

☐ Temperature of incubator (in)☐ Temperature of incubator (out)FIELD EQUIPMENT VERIFICATION (PRE/POST A WEEKLY SAMPLING):

Session No:	Verifiers:	Pre date:	Pre time:	Post Date:	Post time:
16	G. QUARLES S. DELA SOTA	6/18/18	9:50	6/22/18	10:50

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 2) (Probe 1) 21.9 21.7		19.9		± 1°C of NIST	Within 1°C	
	2	2	n/a		22.1		19.1				
	2	1	n/a		21.9		—				
Salinity				Std	0.13	STANDARD 35.0	0.13	35.0	± 3%, blank	33.95 – 36.05	
	2	2	6/18/18		0.12	34.9	0.10	34.9		SALINITY STANDARD BOTTLE OPENED 3/19/18	
	2	1	6/18/18		0.12	34.9	—	—			
Dissolved Oxygen				Std	100%		100%		Post-check ± 5 % of pre-check (0-100%)	80 – 120 %	
	2	2	9/19/17		100.3%		98.6%				
	2	1	9/19/17		97.2%		—				
pH				Std	7.00	10.01	7.00	10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
	2	2	6/18/18		7.03	10.06	7.03	10.08			
	2	1	6/18/18		7.03	10.06	—	—			

QA:

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

Team	Kamaole	Samplers (Last Name, 1st Initial) <i>SCOTT Green - NOTE TAKER</i> <i>Mitch Brown</i> <i>Steve Paulus</i>	Meters and Probes ID		
Session	16		HQ40d: 2		2100Q: 2
Date	06/19/18		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		
Kalepolepo North NKN180619	8:01	26.1	33.6	5.78 5.78	86.2	8.14	2.39	2.14	2.46	0.5	1	0	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Waipuilani Park KWP180619	8:22	25.2	31.7	6.30	91.6	8.10	14.7	15.5	16.2	0.5	1	0	1	1	<input type="checkbox"/>	<input type="checkbox"/>
Kihei South KKS180619	8:40	26.4	32.8	5.83	87.1	8.16	7.27	8.07	6.95	0.5	1	0	6	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalama Park KKP180619	8:59	26.4	34.1	6.59	99.1	8.16	8.41	8.97	8.86	1	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Cove Park KCP180619	9:18	26.6	31.5	6.74	100.3	8.14	2.23	2.72	3.15	0.5	1	7	0	0	<input type="checkbox"/>	<input type="checkbox"/>
															<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: 3:51 am High: 9:15 am (rising)
Moon day (from new)	7
Cloud cover (0-8)	1.0
Rain conditions (last 24 hrs)	0
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	0.06	6.03	54.9	581
Pre-sampling	0.08	5.95	55.5	581
Post-sampling	0.05	5.88	55.4	581

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	0		
Nutrients	5	NMS	GEORGE BURNETT
Bacteria	0		

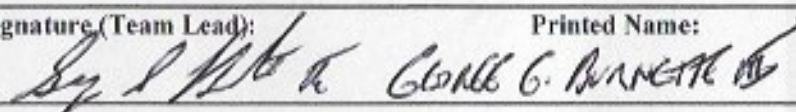
Signature (Team Lead):	Printed Name:
<i>Steve Paulus</i>	GEORGE B. BURNETT

Team	Kamaole	Samplers (Last Name, 1st Initial)	GRAVES, S BROWN, M PASELLE, S
Session	16		
Date	06/19/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN180619-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KWP180619-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:22	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS180619-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	
KKP180619-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:54	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP180619-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:18	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
		<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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):

Printed Name:



Team	Makena	Samplers (Last Name, 1st Initial)	Sheryl Fries, Jeep Dunning, Tina Wildberger, Maile Sharpe	Meters and Probes ID		
Session	16			HQ40d: 2		2100Q: 2
Date	06/20/18			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		
Makena Landing MML180620	8:00	26.4	34.4	6.55	98.6	8.18	1.29	1.10	1.06	0	0	0	4	4	<input type="checkbox"/>	<input type="checkbox"/>
S Maluaka Beach MMB180620	8:25	27.0	34.9	6.54	99.8	8.18	1.26	1.28	1.22	0	0	6	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Oneuli MON180620	8:50	26.7	35.1	6.57	99.8	8.12	1.29	1.34	1.21	0	0	3	5	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau North MAN180620	9:20	26.2	34.7	6.86	103.3	8.09	0.84	0.87	1.00	0	0	8	6	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau South MAS180620	9:25	26.1	35.2	6.27	94.5	8.13	0.45	0.55	0.50	0	0	6	12	0	<input type="checkbox"/>	<input type="checkbox"/>
															<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: 4:48 am High: 11:27 am (rising)
Moon day (from new)	8
Cloud cover (0-8)	3 w/ some veg
Rain conditions (last 24 hrs)	none
Wind direction (Trades/Kona)	North
Streams flowing? (Y/N)	NA

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed.
MMB - demolition of Makena Golf Resort behind beach MON - 3 rd sample for NTU was redone as it was high @ 1.99

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.05	6.03	54.9	581
Pre-sampling	0.08	5.95	55.7	580
Post-sampling	0.06	5.97	55.4	581

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	0		
Nutrients	5	NMS	GENE BARNETT
Bacteria	0		

Signature (Team Lead):	Printed Name:
<i>Sheryl Fries</i>	Gene G. Barnett

Team	Makena	Samplers (Last Name, 1st Initial)	FARRIS, S. O'NEILL, J. WILSON, T. SHARPE, M.
Session	16		
Date	06/20/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
MML180620-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB180620-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	
MON180620-N-1	Oneuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN180620-N-1	Ahihi-Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS180620-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	
		<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		
		<input type="checkbox"/>	<input type="checkbox"/>		500 ml		

Signature (Team Lead):

Printed Name:


 SCOTT C. BENNETT

Team	North Kihei	Samplers (Last Name, 1st Initial)	Thunhulm, K Bahr, F.	Meters and Probes ID		
Session	16			HQ40d: 2		2100Q: 2
Date	06/21/2018			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 NHP180621	8:12	26.3	34.7	6.72	101.2	8.15	2.69	2.54	2.23	1	0	0	1	0	<input type="checkbox"/>	<input type="checkbox"/>
Kealia Pond NKP180621	8:38	25.9	35.2	6.72	100.6	8.18	1.16	1.26	1.07	1	0	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Sugar Beach NSB180621	9:00	26.9	35.1	6.66	101.5	8.18	4.30	5.05	4.42	0	0	1*	7	0	<input type="checkbox"/>	<input type="checkbox"/>
Kihei Canoe Club NKC180621	9:17	26.6	34.7	6.66	100.8	8.16	4.58	4.82	4.75	0	0	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Mai Poina Oe Iau NMP180621	9:32	27.2	33.5	6.55	99.4	8.14	2.25	2.01	1.94	0	0	3	2	0	<input type="checkbox"/>	<input type="checkbox"/>
															<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: 4:14 am (R) High: 11:09 am
Moon day (from new)	8
Cloud cover (0-8)	0
Rain conditions last 24 hrs (0-4)	0
Wind direction (Trades/Kona)	W 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	0.06	6.03	54.9	581
Pre-sampling	0.06	5.99	55.5	581
Post-sampling	0.04	5.99	55.6	580

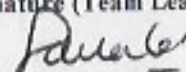
CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	NMS	Sofia
Bacteria	-	-	-

Signature (Team Lead):	Printed Name:
<i>Sofia</i>	Sofia de la Sota

Team	North Kihei	Samplers (Last Name, 1st Initial)	Thunholm, K Bahr, F
Session	16		
Date	06/21/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NHP180621-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:12	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP180621-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:38	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NSB180621-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	
NKC180621-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:17	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMP180621-N-1	Mai Poina Oe Iau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:32	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:

Sofia de la Cruz

Team	Wailea	Samplers (Last Name, 1st Initial) <i>A. Wolff</i> <i>H. Rindge</i> <i>Harry Hacht</i>	Meters and Probes ID	
Session	16		HQ40d: 2	2100Q: 2
Date	06/22/18		pH: 2	DO: 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 WKD180622	7:59	24.5	34.9	6.53	98.7	8.16	0.56	0.95	0.61	0	0	2	12	0	<input type="checkbox"/>	<input type="checkbox"/>
Keawakapu Beach WKB180622	8:25	26.6	35.1	6.65	100.6	8.14	0.67	0.64	0.47	1	0	12	12	0	<input type="checkbox"/>	<input type="checkbox"/>
Ulua Beach WUL180622	8:55	26.7	34.5	6.61	100.6	8.14	0.98	0.90	0.88	1	0	35	18	0	<input type="checkbox"/>	<input type="checkbox"/>
Palauea WPL180622	9:10	26.8	35.0	6.61	100.4	8.19	0.40	0.39	0.41	1	1	3	7	0	<input type="checkbox"/>	<input type="checkbox"/>
Poolenalena WPO180622	9:30	27.3	35.1	6.64	101.8	8.20	0.34	0.34	0.31	1	1	5	5	6	<input type="checkbox"/>	<input type="checkbox"/>
															<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: 4:53 am (R) High: 12:07 pm
Moon day (from new)	9
Cloud cover (0-8)	0
Rain conditions last 24 hrs (0-4)	0
Wind direction (Trades/Kona)	Trade
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	0.04	6.03	54.9	581
Pre-sampling	0.04	5.99	55.4	580
Post-sampling	0.04	5.72	53.5	572

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

Signature (Team Lead): <i>Sofia de la Cruz</i>	Printed Name: Sofia de la Cruz
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Hui O Ka Wai Ola - Sample Collection Datasheet

Team	Wailea	Samplers (Last Name, 1st Initial)	Wolf, A Rindge, H Hecht, H	D'Amico, S
Session	16			
Date	06/22/2018			

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD180622-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:59	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB180622-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL180622-N-1	Ulua Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPL180622-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	
WPO180622-N-1	Poolenalena	<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):

Sofia de la Sota

Printed Name:

Sofia de la Sota