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

Session No:	Verifiers:	Pre date:	Pre time:	Post: Date:	Post time:	
27	C. MAXWELL G. BUNDETTE	9/11/17	11:15	9/15/17	12:15	



	QA/QC Check	Inst#	Probe #	Last Cal Date		Verifica	PRE: ation Value		OST: ition Value	Acceptable Range (Check range)	Comments/ Notes	QA?
	Temperature			n/a	Std	(Prose 2) 27,9	(Pro863) Z8.0	27	7	± 1°C of NIST	Within 1°C	
*		2	2	n/a		2	7.8 0	27.	6°C			
		2	3	n/a		2	7.702					
	Salinity				Std	0,04	33.3	0.04	33.3	± 3%, blank	33.95 – 36.05	
*		2	2	6/19/17		6.04	33.7	0.04	33.5			
		2	3	6/19/17		0.04	34.4					
	Dissolved Oxygen				Std	10	0%	10	0%	Post-check ± 5 % of pre-check (0- 100%)	80 – 120 %	
*		2	1	3/28/17		100	0,2%	10	3.1%			
		2	2	8/1/17			7.4%					
	рН				Std	7.00	10.01	7.00	10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
X		2	3	9/11/17		7.00	10.01	7.03	10.00			
												And the second of the second of

QA:

week? * Used in field. Did not post verify probes that were not used in field. * Are pre- and post within one week?

* Delay times are ok?

* Other equipment issues?

Team/ Session			(,			mplers me, 1st l	[nitial				Ins	strumen #	i t j	p H #	DO #	Salinity #	Date:
R2R	Notetaker:	Schro	eder!	Marie	,		£ 1				40d:	2		3	l	2	9/12/17
27	Others:		rgity	Tun	inak	eni,	Brend	.0-			2100	q: Z					
Locatio	on Name	Time	Temp	Sal	DO	DO Sat	рH	Tu	rbidity (NT	PID .	Waves	Wind	Peopl	e (within	100 ft)	TSS	Nutrient
			(C)	(ppt)	(mg/L)	(%)	r	,		,		1	In. Water	Beach	Camp	?	Duplicate ?
	Bay RNS 170912	7:56	27.1	34.4 em	6.31	96.5	8.08	1.27	1.19	1.13	0	Ø	0.5	5-10	8		
	tu RPO 170912	8.33	27.5	100 100 100 100 100 100 100 100 100 100	6:33	-969	8.131	7.09	6.82	6.73	1	0	0	pear fist	or of		
A CONTRACTOR OF THE PARTY OF TH	li Sh RKS 170912	C:42	27.4V 27.3	34.5 cm	6.07	93.0	808	6.42	653	6.51	1	Ø	1-5	5-10	Ø		
	Seach RAB 170912	9:02	-28.1°	345 CM	6.38	98.8		.49	,55	155	Ø	0	10:30	10-20	ø	,	
	each RCB 170912	9:20	28.0 28.1 27.8	34.7 cm	6.60	0,		1.80	1.60	1.69	0-1	7	5.10	1-5	Ø		
	ıli RWA 170912	9:38	18.0v	-34.6 CM	6.57	160.8	8.17	1.26	1.19	1.29	0-1	8	1	0	Ø		

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 1:07 a.m; Rising High 9:20 a.m.
Moon Day (from new)	22
Cloud Cover (0-8):	0
Rain Conditions (last 24 hours)	
Wind Direction (Trades? Kona?):	e Little
Streams flowing? (Y/N)	N
0.1.1.	

QA Notes and Comments (Trends? Equip problems? Errors? Concerns? Use back of form if needed.)

Pohaken while taking sample Terry picked
plastic bay but of water
that day! Hunid
Waves a Canoe
Napili access OK due to affernate now
clespite stairs were washed out

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

	Blank	Low	Med	High
Standard	0.08	6.90	60.8	578
Pre	P.11 2	687	40.8	578
Post	0.12	7.00	61 5	676

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	Maxwell
Nutrient	6	LHS	Maxwell C
Bacteria	0		Maxwell C

Signature (Team Lead):

Print name here:

WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2R - 27	Schroeder	M	9/12/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RNS170912-N-1	Napili Bay			7:56	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RPO170912-N-1	Pokahu	Q'		8:33	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKS170912-N-1	Kaanapali Sh	Ø/		8:42	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RAB170912-N-1	Airport Beach	4		9:02	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RCB170912-N-1	Canoe Beach	₽/		9:22	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RWA170912-N-1	Wahikuli	M		9:38	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							
RNS170912-S-1	Napili Bay				500		
RPO170912-S-1	Pokahu				500		
RKS170912-S-1	Kaanapali Sh				500		
RAB170912-S-1	Airport Beach				500		
RCB170912-S-1	Canoe Beach				500		
RWA170912-S-1	Wahikuli				500		

Signature (Team Lead):	Print name here:
mon on	TY FREIBERG
Cothern Maxwell	Cathy Maxwell

Team/ Session					Sar Last Nar	nplers me, 1st I	nitial				Ins	trumen #	t p	H #	DO #	Salinity #	Date:
Polanui	Notetaker:	BUI	RPETTA	ξ , C	,						40d:	2	-3		1	2	9/13/17
27	Others:	BAYL	YR	13	nown	m					21000	: 2					
Location	n Nome	Time	Temp	Sal	DO	DO Sat	рH	т.,	rbidity (NT	CID.	Waves	Wind	People	(within	100 ft)	TSS	Nutrient
Location	i (vanie		(C)	(ppt)	(mg/L)	(%)			i bidity (141	10)	waves	willu	In Water	Beach	Camp	?	Duplicate ?
505 Fron PFF17		0811	28.0	34.9	6.38	99.0	8.08	4.06	3.89	4.66	/	0	5	1	0		
Lindsey H PLH1'		0843	27.9	34.5	6.36	99.3	8,11	8.13	8.25	8.50	/	2	6	3	0	ta/	
Lahaina T PLT1'		1014	27.7	33.8	6.51	99.9	8.08	19.9	19.3	[8,4	1+600	34	4660	1669	0	b /	
Puamar PPU1'		μ	O SAI	nPeti	16 -	SUR	F T	60 H	164	•——							
Launiupo OLP1		0915	28.0	34.9	6.40	99.1	8.11	7.34	2.45	2.51	2	3	4	l	0		
Olowalu l OSF1'		0933	Z8.3	34.9	6.15	95.9	8,04	1.18	1.21	1,06	1	3	0	1	3		

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 2:19 a.m; High 11:14 a.m. Rising				
Moon Day (from new)	22				
Cloud Cover (0-8):	. 8				
Rain Conditions (last 24 hours)	GGB HONE YES				
Wind Direction (Trades? Kona?):	KONA HOTE 668				
Streams flowing? (Y/N)	Y				

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

Use back of form if needed.)

LIGHT BUT STEADT STREAM FLOW AT PER

HEAVY MAN AT PLI - WE SKIPPED THAT STATE AND CAME

HEAVY LOT NATION AT OLD AND PLH

BY SAMPLE AT PLI LAST PLE TO MAD SHOULD

FUSHING WATER FROM SYNTHEE GGB GONLIER

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

urbidity Verification * See note on back										
	Blank	Low	Med	High						
Standard	0.12	6,90	60.8	577						
Pre	0.20	6.94	61.8	582						
Post	0.12	7.12	62.1	582						

Total # of samples	Relinquished To::	Contact
2	LHS	GEORGE BURNET
6	LHS	GEORGE BUNDER
0		GENGE BURYETTE
		samples Reinquished 10:: 2 LHS

Signature (Team Lead):

Signat

* Turbidity meter #2 is starting to exhibit signs of a fouled optical fiter again. Took meter out of service until Hach TS contacted. (Higher DI water reading).

Team:	Notetaker:	Last Name, 1st Initial	Date:
Polanui 27	BURNET	re, G.	9/13/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF170913-N-1	505 Front St			0811	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PLH170913-N-1	Lindsey Hale	Q/	660	0843	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PLT170913-N-1	Lahaina Twn	P	668	1614	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PPU170913-N-1	Puamana	pot	SAMP	ED	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OLP170913-N-1	Launiupoko	₽		0915	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OSF170913-N-1	Olowalu Pier	Ø		0933	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							
PFF170913-S-1	505 Front St				500		
PLH170913-S-1	Lindsey Hale	0		6843	500		
PLT170913-S-1	Lahaina Twn			1014	500		
PPU170913-S-1	Puamana				500		
OLP170913-S-1	Launiupoko				500		
OSF170913-S-1	Olowalu Pier				500		

Signature (Team Lead):	Print name here:
En & Mille to	GEONGE G. BURDETTE &

														Hui O	Ka Wai O	la. 09/07/201	
Team/ Session					Sai Last Na	mplers me, 1st l	nitial				Ins	trumen #		H	DO #	Salinity #	Date:
Olowalu	Notetaker:	BUR	HEME,	6							40d:	2		3	1	2	9/14/17
27	Others:	60 LF 6	JOUL,	M	0101	no, L	_				2100	q: /					
			Temp	Sal	DO	DO							People	(within	100 ft)	TSS	Nutrient
Locatio	n Name	Time	(C)	(ppt)	(mg/L)	Sat (%)	pН	Tu	rbidity (N	ru)	Waves	Wind	In Water	Beach	Camp	?	Duplicate ?
	Iale OPM 170914	0715	2.7.6	34.7	5.16	79.4	7.97	1.27	1.32	1.30	0	1	0	Ö	0		
	walu OCO 170914	0737	28.5	34.7	6.13	95.7	8.02	4.41	4.44	4.94		Ö	D	i	0		
OM	arker 14 /IM 170914	0752	28.5	34.8	5.63	88.0	1.98	3.94	3.95	3.94	l		6	0	1		
	ame OUB 170914	0807	28.3	34.9	635	98.9	8.08	9.11	8.57	8.50	l	1	2	0	0		
Ol	ia Beach PB 170914	0825	28,4	35.0	6.61	103.2		4.53	5.04	5.13	1	I	0	0 (0		
	Pali OPP 70914	0840	28.5	34.3	6.5P.	1026 1026	8,07	2.66	2,18	2.65	2	}	2	2	2		
<u>C</u>	COASTAL AN	D ENVIRO	NMENTAL	CONDIT	ION NOTE	s 661	3	Wa	ves: 0 ft = no	vaves; 1 ft = si	mall waves	; 2 ft = kne	e high; 3 ft	= waist hi	igh		
	Low & High tion) indicat				Low 3:58 h 12:29 p.				nd: 0 = calm, 1 ople: Swimmer					4 = mode	rate breeze		
Moon Day (from new)				24			Tui	rbidity Ver	Marie Marie Marie Salari S	(p) and the						
Cloud Cover	r (0-8):				0						lank		Low		Med		High
Rain Conditi	ions (last 24	hours)			465-4	ESTENDA	17		Standard	0.05	1266	1 5	,49		57,0	6	25
Wind Direct	ion (Trades?	Kona?):			LADES	-) 4.77			Pre	0.	06	5	.52		57.0	6	28
Streams flov	ving? (Y/N)			Water in	N				Post	0-	06	6	7.48		57.	1 6	25

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

Use back of form if needed.)

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	GEORGE BURYETTE
Nutrient	6	LHS	GEORGE BURNETTE
Bacteria	0		GEORGE BUNDETE

Signature (Team Lead):

Print name here:

Team:	Notetaker:	Last Name, 1st Initial	Date:
Polanui 27	BUNNETT, G		9/14/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
OPM170914-N-1	Martin Hale			0715	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OCO170914-N-1	Camp Olowalu			0737	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OMM170914-N-1	Mile Marker 14			0752	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OUB170914-N-1	Ukumehame	Φ/		0807	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPB170914-N-1	Papalaua Beach			0825	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPP170914-N-1	Papalaua Pali	Ø		0840	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							
OPM170914-S-1	Martin Hale				500		
OCO170914-S-1	Camp Olowalu				500		
OMM170914-S-1	Mile Marker 14				500		
OUB170914-S-1	Ukumehame				500		
OPB170914-S-1	Papalaua Beach				500		
OPP170914-S-1	Papalaua Pali				500		

Signature	(Team	Lead):		
- //	1	11/10	1	
Sun	1	11/10	12	
10/	0	-		

Print name here:
Clance 6. BURNETE TO

	Team/ Session					Sar Last Na	mplers me, 1st I	nitial				Ins	trumen #)H #	DO #	Salinity #	Date:
-	NR2R	Notetaker:	Reed	, D-								40d:	2	-	3	1	2	9/15/17
	27	Others: B	anker	, B.	Hutc	hings	,L-,	Hehe	mann	C.		21000	a: /					
	Location		Time	Temp	Sal	DO	DO Sat	рН		rbidity (NT	CID.	Waves	Wind	People	(within	100 ft)	TSS	Nutrient Duplicate
				(C)	(ppt)	(mg/L)	(%)							In Water	Beach	Camp	?	2
	Honolua E RHL17		8:00	26.9	34.1	5,50	83.4	8.07	6.31	7.89	6.19	φ	ф	4	5	\$		
	Fleming No RFN17		8:45	27.5	34.7	6.61	101.4	8,16	0.84	1.17	0,86	2	2	ф	10	\$		
Jos.	Oneloa Ba		9:20	27.6	34.8	6.69	103.0	8.17	0.49	0.52	0.50	1	2	5	15	ф		
	Kapalua I RFS17		9:55	28.5-	34.4	6.73	104,9	8.15	1.73	1,27	1,46	0-1	1	~40	~40	¢		
	Ka'opala I RKO1		10:27	28.4	34.5	6.66	103.6	8.14	6.39	6.62	7.04	0-1	١	ф	d	d		×
	Kahana V RKV17	7ill RKV 70915	10:57	28.3	34.4	6.97	108.3	8.13	9,53	10.4	10.6	1	1	2	2	\$		

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time	Low 5:27 a.m; Rising
(Lahaina station) indicate Falling or Rising	High 1:19 p.m.
Moon Day (from new)	25
Cloud Cover (0-8):	2
Rain Conditions (last 24 hours)	none
Wind Direction (Trades? Kona?):	Trades Ligh
Streams flowing? (Y/N)	N-HNL N-RFN

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

RH Lise back of form if needed.)

HNT- Suspended wood looking particles; Chickens-lots

RFN- Pailolo challenge-cances getting

WATER QUALITY SAMPLING:

Prepped.

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

Turbidity Verification

	Blank	Low	Med	High
Standard	0.06	5.49	57.0	625
Pre	0,08	5.47	57.0	626
Post	0.04	0,00 DR	57.2	620

	Total # of samples	Relinquished To::	Contact
Sediment	6	LHS	
Nutrient	7	LHS	Dana Ree
Bacteria	0		

Signature (Team Lead):

Print name here:

Team:	Notetaker	Last N	lame, 1 st	Date:
NR2R - 27	Reed,	D,		9/15/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL170915-N-1	Honolua Bay	X		8:00	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RFN170915-N-1	Fleming North	型		8:45	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RON170915-N-1	Oneloa Bay	Ø		9:20	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RFS170915-N-1	Kapalua Bay	À		9.55	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKO170915-N-1	Ka'opala Bay	Þ		10:27	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKV170915-N-1	Kahana Village	Ø		10:57	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKO170915-N-2	Ka'opala Bay	×		10:27	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
Sediment							
RHL170915-S-1	Honolua Bay				500		
RFN170915-S-1	Fleming North				500		
RON170915-S-1	Oneloa Bay				500		
RFS170915-S-1	Kapalua Bay				500		
RKO170915-S-1	Ka'opala Bay				500		
RKV170915-S-1	Kahana Village				500		

Signature (Team Lead);	Print name here:
En & Miles	GEORGE G. BURYETE W