## FREED EQUIPMENT VERIFICATION (PRE/POST A WEEKLY SAMPLING):



Post Time: Post Date: Verifiers (post-sampling): Verifiers (pre-sampling): Pre Date: Pre Time: Session No: 22 11 11 11/14/22 9:35 10:00 Y.St-Louis, M. Sharpe 89 Y.St-Louis, M. Sharpe

QA/QC Check	Inst#	Probe	Last Cal Date			tE: ion Value	PO Verificat	ST: ion Value	Acceptable Range	Comments/ Notes	QA
emperature	NIST	ng i	NIST Exp.	Std Val	NIST 25-7 <sub>C</sub>	NIST 25.2 <sub>C</sub>	78.7 <sub>°C</sub>	NIST C	±0.6°C of NIST	Compare to NIST Std value in tap water	
	1	3	6/20/2028 6/28/2028		25.8	25.3	2.8.7				
Salinity			3 igailty	Std Val	Cap water 0-13	9/29/22: 33.7 PS	Tap water	Salin Sid 9[29[29] 33.7ppt	± 1 ppr	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	I.	3	10/24/2022 10/24/2022		0.19 33.2 0.19 33.1 Mg 0.18 33.4 —						
Dissolved Oxygen			Lyear	Std Val	100条		100%		±5%		
	1	2	1 12/16/2021 94.8 96.1								
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 Manuflicturer pH Std value on bottle	
	1	4 5	11/14/12 10/14/2012 11/14/22 10/20/2022		7.00	9.99	7.01	10.00		PHT EXP 3 (2023) PHY EXP 12 2023	
Turbidity			3 months	Std Val	BLANK -d0.1	LOW 1-10 NTU	BLANK <0.1	LOW I-10 NTU	±0.18 NTU Low 1-10	Compare to Gill LOW 1-10 Std Calibration value	
	2 3	1187H	11/14/22		6. 65 6. 67	6.75	0.05	6.89		Low: 6.73 Low: 6.91 calibrated	

\* Carner equipment issues?

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



Protection and the	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
Session No:	verners (pre-sampung).		THE PARTY OF THE P	The state of the s	1111112	10:00
89	Y.st-Louis, M. Sharpe	11/14/22	9:35	Yist-Louis, M. Sharpe	23/11/11	10.00

QA/QC Check	Inst#	Probe	Last Cal Date		PR Verificati			ST: ion Value	Acceptable Range	Comments/ Notes	QA
conperature	NIST	n/a	NIST Exp. Date	Std Val	NIST 25.7 <sub>°C</sub>	25.2 <sub>C</sub>	NIST <b>73.7</b> <sub>℃</sub>	NIST C	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	1	3	6/20/2024		25.8	nig St.	2.8.7				
	Î	2	4/20/202A	Í		25.3					
Salinity	,,		5 months	Std Val	Fap water 0-13	9/29/22 33.7	1'ap water 0-13	Salin Std 9[29]292 33.7 ppt	± 1 ppt	Tap water - compare pre & post values Sulmity Std - compare to value on Salmity Std bottle	
	1	3	10/24/2022	16	0.19	33.2	0.19	33. M			
	1	2	10/24/2022		0.18	33.4	_	55.1			
Dissolved Oxygen			) year	Std Val	10	0%	10	0%	±5%		
	1	t	12/16/2021		94	.જ	96	.t			
	1	2	12/16/2021		96	.3					
рН			3 works	Std Val	pH 7.00	pH 10:00	gāl 7.00	pH 10.01	± 0.1 pH of pH aid value	Compute to Munufacturer pH Std value on bottle  OH 10 Exp 3 2013	
	T	4	10/14/22		7.00	9.99	-	-		PH 10 EXP 3/2023	
		5	11/14/22		7.00	10.03	7.01	10.00		SHA ETO 15 5053	
Turbidity			3 months	Std Val	BLANK 40.1	LOW 1-10 NEU	BLANK <0.1	LOW 1-10 NIU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
	2	m/a.	11/14/22		6.05	6.75		9-		Low: 6.13	
	3	non	11/14/22		0.07	6.92	0.05	6.89		Low: 6.91	

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

\* Other equipment rolles!

NMS Turbitity meters re-calibrated

Team Kamaole Samplers
(Last Name, 1st Initial)

Date 11/15/2022

K. McHugh H. Hecht S. Graves

Meters and	Probes 10		
HQ40d; I		21000	3.
nH:5	DO: I		Salinity: 1

		-141		Salinity	Dissolved	Oxygen	1400	SANS HARRING	People (within 100 ft)		
Location Name Sample ID	Freshwater Flowing (Y/N)	Time (of collection)	(°C) variable	(ppt) 30-35 normal	(mg/L)	(%) 85-105 normal	pH 8-8.3 normal	Turbidity (NTU)	water	beach	camp
Kalepolepo North NKN221115	N	7.51	248	34.1	6.27	91.7	8.15	3.25 5.17 3.99	1	18	0
Waipuilani Park KWP221115	N	9:13	24.0	33.3	6.18	89.0	8.12	8.58 8.57 8.39	0	O	I
Kibei South KKS221115	N	8:30	23.9	33.7	6.09	87.5	8,13	5.84 6.10 5.13	4	7	0
Kalama Park KKP221115	N	8=48	25.2	34.7	6.26	92.8	8.14	13.3 13.0128	2	OXPU	0

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

NKN: High tide, windy, a tiny waves. 2 causes just got out of waterand are on the brack. A Turbidity #4 3.51@NKN

Kup: high tide, some smell waves, wind

KKS: Small waves, wholy, a few people swimming

KKP: 2 on beach moved into water

TURBIDITY VER	UFICATION				
	Blank Imusi be 40.001	Low 201-0187	Med (= 100)	High	
Standard	0.07	6-91	60.1	608	
Pre-sampling	0.11	6.88	60.2	609	
Post-sampling	0.09	6.97	60,1	609	

CHAIN OF CUS	STODY INFORMATIO	)N	
	# of samples	Relinquished to	Contact
Sediment	1+1	NMS	
Nutrients	4	Amo	ym
Bacteria	-:		0

Signature (Team Lead):

Printed Name:

Ylenia St-Cours

Sites with potential for freshwater flow: All

Team	Kamaole	Samplers	k. Mchugh
Session	89	(Last Name, 1st Initial)	H. Hecht
Date	11/15/2022		S. Graves

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN221115-N-I	Kalepolepo North	Ø	D	7:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP221115-N-1	Waipuilani Park	Ø	D	8:13	(25:m1	Washed, rinsed syringes, acid washed bottles, 0.2 um disposable filters	
KKS221115-N-1	Kihei South	e	D	8:30	125 ml	Washed, rinsed syringes; ocid washed bottles, 0.2 um disposable filters	
KKP221115-N-1	Kaluma Park	Ø		8:48	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 am disposable filters	

Sediments		- 1	
	à <u>i</u>	0	500 ml
	О	П	500 ml
	D	D	500 ml
		D	500 ml

Signature (Team Lead):	Printed Name:
4mano	Y. St-Louis
or ye	1

Team Wallea-Makena Samplers (Lust Name, 89 Session 1st Initial)

11/16/2022

Date

Bob Soce 322 Marco Martella Dean Bentley

Meters and Probes ID HQ40d: 1 21000:2 DO: 1 Salinity: 1 pH-5

	20 00 00		1112	Salinity	Dissolved	Oxygen	-	(A. 1598A)	Peopl	e (within l	00 ft)
Location Name Sample ID	Freshwater Flowing (Y/N)	Time (of collection)	Temp (°C) variable	(ppt) 30-35 normal	(mg/L)	(%) 85-105 normal	pH 8-8.3 normal	Turbidity (NTU)	water	beach	camp
Cove Park KCP221116	N	8:01A	25,7	34.3	5.93	88.1	8.12	3.70 5.59 5.74	1	8	4
S Maluaka Beach MMB221116	N	8:334	25.8	35.4	6.48	97.1	8.17	0.79 0.75 0.75	2	11	0
Ahihi Kinan North MAN221116	N	8:56A	25.8	35.2	6.62	99.0	8.0%	0.56 0.90 0.74	3	5	Ø
Ahihi Kinau South MAS221116	N	9:124	25,9	35,4	6.12	91.8		0.59 0.60 0.67		28	Ø

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

TURBIDITY VERIFICATION							
	Blank (musi be <0.10)	Low	Med e- 180	High (+= 18)			
Standard	0.09	6.91	60.1	608			
Pre-sampling	0.114	6.84	60.4	610			
Post-sampling	0.09	4.86	60.5	608			

	# of samples	Relinquished to	Contact
Sediment	+	360	+
Nutrients	4	NM5	Sharpe
Bacteria	120	(4)	20

Signature (Leam Lead);

Printed Name:

Sharpe

Sites with potential for freshwater flow: Cove Park

Team	Wailea-Makem	Samplers	Bob Sousa	
Session	89	(Last Name, Ist Initial)	Dean Bentley	
Date	11/16/2022		Marco Martella	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KCP221116-N-1	Cove Park	2	П	8:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB221116-N-1	S Maluaka Beach	×		8:33	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN221116-N-1	Ahihi Kinau North	8	m	8.56	125 ml	Washed, rinsed syringes, acid washed bottles; 0.2 am disposable filters	
MAS221116-N-1	Ahihi Kinau South	Z		9:12	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Sediments				
	50	D	500 ml	
	0	О	500 ml	
		10	500 ml	
	П	П	500 ml	

Signature (Team Lead):	Printed Name:	
	M Sharpe	
/ ~		

Team	North Kihei	Samplers	AWOLF & Ba	hr 21/6/1 1	Meters and	Probes ID		
Session	89	(Last Name, 1st Initial)	Awar, 4 pa	hr, XI religional	HQ40d: 1		2100Q	3
Date	11/17/2022		L Manuell		pHI: 5	DO: I		Salinity: 1

	22 - 22	24		Salinity	Dissolved	Oxygen	-777	217-00045-07	Peopl	e (within l	00 ft)
Location Name Sample ID	Freshwater Flowing (Y/N)	Time (of collection)	Temp (°C) variable	(ppt) 30-35 normal	(mg/L)	(%) 85-105 normal	5-105 normal	Turbidity (NTU)	water	beach	camp
Maalaea Harbor NMH221117	N	7:45	25.4	34.8	5.85	867	8.12	1.61 1.82 150	0	0	0
Manlaca Condos NMC221117	N	8119	25.5	34.0	6.60	97.5	8.03	3.11 3.05 2.96	0	0	0
Haycraft Park NHP221117	N	8:33	25.8	35.D	6.42	95.9	8.13	5.22 7 534	0	1	D
Kealia Pond NKP221117	N	8155	263	35.5	6.54	98.7	6.18	1.33 436 1.26	0	0	0
Kihei Canoc Club NKC221117	N	9:14	26.2	35.1	6.49	97.9	8.17	#57 3.83 4.15	0	6	0

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

elid furbidity vaitication twice on the low
sample with exact some results
\*Issue with turbidity blank
Team firgot to read blank
Redid Arrit turbidity points at Harbor
Blank would not read 20.17-did all
troubles bootine
NMC-churned up with shorebreak
algae in sample bucket

NHP 44 Terb reading + NKP + NKEGX

Sites with potential for freshwater flow: Maalaea Harbor, Maalaea Condos, Kealia Pond, Kihei Canoe Club

TURBIDITY VER	IFICATION			
	Blank (must be <0.10)	Low (#1-11.18)	Med (2)-1,80)	High (+/-18)
Standard	0.09	6.86	60.5	608
Pre-sampling	0.17	7.09	60.2	610
Post-sampling	0.05	6.89	60.3	608

CHAIN OF CUS	STODY INFORMATIO	)N	
	# of samples	Relinquished to	Contact
Sediment	-		
Nutrients	.5	NWZ	Liz Yannel
Bacteria	+1		-

ignature (Team Lead):		Printed Name:				
Lin	Youll	liz	yannell			
	_					

Team North Kihei	Samplers	A. Wolf	L. Yannell
Session 89	(Last Name, 1st Initial)	F. Bahr	
Date 13/17/2022	1 3 11 11 11 11 11	A. Helgeland	

Sample 1D	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
lutrients							
NMH21117-N-1	Maalaca Harbor	ø	D	7:45	125 ml	Washed, rinsed syringes; acid washed bottles: 0,2 um disposable filters	= =
NMC221117-N-1	Manlaea Coridos	ď	П	8:19	125 ml	Washed, rimsed syringes, acid washed bottles; 0.2 um disposable filters	
NHP221117-N-1	Haycraft Park	ø	D	8:33	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP221117-N-1	Kealia Pond	D/		8:55	125 m)	Washed, rinsed syringes, acid washed bottles; 0.2 um disposable filters	
NKC221117-N-1	Kihei Canoe Club	ø	Ш	9:14	(25 m)	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Sediments				
	П		500 ml	
	100	Ø	500 ml	
	D	П	500 ml	
	Ø	O	500 ml	

Signature (Team Lead):	Printed Name:	
Umaral	V. St-Louis	
1117		