

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
SM 28	Melode Brown, Strickland	2/25/18	8:58 am	Melode Brown	3/1/19	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 24.2 °C	NIST 24.1 °C	NIST 25.3 °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water
	1	1	n/a		24.4	—			
	2	2	n/a		24.2	25.4			
Salinity			3 months	Std Val	Tap water 0.13 ppt	Salin Std date 33.4 ppt	Tap water date 33.4 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle
	1	1	2/25/19		0.10 ppt	33.3	0.11 ppt 33.4 ppt		
	1	2	2/25/19		0.10 ppt	33.5	0.11 ppt 33.6 ppt		
Dissolved Oxygen			1 year	Std Val	100%	100%	± 5 %		
	1	1	10/1/18		101.4	—			
	1	2	10/1/18		101.7	101.4			
pH			3 weeks	Std Val	pH 7.00	pH 10.00	pH 7.00	± 0.1 pH of pH std value	Compare to Manufacturer pH Std value on bottle
	1	1	2/25/19		7.00	10.02	—		
	1	2	2/25/19		7.00	10.02	7.02	10.03	
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 6.13/6.62 NTU	BLANK <0.1	LOW 1-10 NTU	± 0.18 NTU Low 1-10 Std Calibration value
	1	n/a	2/6/19		0.06	6.15	0.03	6.15	
	1	n/a	2/8/19		0.05	6.52	—	—	

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

Team	Kamaole	Samplers (Last Name, 1st Initial)	<i>M. Brown D. Howard</i>						Meters and Probes ID					
Session	28								HQ40d: 2			2100Q: 2		
Date	2/26/19								pH: 2			DO: 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)	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal			water	beach	camp
Kalepolepo North NKN190226	N	8:00	24.1	33.5	6.08	97.5	8.11	0.52	0.68	0.74	—
Waipuilani Park KWP190226	N	8:30	23.4	31.9	6.11	86.0	8.10	6.16	7.09	6.88	—
Kihei South KKS190226	N	8:55	24.1	33.0	6.35	91.1	8.19	4.44	4.77	4.71	—
Kalama Park KKP190226	N	9:15	23.6	34.5	6.72	96.4	8.18	7.81	8.34	8.79	2*
Cove Park KCP190226	N	9:40	24.6	31.1	6.64	95.0	8.13	1.15	1.20	1.38	2

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

Use the back of the form if needed.

** dogs 2*

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.05	6.13	55.7	567
Pre-sampling	0.05	6.16	55.3	568
Post-sampling	0.04	6.16	55.9	568

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment			
Nutrients	5	NAS	<i>M Brown</i>
Bacteria	-		

Signature (Team Lead):

Mitch Brown

Printed Name:

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

Team	Kamaole	Samplers (Last Name, 1st Initial)	<i>M. Brown</i>			
Session	28		<i>D. Howard</i>			
Date	2/26/19					

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN190226-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP190226-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	
KKS190226-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP190226-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	
KCP190226-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:40	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): *Mike M. Brown* Printed Name: *Mike M. Brown*

Hui O Ika Wai Ola - Sample Collection Datasheet

Team	Makena	Samplers (Last Name, 1st Initial)	<i>J. Fries, T. Durning, M. Sharpe, B. Sousa</i>						Meters and Probes ID		
Session	28								HQ40d: 2	2100Q: 2	
Date	2/27/19								pH: 2	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)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
Makena Landing MML190227	NA	7:55am	23.4	34.2	6.70	95.6	8.14	1.85	1.79	1.63	NA	NA	NA
S Maluaka Beach MMB190227	NA	8:28	23.0	34.5	7.06	100.5	8.17	0.58	0.63	0.63	0	4	0
Oneuli MON190227	NA	8:42	22.9	34.6	7.21	100.1	8.17	0.72	0.71	0.73	0	0	0
Ahihi Kinau North MAN190227	NA	9:04	23.1	34.6	7.42	105.8	8.11	9.69 ^{out}	7.06	1.05	0.69	0	2
Ahihi Kinau South MAS190227	NA	9:25	23.4 ^{out}	34.3	6.98	99.6	8.11	0.72	0.73	0.89	3	12	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	Med	High
Standard	0.04	6.13	55.7	567
Pre-sampling	0.10	6.30	55.4	568
Post-sampling	0.05	6.15	55.9	567

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	
Nutrients	5	NMS	Mitch Brown
Bacteria	-	-	

Signature (Team Lead):

Mitchell Kuhn

Printed Name:

Mitch Brown

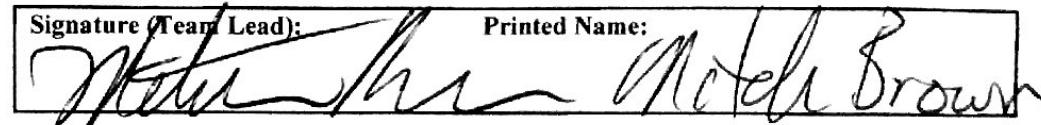
Sites with streams/outflows: Makena Landing

Team	Makena	Samplers (Last Name, 1st Initial)
Session	28	
Date	2/27/19	

Sousa B. Fries C
 Dunning J.
 Sharpe M.

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
MML190227-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB190227-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:28	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MON190227-N-1	Oneuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:42	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN190227-N-1	Ahihi-Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:04	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS190227-N-1	Ahihi-Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:25	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: Nellie Brown

Hawaiian Islands Water Quality Collection Data Sheet

Team	North Kihei	Samplers (Last Name, 1st Initial)	<i>R. Riley M. Brown</i>						Meters and Probes ID					
Session	28								HQ40d: 2			2100Q: 2		
Date	2/28/19								pH: 2			DO: 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)	People (within 100 ft)		
					(mg/L)	(%) 85-105 normal			water	beach	camp
Haycraft Park NHP190228	N	8:10	22.0	33.3	6.43	88.9	8.06	2.23 2.13 1.75 2.26 2.97 3.48	0	6	1
Kealia Pond NKP190228	N	8:40	22.7	35.0	7.05	99.3	8.20	0.47 0.49 0.48	0	1	0
Sugar Beach NSB190228	N	9:00	22.6	34.7	6.98	98.1	8.19	1.85 2.16 1.75	0	9	0
Kihei Canoe Club NKC190228	N	9:21	23.3	34.1	6.85	97.5	8.16	3.61 4.49 6.59	0	35	0
Mai Poina Oe Iau NMP190228	N	9:40	23.6	33.1	6.83	97.3	8.15	3.25 2.23 2.46	0	5	0

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

Use the back of the form if needed.

NHP - after 3rd saw drops on vial
 Took 3 more readings

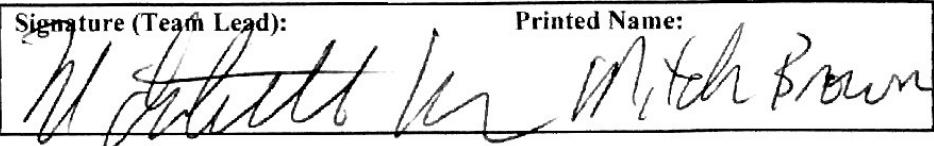
TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.05	6.13	55.7	567
Pre-sampling	0.06	6.18	55.1	568
Post-sampling	0.06	6.16	55.5	566

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	PMS	Mitch
Bacteria	-	-	-

Signature (Team Lead):



Printed Name:

Mitch Brown

Hawai'i Rain Gauge - Sample Collection Datasheet

Team	1	Streams/Outflows:					
Session	28	Samplers (Last Name, 1st Initial)	<i>R. Riley M. Brown</i>				
Date	2/28/19						

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NHP190228-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP190228-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	
NSB190228-N-1	Sugar Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC190228-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMP190228-N-1	Mai Poina Oe Iau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:40	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):

R. Riley M. Brown

Printed Name:

Team	Wailea	Samplers (Last Name, 1st Initial)	<i>Wolf, D'Alvata</i>						Meters and Probes ID		
Session	28								HQ40d: 2		
Date	3/1/19		pH: 2			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)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
Kilohana Dr WKD190301	N	7:50	22.1	34.7	7.18	100.2	8.17	0.88	0.72	0.74	0	8	0
Keawakapu Beach WKB190301	N	8:11	22.3	34.8	7.06	99.0	8.16	0.69	0.72	0.61	1	2	0
Ulua Beach WUL190301	N	8:37	23.0	33.9	6.89	97.2	8.14	*0.88	0.77	*0.75	4	9	0
Palaea WPL190301	N	8:53	22.8	34.7	7.11	100.4	8.19	1.21	1.13	1.12	0	0	0
Poolenalena WPO190301	N	9:08	23.4	34.5	7.11	101.3	8.20	1.11	1.18	1.18	1	9	0

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

Use the back of the form if needed.

* had to re-take reading due to odd reading

TURBIDITY VERIFICATION

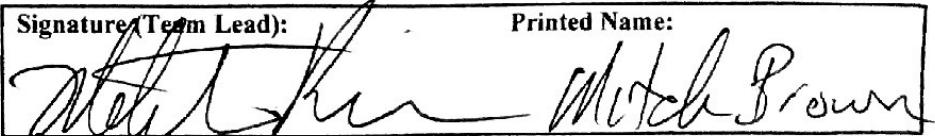
	Blank (must be <0.10)	Low	Med	High
Standard	0.06	6.13	55.7	567
Pre-sampling	0.06	6.12	55.1	567
Post-sampling	0.03	6.15	55.7	566

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	NMS	Mitch Brown
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:



Team	Wailea	Samplers (Last Name, 1st Initial)	<i>Wolf A D'alexa S.</i>				
Session	28						
Date	3/01/19						

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD190301-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	
WKB190301-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:11	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL190301-N-1	Ulua Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:37	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPL190301-N-1	Palauea	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:53	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPO190301-N-1	Poolenalena	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:08	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):

Mitch Brown

Printed Name: