

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



Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
02	M. Brown T. Stark	4/19/21	10:00 am	T. Stark M. Brown	4/22/21	3:00 pm

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value		POST: Verification Value		Acceptable Range	Comments/ Notes	QA?
Temperature <i>28</i>	NIST 7/21	n/a	n/a	Std Val	NIST 27.2 °C	NIST 27.1 °C	NIST — °C	NIST 26.5 °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	2	1	n/a		27.4		—			pre temp in dets lab: 28°C post-temp DHS lab: 26°C	
	2	2	n/a			27.4		26.8			
Salinity			3 months	Std Val	Tap water 0.32	Salin Std 11/2/20 35.0 ppt	Tap water 0.32	Salin Std 11/2/20 35.0 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	1	2/15/21		0.33	35.2	—	—			
	2	2	2/15/21		0.33	35.4	0.33	35.5			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	1	11/2/20		98.0		—				
	2	2	11/2/20		98.2		98.7 %				
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	1	4/19/21		6.99	9.98	—	—			
	2	2	4/19/21		7.01	9.99	7.02	10.00			
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		0.05	6.64	—	—			
	2	n/a	3/8/21		0.05	6.47	0.07	6.49			

QA: \* Are pre- and post within one week?

\* Delay times are ok?

\* Other equipment issues?

\* Did post solate Hc used equipment to train new voluntyer.

Lab: DHS

Standard #2 - 6.48  
#1 - 6.66

<b>Team</b>	Kamaole	<b>Samplers</b> (Last Name, 1st Initial)	Cyr, MARGIE 97.3 GRAVES SCOTT 96.6 Cyr, Rick 97.2	<b>Meters and Probes ID</b>		
<b>Session</b>	62			HQ40d: 2		2100Q: 2
<b>Date</b>	4/20/21			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 NKN210420	N	0755	25.5	33.7	5.80	85.7	8.11	2.36	2.53	2.48		0	0	0
Waipuilani Park KWP210420	N	8:15	26.0	32.8	5.64	83.6	8.11	7.89	6.81	7.42		0	3	0
Kihei South KKS210420	N	8:35	26.2	31.8	6.12	90.6	8.12	4.49	4.71	4.31		4	8	0
Kalama Park KKP210420	N	8:50	26.2	34.8	6.25	93.9	8.13	5.23	5.96	5.65		4	0	0

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

1 NKN - PROBES IN WATER 0820 - 0802  
2 probes in H<sub>2</sub>O 0820 - 0823 → pH probe disconnected  
probe in 8:38 - 0841 → No reading taken  
probe in 8:52 0900 0900

\*Sites no longer sampled - Mai Poina Oe Ia'u,  
Cove Park

\*All 4 sites have possible freshwater flow

#### TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.05	6.48	55.6	574
Pre-sampling	0.08	6.49	56.0	575
Post-sampling	0.04	6.47	55.8	574

#### CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	dlb	M Brown

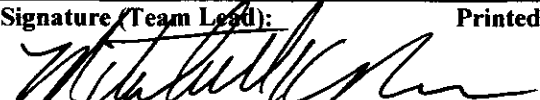
Signature (Team Lead):

Printed Name:

Mitch Brown

<b>Team</b>	Kamaole	<b>Samplers (Last Name, 1st Initial)</b>  Cyr M Cyr R Graves S.
<b>Session</b>	62	
<b>Date</b>	4/20/21	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
NKN210420-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	
KWP210420-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS210420-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP210420-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	

<b>Signature (Team Lead):</b> 	<b>Printed Name:</b> Mitch Brown
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<b>Team</b>	Wailea-Makena	<b>Samplers</b> (Last Name, 1st Initial)	J. Dunning, M. Sharpe, B. Sousa	<b>Meters and Probes ID</b>		
<b>Session</b>	62			HQ40d: 2		2100Q: 2
<b>Date</b>	4/21/21			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  CFU	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal						water	beach	camp
Cove Park KCP210421	N	8:35	25.8	31.2	6.23	91.0%	8.07	2.14	2.17	2.09	—	3	2	—
S Maluaka Beach MMB210421	N	9:19	25.4	35.0	6.34	94.0%	8.13	0.51	0.53	0.62	—	4	7	—
Ahihi Kinau North MAN210421	N	9:38	25.1	34.7	6.88	101.1%	8.08	1.24	0.82	0.87	—	0	0	—
Ahihi Kinau South MAS210421	N	10:00	25.1	34.6	6.48	95.3%	8.10	0.67	0.80	0.69	—	5	11	—

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

~~1st second turbidity on 1st test 0.53~~ <sup>was</sup> ~~0.53~~

Sites with freshwater flow: Cove Park

#### TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.04	6.48	55.6	574
Pre-sampling	0.06	6.46	55.7	575
Post-sampling	0.08	6.52	55.8	575

#### 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	Samplers (Last Name, 1st Initial)  <i>J. Dunning</i>  <i>M. Sharpe</i>  <i>B. Sousa</i>
Session	62	
Date	04/21/21	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
KCP210421-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB210421-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:19	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN210421-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:38	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS210421-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:00	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: Tara Stark
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<b>Team</b>	North Kihei	<b>Samplers</b> (Last Name, 1st Initial)	BURNETT, G. BARR, F WOLF, A	<b>Meters and Probes ID</b>		
<b>Session</b>	62			HQ40d: 2		2100Q: 2
<b>Date</b>	04/22/21			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  CFU	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal						water	beach	camp
Maalaea Harbor NMH210422	N	7:45	24.8	35.1	6.25	91.7	8.14	1.17	0.99	1.10		0	—	—
Maalaea Condos NMC210422	N	8:05	25.1	31.8	* 7.76	* 112.2	8.08	3.04	3.02	<del>2.55</del> <del>2.46</del>		0	0	0
Haycraft Park NHP210422	—	8:20	25.1	34.2	6.70	98.4	8.11	7.58	7.59	7.50		0	1	0
Kealia Pond NKP210422	N	8:45	25.1	35.7	6.70	99.1	8.16	0.75	0.69	0.66		0	4	0
Kihei Canoe Club NKC210422	N	9:05	25.9	34.3	6.60	98.2	8.12	3.04	2.81	3.64		0	3	0

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

NAL NUTRIENT BOTTLE MISLABELLED AS MML  
WOODEN BOX MISSING FROM KIT (FOR NUTRIENT EXTRACTION)  
\*NAL DO% READING OUT OF NORMAL RANGE—  
TOOK 2 READINGS WITH SAME RESULT—  
SAME COMMENT FOR DO READING

**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	0.08	6.48	55.6	574
Pre-sampling	0.07	6.58	55.7	575
Post-sampling	0.07	6.50	56.0	575

#### CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

*J. Cook*

Printed Name:

Tiara Stark

Team	North Kihei	Samplers (Last Name, 1st Initial)	Burnette G. Wolf A Bahr F
Session	62		
Date	04/22/21		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
NMH210422-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	
NMC210422-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	
NHP210422-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	
NKP210422-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	08:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC210422-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	09:05	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:
<i>Maara Star</i>	Tiara Star