

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

Session No:	Verifiers (pre-sampling):	Pre Date:	Pre Time:	Verifiers (post-sampling):	Post Date:	Post Time:
602 21	Sofia - George - Mitch	10.01.18	9:00 am	Mitch Brown	10/5/18	10:45

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	NIST	NIST	NIST	± 0.6 °C of NIST	Compare to NIST Std value in tap water	
					25.1 °C	25.6 °C	18.9 °C	°C			
	2	1	n/a		25.0		19.2				
	2	2	n/a			25.6		—			
Salinity			3 months	Std Val	Tap water	Salin Std	Tap water	Salin Std	± 1 ppt	Tap water - compare pre & post values Salinity Std - compare to value on Salinity Std bottle	
					0.13	21.9 date 35.0 ppt		3/18 date 32.6 ppt			
	2	1	10/01/18		0.16	34.9	0.12	33.3			
	2	2	10/01/18		0.16	34.9	—	—			
Dissolved Oxygen			1 year	Std Val	100%		100%		± 5 %		
	1	1	10/01/18		100.9 %		100.9 %				
	1	2	10/01/18		100.5 %		—				
pH			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	
	1	1	10/01/18		7.03	10.06	7.07	10.11			
	1	2	10/01/18		7.03	10.06	—	—			
Turbidity			3 months	Std Val	BLANK <0.1	LOW 1-10	BLANK <0.1	LOW 1-10	+ 0.18 NTU Low 1-10	Compare to Gel LOW 1-10 Std Calibration value	
						6.28 NTU		NTU			
	1	n/a	10/01/18		0.05	6.28	0.04	6.26			
	2	n/a	10/01/18		0.03	6.00	—	—			

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

Team	Kamaole	Samplers (Last Name, 1st Initial)	Scott Graves Mitch Brown Donna Howard	Meters and Probes ID		
Session	21			HQ40d: 1		2100Q: 1
Date	10/02/18			pH: 1	DO: 1	Salinity: 1

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
Kalepolepo North NKN181002	N	8:00 AM	27.8	34.5	5.80	85.3	8.10	2.09	2.03	2.57	0	0	0
Waipuli Park KWP181002	N	8:15	26.6	33.2	6.16	91.4	8.02	21.2	22.3	23.0	0	3	0
Kihei South KKS181002	N	8:35	27.4	33.7	5.92	90.2	8.11	8.79 2.80	9.39	10.1	0	3	0
Kalama Park KKP181002	N	8:55	27.3	34.1	6.61	100.6	8.14	9.91	10.4	10.0	2	2	0
Cove Park KCP181002	N	9:10	27.7	33.6	6.47	99.0	8.14	3.45	2.79	2.82	3	1	0

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

KKS - 1st reading sat too long before
pushing read. replaced w/ 4th reading
KKP - 2 dogs

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.05	6.28	58.4	601
Pre-sampling	0.04	6.27	58.8	601
Post-sampling	0.04	6.29	59.0	600

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Mitch Brown Mitch Brown

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

Team	Kamaole	Samplers (Last Name, 1st Initial)	Graves S. Howard D. Brown M.
Session	21		
Date	10/02/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NKN181002-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	
KWP181002-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS181002-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP181002-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP181002-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:10	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:
	Mitch Brown

Team	Makena	Samplers (Last Name, 1st Initial)	L. Lowder, M. Sharp, Jeep Dunning	Meters and Probes ID		
Session	21			HQ40d: 1	2100Q: 1	
Date	10/03/2018			pH: 1	DO: 1	Salinity: 1

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
Makena Landing MML181003	N	8:01 27.1	27.1	26.5	6.97	102.2	8.14	3.29	3.14	2.80	5	2	0
S Maluaka Beach MMB181003	N	8:36	27.8	35.1	6.46	99.9	8.14	.90	.82	.98	9	11	0
Oneuli MON181003	N	8:52	27.8	35.1	6.69	103.3	8.13	3.29	2.79	2.74	0	1	0
Ahihi Kinau North MAN181003	N	9:15	27.8	35.2	6.91	106.8	8.11	2.02	2.36	2.14	4	0	0
Ahihi Kinau South MAS181003	N	9:28	28.1	35.4	6.45	104.0	8.12	1.71	1.88	1.80	23	11	

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

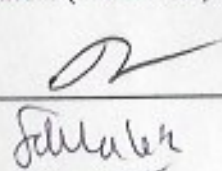
TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.04	6.28	58.4	601
Pre-sampling	0.05	6.31	59.1	599
Post-sampling	0.04	6.28	59.2	601

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	5	NIMS	Sofia
Bacteria	-	-	-

Signature (Team Lead):



Printed Name:

Cory Lowder
Sofia de la Sota

Sites with streams/outflows: Makena Landing

Team	Makena	Samplers (Last Name, 1st Initial)	Lowder, L Shawke M Dunning J
Session	21		
Date	10/03/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
MML181003-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:01	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB181003-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:36	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MON181003-N-1	Oneuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:52	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN181003-N-1	Ahihi-Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:15	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS181003-N-1	Ahihi-Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:28	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):

Jullaly

Printed Name:

Sofia de la Fran

Team	North Kihei	Samplers (Last Name, 1st Initial)	Ilo Bahr Riley, R. BARNETT, G	Meters and Probes ID		
Session	21			HQ40d: 1	2100Q: 1	
Date	10/04/18			pH: 1	DO: 1	Salinity: 1

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
Haycraft Park NHP181004	N	8:20	27.4	35.0	6.69	103.0	8.15	4.33	4.76	4.32	1	4	5
Kealia Pond NKP181004	N	8:46	27.5	35.3	6.74	104.0	8.17	3.08	3.50	2.93	0	0	0
Sugar Beach NSB181004	N	9:10									0	4	0
Kihei Canoe Club NKC181004	N	9:25									0	15	0
Mai Poina Oe Iau NMP181004	N	9:37	28.1	35.1	6.58	102.6	8.17	4.91	4.91	5.03	3	1	0

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

NSB - waves too high to take samples
without being knocked down.

NKC - same

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.04	6.28	58.4	601
Pre-sampling	0.04	6.32	59.1	600
Post-sampling	0.03	6.19	59.0	600

CHAIN OF CUSTODY INFORMATION

	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	3	NMS	Carol Barnett
Bacteria	-	-	-

Signature (Team Lead):

Printed Name:

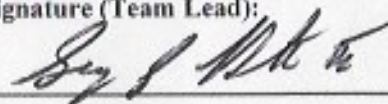
By I Mott & G. Barnett

Team	North Kihei	Samplers (Last Name, 1st Initial)	BARR, F BURNET, G. AUST, A.
Session	21		
Date	10/04/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NHP181004-N-1	Haycraft Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKP181004-N-1	Kealia Pond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NSB181004-N-1	Sugar Beach	<input type="checkbox"/>	<input type="checkbox"/>	9:10	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	NOT SAMPLED HIGH SURF
NKC181004-N-1	Kihei Canoe Club	<input type="checkbox"/>	<input type="checkbox"/>	9:25	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	NOT SAMPLED HIGH SURF
NMP181004-N-1	Mai Poina Oe Iau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:37	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 G. BURNETT JR

Team	Wailea	Samplers (Last Name, 1st Initial)	Rindge, H. Judy Alfie Wok	Meters and Probes ID		
Session	21			HQ40d: 1		2100Q: 1
Date	10/05/18			pH: 1	DO: 1	Salinity: 1

Location Name Sample ID	Streams Flowing (Y/N)	Time (of collection)	Temp (°C)	Salinity (ppt)	Dissolved Oxygen		pH	Turbidity (NTU)			People (within 100 ft)		
					(mg/L)	(%)					water	beach	camp
Kilohana Dr WKD181005		9:27am	28.1	35.4	6.60	102.8	8.16	3.37	3.72	3.60	2	18	0
Keawakapu Beach WKB181005		9:10am	27.9	35.3	6.62	102.8	8.18	4.71	4.75	4.57	9	7	0
Ulua Beach WUL181005		8:50am	27.8	35.1	6.66	103.1	8.17	5.81	6.36	6.49	7	11	0
Palaua WPL181005		8:12am	27.5	26.6	6.98	103	8.17	5.08	4.96	5.03	0	20	8
Poolenalena WPO181005		8:30am	27.9	27.1	6.92	103.1	8.19	3.60	3.89	4.13	0	0	0

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

High Surf

TURBIDITY VERIFICATION

	Blank (must be <0.10)	Low	Med	High
Standard	0.03	6.28	58.4	601
Pre-sampling	0.06	6.30	59.1	600
Post-sampling	0.04	6.26	59.0	600

CHAIN OF CUSTODY INFORMATION

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

Signature (Team Lead):

Printed Name:

Mitchell Kohn Mitch Brown

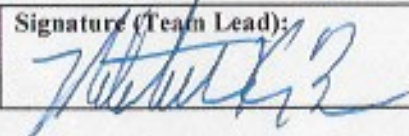
Sites with streams/outflows: NONE

Team	Wailea	Samplers (Last Name, 1st Initial)	Ridge H. Wolf, A Jarvis J.
Session	21		
Date	10/05/18		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD181005-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:27am	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB181005-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:10am	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL181005-N-1	Ulua Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:50am	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPL181005-N-1	Palauea	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:12am	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPO181005-N-1	Poolenalena	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30am	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:

Mitch Brown