

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 44 19	Sofia / Post = BURNING, G	9.20.18	10:00 am	BURNING, G	5/22/18	11:00 am

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value		POST: Verification Value		Acceptable Range	Comments/ Notes	QA?
Temperature			n/a	Std	NIST	NIST	NIST	NIST	± 1°C of NIST	Within 1°C	
	1	1	n/a		21.5	21.2	29.2				
	1	2	n/a		21.7	—	29.1				
	1	2	n/a		—	21.5		—			
Salinity			3 months	Std	Tap water	Salin Std	Tap water	Salin Std	± 3%, blank	33.95 – 36.05	
					0.13	4.7.18 date	0.13	4/4/18 date			
					0.04 ppt	33.0 ppt	0.04 ppt	33.0 ppt			
	1	1	9.18.18		0.14	33.4	0.15	33.2			
	1	2	6.18.18		0.14	33.4	0.15	—			
Dissolved Oxygen			1 year	Std	100%		100%		Post-check ± 5 % of pre-check	80 – 120 %	
	1	1	9/19/17		97.0 %		97.3 %				
	1	2	9/19/17		98.6 %		—				
pH			3 weeks	Std	pH 7.00	pH 10.00	pH 7.00	pH 10.00	± 3 % of cal solution (6-8)	6.79 – 7.21	
	1	1	7.30.18		7.02	10.07	7.05	10.09	PRETEMP 19.1°		
	1	2	7.30.18		7.02	10.07	—	—	PRETEMP		
Turbidity			3 months	Std	BLANK	LOW 1-10	BLANK	LOW 1-10	Blank < 0.1 ± 3 % of secondary standard	Low ± 0.18 NTU Med ± 1.8 NTU High ± 18 NTU	
					<0.1	6.02/6.21	<0.1	6.21			
	1	N/A	6.18.18	6.21	0.04	6.21	0.03	6.23			
	2	N/A	6.18.18	6.03	0.03	6.03	—	—			

QA: * Are pre- and post within one week? 669
* Delay times are ok?
* Other equipment issues?

669

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Kamaole	Samplers (Last Name, 1st Initial)	Houma, D Brown, M Rasick, S	Meters and Probes ID		
Session	19			HQ40d: 1	2100Q: 1	
Date	08/21/2018			pH: 1	DO: 1	Salinity: 1

Location Name Sample ID	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			Waves (0-3)	Wind (0-6)	People (within 100 ft)			TSS	Nutrient duplicate
				(mg/L)	(%)							water	beach	camp		
Kalepolepo North NKN180821	7:55	26.9	31.6	5.92	88.5	8.13	1.73	1.93	1.56	1	4	1	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Waipuilani Park KWP180821	8:28	26.4	31.8	5.58	83.0	8.11	5.09	4.67	5.08	0	1	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Kihei South KKS180821	8:40	27.5	33.4	4.99	76.0	8.10	4.75	5.50	5.32	1	1	2	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalama Park KKP180821	9:00	27.3	34.0	6.51	99.2	8.16	7.01	7.50	6.73	1	2	1	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Cove Park KCP180821	9:13	28.2	32.9	6.16	94.9	8.16	1.93	1.64	1.94	0	1	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>

Waves: 0ft: no waves; 1ft: small waves; 2ft: knee high; 3ft: waist high

Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL CONDITIONS	
Most recent tide time (falling or rising)	Low: 6:26 am (rising) High: 2:43 pm
Moon day (from new)	11
Cloud cover (0-8)	
Rain conditions last 24 hrs (0-4)	
Wind direction (Trades/Kona)	Trades
Streams flowing? (Y/N)	

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).
Use the back of the form if needed.
took 2 reads of blank & was over 2.0 wiped with oil 1st & 2nd a kalama nutrient bottle was spilled & resample was taken w/ same syringe & bottle

TURBIDITY VERIFICATION				
	Blank (must be <0.10)	Low	Med	High
Standard	0.04	6.21	58.1	602
Pre-sampling	0.25	4.24	58.2	6.04
Post-sampling	0.08	6.21	58.1	604


CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	NAS	George Brown
Bacteria	-	-	-

Signature (Team Lead):	Printed Name:
<i>[Signature]</i>	GEORGE C. BROWN

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Kamaole	Samplers (Last Name, 1st Initial)	Howard D. Brown M. Pasella S.
Session	19		
Date	08/21/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN180821-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP180821-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:28	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS180821-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:40	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP180821-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP180821-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:13	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:
	GEORGE C. BROWN

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Makena	Samplers (Last Name, 1st Initial)	M. Sharpe, J. Dunning, S. Fries, T. Wildberger	Meters and Probes ID		
Session	19			HQ40d: 1	2100Q: 1	
Date	08/22/2018			pH: 1	DO: 1	Salinity: 1

Location Name Sample ID	Time	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			Waves (0-3)	Wind (0-6)	People (within 100 ft)			TSS	Nutrient duplicate
				(mg/L)	(%)							water	beach	camp		
Makena Landing MML180822	7:52am	27.3	26.2	6.44	94%	8.17	1.16	1.36	1.08	1	0	3	9	0	<input type="checkbox"/>	<input type="checkbox"/>
S Maluaka Beach MMB180822	8:25	27.7	34.7	6.23	96.2	8.18	1.22	1.62	1.15	1	0	4	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Oneuli MON180822	8:47	(closed)					9.5					6	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi-Kinau North MAN180822	9:04	27.5	34.8	7.17	110.1	8.15	0.95	1.09	1.31	1	0	6	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi-Kinau South MAS180822	9:00	(closed)													<input type="checkbox"/>	<input type="checkbox"/>

Waves: 0ft: no waves; 1ft: small waves; 2ft: knee high; 3ft: waist high
Wind: 0: calm; 3: gentle breeze; 6: strong breeze

COASTAL AND ENVIRONMENTAL CONDITIONS	
Most recent tide time (falling or rising)	Low: 7:12 am (rising) High: 3:12 pm
Moon day (from new)	12
Cloud cover (0-8)	4
Rain conditions last 24 hrs (0-4)	
Wind direction (Trades/Kona)	NNW 4 mph
Streams flowing? (Y/N)	

NOTES AND COMMENTS (trends, equipment problems, errors, concerns).
Use the back of the form if needed.
Hurricane lane warning issued 5:37am / MMB - construction behind beach as well as demolition MON - beach closed, 8:47am MAN - north - foul smell - source unknown

TURBIDITY VERIFICATION				
	Blank (must be <0.10)	Low	Med	High
Standard	0.08	6.26	58.7	603
Pre-sampling	0.04	6.16	58.3	603
Post-sampling	0.03	6.23	58.2	604

Correct pre-sample

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	3	NMS	GEORGE BURWETTE
Bacteria	-	-	-

Signature (Team Lead):	Printed Name:
Shy 8/22/18	GEORGE B. BURWETTE III

Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Makena	Samplers (Last Name, 1st Initial)	SHARP, M. O'CONNOR, J. FRIS, S. WILSON, T.
Session	19		
Date	08/22/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
MML180822-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB180822-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MON180822-N-1	Oneuli	<input type="checkbox"/>	<input type="checkbox"/>	—	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN180822-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	
MAS180822-N-1	Ahihi-Kinau South	<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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):	Printed Name:
<i>George G. O'Connell</i>	GEORGE G. O'CONNELL