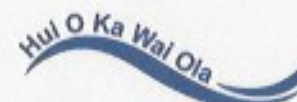


FIELD EQUIPMENT VERIFICATION (PRE/POST A WEEKLY SAMPLING):



Session No:	Verifiers:	Pre date:	Pre time:	Post Date:	Post time:
15	George / Sofia	05/25/18	9:15	06/01/18	11:15

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	24.0	23.6	31.1		± 1°C of NIST	Within 1°C	
	1	S-1	n/a		24.2		31.1				
	1	S-2	n/a			23.7					
Salinity				Std	0.13	33.0	0.13	33.0	± 3%, blank	33.95 - 36.05	
	1	1	3/19/18		0.12	33.5	0.14	33.3			
	1	2	3/19/18		0.12	33.2					
Dissolved Oxygen				Std	100%		100%		Post-check ± 5 % of pre-check (0- 100%)	80 - 120 %	
	1	1	9/19/17		97.7%		99.4 %				
	1	2	9/19/17		99.8 %						
pH				Std	7.00	10.01	7.00	10.01	± 3 % of calibration solution (6-8)	6.79 - 7.21	
	1	1	5/14/18		7.03	10.06	7.03	10.06			
	1	2	5/14/18		7.03	10.07					

QA:

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

Team	Kamaole	Samplers (Last Name, 1st Initial) <i>GRAVES, S</i> <i>Quinn, A</i> <i>Paselle, S</i>	Meters and Probes ID		
Session	15		HQ40d: 1	2100Q: 1	
Date	05/29/2018		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		
Waipulani Park KWP180529	8:45	25.5	31.8	5.71	83.3	8.08	4.54	5.09	5.31	1	0	0	0	5	<input type="checkbox"/>	<input type="checkbox"/>
Kihel South KKS180529	8:00	26.5	32.5	5.73	85.3	8.08	4.49	4.70 ^{NO}	4.85	1	0	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalama Park KKP180529	8:16	26.8	34.8	6.27	93.6	8.12	4.31	4.06	4.80	2	0	0	15	0	<input type="checkbox"/>	<input type="checkbox"/>
Cove Park KCP180529	8:30	25.9	33.0	6.37	94.2	8.12	1.44	2.05	2.03	1	0	40	5	0	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole I KKO180529	8:45	25.7	34.1	6.48	96.2	8.16	1.43 ^{NO}	1.49	1.51	1	0	24	45	0	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole III KKT180529	8:59	26.0	34.7 ^{NO}	6.44	96.4	8.15	0.70	0.95	0.69	1	0	32	30	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: 7:52 am (R) High: 3:07 pm
Moon day (from new)	15
Cloud cover (0-8)	7
Rain conditions last 24 hrs (0-4)	NONE
Wind direction (Trades/Kona)	TRADES
Streams flowing? (Y/N)	

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.06	6.06	56.6	588
Pre-sampling	0.04	6.13	57.2	589
Post-sampling	0.05	6.09	57.2	589

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

NOTES AND COMMENTS (trends, equipment problems, errors, concerns). Use the back of the form if needed. <i>Lots of fog, no wind - warning sign posted @ cove park for bacteria</i>
--

Signature (Team Lead):	Printed Name:
<i>George C. Burnett</i>	GEORGE C. BURNETTE

Team	Kamaole	Samplers (Last Name, 1st Initial)	GRAVES, S. QUINN, A. PASELU, S
Session	15		
Date	05/29/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
KWP180529-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKS180529-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:00	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKP180529-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:16	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KCP180529-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKO180529-N-1	Kamaole I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:45	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
KKT180529-N-1	Kamaole III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:59	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):

By S. M. E.

Printed Name:

Gerald G. BURRIDGE

Team	Makena	Samplers (Last Name, 1st Initial) LOWDER, L., DUNWING, J., SHARPE, M., WILBERGER, T.	Meters and Probes ID		
Session	15		HQ40d: 1		2100Q: 1
Date	05/30/2018		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 MML180530	7:46	25.2	34.6	6.68	98.9	8.15	2.45 3.70	2.28	2.72	1	0	30+	20+	0	<input type="checkbox"/>	<input type="checkbox"/>
S Maluaka Beach MMB180530	8:10	25.8	35.2	6.50	97.6	8.15	1.19	1.61	1.45	1	1	0	13	0	<input type="checkbox"/>	<input type="checkbox"/>
Oneuli MON180530	8:41	25.6	34.3	6.67	99.3	8.07	2.59	2.76	2.81	2	1	0	4	0	<input type="checkbox"/>	<input type="checkbox"/>
Makena Beach MBS180530	9:05	25.7	35.5	6.65	99.9	8.18	0.59	0.58	0.60	2	0	20 ^{LL}	20+	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau North MAN180530	9:27	25.8	35.3	7.06	106.1	8.12	0.94	0.87	1.00	0	0	0	1	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau South MAS180530	9:39	26.3	35.3	6.62	100.1	8.12	2.29	2.25	2.78	1	0	4	18	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: 8:19 am (R) High: 3:41 pm
Moon day (from new)	16
Cloud cover (0-8)	4
Rain conditions last 24 hrs (0-4)	2
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.
lots of kayakers!! at Makena Landing TURBIDITY BLANK DON'T GET BELOW 0.10 BLACK CLOTH NOT USED

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.05	6.06	56.6	588
Pre-sampling	0.16	6.06	57.1	588
Post-sampling	0.04	6.08	57.2	588

CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	NMS	6/6/18 BARNETT
Bacteria	-	-	-

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

Team	Makena	Samplers (Last Name, 1st Initial)	LOWAN, L. DUNN, J. SHARPE, M. WILYBARGER, T.
Session	15		
Date	05/30/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
MML180530-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:46	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MMB180530-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:20	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MON180530-N-1	Oneuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:41	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MBS180530-N-1	Makena Beach Shoreline	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:05	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAN180530-N-1	Ahihi-Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:27	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
MAS180530-N-1	Ahihi-Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:39	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):

By: L. Dunn

Printed Name:

George G. BAKER JR

Team	North Kihei	Samplers (Last Name, 1st Initial) BAHR, F SPLAUN, S RILEY, R	Meters and Probes ID		
Session	15		HQ40d: 1		2100Q: 1
Date	05/31/2018		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		
Haycraft Park NHP180531	0820	25.1	35.2	6.73	99.3	8.15	4.91	5.55	5.51	3	3	0	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Kealia Pond NKP180531	0845	25.2	35.7	6.71	99.4	8.15	7.77	6.96	8.12	3	3	0	4	0	<input type="checkbox"/>	<input type="checkbox"/>
Sugar Beach NSB180531	0908	26.3	35.7	6.56	99.0	8.14	4.74	5.75	4.82	2	3	2	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Kihei Canoe Club NKC180531	0930	26.2	35.0	6.55	98.4	8.11	6.25 4.60	7.94	8.22	3	0	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Mai Poina Oe Iau NMP180531	0951	26.2	35.1	6.69	100.7	8.14	4.33	4.97	4.12	2	1	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalepolepo North NKN180531	10:05	26.4	32.8	6.69	99.8	8.15	13.5	14.0	11.9	3	0	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: 8:48 am High: 2:24 am (F)
Moon day (from new)	17
Cloud cover (0-8)	1
Rain conditions (last 24 hrs)	0
Wind direction (Trades/Kona)	T
Streams flowing? (Y/N)	N

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.04	6.06	56.6	588
Pre-sampling	0.08	6.16	56.2	589
Post-sampling	0.04	6.07	57.5	588

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

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

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

Took ¹ duplicate @ NHP
field
NKP
NSB
(turbidity + sal + DO + pH) + temp)

Team	North Kihei	Samplers (Last Name, 1st Initial)	BAHR F JPLEAN S RILEY R
Session	15		
Date	05/31/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
NHP180531-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	
NKP180531-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	
NSB180531-N-1	Sugar Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:08	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKC180531-N-1	Kihei Canoe Club	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:30 9:50	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NMP180531-N-1	Mai Poina Oe Iau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:51	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
NKN180531-N-1	Kalepolepo North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:05	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. L. Bahr

Printed Name:

D. J. de la Garza

Team	Wailea	Samplers (Last Name, 1st Initial)	Jarvis, Burnette, G	Meters and Probes ID		
Session	15			HQ40d: 1		2100Q: 1
Date	06/01/18			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 WKD180601	0800	25.6	35.3	6.67	99.4	8.15	0.84	1.44	1.24	1	0	0	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Keawakapu Beach WKB180601	0835	25.7	35.7	6.75	101.1	8.18	0.25	0.30	0.39	1	0	5	11	0	<input type="checkbox"/>	<input type="checkbox"/>
Ulua Beach WUL180601	0855	25.9	34.8	6.59	98.6	8.14	0.83	1.09	1.07	2	1	20	20	0	<input type="checkbox"/>	<input type="checkbox"/>
Wailea Beach WWA180601	0925	26.1	35.5	6.58	99.2	8.19	0.44	0.50	0.50	1	0	12	30	0	<input type="checkbox"/>	<input type="checkbox"/>
Palauea WPL180601	0955	26.1	35.2	6.67	100.3	8.18	0.95	1.39	1.05	1	1	6	14	0	<input type="checkbox"/>	<input type="checkbox"/>
Poolenalena WPO180601	1015	25.9	35.2	6.68	100.1	8.19	0.85	0.81	1.13	1	0	8	14	2	<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: 9:17 am High: 2:52 am (F)
Moon day (from new)	18
Cloud cover (0-8)	0
Rain conditions in last 24 hrs (0-4)	0
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.
Some vog

TURBIDITY VERIFICATION				
	Blank	Low	Med	High
Standard	0.04	6.06	56.6	588
Pre-sampling	0.06	6.18	57.2	589
Post-sampling	0.04	6.11	57.2	589

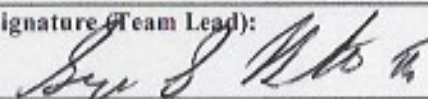
CHAIN OF CUSTODY INFORMATION			
	# of samples	Relinquished to	Contact
Sediment	-	-	-
Nutrients	6	NAS	GEORGE BURNETTE
Bacteria	-	-	-

Signature (Team Lead):	Printed Name:
<i>George G. Burnette</i>	GEORGE G. BURNETTE

Team	Wailea	Samplers (Last Name, 1st Initial)	JANUKE, J. BARNETT, G.
Session	14		
Date	05/18/2018		

Sample ID	Location Name	Sample taken?	Storm sample?	Time	Volume	Protocol Notes	Comments
Nutrients							
WKD180601-N-1	Kilohana Dr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0800	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WKB180601-N-1	Keawakapu Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0835	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WUL180601-N-1	Ulua Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0855	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WWA180601-N-1	Wailea Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0905	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPL180601-N-1	Palaua	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0955	125 ml	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	
WPO180601-N-1	Poolenalena	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1015	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. BARNETT TB