

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

Hui O Ka Wai Ola

Session No: 24	Verifiers (pre-sampling): M. Brown G. Burnette	Pre Date: 12/3/18	Pre Time: 8:40	Verifiers (post-sampling): M. Brown	Post Date: 12/7/18	Post Time: 10:15
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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	
	2	1	n/a		22.9°C	22.9°C	—	24.3°C			
	2	2	n/a		23.2	23.1	—	24.5			
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	
	2	1	10/1/18		0.13	33.4	—	—			
	2	2	10/1/18		0.13	33.3	0.13	33.3			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	1	10/1/18		101.3		—				
	2	2	10/1/18		106.1		100.3				
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	
	2	1	12/3/18		7.02	10.03	—	—			
	2	2	12/3/18		7.02	10.03	7.02	10.03			
Turbidity			3 months	Std Val	BLANK <0.1	6.15/6.30 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	10/1/18		0.05	6.30	—	—			
	2	n/a	10/1/18		0.04	6.03	0.05	6.04			

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

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Kamaole	Samplers (Last Name, 1st Initial) <i>Horry Hech</i> <i>Scott Graves</i> <i>Dana Howard</i> Ross Perez	Meters and Probes ID		
Session	24		HQ40d: 2		2100Q: 2
Date	12/4/18		pH: 2	DO: 2	Salinity: 2

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
Normal Values			variable	30 - 35 ppt		85 - 105%	8 - 8.3	variable					
Kalepolepo North NKN181204	N	8:02	25.1	32.7	6.06	88.5	8.15	0.82	1.00	1.30	1	0	0
Waipuilani Park KWP181204	NA	8:36	24.4	32.5	5.94	85.6	8.12	6.36	6.58	7.29	0	2	1
Kihel South KKS181204	NA	8:54	25.3	34.5	5.77	85.3	8.16	4.53	3.55	3.55	0	1	0
Kalama Park KKP181204	N	9:15	24.9	34.5	6.77	99.5	8.16	6.57	7.27	5.98	3	3	0
Cove Park KCP181204	N	9:30	26.1	32.7	5.84	87.2	8.13	1.73	1.45	1.73	12	6	0

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

4 double A Batteries @ Waipuilani
Donna - Provided.
Did not work @ 30% (Multimeter)

TURBIDITY VERIFICATION				
	Blank (must be <0.10)	Low	Med	High
Standard	0.03	6.00	55.6	590
Pre-sampling	0.03	6.02	56.0	591
Post-sampling	0.03	5.99	56.1	590

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	.	.	.
Nutrients	5	NWS	Mitch Brown
Bacteria	.	.	.

Signature (Team Lead): *Mitch Brown* Printed Name: Mitch Brown

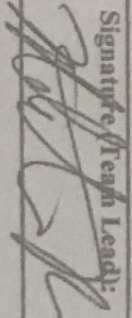
Sites with streams/outflows: Kalepolepo North, Kalama Park, Cove Park

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Kamaole	Samplers (Last Name, 1st Initial)	H. Hecht S. Graves B. Howard R. Ruiz
Session	24		
Date	12/4/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN181204-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP181204-N-1	Waipuliani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:36	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS181204-N-1	Kihai South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:54	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP181204-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	
KCP181204-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30	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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature of Team Lead:	Printed Name:
	Michael Brown

Team	North Kihei	Samplers (Last Name, 1st Initial)	CHASE, B SOUSA, B - (IN TRAINING) BURNETTE, G.	Meters and Probes ID		
Session	24			HQ40d: 2		2100Q: 2
Date	12/6/18			pH: 2	DO: 2	Salinity: 2

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
Haycraft Park NHP181206	N/A	8:20	24.6	34.7	6.72	98.1	8.13	2.44	8.81	8.41	0	0	0
Kealia Pond NKP181206	P	8:45	24.9	35.5	6.80	101.1	8.20	0.34	0.55	0.45	0	2	0
Sugar Beach NSB181206	N/A	9:10	25.0	35.1	6.84	100.8	8.18	1.34	1.49	1.45	0	2	0
Kihei Canoe Club NKC181206	N/A	9:28	25.5	34.4	6.77	100.3	8.15	1.26	1.74	1.74	2	10	0
Mai Poina Oe Iau NMP181206	N/A	9:45	25.6	33.4	6.57	97.0	8.14	2.20	2.67	2.68	0	0	0

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

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	53.8	590
Standard	0.03	6.00	56.1	580
Pre-sampling	0.06	6.02	55.9	591
Post-sampling	0.03	6.00	55.9	589

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	MMS	Gene Burnett
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:

By S. H. H. GENE B. BURNETTE

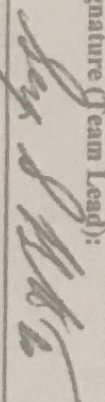
Sites with streams/outflows: Kealia Pond

Hui O Ka 'Ōla - Sample Collection Datasheet

Team	North Kihei	Samplers (Last Name, 1st Initial)	Cusick, B. Soika, D. C. (N. Thompson) Barnette, C.
Session	24		
Date	12/6/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NHP181206-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	
NKPI181206-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NSBI181206-N-1	Sugar Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC181206-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:28	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMPI181206-N-1	Mai Poia Oe Iau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:45	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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):	Printed Name:
	David L. Barnette

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Wailea	Samplers (Last Name, 1st Initial) Holly Rindge, Alfred Wolf, Judy Jarvis CHRIS LAMB	Meters and Probes ID		
Session	24		HQ40d: 2	2100Q: 2	
Date	12/7/18		pH: 2	DO: 2	Salinity: 2

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
Kilohana Dr WKD181207	N	07:50	24.9	35.4	6.80	100.2	8.18	1.08	1.36	1.17	1	7	0
Keawakapu Beach WKB181207	N	08:21	25.3	35.4	6.75	100.1	8.15	0.60	0.60	0.78	1	3	0
Ulua Beach WUL181207	N	8:40	25.6	35.3	6.75	100.7	8.15	1.03	0.98	0.92	6	8	0
Palauca WPL181207	N	9:05	25.8	35.4	6.81	101.8	8.17	0.71	0.86	0.79	0	8	0
Poolenalena WPO181207	N	9:22	25.9	35.3	6.84	102.3	8.20	0.43	0.43	0.39	4	2	0

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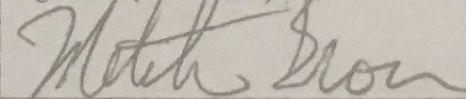
TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.03	6.00	55.6	590
Pre-sampling	0.06	6.01	55.9	591
Post-sampling	0.05	6.04	56.0	590

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment			
Nutrients	5	N/A	Mitch Brown
Bacteria			

Signature (Team Lead):



Printed Name:

Mitch Brown

Sites with streams/outflows: NONE

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Wailea	Samplers (Last Name, 1st Initial) <i>Ridge H Lamb C</i> <i>Wolfe A</i> <i>Jarvie J</i>
Session	24	
Date	12/7/18	

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD181207-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB181207-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:21	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL181207-N-1	Ulua Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPL181207-N-1	Palauea	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPO181207-N-1	Poolenalena	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:22	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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):	Printed Name:
<i>Mitch Brown</i>	Mitch Brown