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

Session No:	o: Verifiers:		Pre date:	Pre time:	Post: Date:	Post time:	
28	BUNDER	6 MAXWELL C	10/2/17	10:00	10/13/17	12:20 pm	



QA/QC Check	Inst #	Probe #	Last Cal Date		PR Verificati			ST: ion Value	Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature			n/a	Std	28.0	(Prosez) 28.2	(probe3) 27.3		± 1°C of NIST	Within 1°C	
	7	3	n/a		27	7.8	27.1				
	1	2	n/a		78	F. 0					
Salinity				Std	0.04	35.0	0.04	900000kg 3td 12/12/16 35.0	± 3%, blank	33.95 – 36.05	
		3	10/2/17		0.64	34.9	0.04	35.0			
	/	2	10/2/17		0.04	35.6	-				
Dissolved Oxygen				Std	106	%	100)	6	Post-check ± 5 % of pre-check (0- 100%)	80 – 120 %	
	4										
	1	2	8/1/17		98.	9 %	99.	4%			
	1	2	8/1/17		98. 160.	9%	99.	4%			
рН	1	2		Std	98. 160. 7.00	9 % 2 % 10.01	7.00	10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
рН	1	2 1			160.	2%			calibration	6.79 – 7.21	

QA:

* Are pre- and post within one week? SALDUT! MODS 3 AND Z WERE CALLBRATED

* Delay times are ok?

* Other equipment issues?

Post Verification NOT done within I wade

Team/ Session		0		Last Na	mplers me, 1st l	[nitial_				Ins	trumen #	The state of the s	H #	DO #	Salinity #	Date:	
R2R Notetaker:	Mar	te 80	hroe	der	4	MX				40d:	Ì	4		2	3	10/3/17	
28 Others:	KTyT	- and	ter	ry		berg	T.,	Schroede	er, T	21000	# /						
Location Name	Time	Temp	Sal	DO	DO Sat	рН	Tu	rbidity (N7	CID.	Waves	Wind	People	(within	100 ft)	TSS	Nutrient Duplicate	
		(C)	(ppt)	(mg/L)	(%)	r		i Dianij (i v		1,11,03	aves Willu		Beach	Camp	?	?	
Napili Bay RNS RNS171003	8:14	2.7.0	33.7	4.59	1019	8.14	2.33	248	2.51	i	0	0	6	0	MA		
Pohaku RPO RPO171003	8:40	26.8	32.4	6:29	94.6	1-8.15	3.15	3.46	5.79	8	1	Surfer	1 Ash	0	inst		
Kaanapali Sh RKS RKS171003	8:58	27.1	34.2	6.41	97.8	8.11	3.05	3.22	3.39	į	0	3 divers	2 Fish	when	THE TAX		
Airport Beach RAB RAB171003	9:16	27.9	34.0	6.49	100.0	8.19	,50	.79	.67	J	ĵ	10+	10+	enner	NSOX		
Canoe Beach RCB RCB171003	9:36	28.0	33.3	659	101.3	8.19	371	658	6.00	0	0	3	6	0	WS W		
Wahikuli RWA RWA171003	9:52	27.6	33.4	6.50	1998	8.20	0.50	0.50	0.49	1	1	2	0	ð	N/2 DY		

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 7:52 a.m; Rising High 2:35 p.m.				
Moon Day (from new)	14				
Cloud Cover (0-8):	0				
Rain Conditions (last 24 hours)	0				
Wind Direction (Trades? Kona?):	Trades 0				
Streams flowing? (Y/N)	N				

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

Nap. Brach Erosion - drop off 7 more evident

Pohaken - Surf's up today.

Kaanapali Shores - beach very busy

Airport very busy

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	0.04	5.49	57.6	625
Pre	0,05	5 57	57.2	627
Post	0.05	5.45	57.3	626

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	Maxwell
Nutrient	6	LHS	MaxwellC
Bacteria	0		Maxwell
	b D	O Pri	int

WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2R - 28	Schroeder,	M	10/3/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients						a contract of the contract of	
RNS171003-N-1	Napili Bay	Ō.		8:14	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RPO171003-N-1	Pokahu			8:40	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKS171003-N-1	Kaanapali Sh	Ø		8:50	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RAB171003-N-1	Airport Beach	8		9:16	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RCB171003-N-1	Canoe Beach	Q/		9:36	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RWA171003-N-1	Wahikuli	9		9:52	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 - TSS							
RNS171003-S-1	Napili Bay				500		
RPO171003-S-1	Pokahu				500		
RKS171003-S-1	Kaanapali Sh				500		
RAB171003-S-1	Airport Beach				500		
RCB171003-S-1	Canoe Beach				500		
RWA171003-S-1	Wahikuli				500		

Signature (Team Lead):	Print name here:
Carlein Moavel	Cotherine Maxwell

Team/ Session					Sa: Last Na	mplers me, 1st I	nitial				Ins	strumen #		H #	DO #	Salinity #	Date:
Polanui	Notetaker:	Maxu	: الم	5.							40d:	1	4	4	2	3	10/4/17
28	Others:		3.K.	,	Brown	n, M	,				2100	q: /					
		Tri	Temp	Sal	DO	DO Sat			Lidia (NIT	P. D.	Waves	XV:3	People	(within	n 100 ft)	TSS	Nutrient
Locatio	n Name	Time	(C)	(ppt)	(mg/L)	(%)	рH	1 41	rbidity (N7	(0)	waves	Wind	In Water	Beach	Camp	2	Duplicate ?
505 From PFF1	nt St PFF 71004	8:20	27.6	34.0	5.54	24.9	3.04	10,1	10.3	10.6	ь	i	Ġ	ſ	0		
Control of the State Sta	Hale PLH 171004	2:40	27.8	33.8	5.64	86.7	8.03	4.04	4.14	4.08	0	l	0	4	0		
	Γοwn PLT 171004	9:00	29.3	33.7	5,67	87,7	8.65	3,29	4,30	\$ 1.79 4.79	0	2	0	l	0		
	na PPU 71004	9:25	28.1	34.5	646	100.1	8,18	2.24	2.63	2.42	1	2	0	6	0		
	oko OLP 171004	9 42	- 23-4	34.6	6.52	101.4	8.14	1.51	1.94	1.55	1	2	3	٤	0		
	Pier OSF 171004	10:10	27.9	34.6	6.31	105.3	8.15	1.02	1.43	1.23	0	1	l	t	0		

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Low 8:30 am High 3:01 pm Rising
14
001411
don't know
TRADES
Below

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

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	0.05	5.49	57.0	625
Pre	0.06	5.53	57.2	626
Post	0.04	5.51	57.4	624

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	GROAGE BUNHETT
Nutrient	6	LHS	GEORGE BURGE
Bacteria	0		

Team:	Notetaker:	Last Name, 1st Initial	Date:
Polanui 28	Maxwe	1,5	10/4/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF171004-N-1	505 Front St	Ø		8:20	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PLH171004-N-1	Lindsey Hale	đ		8:40	125		
PLT171004-N-1	Lahaina Twn	Ø		9:00	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PPU171004-N-1	Puamana	囡		9:25	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OLP171004-N-1	Launiupoko	Ø`		9:42	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OSF171004-N-1	Olowalu Pier	u ^r		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							
PFF171004-S-1	505 Front St				500		
PLH171004-S-1	Lindsey Hale				500		
PLT171004-S-1	Lahaina Twn				500		
PPU171004-S-1	Puamana				500		
OLP171004-S-1	Launiupoko				500		
OSF171004-S-1	Olowalu Pier				500		

Signature (Team Lead):	Print name here:
Sy & ME	GENER G. PUNDETTE TO

Team/ Session						mplers me, 1st I	nitial ,				Ins	trumen #		H #	DO #	Salinity #	Date:	
Olowalu	Notetaker:	ICHAM	LD, No	DONE	663	NOP	ONEN 1	&			40d:	1	4		2	3	10/5/17	
28	Others: La	DMO	SRIFF	041	063	GRIGA	Soul, 1	w.			2100	q: /						
Locatio	n Name	Time	Temp	Sal	DO	DO Sat	рН	To					TSS	Nutrient Duplicate				
			(C)	(ppt)	(mg/L)	(%)			, (.,		VI II VI		In Water	Beach	Camp	?	?	
Martin H OPM1	Iale OPM 171005	7:10	26.0	34.7	5.80	87.0	8.10	3.05	2.57	2.60	0	10-15 4	0	0	0			
	walu OCO 171005	1:35	26.0	34.6	6.19	92.6	8.67	6.71	6.81	7.00	l	10215	0	5	0			
ON	arker 14 //M 171005	7;52	25.7	34.5	5.99	89.1	8,02	1.95	7.79	7.83	1	Z	0	0	Ò			
	ame OUB 171005	8113	25.7	34.6	6.61	98.4	8.12	10.50	10.60	10. <u>1</u> 0	1-2	15	0	0	0			
Ol	a Beach PB 171005	8:125	25.9	34.6	6.85	102.2	8.15	7.56	8.04	8.11	1-2	2	0	0	0			
	Pali OPP 71005	8:38	26.3	34.2	6.71	100 s k	8,13	3,64	3,48	3,13	1-2	3	0	1	6			
<u>C</u>	COASTAL AN	D ENVIRO	NMENTAL	CONDIT	ION NOTE	ES			ves: 0 ft = no v									
	Low & High			ш	Low 9:09				d: 0 = calm, 1 ple: Swimmer	Control of the contro				4 = moder	ate breeze			

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 9:09 am High 3:26 am Falling
Moon Day (from new)	15
Cloud Cover (0-8):	1
Rain Conditions (last 24 hours)	MINIMAL
Wind Direction (Trades? Kona?):	TRANE (
Streams flowing? (Y/N)	NA

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

Use back of form if needed.)

A LITTLE CONFISHIN ON EXACT LOCATION OF OMM.

MAY HAVE BEEN 50' OFF TANCET

CORRECTED WIND RELOCKS FROM MPH TO APPROPRIATE CODE.

	Blank	Low	Med	High
Standard O	04	5.49	57.0	625
Pre 🖰	.05	6.46	57.2	625

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	GENER BUXIETE
Nutrient	6	LHS	660168 BUNNETE
Bacteria	0		

Signature (Team Lead):

Cloude 6 BUNNETTE TH

Team:	Notetaker:	Last Name, 1st Initial	Date:
Olowalu 28	NOPONEN	R	10/5/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
OPM171005-N-1	Martin Hale			7:10	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OCO171005-N-1	Camp Olowalu	Ø		7:35	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OMM171005-N-1	Mile Marker 14			7:52	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OUB171005-N-1	Ukumehame	Ø/		8:13	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPB171005-N-1	Papalaua Beach			8:25	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPP171005-N-1	Papalaua Pali			8:38	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							
OPM171005-S-1	Martin Hale				500		
OCO171005-S-1	Camp Olowalu				500		
OMM171005-S-1	Mile Marker 14				500		
OUB171005-S-1	Ukumehame				500		
OPB171005-S-1	Papalaua Beach				500		
OPP171005-S-1	Papalaua Pali				500		

Signature (Team Lead);	Print name here:
Sol Mer	GEORGE C- GENOLOTE B

Samplers Last Name, 1st Initial Notetaker: Lin Hutchings Cm Hutchings L											trumen #			DO #	Salinity #	Date:
Notetaker:	Lun Ho	(China	cm			Hust	chinas	L		40d:	1	4		2	3	10/6/17
Others: Brill Brillian Brillian Banker, B Maxwell, C 2100q: 1										~-						
N	Tr:	Temp	Sal	DO	DO			1:14 (8)				People	(within	100 ft)	TSS	Nutrient
n Name	Time	(C)	(ppt)	(mg/L)	(%)	рн	Tu	rbidity (N	10)	Waves	Wind	In Water	Beach	Camp	?	Duplicate ?
Bay RHL 71006	7.56	25.3	33.7	6.32	93.2	8.10	37.2	37.9	405	0	1	0	6	0	2	
orth RFN 71006	8:t0	24.4	34.1	6.6A	99.9	8.16	2.65	1.82	2.26	3	1	6	5	0		
Bay RON 71006	9:15	27.0	316	6.60	100,9	8.19	0.65	0,65	0.61	3	9	1	9	0		
Bay RFS 71006	6 :35	26.9	33.4	6.81	103.0	8.16	3.36	2.70	3.04	Ď	2	34	, 35	O		
Bay RKO 71006	955	269	33.7	6.62	995	8.11	14.0	13.6	12.8	0	1	0	2	D		
Vill RKV 71006	10:15	27.9	34.7	7.24	112.)	8.33	3.94	4.63	4.45	1	2	4	8	0		Ø
	Others: In Name Bay RHL 71006 Orth RFN 71006 Bay RON 71006 Bay RFS 71006 Bay RKO 71006 Vill RKV	Others: DAGC IN Name Time Bay RHL 71006 Orth RFN 71006 Say RON 71006 Bay RFS 71006 Bay RKO 71006 Control RFN 71006 Cont	Others: Drace Bond Drace Bond Bay RHL 71006 7:15 27:0 24:4 8ay RON 71006 9:35 24:9 Bay RKO 71006 9:35 24:4 Vill RKV 115 27:9	Notetaker: Lyn Hull hings Circ Annual State Con Cothers: Druce Bay Ren (C) Sal (ppt) Bay RHL 7:56 Z5.3 33.7 orth RFN 8:40 Z4.4 34.1 Bay RON 7:1006 Bay RFS 7:1006 Bay RKO 7:55 Z6.9 33.4 Will RKV 115 279 34.7	Notetaker: Lyn Hu Chipping Cm Others: DANCE BONNER DO (mg/L) Bay RHL 7.56 25.3 33.7 6.32 Orth RFN 7.1006 8.70 24.4 34.1 6.64 Bay RFS 7.1006 7.15 27.0 34.6 6.81 Bay RKO 7.55 26.9 33.7 6.81 Bay RKO 7.55 26.9 33.7 6.81 Bay RKO 7.55 27.9 34.7 7.74 Vill RKV N.15 27.9 34.7 7.74	Notetaker: Lyn Hu Chip Chi Chi	Last Name, 1st Initial Notetaker: Light Hulbert Con Hulbert Scon Gard March Scon Gard March Scon Gard March Gard March Gard March Gard Gard March Gard Gard	Notetaker: Light Hutchings CM Hutchings CM Hutchings CM Hutchings CM Hutchings CM Stone, A Ganker, B Others: Drill Banker M DO (mg/L) Stone, A Ganker, B Name Time Temp (C) Sal (ppt) DO (mg/L) Sat (%) pH Tu Bay RHL 7:56 Z5.3 33.7 6.32 93.2 8.10 37.2 Orth RFN 7:1006 8:70 26.4 34.1 6.64 99.9 8.16 2.65 Say RON 7:15 27.0 33.4 6.61 103.0 8.19 0.65 Bay RFS 7:1006 9:35 26.9 33.7 6.61 103.0 8.16 3.36 Bay RKO 7:1006 9:55 26.9 33.7 6.62 99.5 8.11 14.0 Vill RKV N:15 27.9 34.7 7.74 117.1 8.33 3.94 Vill RKV N:15 27.9 34.7 7.74 117.1 8.33 3.94 Vill RKV N:15 27.9 34.7 7.74 117.1 8.33 3.94	Notetaker: Light Hutchings Com Hutchings L. Others: Danker Stone A Mark Danker Banker B DO Sat (%) pH Turbidity (N. Bay RHL 7.56 25.3 33.7 6.32 93.2 8.10 37.2 37.9 Orth RFN 8.70 26.4 34.1 6.64 99.9 8.16 2.65 1.82 Say RON 7.15 27.0 34.6 6.60 100.9 8.19 0.65 0.65 Bay RFS 103.6 103.0 8.16 3.36 2.70 Bay RKO 9.55 26.9 33.7 6.61 103.0 8.16 3.36 2.70 Bay RKO 9.55 26.9 33.7 6.62 99.5 8.11 4.0 13.6 Vill RKV 10.15 27.9 34.7 7.74 117.1 8.73 3.94 4.63	Notetaker: Life Hutchings Cin Hutchings Cin Hutchings L. Others: Diffice Banker and Markett Stone, A. Markett, C. Banker, B Time Temp (C) Sal (ppt) DO Sat (%) pH Turbidity (NTU) Bay RHL 7:56 25.3 33.7 6.32 93.2 8.10 37.2 37.9 40.5 Orth RFN 8:40 26.4 34.1 6.6 99.9 8.16 2.65 1.82 2.26 Bay RON 9:15 27.0 346 6.60 100.9 8.19 0.65 0.65 0.61 Bay RFS 71006 9:35 26.9 33.4 6.81 103.0 8.16 3.36 2.70 3.04 Bay RKO 9:55 26.9 33.7 6.82 99.5 8.11 14.0 13.6 12.8 VIII RKV 10:5 27.9 34.7 7.74 117.1 8.33 3.94 4.63 4.45	Notetaker:	Last Name, 1st Initial #	Notetaker: Life	Last Name, 1st Initial	Last Name, 1st Initial	Notetaker: Light Hartening Com Last Name, 1st Initial Hartening Com Hartening Com

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 9:49 a.m; Falling High 4:05 a.m.
Moon Day (from new)	17
Cloud Cover (0-8):	Ť
Rain Conditions (last 24 hours)	lighti overnight
Wind Direction (Trades? Kona?):	tracles
Streams flowing? (Y/N)	N

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

RHL-NO WAYES of collection, but reefstorcaking half way to Lipua A,

* Duplicate sample - Kahana Village

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	0.05	5.49	57.0	625
Pre	0.05	5.47	57.2	626
Post	003	550	573	625

	Total # of samples	Relinquished To::	Contact
Sediment	1	LHS	Maxwell C
Nutrient	7	LHS	Maxwello
Bacteria	0	*	Maxwell C

Signature (Team Lead):

Print name here:

Catherine Maxwell

WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1 st	Date:
NR2R - 28	HUTCHINC	15,16	10/6/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL171006-N-1	Honolua Bay	3		7:56	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RFN171006-N-1	Fleming North			9:40	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RON171006-N-1	Oneloa Bay	/D/		9:15	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RFS171006-N-1	Kapalua Bay			9:35	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKO171006-N-1	Ka'opala Bay	D /		9:55	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKV171006-N-1	Kahana Village			10:15	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKV171006-N-2	Kahana Village	Ø		1015	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
Sediment - TSS							
RHL171006-S-1	Honolua Bay	O/		7.56	500		
RFN171006-S-1	Fleming North			7 7 7	500		
RON171006-S-1	Oneloa Bay				500		
RFS171006-S-1	Kapalua Bay				500		
RKO171006-S-1	Ka'opala Bay				500		
RKV171006-S-1	Kahana Village				500		

Signature (Team Lead):		Lead):	Print name here:		
(atterier	Maxwell	Catherine Maxwell		