

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
55	T, Stark; J, Strickland	11/16/20	12:45 pm	M, Brown	11/19/2020	1000

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	
					26.4 °C	26.4 °C	27.4 °C	°C			
	1	1	n/a		26.3		27.2				
	1	2	n/a			26.3		—			
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	
					.	9/25 date 35.0ppt		11/22 date 35.2ppt			
	1	1	11/16/20		.33	34.8	.33	35.2			
	1	2	11/16/20		.33	34.8	—	—			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
					—		—				
	1	1	—		—		—				
	1	2	10/18/20		100.3		100.6				
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	
	1	3	11/16/20		7.01	9.97	6.98	10.0			
	1	4	11/16/20		7.01	9.99	—	—			
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	11/16/20		0.08	6.59	0.06	6.61		Low STD: 6.60	
	2	n/a	11/16/20		0.07	6.39				Low STD: 6.39	

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

Team	Kamaole	Samplers (Last Name, 1st Initial)	H. J. HEART, Scott GRAVES 97.7 Cyr M - 97.6 Cyr R - 97.6	Meters and Probes ID		
Session	55			HQ40d: 1		2100Q: 1
Date	11/17/20			pH: 3	DO: 2	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	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					CFU	water	beach	camp
Kalepolepo North NKN201117	N	7:58	25.7	35.4	6.22	92.8	8.11	1.79	2.20	2.13		0	1	0
Waipuilani Park KWP201117	N	8:12	24.6	33.1	6.49	94.1	8.02	23.0	23.8	23.7		0	3	0
Kihei South KKS201117	N	8:33	25.6	34.4	6.38	94.6	8.10	2.99	2.92	2.94		3	0	0
Kalama Park KKP201117	N	8:48	26.3	35.0	6.56	98.8	8.13	4.04	4.32	4.72		4*	4	0
Cove Park KCP201117	N	9:09	26.5	34.4	6.26	94.2	8.11	2.34	3.16	3.03		0	3	0

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

KWP NASTY WATER Dirty debris
* Spearfisher man = KKP

*Sites no longer sampled -, Mai Poina Oe Ia'u, PPT MGL OXY
KWP 2ND Reading 33.2 6.51 94.1

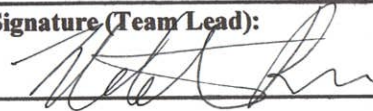
TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.08	6.60	58.6	593
Pre-sampling	0.08	6.60	58.2	592
Post-sampling	0.09	6.62	58.8	593

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):



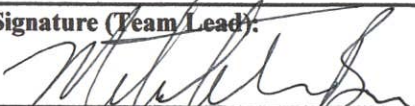
Printed Name:

Mitch Brown

Team	Kamaole	Samplers (Last Name, 1st Initial)	Hecht H Graves S Cyr R Cyr M
Session	55		
Date	11/17/20		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN201117-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:58	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP201117-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:12	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS201117-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:33	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP201117-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:48	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP201117-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:07	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
		<input type="checkbox"/>	<input type="checkbox"/>		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		

Signature (Team Lead): 	Printed Name: Mitch Brown
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Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	Wolf A, Starke M, Sousa B	Meters and Probes ID		
Session	55			HQ40d: 1		2100Q: 1
Date	11/18/20			pH: 3	DO: 2	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
Kilohana Dr WKD201118	N	7:55	26.0	35.5	6.63	99.7	8.11	0.89	0.92	0.96		1	7	0
Keawakapu Beach WKB201118	N	8:14	26.2	35.5	6.51	98.2	8.12	0.51	0.58	0.56		0	4	0
Ulua Beach WUL201118	N	8:43	26.3	35.5	6.54	98.9	8.13	0.78	0.84	0.87		3	4	0
S Maluaka Beach MMB201118	N mist	9:17	26.2	35.4	6.43	97.2	8.13	0.58	0.65	0.59		*5	0	0
Ahihi Kinau North MAN201118	N	9:27	26.1	35.2	6.12	92.2	8.00	0.81	0.89	0.86		2	4	0
Ahihi Kinau South MAS201118	N	9:50	26.3	35.3	6.50	98.3	8.10	1.37	1.43	1.60		6	0	0

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

WUL - in other bottle marked
with green tape.

*M one tour boat leaving shore

★ Volunteers forgot to do
pre-sampling turbidity

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.17	6.58	58.2	593
Pre-sampling				
Post-sampling	0.11	6.55	58.5	596

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	DHS	T. Starke
Bacteria	-	-	-

Signature (Team Lead):

Tiara Starke

Printed Name:

Tiara Starke

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	Wolf, A. Sousa, B. Sharpe, M.
Session	55		
Date	11/18/20		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD201118-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB201118-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:14	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL201118-N-1	Ulua Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:43	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB201118-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:17	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN201118-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:27	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS201118-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:50	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

Team	North Kihei	Samplers (Last Name, 1st Initial)	BUNNETT, G. BAHN, F	Meters and Probes ID		
Session	55			HQ40d: 1	2100Q: 1	
Date	11/19/20			pH: 3	DO: 2	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	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					CFU	water	beach	camp
Maalaea Harbor NMH201119		7:45 AM	25.1	34.7 34.7 ±0.2	6.14	90.5	8.10	0.70	0.73	0.81		0	0	0
Maalaea Condos NMC201119		8:05	24.9	34.8	6.67	98.3	8.07	7.55	8.00	7.72		0	0	0
Haycraft Park NHP201119		8:30	25.4	34.9	6.33	94.2	8.11	1.90	2.12	2.16		0	0	0
Kealia Pond NKP201119	N	8:56	25.6	35.5	6.64	99.4	8.11	0.89	0.87	0.80		1	2	0
Kihei Canoe Club NKC201119		9:17	26.6	35.2	6.55	99.5	8.11	0.49	0.63	0.53		0	2	0

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

pH Probe - No KC! in bottle after 1st beach
HQ40d meter - shut off numerous times when
pressing READ button
NMC beach - unusually high tide

Sites with stream outflow: Kealia

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.11	6.60	58.6	593
Pre-sampling	0.07	6.64	58.4	603
Post-sampling	0.06	6.61	58.5	594

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Mitch Brown

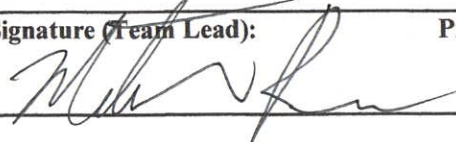
Printed Name:

Mitch Brown

Team	North Kihei	Samplers (Last Name, 1st Initial)	Burnette G. Bahr F
Session	55		
Date	11/19/20		

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NMH201119-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	
NMC201119-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	
NHP201119-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP201119-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:56	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC201119-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:17	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