

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



Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
61	M. Brown, T. Stark	3/29/21	2:01	T. Stark, M. Brown	4/1/21	10:45 am

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value		POST: Verification Value		Acceptable Range	Comments/ Notes	QA?
Temperature	NIST 7/8/21	n/a	n/a	Std Val	NIST 26.0 °C	NIST 25.9 °C	NIST 26.2 °C	NIST — °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	1	1	n/a		25.7		26.0			pre lab temp 26.3 °C	
	1	2	n/a			25.6		—		post lab temp 26.8 °C	
Salinity			3 months	Std Val	Tap water 0.30	Salin Std 11/2/20 date 35.0 ppt	Tap water 0.30	Salin Std 11/2/20 date 35.0 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	1	1	2/15/21		0.31	35.1	0.31	35.2			
	1	2	2/15/21		0.31	36.5	—	—			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	1	1	11/2/20		99.1		100.1				
	1	2	11/2/20		99.3		—				
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	3	3/29/21		6.94	9.98	7.01	10.01			
	1	4	3/29/21		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		0.06	6.62	0.06	6.61			
	2	n/a	3/8/21		0.04	6.53	—	—			

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

Std #1 6.66
Std #2 6.48

Lab: DHS

Team	Kamaole	Samplers (Last Name, 1st Initial)	Harry Hecht 97.3 Scott 97.2 Margie 97.9 Rick 99.0	Meters and Probes ID		
Session	61			HQ40d: 1		2100Q: 1
Date	3/30/21			pH: 3	DO: 1	Salinity: 1

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 CFU	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal						water	beach	camp
Kalepolepo North NKN210330	N	7:57	24.7	33.5	6.6	95.9	8.12	7.86	11.4	11.0	—	0	1	0
Waipuilani Park KWP210330	N	8:15	24.7	34.4	6.58	96.3	8.07	19.7	19.5	19.3	—	0	1	0
Kihei South KKS210330	N	8:32	25.3	33.8	6.39	94.1	8.07	19.0	22.6	23.7	—	1	15	0
Kalama Park KKP210330	N	8:50	25.1	35.2	6.67	98.7	8.14	4.63	4.41	4.60	—	3	1	1

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

Use the back of the form if needed.

NKN - Addition Turb. (10.5) used 4th

*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	0.06	6.66	58.3	592
Pre-sampling	0.06	6.68	57.9	586
Post-sampling	0.05	6.70	58.2	589

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	dlHS	MBrom

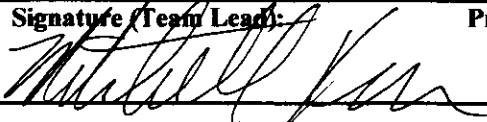
Signature (Team Lead):

Printed Name:

Mitchell K... Mitch Brown

Team	Kamaole	Samplers (Last Name, 1st Initial)	Heck H graves S. Cyr M.
Session	61		
Date	3/30/21		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN210330-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:57	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP210330-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	
KKS210330-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:32	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP210330-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Signature/Team Lead:	Printed Name:
	Mitch Brown

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	B. Souza, M. Sharpe, J. Dunning	Meters and Probes ID		
Session	61			HQ40d: 1		2100Q: 1
Date	03/31/21			pH: 3	DO: 1	Salinity: 1

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 KCP210331	Ø	8:37	25.4	32.4	6.72	98.3	8.10	5.26	4.23	4.28	-	20 2	Ø	Ø
S Maluaka Beach MMB210331	Ø	9:08	25.4	34.3	6.86	101.1	8.13	2.78	2.78	2.68	-	6	3	Ø
Ahihi Kinau North MAN210331	Ø	9:33	25.1	35.3	7.24	106.8	8.13	1.56	1.44	1.36	-	Ø	Ø	Ø
Ahihi Kinau South MAS210331		9:52	25.4	34.5	6.84	101.3	8.11	2.14	2.18	1.99	-	16	35	

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

3-4 foot waves at Maluaka Beach
3 foot wave at Ahihi Cove

MAN: Jeep informed Tiara they noticed
high oxygen reading but it was too late to
re-take it.

Sites with freshwater flow: Cove Park

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.05	6.66	58.3	592
Pre-sampling	0.07	6.71	58.1	591
Post-sampling	0.07	6.67	58.1	587

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

[Signature]

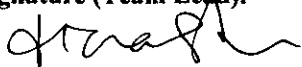
Printed Name:

Tiara Stark

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	B. Sousa M. Sharpe J. Dunning
Session	61		
Date	03/31/21		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KCP210331-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:37	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB210331-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:08	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN210331-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:33	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS210331-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:52	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 Stash
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Team North Kihei	Samplers (Last Name, 1st Initial) <i>BURNETTE, G. BARR, F</i> <i>WOLF, A.</i>	Meters and Probes ID	
Session 61		HQ40d: 1	2100Q: 1
Date 04/01/21		pH: 3	DO: 1

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 NMH210401	N	0745	24.1	34.7	6.43	93.1	8.13	1.66	1.73	1.62		0	3	0
Maalaea Condos NMC210401	N	0800	24.2	34.1	7.15	103.4	8.09	2.12	2.26	2.53		0	0	0
Haycraft Park NHP210401	N	0820	24.4	35.0	6.89	100.7	8.13	5.17	6.66	6.35		1	1	1
Kealia Pond NKP210401	N	0840	24.5	35.1	6.87	100.5	8.17	1.74	1.77	1.97		0	0	0
Kihei Canoe Club NKC210401	N	0900	25.2	34.6	6.84	101.1	8.14	9.11	11.1	10.9		0	3	0

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

High waves all week
* PER TEAM LEAD INSTRUCTION - TAKING A 4TH
TURBIDITY READINGS ONLY IF A 50% DIFFERENCE EXISTS,
NOT SURE IF THIS IS THE STANDARD WE WANT OR NOT.

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	0.07	6.66	58.3	592
Pre-sampling	0.06	6.69	57.8	586
Post-sampling	0.06	6.69	58.1	587

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	DHS	T. Stark
Bacteria	-	-	-

Signature (Team Lead):

[Signature]


Printed Name:

Tiarn Stark

Team	North Kihei	Samplers (Last Name, 1st Initial)	Burrette, G. Wolf, A.	Bahr, F.
Session	61			
Date	04/01/21			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NMH210401-N-1	Maalaea Harbor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMC210401-N-1	Maalaea Condos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NHP210401-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP210401-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC210401-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	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