

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
77	T. Stark, Y. St-Louis	3/7/22	10:50 am	T. Stark, Y. St-Louis	3/10/22	10:05 am

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	
	1		10/16/22		25.5 °C	25.3 °C	25.4 °C	— °C			
	1				25.5	25.4		—			
Salinity			3 months	Std Val	Tap water	Salin Std	Tap water	Salin Std	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	1	3	2/15/22		0.05	1/24/22 date 33.9 ppt	0.18	1/24/22 date 33.9 ppt		pre-verification @ TSK	
	1	2	2/15/22		0.04	33.7	—	—		post-verification @ YSK	
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	1	1	12/16/21		101.0 %		99.9 %				
	1	2	12/16/21		100.9 %		—				
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	
	1	5	3/7/22		7.03	10.01	6.99	10.00		pH 10.01 expire: 03/22 pH 7.00 expire: 03/23	
	1	4	3/7/22		7.01	10.01	—	—		pH 4.01 expire: 12/23	
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	n/a	1/24/22		0.08	6.61	0.04	6.59		LOW STD: 6.57 NTU Hardtime getting blank <0.1 NTU.	
	2	n/a	1/24/22		6.09	6.30	—	—		Brand new distilled water. LOW STD: 6.32 NTU	

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

Lab TSK = Tiara Stark Kitchen

Lab YSK = Ylenia St-Louis Kitchen



Team	Kamaole	Samplers (Last Name, 1st Initial)	Scott G. Ylenia S.	T. Stark	Meters and Probes ID		
Session	77				HQ40d: 1	2100Q: 1	
Date	02/08/2022 <del>02/15/2022</del>				pH: 5	DO: 2.1 <del>2.5</del>	Salinity: 3

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 NKN220308	N	0800	24.3	33.4	6.37	91.9	8.13	3.48	3.46	3.61	0	11	0
Waipuilani Park KWP220308	N	0821	24.1	33.6	5.96	85.8	8.09	11.9	11.9	11.8	2	3	0
Kihei South KKS220308	N	0838	25.0	34.8	6.08	89.4	8.14	4.27	4.34	4.31	2	1	0
Kalama Park KKP220308	N	0851	24.2	35.1	6.61	96.1	8.12	6.97	7.43	7.61	2	3	0

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

KKN Calm, no shore break, some people walking by.

KWP: Calm, light wind, little to no surf.

KKS 220308 - 0-2ft surf, light wind.

KKP - Dogs playing in water & beach near sample site.

Sites with potential for freshwater flow: All

#### TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.08	6.57	57.5	565
Pre-sampling	0.09	6.70	56.7	564
Post-sampling	0.09	6.57	57.5	565

#### CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	TSK	YstLouis
Bacteria	-	-	-

Signature (Team Lead):

*Ylenia S.*

Printed Name:

Ylenia St-Louis

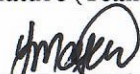
\* ~~Training~~ Kristina  
Observation w/

& Introduction to Ylenia

<b>Team</b>	Kamaole	<b>Samplers (Last Name, 1st Initial)</b>	Scott G. ylenia S.	T. stark
<b>Session</b>	77			
<b>Date</b>	03/08/2022			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
NKN220308-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0800	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP220308N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0821	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS220308-N-1	Kihe South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0838	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP220308-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0857	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

<b>Sediments</b>							
		<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		

<b>Signature (Team Lead):</b> 	<b>Printed Name:</b> Ylenia S. Stark
--	---



Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	A. Wolf, M. Sharp, Y. St. Louis, J. Dunning	Meters and Probes ID		
Session	77			HQ40d: 1		2100Q: 1
Date	03/09/2022			pH: 5	DO: 1	Salinity: 3

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 KCP220309	N	8:19	25.0	31.4	6.08	88.0	8.04	5.57	5.78	5.44 <del>4.21</del>	0	3	2
S Maluaka Beach MMB220309	N	8:59	24.6	35.2	6.77	99.4	8.14	0.58	0.86	0.76	3	4	0
Ahihi Kinau North MAN220309	N	9:24	24.9	34.9	7.71	113.4	8.07	1.90	<del>1.58</del> <del>3.5</del>	1.75	6	11	0
Ahihi Kinau South MAS220309	N	9:45	25.2	34.2	6.74	99.4	8.03	0.80	0.80	0.80	8	6	0

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

#### TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.09	6.57	57.5	565
Pre-sampling	0.09	6.61	57.6	565
Post-sampling	0.05	6.61	57.6	564

#### CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	YSK	ymstLouis
Bacteria	-	-	-

Signature (Team Lead):

*Y. St. Louis*

Printed Name:

Ylenia St-Louis


Sites with potential for freshwater flow: Cove Park

YSK = Ylenia St-Louis kitchen

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	a. Wolf, m. sharp, J. Dunning y. St-Louis
Session	77		
Date	03/09/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KCP220309-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:19	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB220309-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:59	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN220309-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:24	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS220309-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:45	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



Team	North Kihei	Samplers (Last Name, 1st Initial)	BURNETTE, G. St-Louis, Y BAHN, F	Meters and Probes ID		
Session	77			HQ40d: 1		2100Q: 1
Date	03/10/2022			pH: 5	DO: 1	Salinity: 3

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 NMH220310	N	7:50	24.8	35.5	6.36	93.7	8.13	0.85	0.92	0.91	0	0	0
Maalaea Condos NMC220310	N	8:10	24.9	33.7	7.01	102.5	8.63	5.22	5.23	4.95	0	1	0
Haycraft Park NHP220310	—	8:30	24.8	35.0	6.74	99.3	8.09	2.43	2.22	2.34	0	5	0
Kealia Pond NKP220310	N	8:50	25.0	35.8	6.71	99.4	8.15	0.49	0.43	0.45	2	2	1
Kihei Canoe Club NKC220310	N	9:10	25.5	34.9	6.68	99.6	8.12	1.37	1.62	1.46	7	24	0

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

Kihei Canoe Club - Lots of people finishing  
canoeing. First time since storm that Turbidity  
is low.  
very calm winds and waves.

NMC - Sample Location getting very rocky  
hard to get in and out.

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	0.05	6.57	57.5	565
Pre-sampling	0.05	6.65	57.2	565
Post-sampling	0.04	6.59	57.5	564

#### CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	YSK	T. Stark
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:


*[Signature]*

Tiara Stark

Team	North Kihei	Samplers (Last Name, 1st Initial)	G. Burnette F. Bahr Y. St-Louis
Session	77		
Date	03/10/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NMH220310-N-1	Maalaea Harbor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMC220310-N-1	Maalaea Condos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NHP220310-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP220310-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC220310-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:10	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:
	Tiara Stark