

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
20	Sofia / Mitch	9/10/18	9:05	Sofia	9/14/18	

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 22.4 °C	NIST 22.7 °C	NIST 20.8 °C	NIST 20.8 °C	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
	2	1	n/a		22.6		—				
	2	2	n/a			22.9		21.0			
Salinity			3 months	Std Val	Tap water 0.13	Salin Std 4/9/18 date 33.0 ppt	Tap water 0.13	Salin Std 4/9/18 date 33.0 ppt	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
	2	1	6/18/18		0.10	33.3	—	—		Used tap water from Brita filter (bam times)	
	2	2	6/18/18		0.10	33.4	0.09	33.6			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	2	1	9/19/17		97.1		—				
	2	2	9/19/17		98.1		98.7				
pH	2		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	8/20/18		7.02	10.04	—	—			
	2	2	8/20/18		7.03	10.05	7.06	10.09			
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10 6.03 NTU	BLANK <0.1	LOW 1-10 6.03 NTU	± 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
	1	n/a	6/18/18		0.04	6.27	—	—			
	2	n/a	6/18/18		0.07	5.77	0.04	5.77			

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

Team	Kamaole	Samplers (Last Name, 1st Initial)	Quinn, P, S, G, S, Brown, M	Meters and Probes ID		
Session	20			HQ40d: 2	2100Q: 2	
Date	09/11/2018			pH: 2	DO: 2	Salinity: 2

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 NKN180911	8:00	26.8	32.9	6.35	95.7	8.14	4.13	5.68	4.37	1	1	0	0	2	<input type="checkbox"/>	<input type="checkbox"/>
Waipuilani Park KWP180911	8:17	26.5	32.9	6.38	95.0	8.12	19.1	19.9	20.1	1	1-2	2	7	0	<input type="checkbox"/>	<input type="checkbox"/>
Kihei South KKS180911	8:37	27.2	33.3	6.04	92.1	8.14	4.88	5.43	5.65	1	1	2	4	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalama Park KKP180911	8:52	27.0	33.8	6.36	96.9	8.15	5.71	5.05	5.84	1	2	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Cove Park KCP180911	9:11	27.2	31.6	6.52	98.4	8.14	3.36	3.80	4.87	1	1	11	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: 10:41 am High: 5:13 am (F)
Moon day (from new)	3
Cloud cover (0-8)	1
Rain conditions last 24 hrs (0-4)	1
Wind direction (Trades/Kona)	T.
Streams flowing? (Y/N)	N

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

Use the back of the form if needed.

threat of tropical storm Olivia, became
more breezy at KWP, gusty at KKS
KKP- stream has been dredged.

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.07	6.03	54.9	581
Pre-sampling	0.04	5.18	53.8	581
Post-sampling	0.03	5.75	53.5	575

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6 581	NAS	GEORGE BURNETT
Bacteria	-	-	-

Signature (Team Lead):



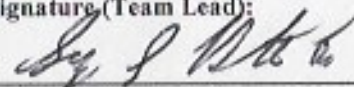
Printed Name:

GEORGE C. BURNETT III

Team	Kamaole	Samplers (Last Name, 1st Initial)	QUINN, A MASELL, S GRANDS, S HANSEN, M
Session	20		
Date	09/11/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN180911-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	
KWP180911-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:17	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS180911-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:37	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP180911-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP180911-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:11	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:

GREG B. BRUNETTE

Team	North Kihei	Samplers (Last Name, 1st Initial)	BURPENE G. STOKLAND, J SOUSA, R - OBSERVER	Meters and Probes ID		
Session	20			HQ40d: 2	2100Q: 2	
Date	09/13/2018			pH: 2	DO: 2	Salinity: 2

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			
Haycraft Park NHP180913	8:25	26.8	34.9	6.44	98.0	8.17	2.67	2.42	8.88	8.69	1	2	0	6	0	<input type="checkbox"/>	<input type="checkbox"/>
Kealia Pond NKP180913	8:50	27.0	35.4	6.44	98.5	8.20	1.33	1.39	1.67	1	4	0	1	0	<input type="checkbox"/>	<input type="checkbox"/>	
Sugar Beach NSB180913	9:20	28.0	35.3	6.44	100.4	8.19	2.61	2.27	2.03	2.49	1	0	0	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Kihei Canoe Club NKC180913	9:50	28.1	34.9	6.41	99.9	8.18	2.17	2.36	2.93	1	1	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>	
Mai Poina Oe Iau NMP180913	10:11	27.7	34.1	6.46	99.7	8.17	3.05	3.07	3.12	1	2	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: 12:06 pm (falling) High: 6:45 am
Moon day (from new)	4
Cloud cover (0-8)	4
Rain conditions last 24 hrs (0-4)	3
Wind direction (Trades/Kona)	TRADES
Streams flowing? (Y/N)	N/A

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.
PRE-SAMPLING BLANK READ SEVERAL TIMES WIPED WITH BLACK CLOTH, NSB - SPILLED NUTRIENT BOTTLE AND RE-SAMPLED WITH A NEW BOTTLE

TURBIDITY VERIFICATION				
	Blank (must be <0.10)	Low	Med	High
Standard	0.03	6.93	54.9	581
Pre-sampling	0.10	5.71	53.6	574
Post-sampling	0.07	5.75	53.8	573

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	NMS	GEORGE BARNETT
Bacteria	-	-	-

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

Team	North Kihei	Samplers (Last Name, 1st Initial)	BURNETT, G. STRECKLAND, J SOUSA, A - OBSERVER
Session	20		
Date	09/13/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NHP180913-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:26	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP180913-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	
NSB180913-N-1	Sugar Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC180913-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMP180913-N-1	Mai Poina Oe Iau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:11	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:

By S. W. E. GORDON G. BURNETT

Team	Wailea	Samplers (Last Name, 1st Initial)	Rindge, H. Jarvie, J. D. Alenta, S.	Meters and Probes ID		
Session	20			HQ40d: 2		2100Q: 2
Date	09/14/18			pH: 2	DO: 2	Salinity: 2

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		
Kilohana Dr WKD180914	7:52	27.2	35.6	6.41	98.8	8.2	0.72	0.77	0.75	0	0	1	8	0	<input type="checkbox"/>	<input type="checkbox"/>
Keawakapu Beach WKB180914	8:18	27.6	35.2	6.48	99.9	8.15	0.65	0.80	0.83	1	0	3	11	0	<input type="checkbox"/>	<input type="checkbox"/>
Ulua Beach WUL180914	8:37	27.5	35.3	6.47	99.8	8.18	0.68	1.10	0.78	1	0	14	14	0	<input type="checkbox"/>	<input type="checkbox"/>
Palauea WPL180914	8:54	27.4	35.4	6.46	99.9	8.18	0.79	0.85	0.96	1	0	0	7	0	<input type="checkbox"/>	<input type="checkbox"/>
Poolenalena WPO180914	9:25	28.2	35.5	6.47	101.1	8.21	0.30	0.32	0.48	1	0	0	2	1	<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: 12:58 pm High: 7:39 am (F)
Moon day (from new)	5
Cloud cover (0-8)	0
Rain conditions last 24 hrs (0-4)	0
Wind direction (Trades/Kona)	0
Streams flowing? (Y/N)	N

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.
WKB + WUL - used same syringe as WKD. oops.

TURBIDITY VERIFICATION				
	Blank (must be <0.10)	Low	Med	High
Standard		6.03	54.9	581
Pre-sampling	0.04	5.76	53.9	573
Post-sampling	0.04	5.77	53.8	572

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	NMS	Sofia
Bacteria	-	-	-

Signature (Team Lead): J. Jarvie	Printed Name: Sofia de la Sofia
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hawks bill, watch volcan teens

Team	Wailea	Samplers (Last Name, 1st Initial)	Bridget	Jarvis
Session	20		D'Alema, S	Wolf, A
Date	09/14/2018			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD180914-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB180914-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:18	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL180914-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	
WPL180914-N-1	Palauea	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:58	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPO180914-N-1	Poolenalena	<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):

Julia F. S.

Printed Name:

Sofa de la Sota.