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



Session No: Verifiers (pre-sampling): Pre Date: Pre Time: Verifiers (post-sampling): Post Date: Post Time: 73 J. STRICKLAND 7/6/20 1:50 pm J. Strickland 7/10/20 11/00

QA/QC Check	Inst #	Probe #	Last Cal Date			RE: tion Value		OST: tion Value	Acceptable Range	Comments/ Notes	QA?
Temperature	NIST	n/a	n/a	Std Val	<u>NIST</u> 33.5℃	NIST 33.6c	NIST 30.8°C	<u>NIST</u>	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
		3	n/a		33.0		30,3	加州教育			
	1	1	n/a			324					
Salinity			3 months	Std Val	Tap water	Salin Std 71 Wate 74. Appt	Tap water	Salin Std 1/21 date 34.2 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	1	3	6/15/20	0	.60	34.6	0.61	34.7			
	1	ı			0.55	33.2					
Dissolved Oxygen			1 year	Std Val	10	0%	10	0%	± 5 %		
	1	16	m)		10)	3	161.	4		wm Probe	
	1	1(sm			97,	3				sm Probe	
рН			3 weeks	Std Val	pH 7.00	pH 10.00	pH 7.00	pH 10.00	± 0.1 pH of pH std value	Compare to Manufacturer pH Std value on bottle	
	1	5	7/6/20		7.02	9,95	7.03	9,99			
		5	7/6/20		7.00	9.97					
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 5.45 NTU	BLANK <0.1	LOW 1-10 5. 45 _{NTU}	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
	1	n/a	6/15/20		0.07	5.48	0.00	5.40			
		n/a		N. Committee							

QA:

* Are pre- and post within one week?

* Delay times are ok?

* Other equipment issues?

Team	R2RS	Samplers	Strickland, J	Meters and Probes ID	
Session	73	(Last Name, 1st Initial)		HQ40d:	2100Q:
Date	7/7/2020			pH: 5 DO:	Salinity: 3

Streams	Time		Salinity	Dissolved	l Oxygen	nН		Turbidity		Peop	le (within 1	00 ft)
Flowing (Y/N)	(of collection)	Temp (°C) variable	(ppt) 30-35 normal	(mg/L)	(%) 85-105 normal	8-8.3 normal		(NTU)		water	beach	camp
N	8:05	26.3	35.6	6.58	99.5	80.8	3.90	3.91	3,76	1	0	0
N	8:39	26.1	31.5	6.74	99,4	8.14	1.80	1,39	1.71	6	0	0
2	9:10	26.0	36.6	6.37	96.4	8,11		7.22	7.00		_	0
N	9:40	26.8	34.9	6.80	103.3	8.17	101	6.96	6.66			0
~	9:58	26.5	34.9	6.76	1.501	8.18	1,84	1,55	1,56	0	3	ð
	(Y/N)	Flowing (of collection) N 8:65 N 8:39 N 9:10 N 9:40	Flowing (of collection) (of co	Flowing (of collection) (°C) variable (°C) v	Streams Flowing (of (°C) variable (°C) variable (mg/L) N 8:05 26.3 35.6 6.58 N 8:39 26.1 31.5 6.74 N 9:10 26.0 36.6 6.37 N 9:40 26.8 34.9 6.80	Flowing (y/N) collection) Temp (Ppt) 30-35 (mg/L) 85-105 normal N 8:05 26.3 35.6 6.58 99.5 N 9:10 26.0 36.6 6.37 96.4 N 9:40 26.8 34.9 6.80 103.3	Streams Flowing (of (°C) variable (°C) varia	Streams Flowing (of (Y/N)) collection) Streams Flowing (Y/N) Collection (Ppt) 30-35 (mg/L) 85-105 (mg/L) 8-8.3 normal N 8:65 26.3 35.6 6.58 99.5 8.08 3.90 N 9:10 26.0 36.6 6.37 96.4 8.14 1.86 N 9:40 26.8 34.9 6.80 103.3 8.17 6.76 N 9:50 2/5 2/5 2/5 2/5 2/5 2/5 N 9:50 2/5 2/5 2/5 2/5 2/5 2/5 2/5 N 9:50 2/5 2/5 2/5 2/5 2/5 2/5 2/5 2/5 2/5 N 9:50 2/5	Streams Flowing (of collection) Temp (of collection) (Ppt) (Streams Flowing (of collection) (°C) variable (°C) variabl	Streams Flowing (of collection) Temp (PD) 30-35 normal (PC) variable normal (PC) variable normal (PC) variable (PC) variable normal (PC) variable normal (PC) variable (PC) variable (PC) variable normal (PC) variable (PC) varia	Streams Flowing (of collection) (PC) 30-35 normal (mg/L) 85-105 normal (NTU) water beach N 8:05 26.3 35.6 6.58 99.5 80.08 3.90 3.91 3.76 1 N 8:39 26.1 31.5 6.74 99.4 8.14 1.80 1.39 1.71 6 N 9:10 26.0 36.6 6.37 96.4 96.11 2.03 2.22 2.00 0 N 9:40 26.8 34.9 6.80 103.3 6.17 6.76 6.96 6.66 0

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.

TURBIDITY VER	RIFICATION			
	Blank (must be <0.10)	Low	Med	High
Standard	0.00	5.45	56, 2	591
Pre-sampling	0.07	5.42	56.0	590
Post-sampling	0.08	5.47	56.2	589

CHAIN OF CUS	STODY INFORMATION	ON	
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	NMS	J. Strickler
Bacteria	×-		-

Signature (Team Lead):	Printed Name:
Com Stra	Jomes Strickland

Team	R2RS	Samplers	Strickland, J
Session	73	(Last Name, 1st Initial)	0,17,0,1,0,1
Date	7/7/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
RNS200707-N-1	Napili Bay	T d		2:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RPO200707-N-1	Pohaku	d d		9:39	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKS200707-N-1	Kaanapali Sh	d		9:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RCB200707-N-1	Canoe Beach	•		9:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RWA200707-N-1	Wahikuli	r _Z		9:58	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Sediments			
		500 ml	

1 8 3 - \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Geam Lead):	Printed Name:	
James Officially	-8/2	James Strickland	

Team	Polanui	Samplers	HARRIS, K
Session	73	Samplers (Last Name, 1st Initial)	STRICKIAND,
Date	7/08/2020		OTICICALIANO,

au, K	Meters and Probes	ID
ICKIAND,)	HQ40d:	2100Q:
	pH: 5 DO	O:] Salinity: 3

Streams	Time		Salinity						People (within 100 ft)			
Flowing (Y/N)	(of collection)	Temp (°C) variable	(ppt) 30-35 normal	(mg/L)	(%) 85-105 normal	8-8.3 normal		Turbidity (NTU)		water	beach	camp
У	8:15	26.2	36,0	6.26	94.8	8.05	2.96	3.05	3,35	0	15	0
N	8:42	26.4	35.5	6.13	92.9	8.07	8,70	10.9	9.75	0		0
/	9:05	27.0	35.8	5.8						0		6
_	9:40	26.6	36.6	6.78							0	0
	(Y/N)	Flowing (of collection) y 8:15 N 8:42 9:05	Flowing (of collection) (°C) variable y 8:15 26.2 N 8:42 26.4 9:05 27.0	Streams Flowing (of (C) variable 100	Streams Flowing (of collection) Temp (PC) 30-35 normal (mg/L) V 8:15 26.2 36.0 6.26 V 8:42 26.4 35.5 6.13 9:05 27.0 35.8 5.8	Flowing (of collection) (°C) variable (°C) 30-35 normal (mg/L) 85-105 normal (Y/N) 8:15 26.2 36.0 6.26 94.8 N 8:42 26.4 35.5 6.13 92.9 9:05 27.0 35.8 5.8 88.9	Streams Flowing (of collection) Temp (PC) 30-35 normal (Mg/L) 85-105 normal (Mg/L) 85-105 normal N 8:42 26.4 35.5 6.13 92.9 8.05	Streams Flowing (of collection) Temp (°C) variable (°C) va	Streams Flowing (of collection) Temp (PDT) (PDT) 30-35 normal (PC) variable (PC) varia	Streams Flowing (of collection) Temp (PD) (PD) 30-35 normal (PC) variable Normal (PC) variabl	Streams Flowing (of collection) Temp (Ppt) 30-35 normal (Ppt) 8-8.3 normal (Ppt) 8-8.3 normal (Ppt) (NTU) (NTU) (NTU) (NTU) (NTU) (NTU)	Streams Flowing (of collection) Y 8:15 26.2 36.0 6.26 94.8 8.05 2.96 3.05 3.35 0 15 N 8:42 26.4 35.5 6.13 92.9 8.05 5.34 5.35 5.23 0 0 9:05 27.0 35.8 5.8 88.9 8.05 5.34 5.35 5.23 0 0

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.

TURBIDITY VER	RIFICATION			N. Vesta
	Blank (must be <0.10)	Low	Med	High
Standard	0.08	5.45	56.2	591
Pre-sampling	0.08	5.43	55.9	590
Post-sampling	0.07	5.39	55.9	589

CHAIN OF CUS	STODY INFORMATI	ON	
	# of samples	Relinquished to	Contact
Sediment	_		_
Nutrients	7	The NMI	J Charlela
Bacteria		-1113	U-U-TICKION

ignature (Team Lead):	Printed Na	ame:	
Gm Ge	Janu	Strick	land

Team	Polanui	Samplers	Horry, K
Session	73	(Last Name, 1st Initial)	Stricklond, J
Date	7/08/2020		

Sample ID Location Name		nple ID Location Name		Storm sample?	Time	Volume	Protocol Notes	Comments
505 Front St	r d		8:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters			
Lindsey Hale	td/		8:42	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters			
Lahaina Town	t d		9:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters			
Olowalu Pier				125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters			
	505 Front St Lindsey Hale Lahaina Town	Lindsey Hale Lahaina Town Olowalu Pier	Lindsey Hale Lahaina Town Location Name taken? sample?	Lindsey Hale Lahaina Town Lahaina Town Location Name taken? sample? Rinte Rinte	Sos Front St Lindsey Hale Lahaina Town Downly Pier Laken? sample? Time Volume Volume 125 ml 2 125 ml 125 ml	Sob Front St D		

Sediments			
		500 ml	

Signature (Team Lead):	Printed Name:	
Ja Shu	- James Strickland	

Team	Olowalu	Samplers	Stricklond, J	Meters and Probes ID	
Session	73	(Last Name, 1st Initial)		HQ40d:	2100Q:)
Date	07/9/2020			pH: 5 DO:	Salinity: 3

	Streams	Time		Salinity	Dissolve	d Oxygen	pH Turbidity				Peop	le (within 10	00 ft)
Location Name Sample ID	Flowing (Y/N)	(of collection)	Temp (°C) variable	(ppt) 30-35 normal	(mg/L)	(%) 85-105 normal	8-8.3 normal		(NTU)		water	beach	camp
Martin Hale OPM200709	N	7:09	25.8	36.7	5.95	90.1	8.01	6.18	6.00	6.67	6	0	0
Camp Olowalu OCO200709	N	7:35	25.1	36.8	6.21	94.5	8.07	7.87	2.85	2.97	0	15	5
Ukumehame OUB200709	N	7:53	25.6	36.7	6.61	99.5	8.08	79.7	79.9	793	1	0	0
Papalaua Beach OPB200709	N	8:15	25.4	36.8	6.80	107.1	8.08	4.45	4.19	4.13	Ô	9	0
Papulua Pali OPP200709	7	8:29	25.9	36.6	6.72	101,5	21.8	11.3	11.7	10.5	3	15	0

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.

<u>DO NOT TAKE NUTRIENT SAMPLES THIS EVENT</u> (Will Only Be Taken Quarterly)

OPP- Surf comp

TURBIDITY VER	RIFICATION	O COLOR			
	Blank (must be <0.10)	Low	Med	High	
Standard	0.08	5.45	56.2	591	
Pre-sampling	0.08	5.42	56.0	589	
Post-sampling	0.08	5.44	55,9	589	

CHAIN OF CUSTODY INFORMATION						
	# of samples	Relinquished to	Contact			
Sediment	0	N/A	N/A			
Nutrients	0	N/A	N/A			
Bacteria	0	N/A	N/A			

Signature (Team Lead)	Printed Name:
m. Sr	Jones Strickland

Team	Olowalu	Samplers	Strickland, J
Session	73	(Last Name, 1st Initial)	
Date	07/9/2020		

Sample ID Location Name		Storm sample?	Time	Volume	Protocol Notes	Comments
OPM200709-N-1 Martin Hale				125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
		Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters				
Ukumehame				125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Papalaua Beach				125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
Papulua Pali				125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
	Martin Hale Camp Olowalu Ukumehame Papalaua Beach	Martin Hale Camp Olowalu Ukumehame Papalaua Beach	Martin Hale	Martin Hale	Martin Hale	Martin Hale

Sediments			
		500 ml	

Signature (Team Lead):	Printed Name:
Chan Stal	Jones Strickland

Team	R2RN	Samplers	Strickland, J	Meters and Probes	, ID	
Session	73	(Last Name, 1st Initial)		HQ40d:)	2100Q	: 1
Date	7/10/2020			pH: 5 I	00: 1	Salinity: 3

	Streams	Time		Salinity	Dissolved	d Oxygen	pН		Turbidity		Peop	le (within 1	00 ft)
Location Name Sample ID	Flowing (Y/N)	(of collection)	Temp (°C) variable	(ppt) 30-35 normal	(mg/L)	(%) 85-105 normal	8-8.3 normal		(NTU)		water	beach	camp
Honolua Bay RHL200710	~	8:10	25.9	35.7	8.54	98.5	8.13	1.32	1.03	1.37	0	i	O
Oneloa Bay RON200710								,	,,,,,				
Kapalua Bay RFS200710					. 1.3								
Ka'opala Bay RKO200710	N	9:16	25.9	35.9	6.42	96.7	8.08	7.41	8.05	7.81	0	0	Ó
Kahana Village RKV200710	7	9:27	26.1	35.9	5.99	\$ 90.5		7.93		8.26	Ò	0	٥

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.

RHL- Stream bed completely dry.

RON/RES- NOT able to access.

Road into Kapalua backed up for about a mile in both direction due to The RITZ giving away Food baskets.

Lower Rd. Closed for Construction at Narili Shores.

TURBIDITY VERIFICATION								
	Blank (must be <0.10)	Low	Med	High				
Standard	0.08	5.45	56.2	591				
Pre-sampling	6.08	5.40	56.1	589				
Post-sampling	0.00	5.40	55.9	589				

CHAIN OF CUSTODY INFORMATION						
	# of samples	Relinquished to	Contact			
Sediment		-	-			
Nutrients	3	NMS	J. Strichland			
Bacteria	-	-	-			

Printed N	tame:
Jane	Strill
	Janes

Team	R2RS	Samplers	Strickland, J
Session	73	(Last Name, 1st Initial)	
Date	7/10/2020		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
utrients		,					
RHL200710-N-1 Honolua Bay		PQ.		8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RON200710-N-1	Oneloa Bay	Oneloa Bay D Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters					
RFS200710-N-1	Kapalua Bay				125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKO200710-N-1	Ka'opala Bay	4		4:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
RKV200710-N-1	Kahana Village	ф		9:27	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
				-1, 6 (ooties, v.2 uii disposable filters	

Sediments					
			500 ml		
		5	500 ml		
		5	500 ml		
		5	500 ml		

Signature (Team) Lead):	Printed Name:	c . 1
(p-31)	- James	Strickland