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

Huli O Ka Wai Ola

Session No:	Ver	ifiers:	P	re da	ate:	Pre time:	Po	st: Date:	Post time:
33	LCallnan	CMaxwell	1/	8/	18	10:00 a	1/	12/18	12:00 pm

QA/QC Check	Inst#	Probe #	Last Cal Date			lE: ion Value		OST: tion Value	Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature			n/a	Std	(prober) 23.1	(probe3) 23.1	CPANBE 2.		± 1°C of NIST	Within 1°C	
	2	2	n/a		23	. 4	23.	1			
	2	3	n/a		23	.3					
Salinity				Std	0.04	35.012/18	160,04	Borne ulistit	± 3%, blank	33.95 – 36.05	
	2	2	1/8/18		0.03	34.9	1.04	33.0			The second
	2	3	1/8/18		0.03	34.8					
Dissolved Oxygen				Std	10	0°70	10	070	Post-check ± 5 % of pre-check (0- 100%)	80 – 120 %	
	2	1	3 28 17		101.	2%	101	1.2%			
	2	Z	8/1/17			7%					
рН				Std	7.00	10.01	7-00	10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
	2	3	12/18/19		7.00	10-01	7.02	10.04		PRE TEMP. 23,3°C	

QA:

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

Team/ Session					Sar Last Na	mplers me, 1st I	nitial				Ins	trumen #	-	H #	DO #	Salinity #	Date:
R2RS	Notetaker:	Dehroe	der, N	1	(-					40d:	2	3	3	1	Z	1/9/18
33	Others:	Schre	eder, iles, K	T. Ja	rmat	ani,]	5. Fre	ciberg.	1 7.		21000	: 3				1	
Location	. Name	Tri	Temp	Sal	DO	DO		_	L'III ONT				People	(within	100 ft)	TSS	Nutrient Duplicate
Location	n ivame	Time	(C)	(ppt)	(mg/L)	Sat (%)	pН	Lui	rbidity (NT	(0)	Waves	Wind	In Water	Beach	Camp	?	?
Napili Ba RNS18		8:15	23.60	34.0	6.95	99.3	8.10	: 60	.55	,56	(0	3	2			
Pohaku RPO18		8:47	24.1	339	6.80	97.6	8.16	, , ,	2.60	2.42	ĺ	0	13-	3	-		
Kaanapali RKS18	i Sh RKS 80109	9:09	23.7	34.5	6.97	99.8	8.15	11.9	12.7	12.6	ı	0	Ø	worker 4	45_		
Airport Be RAB18		9:26	24.8		6.64	96,8	8.17	1.38	132	1.56	0	0	6	204	r -		
Canoe Bea		9.4	25.00	34.4	6.74	98.7	8.18	7.32	8.02	7.62)	Di	2 Shor 2 3 Can	18+			
Wahikul RWA18		10:03	24.9	33.5	6.99	101.6	8.20	1.98	2.06	2.02	7	1	4	warre	us —		

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 2:57 a.m; Rising High 9:20 a.m.
Moon Day (from new)	23
Cloud Cover (0-8):	D
Rain Conditions (last 24 hours)	MONE
Wind Direction (Trades? Kona?):	light
Streams flowing? (Y/N)	JH

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

Use back of form if needed.)

Torbidity blank test bottle scratched, some

particulate matter in the water

gave a cond to fellow on the beach asking?

Kranapali. Susion! Sab. purking whocome

more difficult Rbt. - Said such a short time. ok

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	. 07 MS	6.06	54-1	572

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	CLONEL BURNETE
Nutrient	6	LHS	GEONGE BONDEN
Bacteria	0		

Signature (Team Lead): GLONGE 6 BUNNETTE B WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RS - 33	SCHNOEDE	R. M	1/9/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RNS180109-N-1	Napili Bay			8:15	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RPO180109-N-1	Pokahu			8:47	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKS180109-N-1	Kaanapali Sh	d		9:09	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RAB180109-N-1	Airport Beach	d		9.26	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RCB180109-N-1	Canoe Beach	1		9:46	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RWA180109-N-1	Wahikuli	Ø		10:03	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							
RNS180109-S-1	Napili Bay				500		
RPO180109-S-1	Pokahu				500		
RKS180109-S-1	Kaanapali Sh				500		
RAB180109-S-1	Airport Beach				500		
RCB180109-S-1	Canoe Beach				500		
RWA180109-S-1	Wahikuli				500		

Signature (Team Lead):	Print name here:
Sy 1 1/18 6	Charle 6. BURNETTE B

Session Polar	rui.			Sa Last Na	mplers me, 1st	Initial				In	strumen #	t I	pH #	DO #	Salinity #	Date:
Polanui Notetaker:	1 jet 100	HANT	KK							40d:	2		3	1	2	1/10/18
33 Others:		Rich		NN, M	BA	TLY, M	(2100)q: 3				2 Kit	
Location Name	Time	Temp	Sal	DO	DO Sat	рН	11	rbidity (N	DIN	Waves	Wind	People	e (within	100 ft)	TSS	Nutrient Duplicate
		(C)	(ppt)	(mg/L)	(%)	pπ	14	rbiaity (iv	10)	waves	Wind	In Water	Beach	Camp	?	?
505 Front St PFF PFF180110	8:27	23.9	5.85 34.7	5.85	84.1	8.07	1.46	1.68	1.59	ø	\$	\$	ø	Þ		
Lindsey Hale PLH PLH180110	8:45	24.0		6.10	87.7	8.07	2.38	3.00	2.55	- Ø	ø	20	34	#		
Lahaina Town PLT PLT180110	9:07	24.0	34,2	6.03	86.6	8,06	2.57	2.34	2.49	4	2	ø	/	ø		
Puamana PPU PPU180110	9:33	24,3	34,2	7.03	101,5	8.14	1.24	1.41	1.31	×	2	\$	þ	b		
Launiupoko OLP OLP180110	9:52	25.0	34.5	7.11	104,0	8.15	1.02	1.03 G	1.18	1	4	Ø	ø	B		
Olowalu Pier OSF OSF180110	16:19	24.5	34.5	7.38	107.2	8.13	2.92	2:37	KH 3.49	Þ	4	þ	ø	p		

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 5:42 am High 10:14 am rising
Moon Day (from new)	24
Cloud Cover (0-8):	O
Rain Conditions (last 24 hours)	0
Wind Direction (Trades? Kona?):	· TARDES GUB
Streams flowing? (Y/N)	Y PFF

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

PFF - parking lot drainage flowing strong tright at sample 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

rbidity Verifi	Blank	Low	Med	High
Standard	0.04	3.92	54.3	568
Pre	.05	5.96	54,2	572
Post	0.06	5.93	54,2	592

	Total # of samples	Relinquished To::	Contact
Sediment	6	LHS	GLAGE BULFETTE
Nutrient	6	LHS	GEONG & BUNNETTE
Bacteria	0		

Signature (Team Lead):

Print name here:

Team:	Notetaker:	Last Name, 1st Initial	Date:
Polanui 33	Harris, K		1/10/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF180110-N-1	505 Front St			8:27	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLH180110-N-1	Lindsey Hale	U		8:45	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PLT180110-N-1	Lahaina Twn	T		9:07	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
PPU180110-N-1	Puamana	12/		9:33	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OLP180110-N-1	Launiupoko	11/		9:52	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OSF180110-N-1	Olowalu Pier	Ø		10:19	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							
PFF180110-S-1	505 Front St				500		
PLH180110-S-1	Lindsey Hale				500		
PLT180110-S-1	Lahaina Twn				500		
PPU180110-S-1	Puamana				500		
OLP180110-S-1	Launiupoko				500		
OSF180110-S-1	Olowalu Pier				500		

Signature (Team Lead): Print name here: GEONGE 6. BUNGER

Team/ Session					Sar Last Nar	nplers ne, 1st I	nitial	- ni			Ins	trument	The state of the s	H #	DO #	Salinity #	Date:
Olowalu	Notetaker:	Earn	e of	ome							40d:	2	-	3	į	2	1/11/18
33	Others: M	drelle	BVi	- 1	1, 75	Mar	A Ne	PPU NE	N		21000	: 3				·	
Locatio	on Name	Time	Temp	Sal	DO	DO Sat	рН	Т.,	rbidity (NT	TD.	Waves	Wind	People	(within	100 ft)	TSS	Nutrient Duplicate
Locatio	n Ivanie	Time	(C)	(ppt)	(mg/L)	(%)	hir	14	ibiaity (ixi		Waves		In Water	Beach	Camp	?	?
	Iale OPM 180111	0714	23,1	34.3	5.88	83.4	8.06	2.66	z.53	2.48	0	0	0	0	0		
	walu OCO 180111	0734	24.1	34.0	6.47	93.4	8.10	1.10	0.90	0,83	O	1	9	14	D		
OM	arker 14 MM 180111	0746	23.9	34.4	6.29	90.3	8.09	1.14	1.09	1.20	0	1	0	4	1		
	ame OUB 180111	0800	24,2	34.6	6.65	96.0	8.14	2.09	2016	7.10	1	1	0	1	0		
OI	ia Beach PB 80111	0812	24.2	34.8	6.85	99.3	8.14	4.19	5.02	3.85	1	0	0	0	0		
7	Pali OPP 80111	0830	24.4	34,6	6.82	99.0	8.13	1.53	1.67	1.70	l	b	0	X	0		

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 7:31 am High 11:17 am rising
Moon Day (from new)	25
Cloud Cover (0-8):	1
Rain Conditions (last 24 hours)	, NONE
Wind Direction (Trades? Kona?):	2 A TRADES 668
Streams flowing? (Y/N)	NA

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

0 1 1 2 2 / 12 / 12	
Standard 0.06 5.92 54.3	368
Pre 0-86 594 54.1	572

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	GEINGE BUNNER
Nutrient	6	LHS	6 GARGE BURNET
Bacteria	6		

Signature (Team Lead): Illt 2 GONGE G. BUNNETTE B

Team:	Notetaker:	Last Name, 1st Initial	Date:
Olowalu 33	· Otomo,	L -	1/11/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
OPM180111-N-1	Martin Hale	4		0714	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OCO180111-N-1	Camp Olowalu			0734	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OMM180111-N-1	Mile Marker 14	•		0946	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OUB180111-N-1	Ukumehame			0800	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPB180111-N-1	Papalaua Beach			0812	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
OPP180111-N-1	Papalaua Pali	•		0830	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							
OPM180111-S-1	Martin Hale				500		
OCO180111-S-1	Camp Olowalu				500		
OMM180111-S-1	Mile Marker 14				500		
OUB180111-S-1	Ukumehame				500		
OPB180111-S-1	Papalaua Beach				500		
OPP180111-S-1	Papalaua Pali				500		

Signature (Team Lead): Print name here:

Sy I II B G GOOG G. BUNNER B

Team/ Session					Sar Last Na	mplers me, 1st I	nitial	1		V	Ins	trument #	1	#	DO #	Salinity #	Date:
R2RN	Notetaker:	Lynt	uth	nas							40d:	2	3		1	2	1/12/18
33	Others:	wice	135nK	el, 7	anan	de Sh	sre,	aci H	chumo	ANN	21000	: 3	•				
		_	Temp	Sal	DO	DO						0	People	(within	100 ft)	TSS	Nutrient
Location	n Name	Time	(C)	(ppt)	(mg/L)	Sat (%)	pH	Tu	rbidity (N7	ru)	Waves	Wind	In Water	Beach	Camp	?	Duplicate ?
Honolua RHL1	Bay RHL 80112	7:55A	22.8	33.1	6.82	95.4	8.07	59.6	65.3	68.8	1+	0	0	0	0	×	
Fleming N RFN1	North RFN 80112	8:454	24.0	343	7.04	101.3	8.16	3.27	4.44	3,68	3+	0	0	0	0		
Oneloa B RON1	and the second second	9:150	24,5	34.7	7.02	102.4	8.17	1.04	1.00	1.17	3+	1	Ò	4	0		
Kapalua RFS18		9:401	24.8	33,9	7.6A	102.6	8.16	283	2.41	2.57	1	1	φ	14	0		
Ka'opala l RKO1		10:10s	24.4	33.8	6.99	101.1	8.15	16.8	17.7	18.6	1	1	0	0	O		
Kahana V RKV1		16:30A	25A	34.5	7.20	106.3	8.23	7.79	9.47	8.58	1	1	4"	Ble	0		

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low 8:25 a.m; Rising High 12:16 p.m.
Moon Day (from new)	26
Cloud Cover (0-8):	O
Rain Conditions (last 24 hours)	0
Wind Direction (Trades? Kona?):	T
Streams flowing? (ÝN)	YRHL
QA Notes and Comments (Trends? Equip pr Use back of form if needed.) PAHL: OUTSICU SUF RFS: OUTSICU SUF RKO: Outside SUF FORM I'M RKO: Outside SUF RKO: Outside SUF	iside by

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	5.92	54.3	568
Pre	0.090.05	5.91	53.7	572

	Total # of samples	Relinquished To::	Contact
Sediment	(LHS	GGALL BURNE
Nutrient	6	LHS	GERREE BURDET
Bacteria	0		

Signature (Team Lead):

GENGE G. BULLETE IS

WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1st Initial	Date:
R2RN - 33	HUTCHEROS.	4	1/12/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL180112-N-1	Honolua Bay	B		755	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFN180112-N-1	Fleming North	Þ		8:45	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RON180112-N-1	Oneloa Bay	风		9:15	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RFS180112-N-1	Kapalua Bay	ĮQ.		9:40	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKO180112-N-1	Ka'opala Bay	,Ø		10:10	125	Washed, rinsed syringes; acid washed bottles; 0.2 um filters; washed rinsed filter holders	
RKV180112-N-1	Kahana Village	Q		10:30	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							
RHL180112-S-1	Honolua Bay	12		7:55	500		A
RFN180112-S-1	Fleming North				500		
RON180112-S-1	Oneloa Bay				500		
RFS180112-S-1	Kapalua Bay				500		
RKO180112-S-1	Ka'opala Bay				500		
RKV180112-S-1	Kahana Village				500		

Signature (Team Lead):	Print name here:		
Syl Mitte	GEALL G. BURNETA (15		