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



Session No:	Verifiers:	Pre date:	Pre time:	Post: Date:	Post time:
31	G BUNDETTE L. CALLMAN	12/4/2017	10:00	12/8/17	12:15 pm
	Cmaxwell Lotomo			<u> </u>	

QA/QC Check	Inst #	Probe#	Last Cal Date			RE: tion Value		OST: ation Value	Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature			n/a	Std	(PROBE 2) 24.6	(Prose 3) 24.6	(Riber)		± 1°C of NIST	Within 1°C	
	2	2	n/a		24	4.9	21.3				
	2	3	n/a		24	1.7					
Salinity				Std	0.04	33.3 ppt	0.04	Bottle 1/13/17 33,2 ppt	± 3%, blank	33.95 – 36.05	
	2	2	10/2/17		0.02	33.7	0.03	33.1			
	2	3	10/2/17		0.02	33.6					
Dissolved Oxygen				Std	100	%	100%		Post-check ± 5 % of pre-check (0- 100%)	80 – 120 %	
	2	t	3/28/17		100.	7%	101.1%				
	2	2	8/1/17			4 %					
pН				Std	7.00	10.01	7.00	10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
	2	3	12/4/17		7.00	10.01	7.02	10.03			
	2	4	12/4/17		7.00	10.01					

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

* Delay times are ok? US

* Other equipment issues? no

Team/ Session		Samplers Last Name, 1st Initial									Ins	trumen #	The second secon	H #	DO #	Salinity #	Date:
R2RS	Notetaker:	Reed	, D.								40d:	2		3	1	2	12/5/17
31	Others: F		/	Ja	rmak	kani, E	3.			(*)	21000	2100q: 3					
Location	n Name	Name Time Temp Sal DO Sat pH Turbidity (NTU)								PID.		XV!1	People (within 100 ft)		TSS	Nutrient	
Locatio	пучаше	Time	(C)	(ppt)	(mg/L)	(%)	рн	1.0	rolaity (141	(0)	Waves	Wind	In Water	Beach	Camp	?	Duplicate ?
	Bay RNS 71205	8:06	24,2	35,2	6.89	100.0	8.17	1.04	1.14	1.08	2	3	1	1	ф		
Pohaki RPO1		8:31	23,5	34.5	6.96	99.3	8.17	31.1	31.8	32,6	1	2	d	\$	d		
Kaanapal RKS1	li Sh RKS 71205	8:52	23.5	34.0	7.01	99.8	8,17	10.1	9.83	10.4	2	3	ф	d	Ø		
Airport Bo RAB1	each RAB	9:13	24.5	34.5		99.0	8.18	6.41	6.78	6.52	1	4	\$	6	\$		
Canoe Be RCB1	each RCB 71205	9:33	25,5	34,4	6.84	101.0	8.20	2.13	2.10	2,27	l	4	ф	3	¢		
Wahiku RWA1		9:51	25,1	33,8	6,83	160.0	8.23	1.55	1.57	1,58	1	4	\$	ø	ф	, 🗆	

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 11:41 a.m; Falling High 5:23 a.m.
Moon Day (from new)	18
Cloud Cover (0-8):	4
Rain Conditions (last 24 hours)	Light rain
Wind Direction (Trades? Kona?):	Trades
Streams flowing? (Y/N)	, , 500,00

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

Brown water Pohaku (lots of lime on rocks)
K.S - no beach, brown water

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	0.06	5.92	54.3	568
Pre	0.07	5.90	54.0	571

	Total # of samples	Relinquished To::	Contact
Sediment	6	LHS	
Nutrient	6	LHS	D. Reco
Bacteria	ф	•	

Signature (Team Lead):

Print name here: Dana Reed WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RS - 31	Reed, D.		12/5/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients					*		
RNS171205-N-1	Napili Bay	Ø		8.06	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RPO171205-N-1	Pokahu	□		8-31	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKS171205-N-1	Kaanapali Sh	Ø		8:52	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RAB171205-N-1	Airport Beach	Ø		9:13	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RCB171205-N-1	Canoe Beach	Ø		9:33	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RWA171205-N-1	Wahikuli	Ø		9:51	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							
RNS171205-S-1	Napili Bay			Secretary Secretary	500		
RPO171205-S-1	Pokahu				500		
RKS171205-S-1	Kaanapali Sh				500		
RAB171205-S-1	Airport Beach				500		
RCB171205-S-1	Canoe Beach				500		
RWA171205-S-1	Wahikuli				500		

Signature (Team Lead)	Print name here:
Nay Dead	Dana Reed
The feet	1001011.

Team/ Session		Samplers Last Name, 1st Initial									Ins	trumen #		H #	DO #	Salinity #	Date:
Polanui	Notetaker:	tetaker: Maxwell, J								40d:	2	-	3	1	2	12/6/17	
31	Others:	thers: Harris, K; Bayly R.									2100q: 老 3 DiC						
Logatio	n Name	Time	Temp	Sal	DO	DO Sat		T	akidies (NIT	PIN	Waves	Wind	People	(within	100 ft)	TSS	Nutrient Duplicate
Locatio	ii Name	Time	(C)	(ppt)	(mg/L)	(%)	pН	1 0	rbidity (NT	(0)	waves	WING	In Water	Beach	Camp	?	?
505 Fron PFF1	nt St PFF 71206	8:15	24.5	35.0	6.72	97.8	2.17	3.48	3.54	3.67	l	0	1	3	6		
	Hale PLH 71206	2.35	23.8	34.6	6.67	95.7	3.15	11.9	12.0	12.9	ì	0	0	O	0	0	
Lahaina T PLT1		8:52	23,6	34.3	6.59	94.2	8.13	15.9	16.9	16.0	0	ı	0	1	6	12/	
Puamai PPU1		9:20	24.6	34.6	6.98	101.5	8.21	1.78	2.26	2,10	1	1	٥	5	0		
Launiupo OLP1		9:45	24.7	34.9	6.95	101.6	8:19	1.86	1.69	1.85	1	0	9	17	O		
Olowalu l OSF1		10:08	24.6	34.8	696	101.4	8.16	1.39	1,41	1.33	0	1	0	3	0		

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 12:40 pm High 6:10 am falling
Moon Day (from new)	19
Cloud Cover (0-8):	PEF = 2
Rain Conditions (last 24 hours)	2
Wind Direction (Trades? Kona?):	Ť
Streams flowing? (Y/N)	See Below

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

Use back of form if needed.)

PEF-Stream light + draining from shops

PLH. cloud cover: 0, PLT=0 - Standards not withen et start

PPU- people at pool, clouderer=2 OLP - clouds=2 Twice - did not register I had to power and

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	mo 06	5.92	54.3	568
Pre	0.06	5.91	53.9	571
Post	0.06	5.91	54.0	571

Total # of samples	Relinquished To::	Contact			
0	LHS	GENGE BINET			
6	LHS	GENEL BURNETTE			
O					
	samples 0 6	C LHS			

66016 6 BUNDETTE 15

Team:	Notetaker:	Last Name, 1st Initial	Date:
Polanui 31	Maxwell, J		12/6/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF171206-N-1	505 Front St	Ū²		8:15	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLH171206-N-1	Lindsey Hale			8:75	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLT171206-N-1	Lahaina Twn			8:55	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PPU171206-N-1	Puamana	ID.		9:20	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OLP171206-N-1	Launiupoko	ď	,	9:45	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OSF171206-N-1	Olowalu Pier	Ø		10:08	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							
PFF171206-S-1	505 Front St				500		
PLH171206-S-1	Lindsey Hale	1			500		
PLT171206-S-1	Lahaina Twn				500		
PPU171206-S-1	Puamana				500		
OLP171206-S-1	Launiupoko				500		
OSF171206-S-1	Olowalu Pier				500		

Signature (Team Lead): Print name here:

Sep S Mill E 66066 6. BIN VETTE

Team/ Session			Tagana (Tagana) Tagana (Tagana)		Sar Last Na	nplers ne, 1st I	nitial				Ins	trument #		H #	DO #	Salinity #	Date:
Olowalu	Notetaker:	6.	BURFE	M							40d:	2		3	F	2	12/7/17
31	Others:	Popo	NEW, 1	2.	otom	o, L.					2100	q: 🔏 🗦	3 DR				
			Temp	Sal	DO	DO Sat		т	rbidity (N7	PIN .	Waves	Wind	People	(within	100 ft)	TSS	Nutrient Duplicate
Location	n Name	Time	(C)	(ppt)	(mg/L)	(%)	pН	1 u	roidity (14)	(0)	waves	W III d	In Water	Beach	Camp	?	?
Martin H		0708	23.3	34.8	6.27	89.5	8.09	6.48	6.56	6.95	100	l	0	0	0		
Camp Olov OCO1		0730	23.7	34.9	6.38	91.6	8.13	3.59	3.59	3.52	j	0	0	3	0		
Mile Ma OM OMM1	1M	0747	24.2	35.0	6.07	87.9	8.11	3.25	3.39	3.32	1	O	0	12	1		
Ukumeha OUB1		0804	24.6	34.9	6.55	95.5	8,14	5,75	5.63	5.97.	23 m2	0	\bigcirc	0	0		
Papalaus OF OPB1	PB	0820	24.b	35.0	6.67	97.2	8.18	4.39	4.58	4.15	3	0	0	8	O		
Papalaua OPP1	Pali OPP 71207	0833	24.3	34.8	6.80	98.8	8.18	2.02	2,12	1,99	3	0	0	ン (0	0	

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 1:49 pm High 7:00 am falling
Moon Day (from new)	20
Cloud Cover (0-8):	1
Rain Conditions (last 24 hours)	No
Wind Direction (Trades? Kona?):	THADES
Streams flowing? (Y/N)	P/A

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

DEPOSED OF ONE OF THE SYNEHOLS AFFEN METANICHO TO THE LAB AVE TO ST BEENG VERY OTHESCULT TO USE - EXCESSED FORCE NEOUTHER. 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	0.06	5.92	54.3	568
Pre	0.06	5 91	53.9	571

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	GEARET BUNGETE
Nutrient	6	LHS	GENGE BULLETE
Bacteria	0		

Print name here:
660166 6. PUNICITE TU

Team:	Notetaker: Last Name, 1st Initial	Date:
Olowalu 31	BUNDETT, G.	12/7/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients		ر					
OPM171207-N-1	Martin Hale			0708	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OCO171207-N-1	Camp Olowalu			0730	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OMM171207-N-1	Mile Marker 14			0747	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OUB171207-N-1	Ukumehame	8		0804	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPB171207-N-1	Papalaua Beach			0820	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPP171207-N-1	Papalaua Pali	12/		0833	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							
OPM171207-S-1	Martin Hale				500		
OCO171207-S-1	Camp Olowalu				500		
OMM171207-S-1	Mile Marker 14				500		
OUB171207-S-1	Ukumehame				500		
OPB171207-S-1	Papalaua Beach				500		
OPP171207-S-1	Papalaua Pali				500		

Signature (Team Lead): /	Print name here:
Sen I fleto The	GEONGE 6. BURNETE TO

Team/ Session	Samplers Last Name, 1st Initial									Ins	trumen		pH #	DO S	Salinity #	Date:	
R2RN	Notetaker:	Hutel	nings,								40d:	2	3		1	2	12/8/17
31	Others:		,		3 m	axwe	el, C				21000	× 3	DR DR				
			Temp	Sal	DO	DO			A. Tarra (AIII	PID.	People (within 100			100 ft)	TSS	Nutrient Duplicate	
Location	n Name	Time	(C)	(ppt)	(mg/L)	Sat (%)	pН	Tu	rbidity (N7	(0)	Waves			?	?		
Honolua I RHL1		7,56 An	23.2	34.5	6.78	96.2	8.14	23.9	28,5	25.2	1	0	O	0	0	■ I	
Fleming No		8:40 AM	24.7	35.1	6.95	101.6	8.18	1,41	171	154	3	0	Z	5	0		
Oneloa B RON1		915AM	25.1	35.1	6.91	1018	8.18	0.59	0.69	0.64	3	t	3	6	0		
Kapalua l RFS17	Bay RFS 71208	9:45A	25,4	35.1	7.03	104,0	8.19	1.17	1.60	1.45	l	1	36	60	0		
Ka'opala I RKO1'		0:10am	24.7	34.6	6.99	102.0	8.19	14.6	15.8	15.6	2	1	0	0	0		
Kahana V RKV1	/ill RKV 71208	10:3541	25.5	34.8	6.96	102.9	8.22	21.5 17.1	20.6	21.4	2	0	0	1	D		

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 3:08 p.m; Falling High 7:53 a.m.
Moon Day (from new)	21
Cloud Cover (0-8):	0
Rain Conditions (last 24 hours)	0
Wind Direction (Trades? Kona?):	trades
Streams flowing? (Y/N)	Y (RHL)

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

Use back of form if needed.)

RHL-Stromflowing, whole surf breaking, chilly

RFN-no smeamflow

Whatman Fillens D.2- yery dow

Very high tide all sites

RKV- little bout fish school 5ft from samde

site

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	0.07	5.92	54.3	568
Pre	0.07	5.91	53.7	571
Post	0.09	5.92	54.7	57

	Total # of samples	Relinquished To::	Contact
Sediment		LHS	CMaxwell
Nutrient	7	LHS	CMaxwell
Bacteria	0		Cmaxwell

Signature (Team Lead):

Print name here: Cothy Maxwell

WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RN - 31	Hutchings.	L	12/8/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL171208-N-1	Honolua Bay	日			125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFN171208-N-1	Fleming North				125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RON171208-N-1	Oneloa Bay				125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFS171208-N-1	Kapalua Bay	d			125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKO171208-N-1	Ka'opala Bay	U			125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKV171208-N-1	Kahana Village	Ŋ			125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKO171208-N-2	Ka'opala Bay				125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
Sediment - TSS							
RHL171208-S-1	Honolua Bay	Ø		(1000)	500		
RFN171208-S-1	Fleming North				500		
RON171208-S-1	Oneloa Bay				500		
RFS171208-S-1	Kapalua Bay				500		
RKO171208-S-1	Ka'opala Bay				500		
RKV171208-S-1	Kahana Village				500		

Signature (Team Lead):	Print name here:			
Colora Maxwel	Cathy Maxwell			
Capablas				