

Hui O Na Wai Ola

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
58	T. Stark, J. Strickland	01/25/21	9:45	T. Stark	01/28/21	10:45 am

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value	POST: Verification Value	Acceptable Range	Comments/ Notes	QA?
Temperature	NIST	n/a	n/a	Std Val	NIST 24.9 °C	NIST 25.0 °C	NIST — °C	NIST 24.9 °C	± 0.6 °C of NIST Compare to NIST Std value in tap water
	2 1	n/a			25.1		—		NIST Exp: 7/2021
	2 2	n/a			24.8		24.7		
Salinity			3 months	Std Val	Tap water 0.30 0.13	Salin Std 11/21/20 date 25.0 ppt	Tap water 0.30 0.13	Salin Std 11/21/20 date 25.0 ppt	± 1 ppt Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle
	2 1	11/16/20			0.33	35.2	—	—	
	2 2	11/16/20			0.33	34.9	0.33	35.0	
Dissolved Oxygen			1 year	Std Val	100%	100%	± 5 %		
	2 1	11/2/20			99.8	—			
	2 2	11/2/20			99.4	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
	2 3	1/25/21			6.98	10.01	—	10.01 _{as.}	
	2 4	1/25/21			7.01	10.00	7.02	10.01	
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 6.79 NTU	BLANK <0.1	LOW 1-10 NTU	± 0.18 NTU Low 1-10 Compare to Gel LOW 1-10 Std Calibration value
	2	n/a	11/16/21		0.07	6.40	0.04	6.42	Std: 6.39
	1	n/a	11/16/21		0.05	6.63	—	—	Std: 6.60

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

Lab: DHS

Hin O Ka Wai Ola - Sample Collection Datasheet

Team	Kamaole	Samplers (Last Name, 1st Initial)	SCOTT G.	HARRY H.	SSG 97.3 M.C. 97.5 R.C. 97.4 H ?	Meters and Probes ID			
Session	58		MARGIE C.	REICKE C.		HQ40d: 2		2100Q: 2	
Date	1/26/21					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 NKN210126	N	7:57	24.5	33.7	6.74	97.8	8.16	6.30	6.20	6.51		Ø	4	Ø	
Waipuilani Park KWP210126	N	8:19	24.3	33.6	6.45	92.9	8.06	12.0	11.5	12.5		Ø	1	Ø	
Kihei South KKS210126	N	8:36	24.5	34.1	6.09	88.5	8.06	6.56	6.62	6.76		Ø	1	Ø	
Kalama Park KKP210126	N	8:55	24.7	34.9	6.61	96.8	8.10	6.82	6.14	5.70		3	3	0	

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

A Problem w/ blanking turbidity meter
Poured out water in blank + replaced it w/ bottled DI H₂O

Probes acclimation time

1) 8:04 - 8:09 AM

2) 8:23 - 8:27 AM

3) 8:40 - 8:43

4) 9:00 - 9:03

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

C Brown water out to \approx 1/2 mile (KWP)

Shorebreak today

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07	6.39	56.0	562
Pre-sampling	0.11	6.43	55.7	562
Post-sampling	0.07	6.43	55.4	562

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-		
Nutrients	4	Mitch Brown	Mitch Brown

Signature (Team Lead):

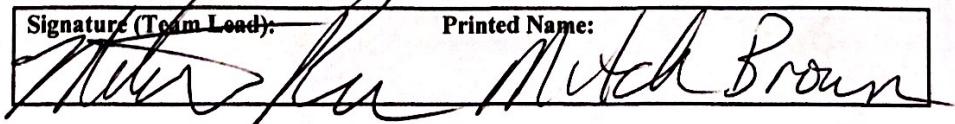
Mitch Brown

Printed Name:

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Kamaole	Samplers (Last Name, 1st Initial)	Graves S. Cyr R.			
Session	58		Cyr M.			
Date	1/26/21		Tech H.			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN210126-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	
KWP210126-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:19	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS210126-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:36	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP210126-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	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	
		<input type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	

Signature (Team Lead):  Printed Name: Mitch Brown

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	J. Dunning, M. Sharpe, B. Sousa J. Strickland		Meters and Probes ID			
Session	58				HQ40d: 2		2100Q: 2	
Date	01/27/21				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)	Enteroto	People (within 100 ft)			
					(mg/L)	(%) 85-105 normal			CFU	water	beach	camp	
Cove Park KCP210127	N	8:31	25.1	33.3	6.41	93.4	8.09	7.45	3.48	2.78	Ø	Ø	1
S Maluaka Beach MMB210127	N	9:07	25.2	35.3	6.66	98.6	8.16	1.25	0.80	0.91	1	2	Ø
Ahihi Kinau North MAN210127	N	9:31	25.1	35.3	7.24	106.6	8.12	2.14	1.27	1.11	Ø	Ø	Ø
Ahihi Kinau South MAS210127	N	9:55	25.2	34.6	6.65	98.2	8.10	2.09	2.00	1.89	2	2	Ø

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

* KCP #4 turbidity reading 3.30

All sites calm, no wind

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07	6.39	56.0	562
Pre-sampling	0.09	6.40	55.5	562
Post-sampling	0.05	6.39	55.7	561

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	4	DHS	J. Strickland
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:

James Strickland James Strickland

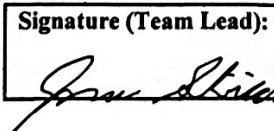
Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Wailea-Makena	Samplers (Last Name, 1st Initial)	J. Dunning ; M. Sharpe ; B. Sousa ; J. Strickland			
Session	58					
Date	01/27/21					

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KCP210127-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:31	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB210127-N-1	S Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:07	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN210127-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:31	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS210127-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:55	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):


 James Strickland

Printed Name:

James Strickland

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	North Kihei	Samplers (Last Name, 1st Initial)	BURNEAU, G. WOLF, A BAHN, F.						Meters and Probes ID			
Session	58								HQ40d: 2		2100Q: 2	
Date	01/28/21				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
Maalaea Harbor NMH210128		0750	23.3	34.8	6.38	99.1	8.13	2.28	2.31	2.24	0	0	0
Maalaea Condos NMC210128		0810	23.0	34.4	6.94	98.3	8.08	7.76	8.51 ^{±3} 9.03	7.95	6	0	0
Haycraft Park NHP210128		0830	23.3	35.0	6.86	98.4	8.13	4.44	5.63	5.80	0	0	0
Kealia Pond NKP210128	N	0850	23.9	35.4	6.89	99.6	8.18	0.99 ⁶⁰¹ 2.84	1.19	1.02	18 ⁶⁰¹	1	0
Kihei Canoe Club NKC210128		0910	25.3	34.8	6.55	96.6	8.15	1.36	1.84 ⁶⁶³ 3.01	1.84	0	0	0

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

VERY WINDY AS NMH
STREAM FLOWING AT NMC
MAN PEeing IN OCEAN AT NKP
HQ40d #2 WOULD NOT TURN ON UNTIL BATTERIES
REMOVED AND RESET
TIARA STARK OBSERVING/REFRESHEN

Sites with stream outflow: Kealia

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.05	6.39	56.0	562
Pre-sampling	0.05	6.38	55.4	563
Post-sampling	0.05	6.42	55.8	563

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Tiara Stark

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	North Kihei	Samplers (Last Name, 1st Initial)	Burnette, G.	Wolf A.
Session	58		Bahr, F.	
Date	01/28/21			

Sample ID	Location Name	Sample taken?	Duplicate sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NMH210128-N-1	Maalaea Harbor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMC210128-N-1	Maalaea Condos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NHP210128-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	
NKP210128-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC210128-N-1	Kihei Canoe Club	<input type="checkbox"/>	<input type="checkbox"/>	9:10	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