

SM\_26\_01142019

Team	Kamaole	Samplers (Last Name, 1st Initial)	Brown M. Howard D.						Meters and Probes ID				
Session	26								HQ40d: 1			2100Q: 3	
Date	1/15/19								pH: 5			DO: 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)			People (within 100 ft)		
					(mg/L)	(%) 85-105 normal					water	beach	camp
Kalepolepo North NKN190115	N	8:04	23.8	33.4	6.72	96.0	8.20	4.56	4.97	4.97	0	1	0
Waipuilani Park KWP190115	NA	8:40	23.4	34.1	6.29	89.6	8.10	10.8	11.8	12.1	0	3	0
Kihei South KKS190115	NA	9:05	24.2	34.1	6.52	94.1	8.17	7.75 04	9.54	8.63 8.44	0	2	0
Kalama Park KKP190115	N	9:30	24.4	34.4	6.65	96.5	8.16	8.76	8.69	9.11 7.58	7	5	0
Cove Park KCP190115	NA	10:00	24.6	32.6	6.90	99.7	8.17	3.30	9.14	4.17	4	2	0

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

Use the back of the form if needed.

\* Took 4<sup>th</sup> reading @ KPSI because we noticed water bubbles on bottle

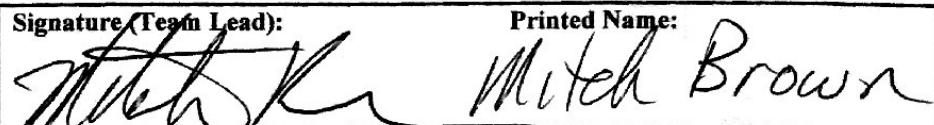
## TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.04	6.27	56.2	605
Pre-sampling	0.04	6.64	56.3	605
Post-sampling	0.04	6.33	56.6	605

## CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):



Printed Name:

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

## Hilo Oke A &amp; Ola - Sample Collection Datasheet

Team	Kamaole	Samplers (Last Name, 1st Initial)	<i>Brown M</i>			
Session	26		<i>Howard D.</i>			
Date	1/15/19					

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
NKN190115-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:04	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP190115-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS190115-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP190115-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP190115-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:00	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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):

*Mitch Brown*

Printed Name:

*Mitch Brown*

Team	Makena	Samplers (Last Name, 1st Initial)	Brown M. Sousa B.						Meters and Probes ID		
Session	26								HQ40d: 1		
Date	1/16/19		pH: 5			DO: 1		Salinity: 3			

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 MML190116	N	8:10	23.5	33.7	6.81	97.2	8.19	2.76	3.79	4.45	Ø	2	6
S Maluaka Beach MMB190116	NA	8:37	23.8	34.2	6.86	92.8	8.18	2.45	2.58	2.56	5	0	0
Oneuli MON190116	NA	9:02	23.9	34.0	6.89	99.3	8.15	2.63	2.80	3.01	Ø	1	Ø
Ahihi Kinau North MAN190116	NA	9:28	24.2	34.5	7.06	102.5	8.15	1.05	0.90	1.08	Ø	5	Ø
Ahihi Kinau South MAS190116	NA	9:50	24.6	34.4	6.78	99.0	8.16	1.44	1.84	1.78	8	20	6

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

Use the back of the form if needed.

MML - 4TH READING

## TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.04	6.27	56.2	605
Pre-sampling	0.04	6.29	56.1	605
Post-sampling	0.03	6.33	56.7	605

## CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

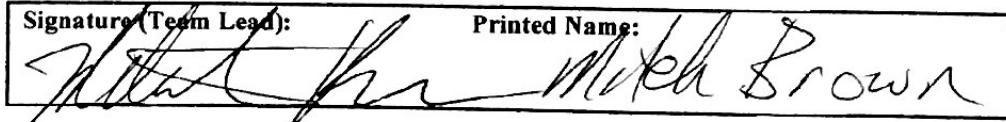
Mitch Brown

Sites with streams/outflows: Makena Landing

## Hui O Ke Wa'a Sample Collection Datasheet

Team	Makena	Samplers (Last Name, 1st Initial)	<i>Brown M.</i>			
Session	26		<i>Sonsa B.</i>			
Date	1/16/19					

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
MML190116-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB190116-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:37	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MON190116-N-1	Oneuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:02	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN190116-N-1	Ahihi-Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:28	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS190116-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	
<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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):  Printed Name: Mitch Brown

Team North Kona

Samplers  
(Last Name,  
1st Initial)Sam, T.  
Chase, B  
Brownholme, K

Meters and Probes ID

Session 26

Date 1/17/19

HQ40d: 1

2100Q: 3

pH: 5

DO: 1

Salinity: 3

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 NHP190117											
Kealia Pond NKP190117											
Sugar Beach NSB190117											
Kihei Canoe Club NKC190117											
Mai Poina Oe Iau NMP190117											

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

Use the back of the form if needed.

Haycraft was too rough. We stopped at each other site and found it too rough. Canoes didn't even go out today.

## TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	.04	6.30	56.78	605
Pre-sampling	.05	6.31	56.5	604
Post-sampling	—	—	—	—

## CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	0		
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:

Team	1 streams/outflows:	Samplers (Last Name, 1st Initial)					
Session	26						
Date	1/17/19						

*Bafr F  
Chase B  
Thankholm K*

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
NHP190117-N-1	Haycraft Park	<input type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP190117-N-1	Kealia Pond	<input type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NSB190117-N-1	Sugar Beach	<input type="checkbox"/>	<input checked="" type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC190117-N-1	Kihei Canoe Club	<input type="checkbox"/>	<input type="checkbox"/>		125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMP190117-N-1	Mai Poina Oe Iau	<input type="checkbox"/>	<input type="checkbox"/>		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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):

Printed Name:

Team	Wailea	Samplers (Last Name, 1st Initial)	<i>Wolf A Judy J Chua Z</i>						Meters and Probes ID			
Session	26								HQ40d: 1			2100Q: 3
Date	1/18/19		pH: 5			DO: 1			Salinity: 3			

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 WKD190118	N	8:00am	23.4	34.8	6.85	98.1	8.19	1.19	1.24	1.32	0	10	0
Keawakapu Beach WKB190118	N	8:20	23.8	34.6	6.85	98.5	8.20	0.80	0.91	0.82	0	2	0
Ulua Beach WUL190118	N	8:40	24.2	34.4	6.84	99.0	8.20	0.60	0.62	0.60	11	3	0
Palaua WPL190118	N	9:10	24.1	34.6	6.86	99.0	8.20	1.24	1.00	1.16	2	2	0
Poolenalena WPO190118	N	9:35	24.3	34.4	6.84	99.1	8.22	0.55	0.63	0.52	1	1	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	6.27	56.2	605
Pre-sampling	0.04	6.30	56.4	605
Post-sampling	0.05	6.35	56.5	605

## CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	Brown Chem	Mike Brown
Bacteria	-	-	-

Signature (Team Lead):

*Mike Brown*

Printed Name:

## Hawai'i State Sample Collection Worksheet

Team	Wailea	Samplers (Last Name, 1st Initial)				
Session	26					
Date	1/18/19					

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
<b>Nutrients</b>							
WKD190118-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB190118-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL190118-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	
WPL190118-N-1	Palauea	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPO190118-N-1	Poolenalena	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:35	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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):  Printed Name: Mitch Brown

SM

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
	STRICKLAND, J	1/14/2019	9:45 AM	STRICKLAND, J	1/18/19	1:40 PM

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 22.0 °C	NIST 21.7 °C	NIST 21.9 °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	JPI 3	n/a			21.8		22.1			
	JPI 1	n/a			21.6					
Salinity			3 months	Std Val	Tap water Salin Std 1/17/19 date 33.1 ppt	Tap water Salin Std 1/19 date 33.1 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle		
	JPI 3	1/16/18			0.04	33.0	0.04	33.0		
	JPI 2	1/16/18			0.04	33.1	—	—		
Dissolved Oxygen			1 year	Std Val	100%	100%	± 5 %			
	JPI 1	4/21/18			98.6	99.3				
	JPI 2	8/6/18			100.5	—				
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	
	JPI 5	1/14/19			7.06	10.01	7.04	10.07		
	JPI 6	1/14/19			7.00	10.01	—	—		
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 6.87 NTU	BLANK <0.1	LOW 1-10 6.87 NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value
	3	n/a	1/16/18		0.04	6.33	0.04	6.33		
		n/a								

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