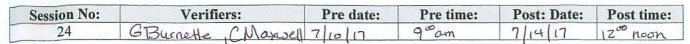
FIELD EQUIPMENT VERIFICATION (PRE/POST A WEEKLY SAMPLING):





QA/QC Check	Inst #	Probe #	Last Cal Date		Verificat	RE:	Verifica	OST: tion Value	Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature			n/a	Std	ainstrument 27.1°C	2/Instrumont 1 27.2°C	instrument 2 or 27.6°C/	27.8°C	± 1°C of NIST	Within 1°C	
	2	5-2	n/a		27.7	°C	27.	.5°c			
	1	5-3	n/a		گ ٦.1	°C	27.	62			
Salinity				Std	0-04	(fram 5/8/17) 33:3	0.04	33.3	± 3%, blank	33.95 – 36.05	
	2	2	6/19/17		0-04	33.4	0.04	33.4			
	1	3	6/19/17		0.04	33.5	0.04	33.2			
Dissolved Oxygen				Std	100	%	10	0%	Post-check ± 5 % of pre-check (0- 100%)	80 – 120 %	
	2	Z	7/25/16		97.	3%	96.	-6%			
	2	1	3/28/17		100.5	87.	102.	4%			
рН				Std	7.00	10.01	7.00	10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
	1	4	7/10/17		7.00	10.01	7.01	9.98		71 2- 72-	
	2	3	7/10/17		7.00	10.01	7.01	9.98			

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

Team/ Session:	Samplers (Initials):	Instrument #	Probe #s	pН	DO	Salinity	Date:	1st Sample Time	End Sample Time:
R2R	Lead: Ty, TFB TSYM.	40d: 2	40d:	3	2,	2	7/11/17	7:55	9:44
24	Notetaker Marie	2100q: 2_							

I Name	Tri-us	Temp	Sal	DO	DO Sat		T-	Lilia OV	ELD	W	XXV. A		People		Top o
Location Name	Time	(C)	(ppt)	(mg/L)	(%)	PH 8.08	C	bidity (N	10)	Waves	Wind	Swim	Beach	Camp	TSS ?
Napili Bay RNS RNS170711	7:55	26.60	328	6.60	98.6	30.8	18,	.80	,89	١	0	5	10.70	6	
Pohaku RPO RPO170711	8:21	26.6 26.5	32.1	6.18	91.92		/	1.16	1.12	Ö	1	0	1-5	D	
Kaanapali Sh RKS RKS170711	8:43	26.62	34.1	5.82	86.70	8.070	1.81	1.94	2.21	İ	1	5-10	10.50	D	
Airport Beach RAB RAB170711	9:05	27.5	133.4	6.23	94.6	8.16~	1.32	132	.38	0	Very ight	20-40	10-20	0	
Canoe Beach RCB RCB170711	9:25	27.4	33,0	0.56	99.3	8.17	.94	,83	,98	0-1	D	10-2	0 0-5	٥	
Wahikuli RWA RWA170711	9:44	27.32	34.1.	6.33	963	8.18	.66	:71	.64	0-)	0-1	1-5	walkers	0	

Most recent low tide time/height (Lahaina station):	High 4:19 a.m; Low 10:13 a.m.
Moon Day (from new)	18
Cloud Cover (1-8):	none - 1
Rain Conditions (last 24 hours)	
Wind conditions (Trades? Kona?):	
Streams flowing? (Y/N)	

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

Airport. a lot of swimmers close to sampling - sunscreen?

Thank veryo phrasing for 2nd vertication resolute.

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, 1-5, 5-10, 10-20, 20-40

	Blank	Low	Med	High
Standard		6.60	60.0	567
Pre	, 07	6.54	59.5	565
Post	.08	6.62	59.7	564

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	Cathy Maxwell
Nutrient	6	LHS	Cathy Maxwel
Bacteria /	0		Contry Maxwe
ignature (Lead):	Varie 0	Dureden	7/11/17

WATER QUALITY SAMPLING:

Team:	Samplers:	Date:	Start time:	Finish time:
R2R - 24	TF BJ	7/11/17	7:45	10:00

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RNS170711-N-1	Napili Bay	B		7:55	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RPO170711-N-1	Pokahu			R:3	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKS170711-N-1	Kaanapali Sh	Ø		8:43	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RAB170711-N-1	Airport Beach	ďν		9:05	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	DESTS OFSWMACIS CLUGE HI SAME
RCB170711-N-1	Canoe Beach	₽		9:25	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RWA170711-N-1	Wahikuli	Ď		9:44	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							
RNS170711-S-1	Napili Bay				500		
RPO170711-S-1	Pokahu				500		
RKS170711-S-1	Kaanapali Sh				500		
RAB170711-S-1	Airport Beach				500		
RCB170711-S-1	Canoe Beach				500		
RWA170711-S-1	Wahikuli				500		

marie Schroeden 71,,117

Team/ Session:	Samplers (Initials):	Instrument #	Probe #s	pН	DO	Salinity	Date:	1st Sample Time	End Sample Time:
Polanui	Lead: RB	40d: 2	40d:	3	2	2	7/12/17	0815	1610
24	Notetaker: 663	2100q: Z							

Least on Name	Time	Temp	Sal	DO	DO Sat	pН	Tour	bidity (N	CTD	Waves	Wind		People		TSS?
Location Name	Time	(C)	(ppt)	(mg/L)	(%)	pn	1 ur	bidity (N	10)	vvaves	wind	Swim	Beach	Camp	155 (
505 Front St PFF PFF170712	0815	27.1	34.5	5.66	86.1	8.06	1.81	2,29	2,31	0	/	0	1-5	0	
Lindsey Hale PLH PLH170712	0835	27.1	34.1	5.47	82.9	8.06	3,93	4.98	5.09	. 0	1	0 1	1-5	1-5	
Lahaina Town PLT PLT170712	0855	28.2	33.7	5,26	81.1	8.04	6.09	6.03	6.22	0	0	5-10	1-5	1-5	
Puamana PPU PPU170712	0920	27.6	34.3	6.50	99.5	8.16	1.22	1.04	1.15	1	1	0	0	0	
Launiupoko OLP OLP170712	0940	27.8	34.5	6.53	100.5	8.11	2.16	2.11	2.10	1	2	5-10	5-10	0	
Olowalu Pier OSF OSF170712	1000	27.8	34.4	6.24	95.9	8,07	1.47	1.84	1.64	0	2	0	1-5	0	

Most recent low tide time/height (Lahaina station):	High 4:58 a.m; Low 10:54 a.m.
Moon Day (from new)	19
Cloud Cover (1-8):	2
Rain Conditions (last 24 hours)	NONE
Wind conditions (Trades? Kona?):	WENT LOT TRADES
Streams flowing? (Y/N)	MAT PEE

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

2 DOGS IN WATER AT PLT

I EXTRA TURBIDITY READONG TAKEN

AT PLH OVE TO LARGE SPREAD

STREAM FLOWING AT PFF, (NO OTHER 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: 0, 1-5, 5-10, 10-20, 20-40

	Blank	Low	Med	High
Standard		6.60	60.0	567
Pre	.10	6.61	59.6	564
Post	.07	6.70	59.9	563

	Total # of samples	Relinquished To::	Contact
Sediment	60	LHS	GEORGE BURNETE
Nutrient	6	LHS	GEORGE BURNETTE
Bacteria	700	1	
ignature (Lead);	1/2	0	

WATER QUALITY SAMPLING:

Team:	Samplers:	Date:	Start time:	Finish time:
Polanui - 24	1B, KH, 663	7/12/17	0800	1030

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
PFF170712-N-1	505 Front St	Þ		0815	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PLH170712-N-1	Lindsey Hale	Ä		0835	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PLT170712-N-1	Lahaina Town	M		0855	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
PPU170712-N-1	Puamana	M		0920	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OLP170712-N-1	Launiupoko	Ø		0940	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OSF170712-N-1	Olowalu SF	赵		1000	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							
PFF170712-S-1	505 Front St				500		
PLH170712-S-1	Lindsey Hale				500		
PLT170712-S-1	Lahaina Town				500		
PPU170712-S-1	Puamana				500		
OLP170712-S-1	Launiupoko				500		
OSF170712-S-1	Olowalu SF				500	/	

an Barby

Team/ Session:	Samplers (Initials):	Instrument #	Probe #s	pН	DO	Salinity	Date:	1 st Sample Time	End Sample Time:
Olowalu	Lead: GGB	40d:	40d:	4	1	3	7/13/17	7:18	9:01
24	Notetaker: MG	2100q:							101

Location Name	Time	Temp	Sal	DO	DO Sat	рН	Tur	skidite (NI	PID.	Waves	Wind	People			Tree 9
Location (Name	Time	(C)	(ppt)	(mg/L)	(%)	pm	141	bidity (N'	10)	waves	Wind	Swim	Beach	Camp	TSS ?
Martin Hale OPM OPM170713	7:18	26.6	34.6	5.22	78.8	8.00	1.34	1.62	1.54	0	0	0	0	0	
Camp Olowalu OCO OCO170713	7:39	26.9	34.5	6.13	93.1	8.08	2.47	2.46	2.67	0	1	0	0	0	
Mile Marker 14 OMM OMM170713	7:55	26.9	34.4	5.77	87.6	8.04	3.58	3.70	4.03	0	i	9 9	;-10	0	
Ukumehame OUB OUB170713	8:14	27.1	34.4	6.19	94.3	8.09	2.37	2.32	2.45	0	1	10-20	1.5	0	
Papalaua Beach OPB OPB170713	3:31	27.3	34.5	6.91	105.5	8.12	6.16	5.98	5.49	Q	0	0	0	O	
Papalaua Pali OPP OPP170713	8:48	26.7	34.2	6.63	100.2	8.13	2.62	2.01	2.15	1	0	0	5-10	0	

Most recent low tide time/height (Lahaina station):	High 5:45 a.m.; Low 11:18 a.m.
Moon Day (from new)	20
Cloud Cover (1-8):	0
Rain Conditions (last 24 hours)	NONE
Wind conditions (Trades? Kona?):	THAPES
Streams flowing? (Y/N)	

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

A Lot of SURFAY AT OUD (UKUMEHAME)

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, 1-5, 5-10, 10-20, 20-40

	Blank	Low	Med	High
Standard		5.40	56.0	608
Pre	0.06.	5.38	56.2	608
Post	0.07	5.37	56.2	606
	Total # of samples	Relinquist	ned To::	Contact
Sediment	0	LH	S	GENLE BUNDET
Nutrient	6	LH	S	GEORGE BURNET
Bacteria	0			GEORGE BURNETTE

Signature (Lead):

Sel leka

ONSERVENS SOFFA DE LA SOTA, ANNALEA FINE

WATER QUALITY SAMPLING:

Team:	Team: Samplers:		Start time:	Finish time:		
Olowalu - 24	60B MG	7/13/17	0700	0915		

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
OPM170713-N-1	Martin Hale	\S		7:18	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OCO170713-N-1	Camp Olowalu	d		7:39	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OMM170713-N-1	Mile Marker 14			7:55	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OUB170713-N-1	Ukumehame	<u>e</u>		8:14	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPB170713-N-1	Papalaua Beach	<u> </u>		8:31	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
OPP170713-N-1	Papalaua Pali	A		8:48	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							
OPM170713-S-1	Martin Hale				500		
OCO170713-S-1	Camp Olowalu				500		
OMM170713-S-1	Mile Marker 14				500		
OUB170713-S-1	Ukumehame				500		
OPB170713-S-1	Papalaua Beach				500		
OPP170713-S-1	Papalaua Pali				500		

So Illa in

Team/ Session:	Samplers (Initials):	Instrument	# Probe #s	pН	DO	Salinity	Date:	1st Sample Time	End Sample Time:
NR2R	Lead: Cathy	40d:	40d:	4	1	3	7/14/17	8:00	10:45
24	Notetaker: Ananda Q5	2100q:							

N. N.	Ti	Temp	Sal	DO	DO Sat	-11	T	Lidia. Ou	ELD	Wasse	XXX a		People		TSS ?
Location Name	Time	(C)	(ppt)	(mg/L)	(%)	pH	Tur	bidity (N	10)	Waves (f+)	Wind	Swim	Beach	Camp	135 :
Honolua Bay RHL RHL170714	8:00	26.4	33-8	6.40	96.2	8.13	0.52	0.78	0.66	0	ι	2.	17	0	
Fleming North RFN RFN170714	8:41	26.5	34.3	6.74	101.3	8.15	1.81	1.41	1.39	1-2	B4 BA	0	23	6	
Oneloa Bay RON RON170714	9:10	26.4	34.6	6.73	101.5	8.16	0.84	0.93	0.91	1/2	15mph	6	9	0	
Kapalua Bay RFS RFS170714	9:32	27.4	31.4	6.51	97,9	8.08	048	0.87	0.44	0	2-5h	60	60		
Ka'opala Bay RKO RKO170714	9:59	27.3	34.3	5.85	89.4	8.09	1.70	1.72	1067	0	1-2 mph	0	١	٥	
Kahana Vill RKV RKV170714	10:25	27.7	33.9	531	81.3	8.05	1.82	1.89	1.77	0	0	6	12	0	

Most recent low tide time/height (Lahaina station):	High 6:47 a.m.; Low 11:57 a.m.
Moon Day (from new)	21
Cloud Cover (1-8):	1
Rain Conditions (last 24 hours)	no rain
Wind conditions (Trades? Kona?):	winD/kona
Streams flowing? (Y/N)	No

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

-2 Boats at RHL
- RFS - Parking lot foll - used handicap
RFS - NUTRIENT got reg. sea water, before syringet
filter

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, 1-5, 5-10, 10-20, 20-40

rbidity Verifi	cation			
	Blank	Low	Med	High
Standard		5.40	56.0	608
Pre	0.12	5.37	56.1	608
Post	0.04	5.34	56.2	606

	Total # of samples	Relinquished To::	Contact
Sediment	0	LHS	adlum Marue
Nutrient	6	LHS	Colue Marwel
Bacteria	6		Carlina Mogu

WATER QUALITY SAMPLING:

Team:	Samplers:	Date:	Start time:	Finish time:	
NR2R - 24	Cathy Awards, Jim	7/14/17	7 430	0:35	

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
RHL170714-N-1	Honolua Bay	র		8;00	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RFN170714-N-1	Fleming North	g		8:41	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RON170714-N-1	Oneloa Bay	. IZî		9:10	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RFS170714-N-1	Kapalua Bay	G,		9.32	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKO170714-N-1	Ka'opala Bay	O'		9:59	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
RKV170714-N-1	Kahana Vill	g		10:25	125	Washed, rinsed syringes; acid washed bottles; 0.7 um filters; washed rinsed filter holders	
Sediment							
RHL170714-S-1	Honolua Bay				500		
RFN170714-S-1	Fleming North				500		
RON170714-S-1	Oneloa Bay				500		
RFS170714-S-1	Kapalua Bay				500		
RKO170714-S-1	Ka'opala Bay				500		
RKV170714-S-1	Kahana Vill				500		

Latheren Maxwell