

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
66	M. Brown, T. Stark	7/12/21	4:06 pm	M. Brown, T. Stark	7/15/21	10:30 am

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value		POST: Verification Value		Acceptable Range	Comments/ Notes	QA?
Temperature	NIST 10/14/22	n/a	n/a	Std Val	NIST 27.4 °C	NIST 27.3 °C	NIST — °C	NIST 27.0 °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	2	1	n/a		27.7		—			lab temp pre 27.4 °C	
	2	2	n/a			27.6		27.3		post 27.6 °C	
Salinity			3 months	Std Val	Tap water 0.33	Salin Std 35.2 ppt	Tap water 0.33	Salin Std 35.2 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	1	5/31/24		0.36	35.2	—	—			
	2	2	5/31/24		0.35	35.0	0.35	35.2			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	1	11/2/20		98.4		—				
	2	2	11/2/20		98.4		99.6				
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	3	7/12/21		7.01	9.97	—	—			
	2	4	7/12/21		7.01	9.98	7.02	9.98			
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	6/21/22		0.05	6.22	0.06	6.20			
	—	n/a	N/A		—	—	—	—		Not working. Sending for service with Haach.	

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

#1 lowstd 6.21

Lab: DHS

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Kamaole	Samplers (Last Name, 1st Initial)	GRAVES, S. Cyr. R. Cyr. M.	Meters and Probes ID		
Session	66			HQ40d: 2		2100Q: 1
Date	7/13/21			pH: 4	DO: 2	Salinity: 2

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C) variable	Salinity (ppt) 30-35 normal	Dissolved Oxygen		pH 8-8.3 normal	Turbidity (NTU)			Entero	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					CFU	water	beach	camp
Kalepolepo North NKN210713	N	0755	26.7	33.7	5.99	84.3	8.09	0.94	0.90	0.91		0	4	0
Waipuilani Park KWP210713	N	0813	26.6	32.7	5.77	84.9	8.07	6.94	8.06	8.44		0	2	3
Kihei South KKS210713	N	0832	26.6	34.6	5.20	78.5	8.09	5.21	6.65	6.50		0	3	0
Kalama Park KKP210713	N	0850	27.0	35.2	6.67	100.9	8.15	4.93	5.13	5.37		1	10	0

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

NKN: PROBES IN @ 0800 - 0803 Pen change @ KWP
KWP: " " 0817 0820
KKS: " " 0836 0839
KKP: " " 0853 0857

Post took 3 tries to get blank below .10
equal not
and attempt @ low was 6.21

Sites with potential for freshwater flow: All

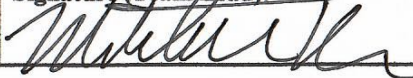
TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low 21	Med	High
Standard	0.05	6.21	54.8	578
Pre-sampling	0.08	6.20	55.0	577
Post-sampling	0.10	6.16	54.8	578

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment			
Nutrients	4	DHS	M. Brown

Signature (Team Lead):

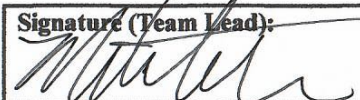


Printed Name:

Mitch Brown

Team	Kamaole	Samplers (Last Name, 1st Initial) Graves S Cyr R Cyr M
Session	66	
Date	7/13/21	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN210713-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	07:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP210713-N-1	Waipuiani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:13	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS210713-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:32	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP210713-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Signature (Team Lead): 	Printed Name: Mitch Brown
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Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	Sousa, B, Wolf, A, Sharpe, N	Meters and Probes ID		
Session	66			HQ40d: 2		2100Q: 1
Date	07/14/21			pH: 4	DO: 2	Salinity: 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)			Entero	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					CFU	water	beach	camp
Cove Park KCP210714	N	9:00	27.1	33.3	6.18	93.5	8.10	3.65	4.18	4.64		80	20	0
S Maluaka Beach MMB210714	N	9:34	27.2	35.3	6.38	98.0	8.13	0.47	0.72	0.68		22	31	0
Ahihi Kinau North MAN210714	N	9:46	26.8	34.9	7.40	112.3	8.10	0.79	0.91	0.83		3	9	0
Ahihi Kinau South MAS210714	N	10:15	26.5	35.0	6.34	96.0	8.10	1.21	1.11	1.26		8	18	0

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

Volunteers forgot to read blank
turbidity for pre-sampling (dumped it).

Sites with potential for freshwater flow: Cove Park

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.10	6.21	54.8	578
Pre-sampling	—	6.22	54.7	578
Post-sampling	0.06	6.19	54.9	578

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

diagram

Printed Name:

Tiam Stark

Team	Wailea-Makena	Samplers (Last Name, 1st Initial) Sousa, B. Wolf, A. Sharpe, N.
Session	66	
Date	07/14/21	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KCP210714-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB210714-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:34	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN210714-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS210714-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:15	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:

Lucia Stale

Tiara Stark

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	North Kihei	Samplers (Last Name, 1st Initial)	BURNETT, G. WOLF, A.	Meters and Probes ID		
Session	66			HQ40d: 2		2100Q: 1
Date	07/15/21			pH: 4	DO: 2	Salinity: 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)			Enterococcus	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					CFU	water	beach	camp
Maalaea Harbor NMH210715	✓	7:46	25.7	35.0	5.98	89.3	8.10	1.62	2.14	1.80		0	0	0
Maalaea Condos NMC210715	✓	8:05	25.7	33.0	6.96	103.0	8.03	1.78	1.82	1.53		0	0	0
Haycraft Park NHP210715	✓	8:25	26.1	35.2	6.61	99.4	8.13	5.36	5.64	5.71		0	4	1
Kealia Pond NKP210715	✓	8:50	26.3	35.6	6.56	99.2	8.16	0.59	0.83	0.61		0	3	1
Kihei Canoe Club NKC210715	N	9:10	26.7	35.3	6.45	98.1	8.14	3.35	4.08	3.69		3	83	0

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

KCL FOUND EMPTY AT NMC
[SALINITY A BIT HIGHER AT NHP, NKP, NKC
NO RAIN HERE IN A LONG TIME
[HQ40D2 METER VERY TRICKY TODAY
HAD TO RESET IT ALMOST FOR EVERY READING
SHUTS OFF WHEN READ BUTTON PRESSED
ALSO DOESN'T ALWAYS TURN BACK ON EASILY - RESET BATTERIES
Sites with potential for freshwater flow: Maalaea Harbor, Maalaea
Condos, Kealia Pond, Kihei Canoe Club CANOE RACES AT NKC

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.06	6.21	54.8	578
Pre-sampling	0.06	6.33	54.6	578
Post-sampling	0.06	6.20	54.7	578

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	JHS	M. Brown
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:

[Signature] Mitch Brown

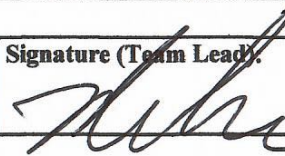
Post rec - 1st read on 2100Q - 6.14

Team	North Kihei	Samplers (Last Name, 1st Initial)	Burnette G. Wolf A.
Session	66		
Date	07/15/21		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NMH210715-N-1	Maalaea Harbor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMC210715-N-1	Maalaea Condos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NHP210715-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP210715-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	
NKC210715-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:

Mitch Brown