

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



Session No:	Verifiers:	Pre date:	Pre time:	Post Date:	Post time:
9	G. BURMAN L OTOMO	3/5/18	9:15	3/9/18	11:00

QA/QC Check	Inst #	Probe #	Last Cal Date		PRE: Verification Value	POST: Verification Value	Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature			n/a	Std	(Probe 1) 21.2 (Probe 2) 21.3	24.4	± 1°C of NIST	Within 1°C	
	1	1	n/a		21.5	24.6			
	1	2	n/a		21.5	—			
Salinity				Std	0.13 33.0	0.13 33.0	± 3%, blank	33.95 – 36.05	
	1	1			0.14 33.9	0.18 33.7			
	1	2			0.14 34.0	— —			
Dissolved Oxygen				Std	100%	100%	Post-check ± 5 % of pre-check (0-100%)	80 – 120 %	
	1	1			98.3%	98.6			
	2*	2			99.0%	—			
pH				Std	7.00 10.01	7.00 10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
	1	1	3/5/18		7.03 10.04	7.04 10.07			
	1	2	3/5/18		7.03 10.05	— —			

QA: * Are pre- and post within one week? * SWAPPED OUT METER 1 AND USED
 * Delay times are ok? METER #2 BECAUSE METER #1 WOULD SHUT ITSELF
 * Other equipment issues? OFF WHEN PRESSING READ. IT DID THIS 4 OR 5
 TIMES AND WITH DIFFERENT PROBES.

Team	Kamaole	Samplers (Last Name, 1st Initial)	BROWN, M PASELK, S HOWARD, D BUANETTE, G	Meters and Probes ID		
Session	9			HQ40d: 605 2	2100Q: 1	
Date	03/06/18			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		
Waipuilani Park KWP180306	7:56	21.4	31.9	6.83	93.3	8.09	24.7	26.3	26.2	2	0	0	1	6	<input type="checkbox"/>	<input type="checkbox"/>
Kihei South KKS180306	8:15	23.4	32.9	6.22	87.9	8.13	7.60	7.60	7.27	1	1	1	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalama Park KKP180306	8:33	23.5	34.6	6.79	97.2	8.16	9.08	10.2	10.5	3	1	4	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Cove Park KCP180306	8:51	24.4	33.3	6.50	93.8	8.14	2.45	3.22	3.94	1	0	20	0	1	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole I KKO180306	9:10	24.8	35.0	6.77	99.2	8.19	7.8	8.87	1.08	1	0	2	12	0	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole III KKT180306	9:30	24.7	34.9	6.76	99.1	8.18	1.05	1.42	1.77	0	1	10	30	6	<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: 12:34 pm High: 6:34 am (falling)
Moon day (from new)	20
Cloud cover (0-8)	1
Rain conditions (last 24 hrs)	NOPE
Wind direction (Trades/Kona)	KONA 060 TRADES
Streams flowing? (Y/N)	N

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.07	5.45	56.6	590
Pre-sampling	0.05	6.01	56.8	591
Post-sampling	0.05	5.98	56.9	591

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	0		
Nutrients	6	NMS	GEORGE BUANETTE
Bacteria	0		

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

US60 HQ40d #2 DUE TO PROBLEMS WITH METER #1
DURING MONDAY COLLECTIONS

Signature (Team Lead):



Printed Name:

GEORGE BUANETTE

Team	Kamaole	Samplers (Last Name, 1st Initial)	BROWN, M. PASELA, S. HOWARD, D. BURMIST, G.
Session	9		
Date	03/06/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KWP180306-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:56	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS180306-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP180306-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:33	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP180306-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:51	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKO180306-N-1	Kamaole I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKT180306-N-1	Kamaole III	<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 (Team Lead)

[Signature]

Printed Name:

GREGG C. BURMIST TB

Team	Makana	Samplers (Last Name, 1st Initial)	Sharpe, M Wells, A Dunning, J Fries, S Wittberger, T Lauder, L Burnette, G.	Meters and Probes ID		
Session	9			HQ40d: 1		2100Q: 1
Date	03/07/18			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		
Makana Landing MML180307	8:13	23.7	35.1	6.71	96.7	8.16	1.51	2.07	1.89	1	Ø	Ø	Ø	Ø	□	□
S Maluaka Beach MMB180307	8:30	23.8	34.7	6.84	98.6	8.18	0.79	1.06	0.89	1	Ø	3	5	Ø	□	□
Oneuli MON180307	8:58	23.9	35.6	6.81	98.7	8.14	2.12	2.15	2.06	1	Ø	3 ^S	5	Ø	□	□
Makana Beach MBS180307	9:19	24.3	35.7	6.80	99.5	8.20	0.37	0.36	0.35	1	Ø	Ø	30	Ø	□	□
Ahihi Kinau North MAN180307	9:50	24.6	35.4	7.55	110.8	8.16	0.74	0.72	0.73	Ø	1	6	10	Ø	□	□
Ahihi Kinau South MAS180307	9:55	23.9	34.8	6.78	98.5	8.08	0.94	0.80	0.84	1	Ø	10	20	Ø	□	□

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: 1:05 pm High: 6:45 am (falling)
Moon day (from new)	21
Cloud cover (0-8)	4
Rain conditions (last 24 hrs)	Ø
Wind direction (Trades/Kona)	Ø 60 TRADES
Streams flowing? (Y/N)	Ø

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

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.05	5.95	56.6	590
Pre-sampling	0.04	5.97	56.8	591
Post-sampling	0.03	5.98	56.8	591

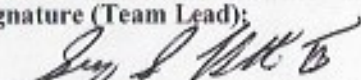
CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	0		
Nutrients	6	NAS	GEORGE BURNETT
Bacteria	0		

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


Team	Makena	Samplers (Last Name, 1st Initial)
Session	9	
Date	03/07/18	

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
MML180307-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:13	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB180307-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MON180307-N-1	Oneuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:58	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MBS180307-N-1	Makena Beach Shoreline	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:19	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN180307-N-1	Ahihi-Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS180307-N-1	Ahihi-Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:55	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 (Team Lead):



Printed Name:

 George G. Buanista
 

Team	North Kihei	Samplers (Last Name, 1st Initial) <i>Renee Kamy Gill</i>	Note.	Meters and Probes ID		
Session	9			HQ40d <i>1</i>	2100Q: 1	
Date	03/08/18			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		
Haycraft Park NHP180308	8:06	22.9	34.5	6.79	96.1	8.14	5.56	5.47	5.61	0	2	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Kealia Pond NKP180308	8:30	23	35.7	6.92	98.5	8.19	0.93	1.37	1.01	1	1	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Sugar Beach NSB180308	8:50	23.6	35.7	6.88	98.0	8.17	1.62	1.89	1.73	2	6	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Kihei Canoe Club NKC180308	9:10	23.9	35.1	6.72	96.9	8.15	1.57	2.80	1.90	1	1	0	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Mai Poina Oe Iau NMP180308	9:27	23.3	34.0	6.71	95.8	8.13	3.60	4.21	3.75	0	1	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalepolepo North NKN180308	9:47	23.3	32.1	6.96	97.7	8.16	4.45	5.17	5.85	0	2	0	0	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: 1:45 pm High: 6:34 am (F)
Moon day (from new)	21
Cloud cover (0-8)	7
Rain conditions (last 24 hrs)	drizzle
Wind direction (Trades/Kona)	Trades
Streams flowing? (Y/N)	N

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

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.03	5.95	56.6	590
Pre-sampling	0.04	6.05	56.6	590
Post-sampling	0.03	6.08	56.7	591

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	NMS	Sofia
Bacteria	-	-	-

Signature (Team Lead): <i>Sofia de la Sota</i>	Printed Name: Sofia de la Sota
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Team	North Kihei	Samplers (Last Name, 1st Initial)	Liley, K Thunholm, K Chau, B Greene, N
Session	9		
Date	03/08/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NHP180308-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:06	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP180308-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NSB180308-N-1	Sugar Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC180308-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMP180308-N-1	Mai Poina Oe Iau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:27	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKN180308-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:47	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 (Team Lead):

J. Liley

Printed Name:

Sophia de la Fera

Team	Wailea	Samplers (Last Name, 1st Initial)	Jarvine, J. de la Sota, S	Meters and Probes ID		
Session	9			HQ40d: 1		2100Q: 1
Date	03/09/18			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		
Kilohana Dr WKD180309	7:57	22.1	35.3	7.00	98.0	8.18	0.60	0.63	0.59	1	2	8	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Keawakapu Beach WKB180309	8:20	22.3	34.8	6.94	97.2	8.17	0.98	1.57	1.01	1	2	8	12	0	<input type="checkbox"/>	<input type="checkbox"/>
Ulua Beach WUL180309	8:37	22.7	34.6	6.93	97.6	8.15	1.00	1.41	1.15	1	0	4	12	0	<input type="checkbox"/>	<input type="checkbox"/>
Wailea Beach WWA180309	9:13	22.8	35.3	6.93	98.3	8.18	1.07	0.98	0.81	2	4	2	17	0	<input type="checkbox"/>	<input type="checkbox"/>
Palauea WPL180309	9:36	22.7	35.4	6.88	97.6	8.17	1.12	1.10	1.08	2	3	0	10	0	<input type="checkbox"/>	<input type="checkbox"/>
Poolenalena WPO180309	10:00	23.6	35.2	6.91	99.4	8.20	0.31	0.33	0.37	3	4	1	1	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: 2:57pm High: 11:14pm, 03/08/18 (F)
Moon day (from new)	22
Cloud cover (0-8)	8
Rain conditions (last 24 hrs)	N
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.

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.03	5.95	56.6	590
Pre-sampling	0.05	6.00	56.8	591
Post-sampling	0.03	6.06	56.7	591

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	NMS	Sofia
Bacteria	-	-	-

Signature (Team Lead): Sofia de la Sota	Printed Name: Sofia de la Sota
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Team	Wailea	Samplers (Last Name, 1st Initial)	Jamie J de la Jota Sofia
Session	8		
Date	02/23/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD180309-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:57	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB180309-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	
WUL180309-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	
WWA180309-N-1	Wailea Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:13	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPL180309-N-1	Palaua	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:36	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPO180309-N-1	Poolenalena	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:00	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 (Team Lead):

Jenna Lee

Printed Name:

Sofia de la Jota