Kit	HQ40d: Z	2100Q: 3
Date 2/21/18	Brown Mitch	pH: 3 DO:	Z Salinity: Z

		Temp	Salinity	Dissolved	Oxygen			Turbidity	7	Waves	Wind	0.5 E.M.	People			Nutrient
Location Name Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	pН		(NTU)		(0-3)	(0-6)	water	beach	camp	TSS	duplicate
505 Front St PFF180221	8:10	23.7	34.2	6.11	87.3	8.04	1.23	1.20	.94	B	Ø	Ø)	9		
Lindsey Hale PLH180221	8:38	23.8	34.1	6.49	93.1	8.07	3.39	4.58	3.19	p	ø	ø	2 dogs 17	Ø		
Lahaina Town PLT180221	9:00	24.3	33.9	6.28	90.8	8.08	5.88	5.36	5.01	\$	150	4	4	Ø		
Puamana PPU180221	9:25	24.4	33.4	7.10	102.5	8.19	3.12	-21	000	3	1	Ø	5	\$		
Launiupoko OLP180221	9:41	24.7	34.5	7.08	103.4	8.15	2.62		2.76	1	0	Ø	7	Φ		
Olowalu Pier OSF180221	10.00	24.7	34.6	4.92	101.3	8.07	2,33	2.64	2.83	/	1	Ø	2	6		

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

Most recent tide time (falling or rising)	Low: 1:12 PM Lahaina Station High: 6:30 AM Lahaina Station
Moon day (from new)	6
Cloud cover (0-8)	8
Rain conditions (last 24 hrs)	5
Wind direction (Trades/Kona)	NA
Streams flowing? (Y/N)	& see notes

	Blank	Low	Med	High
Standard	0.06	6.14	55.Z	581
Pre-sampling	0.05	6.10	55.0	581
Post-sampling	0.06	6.10	55.2	581

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.	
(PFF) moderate flow-stream is flowing 40 ft north of normal location	9
PLH small amount of standing water a PLD 1.5" of mucky sand in bottom	
(ED 10) OF Muchy sava, in Dallon	

	# of samples	Relinquished to	Contact		
Sediment	ф	LHS	D. Reed		
Nutrients	6	LHS	D. Reed		
Bacteria	0				

Signature (Team Lead):	Printed Name:
(Alun Zeal	-Dana Reed

Team: Samplers:	Date:	Start time:	Finish time:
Polanui - 35	2/21/18		

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients		100000000000000000000000000000000000000					
PFF180221-N-1	505 Front St	A		8:10	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PLH180221-N-1	Lindsey Hale	×		8:38	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PLT180221-N-1	Lahaina Town	187		9:00	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PPU180221-N-1	Puamana	À		9:25	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OLP180221-N-1	Launiupoko	A		9:41	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OSF180221-N-1	Olowalu SF	Ø		10:00	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
					125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
Sediment	e er Lennil am Rendeutst Entst		Date 12-3				
PFF180221-S-1	505 Front St				500		
PLH180221-S-1	Lindsey Hale				500		
PLT180221-S-1	Lahaina Town				500		
PPU180221-S-1	Puamana				500	*	
OLP180221-S-1	Launiupoko				500		
OSF180221-S-1	Olowalu SF				500		

Jana Reed

Team Olowalu	Samplers NOPONEN, R	Meters and Probes ID	
Session 35	(Last Name, OTOMO, L 1st Initial) 0.000 E.C.	HQ40d: - Z_	2100Q: -3
Date 2/22/18	RANIERI, L REED, D	pH: 3 DO:	Z Salinity: Z

Location Name	Parameter.	Temp	Salinity	Dissolved	Oxygen			Turbidity	1	Waves	Wind	Garage .	People		医 医骨套	Nutrient
Sample ID	Time	(°C)	(ppt)	(mg/L)	(%)	pН		(NTU)		(0-3)	(0-6)	water	beach	camp	TSS	duplicate
Martin Hale OPM180222	0715	24.0	34.0	5.85	84.2	8,02	6.68	6.73	6.92	0	0	0	0	0		
Camp Olowalu OCO180222	0745	24.7	34.5	6.19	902		3.13	3.06	3.14	1	0	26 KANAKS	6	0		
Mile Marker 14 OMM180222	0802	24.6	34.4	5.90	85.7	8.03	3.28	3.19	3.31	1	0	0	4	8		
Ukumehame OUB180222	ORGO	24.4	34.6	100(0)	96.0	8.10	3.87	4.09	3,97	·	0	0	0	0		
Papalaua Beach OPB180222	0836	24.6	34.7	6,82	99.3	8.10	10.7	10.2	10.2	2	0	0	Ô	0		
Papalaua Pali OPP180222	0852	24.6	34.7	6.51	94.9	8.11	3,96	4.73	4. 38	2	0	D	3	1		

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

Most recent tide time (falling or rising)	Low: 2:06 PM Lahaina Station High: 6:46 AM Lahaina Station
Moon day (from new)	2
Cloud cover (0-8)	-8 D.R.
Rain conditions (last 24 hrs)	0 \
Wind direction (Trades/Kona)	TRADE (LIGHT)
Streams flowing? (Y/N)	AIG

	Blank	Low	Med	High
Standard	0.05	6.14	55.2	581
Pre-sampling	0.06	6.14	54.9	581
Post-sampling	0.05	6.10	55.1	581

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.
Just started oprinkling at last site
Turbidity meter had? by calibration. Read the verify cal 10 NTV and then calibration was happy. Suspect during
calibration the 10 NTI) was read level

not accepted.

CHAIN OF CUSTODY INFORMATION							
	# of samples	Relinquished to	Contact				
Sediment	D	LHS	D Reed				
Nutrients	6	LHS	D Reed				
Bacteria	0						

Signature (Team Lead):	Printed Name:
P DR	R. MOPONEN DR
11 2 Rad	D. Reed

Team:	Samplers:	Date:	Start time:	Finish time:
Olowalu - 35		2/22/18		

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients	nd Bearing Haymballan	entariotech	FEE BARRY	or or white			· 公本中的基础。
OPM180222-N-1	Martin Hale	又		7:15	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OCO180222-N-1	Camp Olowalu	DK		7:45	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OMM180222-N-1	Mile Marker 14	Ø		8:02	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OUB180222-N-1	Ukumehame	対		8:20	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPB180222-N-1	Papalaua Beach	A		8:36	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPP180222-N-1	Papalaua Pali	Ø		8:52	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
					125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
Sediment	of United States Co.	10 11 545	College Str	West of the		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	A distribution participal
OPM180222-S-1	Martin Hale				500		
OCO180222-S-1	Camp Olowalu				500		
OMM180222-S-1	Mile Marker 14				500		
OUB180222-S-1	Ukumehame				500		
OPB180222-S-1	Papalaua Beach			Di-Cong	500		
OPP180222-S-1	Papalaua Pali			- 318	500		

Dana Reed Wenn Paul

Team	R2RN	Samplers	Maxwell, C; Hutchings, L	Meters and Probe	es ID	
Session	35	(Last Name, 1st Initial)	Hehemonn, C	HQ40d: Z	2100Q:	3
Date	2/23/18			рН: З	DO: 2	Salinity: Z

Location		T	0 11 14	Dissolved	Oxygen			Turbidity		Waves	Wind		People			Nutrient
Name Sample ID	Time	Temp (°C)	Salinity (ppt)	(mg/L)	(%)	pН		(NTU)		(0-3)	(0-6)	water	beach	camp	TSS	duplicate
Honolua Bay RHL180223	7.50A	23.3	33.9	6.43	91.3	8.08	24.4	581	24.3	0	1	0	0	0	B	0
Fleming Nrth RFN180223	8:40A	29.0	34.4	7.06	101.7%	8.15	2.28	2.39	2.51	2	0	2	6	0	CSM	
Oneloa Bay RON180223	9:05x	24.3	34.7	7.00	101.7	8.16	0.52	0,55	0.58	2	1	7	3	0		
Kapalua Bay RFS180223	9:350	24.5	33.7	7.16	103.7	8.19	0.97	0.81	0.92		0	12	35	0		
Ka'opala By RKO180223	10:00s	24.3	33.8	6.84	98.9	8.09	9.80	9.95	10.10	l	6	0	Sill	0		
Kahana Vill RKV180223	10.201	25.1	34.0	7.17	105.1	8.15	4.65	5.13	5.94	1		Ö	9	6		

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

Most recent tide time (falling or rising)	Low: 3:27 pm Falling High: 6:50 am		
Moon day (from new)	8		
Cloud cover (0-8)	Thermohere		
Rain conditions (last 24 hrs)	Y Last night not today		
Wind direction (Trades/Kona)	Rona		
Streams flowing? (Y®)	no sites flowing		

	Blank	Low	Med	High
Standard	0.05	6.14	55.2	581
Pre-sampling	0.05	6.28	55.0	281
Post-sampling	0.06	6.13	55.4	580

	DMMENTS (trends, equipment problems, errors, concerns).
Use the back of the	ne form if needed.
50. 1	ity bottle at RHL (Honolua)-furbodity taken from misingoample in bucket by then transferry to spew sedement bottle serveens addition to the bottle. Used saline nix.

CHAIN OF CUSTODY INFORMATION							
	# of samples	Relinquished to	Contact				
Sediment	1	LHS	Path Maxwell				
Nutrients	6	LHS	Cathy Maxwell Cathy Maxwell				
Bacteria	0		Cathy Maxwel				

Signature (Team Lead):	Printed Name:
Carlierum Maxwell	Oathy Maxwell

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RN - 35	Hutchings,	<u>_</u>	2/23/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL180223-N-1	Honolua Bay	g		1:50 A	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFN180223-N-1	Fleming North	Ø		8:40A	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RON180223-N-1	Oneloa Bay	A		9:05 A	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFS180223-N-1	Kapalua Bay	₽ (P)		9:35A	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKO180223-N-1	Ka'opala Bay	Ø		10:00 A	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKV180223-N-1 Kahana Village	The second secon			10:20 A	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							
RHL180223-S-1	Honolua Bay	Ø			500		
RFN180223-S-1	Fleming North				500		
RON180223-S-1	Oneloa Bay				500		
RFS180223-S-1	Kapalua Bay				500		
RKO180223-S-1	Ka'opala Bay				500		0
RKV180223-S-1	Kahana Village				500		

Signature (Team Lead):	Print name here:		
Catherin Marwell	Cathy Maxwell		