

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
99	M.Sharpe , Y.St-Louis	06/26/2023	0950	m.Sharpe , Y.St-Louis	06/29/23	1000

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 27.5 °C	NIST 27.5 °C	NIST — °C	NIST 24.5 °C	± 0.6 °C of NIST Compare to NIST Std value in tap water
	2 4	6/28/2024			—	—	—	—	
	2 5	—			27.5	24.4	—	—	
Salinity		3 months		Std Val	Tap water 0.13	Salin Std 6/6/23 date 33.4 ppt	Tap water 0.13	Salin Std 6/6/23 date 33.9 ppt	± 1 ppt Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle
	3 4	6/6/23			—	—	—	—	
	3 5	6/6/23			0.20	33.9	—	34 refractometer probe 4 Not working (error mesq)	
Dissolved Oxygen		1 year		Std Val	100%	100%	—	—	± 5 %
	3 1	01/31/2023			98.1 %	97.5	—	—	
	3 2	03/17/2023			97.8 %	—	—	—	
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
	3 5	06/26/2023			7.00	10.00	6.91	10.02	
	3 6	06/26/2023			7.00	10.01	—	—	
Turbidity		3 months		Std Val	BLANK <0.1	LOW 1-10 5.15 NTU	BLANK <0.1	LOW 1-10 NTU	± 0.18 NTU Low 1-10 Compare to Gel LOW 1-10 Std Calibration value
	2	n/a	05/09/23		0.06	6.93	—	—	Low : 6.92
	3	n/a	05/09/23		0.07	7.15	0.07	7.07	Low : 7.14 NTU

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

NMS

Team	Kamaole	Samplers (Last Name, 1st Initial)							Meters and Probes ID			
Session	99								HQ2200: 3		2100Q: 3	
Date	06/27/2023								pH: 5	DO: 1	Salinity: 5	

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) 5.2-7.0 normal	(%) 85-105 normal			water	beach	camp
Kalepolepo North NKN230627	N	7:50	25.3	32.7	6.28	92.7	8.08	13.9 Ymp H.T	15.0	14.6	0 0 0
Waipuilani Park KWP230627	N	8:15	25.1	34.5	5.97	87.7	7.99	12.2	12.2	11.0	0 2 0
Kihei South KKS230627	N	8:40	26.0	35.2	6.24	93.2	8.03	28.3	27.8	25.6	0 2 0
Kalama Park KKP230627	N	8:54	26.2	35.5	6.57	98.3	8.13	10.3	11.2	11.6	1 4 0

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).

Use the back of the form if needed.

NKN Shore Break, Wind 2 K, Low tide, Water cloudy, wave 2 feet. Clear Temp: DO-25.3 pH- 25.2 temp.
 Temp: DO-25.3 pH- 25.2 temp.
 Sand in water (NTU)
 KWP. Shore Break, wind 5 K, Low tide, Water cloudy, No clouds. Read turbis 7.99 ph.
 KKS. Shore Break, low tide, cloudy water, wind 3 K, svrt 2 feet, Sunny
 KKP. Shore Break, low tide, cloudy water, Sunny, & wind, small surf, dirty water
 Tbs. 11.50

Sites with potential for freshwater flow: All

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.07	7.14	61.4	626
Pre-sampling	0.08	7.22	61.6	626
Post-sampling	0.08	7.21	61.9	626

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Ynez mayca st-louis

Team	Kamaole	Samplers (Last Name, 1st Initial)	<i>H. Hecht</i>			
Session	99		<i>Y. st-louis</i>			
Date	06/27/2023					

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN230627-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP230627-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS230627-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP230627-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:51	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

		<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:
<i>Maya</i>	<i>Yenice M st-louis</i>

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	J Dunning, D Bentley, D. Grevier						Meters and Probes ID			
Session	99								HQ2200: 3		2100Q: 3	
Date	06/28/2023								pH: 5	DO: 1	Salinity: 5	

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) 5.2-7.0 normal	(%) 85-105 normal			water	beach	camp
Cove Park KCP230628	N	8:01	26.4	32.3	6.39	95.8	8.01	5.76	6.14	6.37	1
S Maluaka Beach MMB230628	N	8:43	26.4	35.3	6.36	95.8	8.13	1.38	1.56	1.40	Ø
Ahihi Kinau North MAN230628	N	9:04	26.1	35.8	6.89	103.0	8.10	1.64	1.47	1.45	3
Ahihi Kinau South MAS230628	N	9:18	25.7	35.8	6.30	93.6	8.07	1.25	1.10	1.19	Ø

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).

Use the back of the form if needed.

KCP - one dog in water, one on beach, partly cloudy skies, no wind, calm surf.
 * Temps - 26.4°C / 26.3°C, OXT /

MMB - Partly cloudy, low wind, calm surf

MAN - 3/4 clouds, calm seas

MAS - 3/4 clouds, high tide, moderately calm sea

Sites with potential for freshwater flow: Cove Park

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.07	7.14	61.4	626
Pre-sampling	0.08	7.08	61.8	627
Post-sampling	0.07	6.98	61.7	627

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

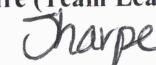
N. Sharpe

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	Dunning J			
Session	99		Bentley D			
Date	06/28/2023		Crevier D			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KCP230628-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB230628-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:43	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN230628-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:04	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS230628-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:18	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

		<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:



Team	North Kihei	Samplers (Last Name, 1st Initial)	Wolf, A Helgeland, A Baillargeon, H						Meters and Probes ID		
Session	99								HQ2200: 3	2100Q: 3	
Date	06/29/2023								pH: 5	DO: 1	Salinity: 5

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) 5.2-7.0 normal	(%) 85-105 normal			water	beach	camp
Maalaea Harbor NMH230629	N	7:44	24.8	33.1	6.15	90.1	8.11	1.92	1.75	2.23	HB 1.57
Maalaea Condos NMC230629	N	8:17	24.8	29.1	7.61	111.3	8.13	1.96	2.05	2.49	HB 2.41
Haycraft Park NHP230629	N	8:37	25.4	33.2	6.69	98.7	8.12	5.70	5.45	5.02	2
Kealia Pond NKP230629	N	9:02	25.9	31.9	6.71	100.1	8.18	0.92	1.19	1.02	HB 1.20
Kihei Canoe Club NKC230629	N	9:20	26.6	32.2	6.46	97.3	8.13	12.9	17.4	12.3	HB 12.6

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).

Use the back of the form if needed.

NMH - Breezy, clear skies, light swell
 pH: 24.8 DL: 24.8 Temp: 33.8 (Salinity probe)

NMC - Breezy, clear skies, light swell
 Salinity probe acting up... saving sample for lab

NHP - Breezy, clear skies, light swell
 4.55 Turbidity

NKP - Breezy, clear skies, lft. swell
 Salinity probe is taking long to read

NKC - light breeze, clear skies, light swell/particles in turbidity
 Sample
 Sites with potential for freshwater flow: Maalaea Harbor, Maalaea
 Condos, Kealia Pond, Kihei Canoe Club

Refractometer - NHP 35‰ NKC - 36‰
 NKP 36‰ NMC - 33‰

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.07	7.14	61.4	626
Pre-sampling	0.07	7.13	61.8	626
Post-sampling	0.07	7.07	61.8	627

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Ylenia M. St-Louis

Team	North Kihei	Samplers (Last Name, 1st Initial)	A. Wolf			
Session	99		A. Helgeland			
Date	06/29/2023		H. Baillargeon			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NMH230629-N-1	Maalaea Harbor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0744	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMC230629-N-1	Maalaea Condos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0817	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NHP230629-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0837	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP230629-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0902	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC230629-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0920	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

		<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:

Ynagen Ylenia m St-Louis