

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
88	y. St-Louis	10/24/22	945	y. St-Louis	10/27/22	9:30

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value		POST: Verification Value		Acceptable Range	Comments/ Notes	QA?
Temperature	NIST	n/a	NIST Exp. Date	Std Val	NIST	NIST	NIST	NIST	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
2	1	6/28/2024			27.6 °C	27.3 °C	29.2 °C	29.2 °C			
2	2				27.7		—				
						27.3		29.4			
Salinity			3 months (5/31/22)	Std Val	Tap water	Salin Std 9/29/22 date 33.7 ppt	Tap water	Salin Std 9/29/22 date 33.7 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
2	2	10/24/22			0.13	33.3	0.13	33.4		was supposed to be calibrated on 8/31/22	
2	3	10/24/22			0.19	33.3	—	—			
					0.20	33.3					
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
2	1	12/16/21			96.6		—				
2	2	12/16/21			98.7		95.4				
pH			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	
2	4	10/6/22			7.03	10.04	6.98	9.96		Read twice same numbers.	
2	5	10/6/22			7.02	10.02	—	—			
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 NTU	BLANK <0.1	LOW 1-10 NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
1	1	n/a	8/01/22		—	—	—	—		could not get it to turn on	
2	2	n/a	8/01/22		0.06	6.01	0.06	6.08	6.06		

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

NMS

Team	Kamaole	Samplers (Last Name, 1st Initial)	Graven, Hecht, K. McHugh	Meters and Probes ID		
Session	88			HQ40d: 2		2100Q: 2
Date	10/25/2022			pH: 4	DO: 2	Salinity: 4

Location Name Sample ID	Freshwater Flowing (Y/N)	Time (of collection)	Temp (°C) variable	Salinity (ppt) 30-35 normal	Dissolved Oxygen		pH 8-8.3 normal	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
Kalepolepo North NKN221025	N	7:55	26.9	34.5	5.73	86.7	8.10	2.45	1.98	2.43	0	16	0
Waipuilani Park KWP221025	N	8:20	25.8	33.2	5.68	83.9	8.02	10.1	9.57	10.4	0	4	0
Kihei South KKS221025	N	8:35	27.1	33.7	5.59 5.99	84.6	8.08	4.15	5.45	3.69	0	2	0
Kalama Park KKP221025	N	8:52	27.2	35.0	6.02	92.0	8.06	9.39	9.80	9.40	0	0	0

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

NKN: 6 canoes on the beach, lots of people on beach. Calm sea, no waves or wind.

KWP: Calm, small waves, slight ripples in water, some sediment/twigs in water, minimal wind

KKS: calm, small waves, minimal wind
Turb 4th 5.45 - 4.84

KKP: small waves, slight ripples in water, light wind

Sites with potential for freshwater flow: All

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.06	6.06	54.2	601
Pre-sampling	0.06	6.05	54.1	602
Post-sampling	0.05	6.02	54.1	602

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	NMS	Ylenia
Bacteria	-	-	-

Signature (Team Lead):

Ylenia M St-Louis

Printed Name:

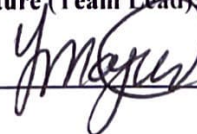
Ylenia M St-Louis

Team	Kamaole	Samplers (Last Name, 1st Initial) S. Graves H. Hecht K. McHugh
Session	88	
Date	10/25/2022	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN221025-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP221025-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS221025-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP221025-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Sediments							
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):



Printed Name:

Ylenia M St-Louis

Team Wailea-Makena	Samplers (Last Name, 1st Initial) <i>Bentley, D</i> <i>Souza, B</i>	Meters and Probes ID	
Session 88		HQ40d: 2	2100Q: 2
Date 10/26/2022		pH: 4	DO: 2

Location Name Sample ID	Freshwater Flowing (Y/N)	Time (of collection)	Temp (°C) variable	Salinity (ppt) 30-35 normal	Dissolved Oxygen		pH 8-8.3 normal	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
Cove Park KCP221026	N	8:05	27.4	34.8	5.62	86.2	8.05	2.17	1.83	2.91	2	5	2
S Maluaka Beach MMB221026	N	8:35	27.5	35.4	6.24	96.3	8.11	0.76	0.68	0.75	12	22	0
Ahihi Kinau North MAN221026	N	9:00	27.0	35.2	6.28	96.0	7.98	0.91	0.97	1.08	0	0	0
Ahihi Kinau South MAS221026	N	9:30	27.1	35.3	5.77	88.3	8.03	0.65	0.58	0.57	0	0	0

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

*Hi Tide
Super calm*

Sites with potential for freshwater flow: Cove Park

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.05	6.06	54.2	601
Pre-sampling	0.06	6.11	54.5	602
Post-sampling	0.06	6.03	52.2	601

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	NMS	ymf
Bacteria	-	-	-

Signature (Team Lead):

ymf

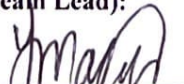
Printed Name:

Glenia St Louis

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	Beautley, D Sousa, B
Session	88		
Date	10/26/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KCP221026-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB221026-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN221026-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS221026-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Sediments							
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead): 	Printed Name: Ylenia St-Louis
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Team	North Kihei	Samplers (Last Name, 1st Initial)	Y. St-Louis A. Wolf Flo	Meters and Probes ID		
Session	88			HQ40d: 2		2100Q: 2
Date	10/27/2022			pH: 4	DO: 2	Salinity: 4

Location Name Sample ID	Freshwater Flowing (Y/N)	Time (of collection)	Temp (°C) variable	Salinity (ppt) 30-35 normal	Dissolved Oxygen		pH 8-8.3 normal	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
Maalaea Harbor NMH221027	N	7:42	25.9	35.1	5.65	84.9	8.06	0.82 ^{yes} 0.99	0.75	0.78	0	0	0
Maalaea Condos NMC221027	N	8:03	25.9	35.0	6.46	96.9	8.02	3.82	3.39	3.49	0	0	0
Haycraft Park NHP221027	N	8:19	26.3	35.1	6.17	93.1	8.06	9.89	9.77	10.4	0	0	0
Kealia Pond NKP221027	N	8:39	26.5	35.6	6.34	96.4	8.11	0.83	0.72 ^{yes} 0.03	0.74	0	0	0
Kihei Canoe Club NKC221027	N	8:53	27.2	35.2	6.19	94.9	8.08	1.33	1.29	1.30	0	0	0

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

windy, cool, high tide - NMH
People loading on boats
NMC - Calmer winds Tide High, High tide was
at 5:44am.
NHP - People walking by
NKP - 1 Diver in water (Dive flag), small
swells.
NKC - Calm waters, light wind
Salinity on all sites where slightly out
of range, is that normal?
Sites with potential for freshwater flow: Maalaea Harbor, Maalaea
Condos, Kealia Pond, Kihei Canoe Club

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.06	6.06	54.2	601
Pre-sampling	0.06	6.05	54.1	602
Post-sampling	0.06	6.08	54.4	602

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	NMS	Yms
Bacteria	-	-	-

Signature (Team Lead):

Yms

Printed Name:

Ylenia M St-Louis

Team	North Kihei	Samplers (Last Name, 1st Initial) Y. St-Louis A. Wolf F. Blur
Session	88	
Date	10/27/2022	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NMH221027-N-1	Maalaea Harbor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:42	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMC221027-N-1	Maalaea Condos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:03	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NHP221027-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:19	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP221027-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:39	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC221027-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:53	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Sediments							
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead): 	Printed Name: Ylenia St-Louis
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