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

Session No:	Verifiers:	Pre date:	Pre time:	Post: Date:	Post time:
25	George Burnette / Cathy	0 7/31/17	10:30	814117	12:00

QA/QC Check	Inst#	Probe#	Last Cal Date			PRE:	Verific	OST: ation Value	Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature			n/a	Std	(probez) 27.7°C	P37.6c	(1002) 28.1C	(28.2C	± 1°C of NIST	Within 1°C	
	Z	Z	n/a		27.6°C		28.0	С			
	Z	3	n/a	Farall	27.5°C		27.9	C			
Salinity				Std	1 tapwate	83.3	10000 D.04	calibristal.	± 3%, blank	33.95 – 36.05	
	Z	۷	6/19/17		0.04	33.6	0.04	35.0			
	Z	3	6/19/17		0.04	33.8	0.04	35.5			
Dissolved Oxygen				Std	100%	100%	/00	o %	Post-check ± 5 % of pre-check (0- 100%)	80 - 120 %	
donote	kZ	_2_	4910		99	3.4%					
	Z	1	3/28/17		100	0.9%	102	.5%			
рН				Std	7.60	10-01	7.00	10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
	2	3	7/3/17		7.00	10.01	7.00	9.98			
	Z	4	7/31/17		7.00	10.01	7.00	9.96			

Notes: Are pre- and post- within one week?

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

* Delay times are ok?

* Other equipment issues?

Team/ Session:	Samplers (Initials):	Instrument #	Probe #s	pН	DO	Salinity	Date:	1 st Sample Time	End Sample Time:
R2R	Lead: Brenda, leny	40d: Z	40d:	3	ı	2,	8/1/17	8.00 am	10:05 am
25	Notetaker: Nane	2100q: 2							

		Temp	Sal	DO	DO Sat								People		Tec
Location Name	Time	(C)	(ppt)	(mg/L)	(%)	рH	lur	bidity (N7	(0)	Waves	Wind	Swim	Beach	Camp	TSS ?
Napili Bay RNS RNS170801	8:00	36.9	32.9	6.75	101.4	8.09	.69	.77	:76	ı	0	1.5	10.2	6-	
Pohaku RPO RPO170801	8:38	26.9 27.0 26.8	32.6	6.54	98.3	8.16	2.47	2.38	2.17	0	0	1-5	1-5	-	
Kaanapali Sh RKS RKS170801	8:52	27.8	34.1	5.88	88.9	8.07	3.25	2.97	3.29	l	0	1-5	10-20)	
Airport Beach RAB RAB170801	9:14	27.5 27.6 27.6	34.0	6.41	98.0	8.15	.35	.34	,36	0	0	10-20	20-6	ło	
Canoe Beach RCB RCB170801	9:36	27.50	33.9	6.67	102.0	8.18	4.63	4.74	4.73	, 1	0-1	1.5	5-1	0	
Wahikuli RWA RWA170801	9:58	37.6	34.2	- 6.63	101.5	8.18	.59	,56	.53		1-7	0	1-	2	

Most recent low tide time/height (Lahaina station):	Low 4:55 a.m; High 1:22 p.m.
Moon Day (from new)	10
Cloud Cover (1-8):	i
Rain Conditions (last 24 hours)	- laterjeste
Wind conditions (Trades? Kona?):	Calm trades
Streams flowing? (Y/N)	N

QA Notes and Comments (Trends? Equip problems? Errors? Concerns?)

Lot of Earl Suspended in the water @ canoe beach

Walikuli very clear

Waves: 0 ft = no waves; 1 ft = small waves; 2 ft = knee high; 3 ft = waist high Wind: 0 = calm, 1 = light air, 2 = light breeze, 3 = gentle breeze, 4 = moderate breeze People: Swimmers/Kayakers/Surfers, On beach, Campers: 0, 1-5, 5-10, 10-20, 20-40

Turbidity Verification

	Blank	Low	Med	High
Standard	188	6.60	60.0	567
Pre	.08	6,50	59.2	562
Post	209 M	6.60	59.4	561

Table 1	Total # of samples	Relinquished To::	Contact
Sediment		LHS	
Nutrient		LHS	
Bacteria	1)	
gnature (Lead):	Marie &	Chroeden	8/1/17

Team:	Samplers:	Date:	Start time:	Finish time:
R2R - 25	Terry, Brenda	8/1/17	7:45 am	10:15 am
	Marie			70,

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RNS170801-N-1	Napili Bay	₽/		8:00	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RPO170801-N-1	Pokahu	Ø		8:28	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKS170801-N-1	Kaanapali Sh	□ ·		8:52	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RAB170801-N-1	Airport Beach	<u>u</u> /		9:14	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RCB170801-N-1	Canoe Beach	₩.		9:36	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RWA170801-N-1	Wahikuli			9:58	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					1		
RNS170801-S-1	Napili Bay				500		
RPO170801-S-1	Pokahu				500		
RKS170801-S-1	Kaanapali Sh				500		
RAB170801-S-1	Airport Beach				500		
RCB170801-S-1	Canoe Beach				500		
RWA170801-S-1	Wahikuli				500		

France Schrudes 8/1/17

Team/ Session:	Samplers (Initials):	Instrument #	Probe #s	рH	DO	Salinity	Date:	1 st Sample Time	End Sample Time:
Polanui	Lead: Kit	40d: 2	40d;	3	1	2	8/2/17		
25	Notetaker: Tim	2100q: Z						8:17	10:15

		Temp	Sal	DO	DO Sat			Lista (NY			Wind		People		TSS?
Location Name	Time	(C)	(ppt)	(mg/L)	(%)	pН	1 ur	bidity (N	10)	Waves	viila?	Swim	Beach	Camp	133 (
505 Front St PFF PFF170802	8:17	27.5	34.3	6.09	93,2	8.03	1,31	0.98	1.55	6"	Ö	5	10 ream	PULLINE YULKINE	
Lindsey Hale PLH PLH170802	8:40	27.4	34.3	6.23	96.0	8.06	5.79	6.39	6.42	Elat	2 mph	0-5	t o	no s	
Lahaina Town PLT PLT170802	9:02	27.8	33.9	5.99	91.9	3.06	5.77	6.64	6.94	Flat	-Zuph	0	0	0	
Puamana PPU PPU170802	9:26	28.0	34.3	6.70	103.6	8.18	1.34	1.25	1.29	154.	-1 mph	6	v	6	
Launiupoko OLP OLP170802	9:47	23.4	34.4	6.75	104.9	8.14	1.89	1.68	1.70	127	4 hoph	20-4	O O	6	
Olowalu Pier OSF OSF170802	10:10	28.3	34.6	6.65	103.3	8.03	1.16	1.05	1.20	Flat	Soph 1	0	Q-5	0	

Most recent low tide time/height (Lahaina station):	Low 5:47 a.m; High 1:58 p.m.
Moon Day (from new)	11
Cloud Cover (1-8):	1
Rain Conditions (last 24 hours)	Don't Know.
Wind conditions (Trades? Kona?):	Kome Lighter varie
Streams flowing? ()/N)	PEE

QA Notes and Comments (Trends? Equip problems? Errors? Concerns?)

* pH probe not pt back in KCl at PFF,

put back in KCl at PLH for Z min

before testing

Waves: 0 ft = no waves; 1 ft = small waves; 2 ft = knee high; 3 ft = waist high Wind: 0 = calm, 1 = light air, 2 = light breeze, 3 = gentle breeze, 4 = moderate breeze People: Swimmers/Kayakers/Surfers, On beach, Campers: 0, 1-5, 5-10, 10-20, 20-40

Turbidity Verification

	Blank	Low	Med	High
Standard		6.60	60.0	567
Pre	0.12	6.58	59.3	562
Post	0.08	6,60	59.4	561

	Total # of samples	Relinquished To::	Contact	
Sediment	U	LHS	Geine Bratter	
Nutrient	6	LHS	GGAGE BURNETE	
Bacteria	0			

Signature (Lead): R. Harris

Team:	Samplers:	Date:	Start time:	Finish time:
Polanui - 25	in Rich Kit	8/2/17	8 707:45	10:25

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF170802-N-1	505 Front St	Ŋ		8:17	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PLH170802-N-1	Lindsey Hale	Ą		8:40	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PLT170802-N-1	Lahaina Town	□/		9:02	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PPU170802-N-1	Puamana	Ø		9:26	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OLP170802-N-1	Launiupoko	র্		9:47	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OSF170802-N-1	Olowalu SF	□Z/		10:10	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							
PFF170802-S-1	505 Front St				500		
PLH170802-S-1	Lindsey Hale				500		
PLT170802-S-1	Lahaina Town				500		
PPU170802-S-1	Puamana				500		
OLP170802-S-1	Launiupoko				500		
OSF170802-S-1	Olowalu SF				500		

T. Hans

Team/ Session:	Samplers (Initials):	Instrument #	Probe #s	pН	DO	Salinity	Date:	1 st Sample Time	End Sample Time:
Olowalu	Lead: 660	40d: 2	40d:	3	1	2	8/3/17	0707	6910
25	Notetaker: NW 66B	2100q: Z							

	Tri.	Temp	CONTRACTOR OF THE PROPERTY OF	DO	DO Sat		-	Liane, Or	PEN		XV:1	People		TSS ?	
Location Name	Time	(C)	(ppt)	(mg/L)	(%)	pН	101	bidity (N'	10)	Waves	Wind	Swim	Beach	Camp	133.
Martin Hale OPM OPM170803	7:07	21.0	3A.8	5.22	79.3	7.94	2,31	2.25	2.30	D	0	θ	Đ	Ð	
Camp Olowalu OCO OCO170803	1:38	21.8	34.4	622	95.7	8,02	6.26	6.19	6.42		1	0	1-5	Ó	
Mile Marker 14 OMM OMM170803	1.58	21.8	34.4	5.56	85.6	8.01	3.47	3.64	3.56	ĺ	l	3	1-5	Ð	
Ukumehame OUB OUB170803	8.18	28.1	34.5	6.40	99.1	8.09	7.21	6.75	6.96	2	1	0	3-10	0	
Papalaua Beach OPB OPB170803	8:40	28.0	34.7	6.79	105.0	8.17	8.06	7.30	7.38	1	1	0	1-5	1-5	
Papalaua Pali OPP OPP170803	8:57	28.1	34.2	6.47	99,9	8.10	1.92	1.93	7.29	2	1	1-5	1-53	(-10	

Most recent low tide time/height (Lahaina station):	Low 6:33 a.m.; High 2:29 p.m.
Moon Day (from new)	12
Cloud Cover (1-8):	<i>b</i>
Rain Conditions (last 24 hours)	NONE.
Wind conditions (Trades? Kona?):	CALINTICADE
Streams flowing? (Y/N)	N N

QA Notes and Comments (Trends? Equip problems? Errors? Concerns?)

OPM - Nutrient syrings leaking - FOUND O-RENG NOT

buttle volume down SCANES STITLE LAN

OO MODE A LITTLE SWA TO LOCK KIL NAT

Waves: 0 ft = no waves; 1 ft = small waves; 2 ft = knee high; 3 ft = waist high Wind: 0 = calm, 1 = light air, 2 = light breeze, 3 = gentle breeze, 4 = moderate breeze People: Swimmers/Kayakers/Surfers, On beach, Campers: 0, 1-5, 5-10, 10-20, 20-40

Turbidity Verification

	Blank	Low	Med	High
Standard		6.60	60.0	567
Pre	0.09	6.50	59.3	562
Post	0.08	6.59	59.4	561

Total # of samples		Relinquished To::	Contact
Sediment	0	LHS	Gence Benvere
Nutrient	6	LHS	GEORGE BUNNETTE
Bacteria	0		GEONGE BUNNETTE

Signature (Lead):

And the &

Team:	Samplers:	Date:	Start time:	Finish time:
Olowalu - 25	66B NW	8/3/17	0700	0915

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients			6.000				
OPM170803-N-1	Martin Hale	×		1:07	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OCO170803-N-1	Camp Olowalu	Ø		1:38	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OMM170803-N-1	Mile Marker 14	×		7.58	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OUB170803-N-1	Ukumehame	Ø		8:18	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPB170803-N-1	Papalaua Beach	本		8:40	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPP170803-N-1	Papalaua Pali	户		8:57	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							
OPM170803-S-1	Martin Hale				500		
OCO170803-S-1	Camp Olowalu				500		
OMM170803-S-1	Mile Marker 14				500		
OUB170803-S-1	Ukumehame				500		
OPB170803-S-1	Papalaua Beach				500		
OPP170803-S-1	Papalaua Pali				500		

In & flit in

Team/ Session:	Samplers (Initials):	Instrument #	Probe #s	pН	DO	Salinity	Date:	1 st Sample Time	End Sample Time:
NR2R	Lead: CATHY MAXWELL	40d: 2	40d:	3	1	2	8/4/17		
25	Notetaker: Avanda Stone	2100q: 2						8:05	11:20

Location Name	70	Temp (C)	Sal (ppt)	DO (mg/L)	DO Sat	pН	Turbidity (NTU)		W	W 2	People		TSS?		
	Time						101	Digity (14	(U) Waves		Wind	Swim	Beach	Camp	133:
Honolua Bay RHL RHL170804	8:05	26.7	33.5	5.68	85.Z	8.09	0.95	1.32	1.46	Flat	very habit breeze	0 no sh	eam fl	0	
Fleming North RFN RFN170804	8:49	27.3	34.3	6.70	102.0	8,17	2.80	3.01	2.86	Ty Ty	2 10 Kusto	0	5	0	
Oneloa Bay RON RON170804	9:22	27.2	34.4	6.75	102.7	8.16	0.67	0.70	0.61	0.5 ft	2-5 /cm26	\$	0	0	
Kapalua Bay RFS RFS170804	9:50	27.8	33.4	6.49	99.1	8,09	1.19	1.01	0.90	flor	Honot	6545 40	27	0	
Ka'opala Bay RKO RKO170804	10:25	27.7	34.0	6.33	96.8	8.12	5,06	4.03	4.95	flat	1 kind	0	4	1 dog 1 fisher	
Kahana Village RKV RKV170804	10:48	28.2	34.1	7.08	109.3	8.15	8.31	6.94	7.46	the town	20.5 and	0		2 fishers	

Low 7:13 a.m.;
High 2:58 p.m.
13
none /50% /60% / 855 / 8
none/none /sprinkles
Trades
170, NO, NO, NO, NO, NO

QA Notes and Comments (Trends? Equip problems? Errors? Concerns?)

* Note: duplicate to do at Kapalua Bay

Waves: 0 ft = no waves; 1 ft = small waves; 2 ft = knee high; 3 ft = waist high Wind: 0 = calm, 1 = light air, 2 = light breeze, 3 = gentle breeze, 4 = moderate breeze People: Swimmers/Kayakers/Surfers, On beach, Campers: 0, 1-5, 5-10, 10-20, 20-40

Turbidity Verification

	Blank	Low	Med	High
Standard		6.60	60.0	567
Pre	.09	6.48	59.0	562
Post	.05	6.59	59.2	561

	Total # of samples	Relinquished To::	Contact		
Sediment	0	LHS	Cothy Maxwell		
Nutrient	η	LHS	Cathy Maxwe		
Bacteria	0		Cathy Maxwe		

Signature (Lead): College Maxwell

Team:	Samplers:	Date:	Start time:	Finish time:
NR2R - 25 A	nanda S, Bruce B Carly	8/4/17	7:30	11:20

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL170804-N-1	Honolua Bay	Ø		8:05	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RFN170804-N-1	Fleming North	Ø		8:49	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RON170804-N-1	Oneloa Bay	Ø		9:22	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RFS170804-N-1	Kapalua Bay	À		9:50	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKO170804-N-1	Ka'opala Bay	Ø		10:25	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKV170804-N-1	Kahana Village	Ø		10:48	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RFS170804-N-2 Mpc2 fun Litter	Kapalua Bay	Ż		9:50	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	O,Zhu filler
Sediment							
RHL170804-S-1	Honolua Bay				500		
RFN170804-S-1	Fleming North				500		
RON170804-S-1	Oneloa Bay				500		
RFS170804-S-1	Kapalua Bay				500		
RKO170804-S-1	Ka'opala Bay				500		
RKV170804-S-1	Kahana Village				500		

note: duplicate to do at Kapalua Bay

Calinia Maxwell