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

Session No:	Verifiers:	Pre date:	Pre time:	Post: Date:	Post time:
34	G. BUNGETTE L. CALLAND	1/24/2018	9:53	2218	11:15am



QA/QC Check	Inst#	Probe #	Last Cal Date		Verificat	RE: tion Value	Verificat	OST: tion Value	Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature			n/a	Std	(PASSE3) 23.6	(Prose 2) 23.5	(puobe 3) Zz.9		± 1°C of NIST	Within 1°C	1.1
	1	3	n/a		23	. 8	23.3				
	- 1	2	n/a		23.	8				ESF	ŀ
Salinity				Std	0.04	33.2 ppt	0.04	33.2 ppt	± 3%, blank	33.95 – 36.05	
	1	3	1/8/18		0.03	33,1	0.04	32.9			
	i	2	1/8/18		0.03	33.2					
Dissolved Oxygen				Std	100	%	100%		Post-check ± 5 % of pre-check (0- 100%)	80 – 120 %	
	1	2	8/1/17		99	2.6	100	.5%			
	1	1	3/28/17	,	100	,7					
рН	T A MA	2 /40		Std	7.00	10.01	7.00	10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
	1	4	1/29/18		7.00	10.01	7.02	10.00		PRETEMP 24.2°C	
	,	3	1/2/10		7.00	10.01					

QA:

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

Team/ Session					mplers me, 1st l	nitial				Ins	strumen #)H #	DO #	Salinity #	Date:
R2RS Noteta	er: Max	well, C						n ndrivi		40d:	1	20 129	4	2	3	1/30/18
34 Others	Jam	akani	,B (Schro	eder,	T				2100q:					上から大	
		Temp	Sal	DO	DO		T	abidita ON	TID.	Waves	Wind	People (within 100 ft)		TSS	Nutrient	
Location Name	Time	(C)	(ppt)	(mg/L)	Sat (%)	pН	Jan Ju	rbidity (N	10)	waves	Willa	In Water	Beach	Camp	?/_	Duplicate ?
Napili Bay RN RNS180130	8:15	23.7	34.5	6.89	99.8	8,18	2.32	1.75	1.88	2	1	0	1	0		
Pohaku RPO RPO180130	8:48	23.8	333	6.97	100.2	8.17	19.7	21.3	20.3	3	之	3	3	0		
Kaanapali Sh R RKS180130	KS 9:16	23.9	34.6	6-84	99.5	8.18	6.40	6.76	6.52	- 2	(1	0	0		
Airport Beach R RAB180130	AB 9:39	24.1	34.4	6.83	99.3	8.19	9.22	7.24	9.87	2	4	3	18	6		
Canoe Beach RC RCB180130	CB 10:03	3 24.1	33.0	6.89	99.6	8.20	1.42	1.54	1.64	1	4	0	5	0		
Wahikuli RWA RWA180130	16:25	5 24.2	33,2	6.84	99.0	8.20	2.16	2.19	2.22	1	4	1	3	0		

Low 9:54 a.m; Falling High 3:40 a.m.
14
0
0
Kona
Pohaku-No

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

Napile - wavefours range bey 3-44t, only 2ft where Polyaku - wind-2

Faarapali Shores - access difficult
Gathere & buckets of sea water

Airport Beach - large particles made turbidet

Ves uto more variable

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

A	Blank	Low	Med	High
Standard	0.05	5.32	55.3	622
Pre	0.06	5.37	55.4	625
Post	0.07	5.29	55.5	622

	Total # of samples	Relinquished To::	Contact			
Sediment	0	LHS	Costry Maxwell			
Nutrient	6	LHS	Cathy Maxie			
Bacteria	0		Cathy Maxwe			
nature (Team	Lead).	Prin	t name here:			

Kaanapali Shoes Daniple site is now problematic due to severello sion and addition of large boulders that make access to tenebeach hazardous of Dana Daniplers, especially at high tide. Request review of the site with Dana to determine a better approach to sampling there or possible movement of the site. There is ongoing earthmoving, etc. by the hotel to show up the Structural support to save the hotel.

WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RS - 34	Maxwell, C		1/30/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RNS180130-N-1	Napili Bay	e e		8:15	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RPO180130-N-1	Pokahu			8:48	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKS180130-N-1	Kaanapali Sh			9:10	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RAB180130-N-1	Airport Beach	D		9:39	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RCB180130-N-1	Canoe Beach			10:03	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RWA180130-N-1	Wahikuli			10:25	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							
RNS180130-S-1	Napili Bay				500		
RPO180130-S-1	Pokahu				500		
RKS180130-S-1	Kaanapali Sh				500		
RAB180130-S-1	Airport Beach				500		
RCB180130-S-1	Canoe Beach				500		
RWA180130-S-1	Wahikuli				500		

Signature (Team Lead):	Print name here:	
Cathering Maxwell	Cotherine Maxwell	

Team/ Session					Sa Last Na	mplers me, 1st	Initial			In	strumer #	THE RESIDENCE OF THE PARTY OF T)Н #	DO #	Salinity #	Date:	
Polanui	Notetaker:	MAXW	ELL, J	,							40d:	1	2	+	2_	3	1/31/18
34	Others: 660	Kit 1	Bayly	Ric							2100q: \						
Location	n Name	Time	Temp	Sal	DO	DO Sat	рН	Tu	rbidity (N	ΓU)	Waves	Wind		(within	100 ft)	TSS	Nutrient Duplicate
			(C)	(ppt)	(mg/L)	(%)							In Water	Beach	Camp	•	?
505 Fron PFF18		8:07	23.8	33.4	6.38	91.8	8.09	10.5	11.4	11.5	1/2	2	6	5	0		
Lindsey F		8:30	23.8	33.8	6.31	91.0	8.09	11.8	12.2	12.9	0	t	0	2	0	斌	
Lahaina T PLT1		8:50	24.0	34.1	6.60	95.7	8.13	4.15	4.83	4.74	0	3	Ø	(٥		
Puamai PPU1		9:12	24.1	34.1	6.94	100.6	8.18	3.79	4.31	4.61	ı	2	0	40)		
Launiupo OLP1		9:32	24.7	34.7	6.85	100.7	8.15	-3.35	3.17	4.45	- 1	2/2 Jsm	٥	4	0		
Olowalu OSF1		9;55	24.6	34.6	6.92	101.5	8.07	4,46	5.28	668	. 6	2,		0	0		

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 10:29 am High 4:17 am falling
Moon Day (from new)	15
Cloud Cover (0-8):	2
Rain Conditions (last 24 hours)	?
Wind Direction (Trades? Kona?):	Kona
Streams flowing? (Y/N)	· ×

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

* PEF Stream flow - moderate
PIH - had boon flowing but stopped

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	5.32	55.3	6ZZ
Pre	0, 12	5.28	55.3	624
Post	0.07	5.29	55.5	622

	Total # of samples	Relinquished To::	Contact
Sediment	1	LHS	CEORGE BAND GOT
Nutrient	6	LHS	GEORGE BUNDETE
Bacteria	0		

Signature (Team Lead):

At the GEONGE G. BUNNETTE G.

Notetaker:	Last Name, 1st Initial	Date:
MAXWELL, I		1/31/18
		MAXWELL, S

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF180131-N-1	505 Front St	风		8.07	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLH180131-N-1	Lindsey Hale	Д		8:30	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLT180131-N-1	Lahaina Twn	Ø		8:50	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PPU180131-N-1	Puamana	X		9:12	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OLP180131-N-1	Launiupoko	Ø		9:32	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OSF180131-N-1	Olowalu Pier	具		9:55	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							
PFF180131-S-1	505 Front St			0.00	500		
PLH180131-S-1	Lindsey Hale	风		8:30	500		
PLT180131-S-1	Lahaina Twn			0.0	500		
PPU180131-S-1	Puamana				500		
OLP180131-S-1	Launiupoko				500		
OSF180131-S-1	Olowalu Pier				500		

Signature (Team Lead):

Signat

Team/ Session		Samplers Last Name, 1st Initial									Ins	trumen #	Office and the second second)H #	DO #	Salinity #	Date:						
Olowalu	Notetaker:	BURNE	ENE G								40d:	1		4 2		3	2/01/18						
34	Others:	NOPON	EN, K	ord	mo, L	^					21000	ı: /	-	-	-		·						
	•	Tr:	Temp	Sal	DO	DO		T	-1-1425- (NT		Warren		Peopl	e (withir	100 ft)	TSS	Nutrient						
Location	n Name	Time	(C)	(ppt)	(mg/L)	Sat (%)	pН	10	rbidity (N	10)	waves	Waves Wind		aves Wind		aves Wind		ves wind		Beach	Camp	?	Duplicate ?
Martin H		7:07	24,2	34,9	6.27	91.6	8.08	20.8	21.2	22.7	1	1	0	0	0								
Camp Olov OCO1		7:27	25.2	34.2	6.44	95.4	8,08	2.96	2.92	3.25	i	1	18	11	b								
Mile Ma OM OMM1	1M	7:44	25,1	34.5	6.26	92.5	8.07	4.57	4.34	4.23	l	l	0	3	3								
Ukumeha OUB1		1:58	24.6	34.7	6.54	95.9	8.12	5.91	6.20	5.72	1/	2	0	0	0								
Papalau OF OPB18	PB	8-12	25.0	34.8	6.59	97.5	8.10	7.42	8.99	7.38	2	2	0	0	0								
Papalaua OPP18		8:28	24.9	34.7	2.05	96.4	8.14	2.65	2.47	2.96	2	1	0	2	2								

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 11:04 am High 4:53 am rising
Moon Day (from new)	16
Cloud Cover (0-8):	663 7 5
Rain Conditions (last 24 hours)	MONE
Wind Direction (Trades? Kona?):	KOYA
Streams flowing? (Y/N)	N/A

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

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	5.32	55.3	622
Pre	0.07	530	55.5	674

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	GEORGE BULDETTE
Nutrient	6	LHS	GEORGE BUNDER
Bacteria	0		

Team:	Notetaker:	Last Name, 1st Initial	Date:
Olowalu 34	BUNDERS.	6.	2/01/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
OPM180201-N-1	Martin Hale	R		7:07	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OCO180201-N-1	Camp Olowalu	Ø		7:27	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OMM180201-N-1	Mile Marker 14	Ø		7:44	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OUB180201-N-1	Ukumehame	Ø		7:58	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPB180201-N-1	Papalaua Beach	Ø		8:12	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPP180201-N-1	Papalaua Pali	A		8:28	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							
OPM180201-S-1	Martin Hale				500		
OCO180201-S-1	Camp Olowalu				500		
OMM180201-S-1	Mile Marker 14				500		
OUB180201-S-1	Ukumehame				500		
OPB180201-S-1	Papalaua Beach				500		
OPP180201-S-1	Papalaua Pali				500		

Signature (Team Lead):	Print name here:
In I Mon	6 GOHGE G. BURNETTE BY

Team/ Session			5		Sai Last Na	mplers me, 1st l	nitial	90	b go	0000	Ins	trumen #	#	#	DO #	Salinity #	Date:
R2RN	Notetaker:	Lun H	Mohir	2015							40d:	1	9	4	2	3	2/2/18
34	Others:	Anoro	Bonk	er	CiCi	Hene	monr)			21000	q: /	-	G60 -			
			Temp	Sal	DO	DO	0	ig.		0,2			People	(within	100 ft)	TSS	Nutrient
Location	n Name	Time	(C)	(ppt)	(mg/L)	Sat (%)	рН	() Tu	rbidity (N7	ru)	Waves	Wind	In Water	Beach	Camp	300	Duplicate ?
Honolua l RHL1	and the same of th	7; 55A	23.5	34.5	6.74	96.7	8.13	13.0	12.8	13.1	0	0	0	0	0	×	
Fleming N RFN1		8:351	24.0	34.8	6.91	100	8.19	6.82	7.13	6.98	1	0	4	3	0	X	
Oneloa B RON1		9:001	24.0	34.8	8.46	100.5	8.18	0.90	0.95	0.82	2	0	4	1	0		
Kapalua RFS1		9:300	24.2	34.3	6.91	1003	8,16	1.88	1.80	1.73	1	0	6	50	D		
Ka'opala RKO1		9:5×	24.3	34.2	6.83	99.3	8.13	11.6	12.2	11.9	-1	0	0	0	0		
Kahana V RKV1		10:10¢	24.6	33.8	6.87	99.9	8.13	8.81	8.56	829	1.	0	2	7	0		

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 11:38 a.m; Falling High 5:27 a.m.
Moon Day (from new)	17
Cloud Cover (0-8):	8
Rain Conditions (last 24 hours)	Y-last printerly
Wind Direction (Trades? Kona?):	0-light kuns
Streams flowing? (Y/N)	NoRHL many

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

RON- CIGHT RAIN STARTEDY ICKO- CLOUDS CLEARING RKV- SUN COMING 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

rbidity Verif	ication	1		1
	Blank	Low	Med	High
Standard	0.06	5.32	55.3	622
Pre	0.07	5.34	55.8	625
Post	0.06	5.32	55.9	623

	Total # of samples	Relinquished To::	Contact
Sediment	2	LHS	Cothy Maxwel
Nutrient	6	LHS	Cathy Maxwe
Bacteria	0		Cothy Maxwel
, (TE T	18	D.:-	A manua hamai

Signature (Team Lead):

Outline Maxwell

Print name here:

Outline Maxwell

WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RN - 34	Lyn Hulel	nings	2/2/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL180202-N-1	Honolua Bay			7:55	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFN180202-N-1	Fleming North	B		8:35	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RON180202-N-1	Oneloa Bay			9:00	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFS180202-N-1	Kapalua Bay	e		9:30	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKO180202-N-1	Ka'opala Bay	O O		9:55	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
	Kahana Village			10:10	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							
RHL180202-S-1	Honolua Bay	1		7:55	500		
RFN180202-S-1	Fleming North			8:35	500		
RON180202-S-1	Oneloa Bay			ì	500		
RFS180202-S-1	Kapalua Bay				500		
RKO180202-S-1	Ka'opala Bay				500		
RKV180202-S-1	Kahana Village				500		0

Signature (Team Lea	d):	Print name here:		
Varheere N	Jaxwel	Cathy Maxwell		