

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
81	M. Sharpe, T. Stark	5/31/22	9:30am	L. Yannell, M. Sharpe, T. Stark	6/3/22	10:15 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	2	8/10/16/22		27.0 °C	26.7 °C	— °C	30.6 °C			
	1	3			27.2		—				
	1	3				26.8		30.9			
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	2	5/31/22		0.13	5/31/22 33.5 ppt	0.13	5/31/22 33.5 ppt		Salinity Std: 5/31/22 33.5 ppt	
	1	3	5/31/22		0.16	33.6	—	—			
	1	3	5/31/22		0.17	33.5	0.18	33.5			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	1	1	12/16/21		98.2		97.9				
	1	2			97.7		—				
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	5/31/22		7.01	10.00	7.01	10.01		pH 4 exp 12/2023 pH 7 exp 03/2023 pH 10 exp 3/2023	
	1	4	5/31/22		7.03	10.00	—	—			
Turbidity			3 months Text	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	7/21/22		0.06	6.36	0.09	6.35		Low: 6.34 Med: 56.8 High: 62.8	
	2	n/a	7/21/22		0.06	6.20	—	—		Low: 6.19	

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

Lab: NMS

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	B. Soasa, J. Dunning, M. Martella		Meters and Probes ID			
Session	81				HQ40d: 1		2100Q: 1	
Date	06/01/2022				pH: 5		DO: 1	Salinity: 23

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 KCP2206021	N	8:18	26.7	32.1	6.58	98.5	8.07	7.55	7.60	8.30	8	0	2
S Maluaka Beach MMB220601	N	9:04	25.8	34.9	6.56	98.4	8.12	2.07	2.35	2.21	4	26	0
Ahihi Kinau North MAN220601	N	9:30	25.5	35.4	6.80	101.4	8.14	2.04	2.07	2.26	0	0	0
Ahihi Kinau South MAS220601	N	9:46	25.6	35.0	6.63	99.1	8.14	2.99	4.33	3.15	0	0	0

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

4th reading for KCP 9.59
High surf advisory 8 side for last week
at MAN water had been up on road,
earlier
4th reading at MAS - turbidity 3.75
High water mark to fence at MAS

Sites with potential for freshwater flow: Cove Park

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.06	6.34	56.8	628
Pre-sampling	0.06	6.35	57.5	629
Post-sampling	0.08	6.29	57.5	629

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	NMS	T. Stark
Bacteria	-	-	-

Signature (Team Lead):

J. Dunning

Printed Name:

Tiana Stark

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	B. Sousa J. Dunning M. Martella
Session	81		
Date	06/02/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KCP220601-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:18	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB220601-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:04	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN220601-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS220601-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:46	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

Team North Kihei	Samplers (Last Name, 1st Initial)	y. St. Louis, A. Wolf, L. Yannell		Meters and Probes ID			
Session 81				HQ40d: 1		2100Q: 1	
Date 06/02/2022				pH: 5	DO: 1	Salinity: <u>YS</u> <u>4.5</u>	

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 NMH220602	N	07:57	25.3 34.8	34.8	6.28	92.9	8.11	3.26	3.38	3.28	0	0	0
Maalaea Condos NMC220602	N	08:19	25.3	34.0	7.01	103.5	8.20	2.65 ^{ym} 3.14	2.43	2.40	0	2	0
Haycraft Park NHP220602	N	0844	25.2	35.0	6.69	99.2	8.16	11.9	11.8	11.5	0	7	0 ^{1^{ym}}
Kealia Pond NKP220602	N	0909	25.5	35.2	6.66	99.3	8.15	1.99	2.06	2.26	0	0	0
Kihei Canoe Club NKC220602	N	0925	26.2	34.7	6.64	99.9	8.09	33.5 32.6	36.7	36.2	0	0	0

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

NMH- Clear Blue Sky, sunny, south swell, parking
not wet due to south swell, Boat with
people getting on near sample site.
NMC- south swell, very rocky entry (low tide),
Surfers way out in the distance, light wind,
water looks green/brown.
NHP- Big waves crashing on to shore, rocks
rolling
surfers in the water bit far more than 100ft
from site location. Families playing on the beach
light wind. water looks brown/green
NKC- Water calmer. One person walking by.
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	0.07	6.34	56.8	628
Pre-sampling	0.05	6.44	57.0	630
Post-sampling	0.03	6.34	57.1	629

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients			
Bacteria	-	-	-

Signature (Team Lead):

Y. St. Louis

Printed Name:

Ylenia St. Louis

NKC- Water brown, mild swell, Canoe Club meeting (large group)
32.1

Team	North Kihei	Samplers (Last Name, 1st Initial)	Y. St. Louis, A. Wolf, L. Yannell
Session	81		
Date	06/02/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NMH220602-N-1	Maalaea Harbor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7 : 57	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMC220602-N-1	Maalaea Condos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8 : 19	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NHP220602-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8 : 44	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP220602-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9 : 09	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC220602-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9 : 25	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:

N. SHARPE

Team Kamaole	Samplers (Last Name, 1st Initial)	L. Yannell, T. Stark, S. Graves		Meters and Probes ID		
Session 81				HQ40d: 1		2100Q: 1
Date 06/03/2022				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
Kalepolepo North NKN220603	N	8:10	24.9	31.4	6.55	94.6	8.10	12.0	11.0	11.6	0	0	0
Waipuilani Park KWP220603	N	8:40	24.7	32.3	6.51	94.1	8.06	12.5	12.7	12.9	1	3	0
Kihei South KKS220603	N	9:00	25.7	32.5	6.41	94.5	8.07	19.5	19.8	19.8	0	4	0
Kalama Park KKP220603	N	9:25	25.7	34.6	6.89	99.7	8.15	10.1 8.51	10.5	10.1	2	3	0

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

NKN - 2 canoe teams went out 1-2 min before sample; windy; brown water

KWP - windy

KKS - unsure if beach gear is camping gear (no tent but lots of other items). Update: check staying on beach.

* 2nd temp reading: 25.7

KKP - 1 dog on beach; very brown; windy near sampling area
* 4th Turbidity reading

Sites with potential for freshwater flow: All

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.03	6.34	56.8	628
Pre-sampling	0.08	6.36	57.3	630
Post-sampling	0.09	6.30	57.2	629

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

E Yannell

Printed Name:

Liz Yannell

Team	Kamaole	Samplers (Last Name, 1st Initial)	Liz. Yannell, L. Stark, T. Graves, S.
Session	81		
Date	06/03/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN220603-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP220603-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS220603-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP220603-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:25	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): Liz Yannell	Printed Name: Liz Yannell
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