

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



Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
60	M. Brown T. Starke	3/8/21	11:05am	M. Brown	3/11/21	12:15pm

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value		POST: Verification Value		Acceptable Range	Comments/ Notes	QA?
Temperature	NIST	n/a	n/a	Std Val	NIST	NIST	NIST	NIST	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	2	1	n/a		23.7 °C	23.8 °C	— °C	25.3 °C			
	2	1	n/a		23.6		—			NIST exp: 7/8/21	
	2	2	n/a			23.6		24.9		lab temp pre 25.8c post 26.6c	
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	
	2	1	2/15/21		0.30	11/2/20 date 35.0 ppt	0.38	11/2/20 date 35.0 ppt			
	2	1	2/15/21		0.32	35.1	—	—			
	2	2	2/15/21		0.32	35.2	0.32	35.5			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	1	11/2/20		98.6 %		—				
	2	2	11/2/20		98.3 %		100.7				
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	
	2	3	3/8/21		7.04	9.99	—	—			
	2	4	3/8/21		7.01	10.00	7.02				
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	n/a	3/8/21		0.08	6.66	—	—		#1 std: 6.66	
	2	n/a	3/8/21		0.06	6.48	0.20	6.49		#2 std: 6.48	

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

Lab: DHS

<b>Team</b>	Kamaole	<b>Samplers</b> (Last Name, 1st Initial)	97.2 Harry	<b>Meters and Probes ID</b>			
<b>Session</b>	60		97.3 Scott		HQ40d: 2	2100Q: 2	
<b>Date</b>	3/9/21		98.1 Margie		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 NKN210309	N	8:02	24.0	33.5	6.33	90.7	8.16	1.06	1.33	1.38		0	1	0
Waipuilani Park KWP210309	N	8:23	23.7	32.3	5.93	83.9	8.08	12.30	10.7	9.12		0	3	0
Kihei South KKS210309	N	8:40	24.4	33.8	5.83	84.2	9.13	6.10	5.81	4.07		5	10	0
Kalama Park KKP210309	N	8:57	24.5	34.4	6.47	94.1	8.13	7.03	6.12	6.53		0	2	0

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

Use the back of the form if needed.

No stream flow. KN.

Read 8:10 in HLD 8:13 Read

Waipuilani Creek Dry

Read 8:29 - 8:31 Read

8:46 - 8:49 Read

9:02 9:05

\*Sites no longer sampled - Mai Poina Oe Ia'u,  
Cove ParkSites with freshwater flow: Kalepolepo North,  
Waipuilani Park, Kihei South, Kalama Park**TURBIDITY VERIFICATION**

	Blank (must be <0.10)	Low	Med	High
Standard	0.06	6.48	55.6	574
Pre-sampling	0.09	6.43	55.1	572
Post-sampling	0.13	6.46	55.5	574

**CHAIN OF CUSTODY INFORMATION**

	# of samples	Relinquished to	Contact
Sediment			
Nutrients	4	dHS	M Brown

Signature (Team Lead):

Printed Name:

Mick Brown

took post sampling blank reading 4 times w/ wiprag. consistently 0.13 or 0.14  
 think it is the lab made DI water

<b>Team</b>	Kamaole	<b>Samplers (Last Name, 1st Initial)</b> <i>Hecht H. Graves S. Cyr M.</i>
<b>Session</b>	60	
<b>Date</b>	3/9/21	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
NKN210309-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP210309-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:23	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS210309-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	
KKP210309-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:57	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

<b>Signature (Team Lead):</b> <i>Mitch Brown</i>	<b>Printed Name:</b> Mitch Brown
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<b>Team</b>	Wailea-Makena	<b>Samplers</b> (Last Name, 1st Initial)	J. Dunning, B. Sousa, M. Sharpe	<b>Meters and Probes ID</b>		
<b>Session</b>	60			HQ40d: 2		2100Q: 2
<b>Date</b>	03/10/21			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 CFU	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal						water	beach	camp
Cove Park KCP210310	N	8:40	25.0	34.9	6.06	87.3	8.06	2.00	1.78	1.72		1	1	0
S Maluaka Beach MMB210310	N	9:10	24.3	35.3	6.67	97.4	8.16	0.53	0.55	0.52		12	6	0
Ahihi Kinau North MAN210310	N	9:30	25.0	34.9	7.62	111.6	8.17	1.41	1.48	1.20		0	3	0
Ahihi Kinau South MAS210310	N	9:48	25.4	35.0	6.75	99.6	8.14	1.20	1.52	1.43		3	5	0

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

Cove park - Dog in water; defecated on beach.  
Ahihi Kinau - 2 % reading - 111.4 % O<sub>2</sub>  
Low tide

**Sites with freshwater flow:** Cove Park

\* Could not get post-sampling blank below  
0.21. Tried cleaning with oil, etc. - Tiara Stark

#### TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.13	6.48	55.6	574
Pre-sampling	0.13	6.37	55.2	575
Post-sampling	0.21	6.48	55.8	573

#### CHAIN OF CUSTODY INFORMATION

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

**Signature (Team Lead):**

*[Signature]*

**Printed Name:**

Tiara Stark

Team	Wailea-Makena	<b>Samplers</b> (Last Name, 1st Initial) <i>J. Dunning</i> <i>B. Sousa</i> <i>M. Sharpe</i>
Session	60	
Date	03/10/21	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
KCP210310-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB210310-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN210310-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	
MAS210310-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:48	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> Tiara Stark
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<b>Team</b>	North Kihei	<b>Samplers</b> (Last Name, 1st Initial)	BUNENE, G. Bahri, F. Wolf, A.	<b>Meters and Probes ID</b>		
<b>Session</b>	60			HQ40d: 2		2100Q: 2
<b>Date</b>	03/11/21			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
Maalaea Harbor NMH210311	N	7:45	24.4	34.9	6.25	90.9	8.14	0.54	0.50	0.45		0	0	0
Maalaea Condos NMC210311	N	8:05	24.5	33.8	6.84	98.8	8.07	2.19	2.56	2.77		0	0	0
Haycraft Park NHP210311	N	8:20	24.7	34.4	6.64	96.7	8.20	3.15	3.39	3.14		0	1	0
Kealia Pond NKP210311	N	8:40	24.7	35.5	6.82	99.8	8.17	0.61	0.54	0.59		0	2	0
Kihei Canoe Club NKC210311	N	9:00	25.3	34.7	6.67	98.2	8.14	0.67	0.67	0.62		0	1	0

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

\* Can't get turbidity blank below 0.22  
ABOUT 20 ~~SECS~~ ATTEMPTS TO PRE-SAMPLE THE BLANK  
WIPED WITH SILICON CLOTH NUMEROUS TIMES.  
HQ40D #2 METER TWICE DIDN'T TAKE READINGS  
UNTIL PUSHING READ BUTTON A SECOND TIME.  
HANGED OUT ONE OF THE INFORMATION CARDS  
AT NHP

**Sites with potential for freshwater flow:** Maalaea Harbor, Maalaea  
Condos, Kealia Pond, Kihei Canoe Club

#### TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.22	6.48	55.6	574
Pre-sampling	0.17	6.51	55.6	574
Post-sampling	0.20	6.49	55.8	574

#### CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

*[Signature]*

Printed Name:

Mitch Brown

Team	North Kihei	Samplers (Last Name, 1st Initial)	Burnette G. Bahr F. Wolf A
Session	60		
Date	03/11/21		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
NMH210311-N-1	Maalaea Harbor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	07:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMC210311-N-1	Maalaea Condos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NHP210311-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP210311-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC210311-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	09:00	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		

Signature (Team Lead):	Printed Name:
	Mike Brown