



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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
76	G. Burrette, T. Stark	2/14/22	9:45 am	G. Burrette, T. Stark	2/17/22	1045

QA/QC Check	Inst #	Probe #	Last Cal Date	Std Val	PRE: Verification Value		Salin Std	Tap water	Salin Std	POST: Verification Value		Acceptable Range	Comments/ Notes	QA?
Temperature	NIST	n/a	NIST Exp. Date		NIST	NIST	1/17/22	0.26	1/17/22	NIST	NIST	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	2	2	10/16/22		25.7 °C	26.0 °C	33.9 ppt	0.26	33.6	76.1 °C	— °C			
	2	3			25.8	26.1		0.26	33.8	26.1	—			
Salinity			3 months	Std Val	Tap water	Salin Std	Salin Std	Tap water	Salin Std	Salin Std	Salin Std	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	2	2/14/22		0.26	33.6	33.9 ppt	0.26	33.6	33.9 ppt	33.8		TAP WATER FROM GEORGE BURRETTE'S GARAGE	
	2	3	2/14/22		0.26	33.8		—	33.8	—	—			
Dissolved Oxygen			1 year	Std Val		100%			100%			± 5 %		
	2	2	12/16/21		100.8			99.7						
	2	1	12/16/21		100.6			—						
pH			3 weeks	Std Val	pH 7.00	pH 10.00		pH 7.00	pH 10.00	pH 10.00		± 0.1 pH of pH std value	Compare to Manufacturer pH Std value on bottle	
	2	4	2/14/22		7.01	10.03		7.01	10.01	10.01				
	2	5	2/14/22		7.01	10.04		7.01	10.04	—				
Turbidity			3 months	Std Val	BLANK <0.1 NTU	LOW 1-10 NTU		BLANK <0.1	LOW 1-10 NTU	LOW 1-10 NTU		± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
1		n/a	1/24/22		0.08	6.61		—	—	—			LOW STD : 6.57	
2		n/a	1/24/22		0.08	6.28		0.08	6.33	6.33			LOW STD : 6.32	

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

Lab: GBC  
 (George Burrette Garage)



Team	Kamaole	Samplers (Last Name, 1st Initial)		D. Vingelen, T. Stark, S. Graves, H. Hecht		Meters and Probes ID	
Session	76					HQ40d: 2	
Date	02/15/2022					2100Q: 2	
						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)		People (within 100 ft)		
					(mg/L)	(%) 85-105 normal				water	beach	camp
Kalepolepo North NKN220215	N	8:05	23.2	34.5	6.56	93.2	8.16	5.82	7.18 8.05 8.19	0	2	0
Waipuilani Park KWP220215	N	8:30	22.5	34.4	6.58	92.5	8.10	12.8	12.9 12.4	1	0	0
Kihei South KKS220215	N	8:54	23.4	33.8	6.85	90.3	8.19	9.78	9.78 8.70	0	3	0
Kalama Park KKP220215	N	9:13	23.5	35.3	6.90	99.2	8.16	6.72	7.01 7.41	3	2	6

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

- NKN • We had to walk along the shoreline to access site. Bank eroded
- NKN • Probes in water for 3 minutes
- KWP • Paddle boarder close to sampling site. In @ 8:37am  
probes. out @ 8:42am
- KKS • Small waves, kind of busy far away
- KKP • Strong waves

Sites with potential for freshwater flow: All

TURBIDITY VERIFICATION				
	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.08	6.32	54.6	607
Pre-sampling	0.08	6.25	53.8	605
Post-sampling	0.08	6.34	54.2	606

CHAIN OF CUSTODY INFORMATION		
	# of samples	Relinquished to
Sediment	-	-
Nutrients	4	GBC
Bacteria	-	-

Signature (Team Lead):	Printed Name:
<i>Diandra</i>	Tiara Stark

- \* Field group training w/ Dariusella (MMPC interns)
- \* Quarterly observation ✓ for S. Graves & H. Hecht



Team	Kamaole	Samplers (Last Name, 1st Initial)	
Session	76	D. Vingelen S. Graves H. Hecht	
Date	02/15/2022	T. Stark	

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
NKN220215-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP220215-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS220215-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:54	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP220215-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:15	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:






Team	Wailea-Makena	Samplers (Last Name, 1st Initial)		B. Sausa, J. Dunning, M. Sharpe	
Session	76			Meters and Probes ID	
Date	02/16/2022			HQ40d: 2	2100Q: 2
				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)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
Cove Park KCP220216	N	8:28	24.1	35.3	6.84	99.7	8.11	7.82	7.32	7.35	3	2	2
S Maluaka Beach MMB220216	N	9:06	24.4	35.7	6.92	101.4	8.15	2.81	2.89	2.80	Ø	Ø	Ø
Ahihi Kinau North MAN220216	N	9:32	24.3	35.7	7.33	107.0	8.15	1.41	1.61	1.67	Ø	Ø	Ø
Ahihi Kinau South MAS220216	N	9:48	24.6	35.7	6.90	101.3	8.15	3.10	3.10	2.82	2	5	Ø

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

Cove Park - large waves  
S. Maluaka - large shore breaking waves  
Ahihi North - Rip at 0900 - 106.8  
Relinquished to "GBG" - George Bennett

Sites with potential for freshwater flow: Cove Park

TURBIDITY VERIFICATION				
	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.08	6.32	54.6	607
Pre-sampling	0.16	6.29	54.5	606
Post-sampling	0.07	6.31	54.5	606

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	GBG	George Bennett
Bacteria	-	-	-

Signature (Team Lead): *George S. Bennett* Printed Name: *George S. Bennett*



Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	SASA, B. Dupont J. SHARPE, M.
Session	76		
Date	02/16/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
KCP220216-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:28	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB220216-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:06	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN220216-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:32	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS220216-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		

Signature (Team Lead):

Printed Name:


  
 GEORGE C. BUNNETTE



Team	North Kihei	Samplers (Last Name, 1st Initial)	<i>BARNETT, C</i>	<i>BARNETT, C.</i>	Meters and Probes ID	
Session	76				HQ40d: 2	2100Q: 2
Date	02/17/2022				pH: 4	DO: 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)	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal			water	beach	camp
Maalaea Harbor NMH220217	N	0750	23.8	35.7*	6.41	92.7	8.16	0.65 0.75 0.81	0	0	0
Maalaea Condos NMC220217	N	0810	23.4	34.8*	6.88	98.6	8.06	8.57 8.64 8.48	0	0	0
Hayercraft Park NHP220217	—	0825	23.7	35.7*	6.67	96.5	8.14	5.03 5.59 5.21	0	5	0
Kealia Pond NKP220217	N	0850	23.7	35.8*	6.90	100.1	8.19	0.98 0.92 0.91	2	3	0
Kihei Canoe Club NKC220217	N	0910	24.4	35.4*	6.79	99.2	8.14	6.42 6.27 5.72	12	50	0

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

*CALM WINDS AND VERY LITTLE SURF TODAY*  
*4 OF 5 BEACHES HAD 0/0 GREENER THAN 35 - MOSTLY*  
*NORMAL I THINK*

*NKC - MULTIPLE CANOES LANDING AND BEACH*  
*CROWDED WITH PADDLERS*

*NKC - WATER WAS CLEANER TO DRINK - FIRST TIME*  
*SINCE HEAVY RAIN EVENT MANY WEEKS AGO*

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

TURBIDITY VERIFICATION				
	Blank (must be <0.10)	Low (+/- 0.18)	Med (+/- 1.80)	High (+/- 18)
Standard	0.07	6.32	54.6	607
Pre-sampling	0.07	6.34	54.3	606
Post-sampling	0.08	6.26	54.6	607

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	GBG	GEORGE BARNETT
Bacteria	-	-	-

Signature (Team Lead):	Printed Name:
<i>Greg S. Barnett</i>	<i>GEORGE C. BARNETT JR</i>



Team	North Kihei	Samplers (Last Name, 1st Initial)	<i>BURDETTE, G. BAM, F.</i>
Session	76		
Date	02/17/2022		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
NMH220217-N-1	Maalaea Harbor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0750	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMC220217-N-1	Maalaea Condos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0810	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NHP220217-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0825	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP220217-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0850	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC220217-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0910	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):

*Geoff S. Mott*

Printed Name:

*GEORGE G. BURDETTE*