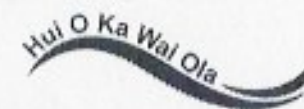


FIELD EQUIPMENT VERIFICATION (PRE/POST A WEEKLY SAMPLING)



Session No:	Verifiers:	Pre date:	Pre time:	Post Date:	Post time:
5	Dana Reed	01/08/18	11:00 AM	01-10-18	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	22.7 <sup>5-1</sup> 22.4 <sup>5-2</sup>	20.4	± 1°C of NIST	Within 1°C	
	1	S-1	n/a		23.0 <del>22.6</del> <sup>0.2</sup>	20.5			
	1	S-2	n/a		22.6	—			
Salinity				Std	0.13 33.3	0.13 <del>25.0</del> <sup>35.5</sup>	± 3%, blank	33.95 – 36.05	
	1	1	12/18/17		0.11 33.2	0.13 35.2			
	1	2	12/18/17		0.12 33.9	— —			
Dissolved Oxygen				Std	100%	100%	Post-check ± 5 % of pre-check (0-100%)	80 – 120 %	
	1	1	09/19/17		98.1	99.0			
	1	2	09/19/17		98.5	—			
pH				Std	7.00 10.01	7.00 10.01	± 3 % of calibration solution (6-8)	6.79 – 7.21	
	1	1	12/18/17		7.00 10.01	7.00 10.08		Temp 19.5-19.7	
	1	2	12/18/17		7.00 10.01	— —		Temp 19.5-19.7	

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

Salinity std und 35 ppt & post verification  
(run out at 33.3 ppt)

Hach 2100Q Blank 0.05



Team/ Session	Samplers Last Name, 1st Initial										Instrument #	pH #	DO #	Salinity #	Date:	
Kamaole	Notetaker: Steve Paselt										40d: -	/	/	/	01/09/18	
5	Others: Audrey Quinn, Scott Graves Michele Brown, Sofia de la Bora										2100q: +					
Location Name	Time	Temp (C)	Sal (ppt)	DO (mg/L)	DO Sat (%)	pH	Turbidity (NTU)			Waves	Wind	People (within 100 ft)			TSS ?	Nutrient Duplicate ?
												In Water	Beach	Camp		
Waipulani Park KWP180109	8:07	22.4	33.4	6.71	93.3	8.12	2.1	22.1	20.1	2	0	3	2	1	<input type="checkbox"/>	<input type="checkbox"/>
Kihei South KKS180109	8:35	23.2	33.8	6.61	93.9	8.12	7.95	9.0	8.17	2	0	1	10	0	<input type="checkbox"/>	<input type="checkbox"/>
Kalama Park KKP180109	8:50	23.8	34.9	6.71	96.9	8.15	20.1	21.3	19.3	2	0	20	10	0	<input type="checkbox"/>	<input type="checkbox"/>
Cove Park KCP180109	9:20	24.5	34.4	6.57	94.0	8.12	4.90	3.76	4.39	2	0	40	10	1	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole I KKO180109	9:35	25.2	35.1	8.72	99.2	8.18	2.05	1.80	1.96	2	0	<del>15</del> 70	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole III KKT180109	9:51	25.0	35.1	6.70	96.9	8.18	1.00	.95	.94	2	0	4	25	0	<input type="checkbox"/>	<input type="checkbox"/>

#### COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low: 3:15am (rising) High: 9:54am
Moon Day (from new)	23
Cloud Cover (0-8):	0
Rain Conditions (last 24 hours)	0
Wind Direction (Trades? Kona?):	ST
Streams flowing? (Y/N)	N

QA Notes and Comments (Trends? Equip problems? Errors? Concerns?  
Use back of form if needed.)

KKP - two dogs  
KKO Two boats

Waves: 0 ft = no waves; 1 ft = small waves; 2 ft = knee high; 3 ft = waist high

Wind: 0 = calm, 1 = light air, 2 = light breeze, 3 = gentle breeze, 4 = moderate breeze

People: Swimmers/Kayakers/Surfers, On beach, Campers

#### Turbidity Verification

	Blank	Low	Med	High
Standard	0.06	5.95	56.6	590
Pre	.21	6.02	56.4	590
Post	0.06	6.00	57.0	589

	Total # of samples	Relinquished To:	Contact
Sediment	-	-	-
Nutrient	6	NMS	Sofia
Bacteria	-	-	-

Signature (Team Lead):

*Sofia de la Bora*

Print name here:

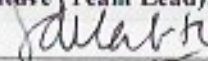
*Sofia de la Bora*



**WATER QUALITY SAMPLING:**

Team:	Notetaker:	Last Name, 1 <sup>st</sup> Initial	Date:
Kamaole 5	Steve Pahlke		01/09/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
<b>Nutrients</b>							
KWP180109-N-1	Waipuilani Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:07	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
KKS180109-N-1	Kihei South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:35	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
KKP180109-N-1	Kalama Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:50	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
KCP180109-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:20	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
KKO180109-N-1	Kamaole I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:35	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
KKT180109-N-1	Kamaole III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:51	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
<b>Sediment</b>							
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>

**Signature (Team Lead):**

**Print name here:**

Sofia de la Rosa



Team/ Session	Samplers Last Name, 1st Initial										Instrument #	pH #	DO #	Salinity #	Date:	
Makena	Notetaker: Lory Lowder										40d: 1	1	1	1	01/10/18	
5	Others: Tina, Sheryl										2100q: 1	+	+	+		
Location Name	Time	Temp (C)	Sal (ppt)	DO (mg/L)	DO Sat (%)	pH	Turbidity (NTU)			Waves	Wind	People (within 100 ft)			TSS ?	Nutrient Duplicate ?
												In Water	Beach	Camp		
Makena Landing MML180110	7:59	23.8	34.5	6.63	95.0	8.17	1.93 <del>1.53</del>	2.08	1.85	0	0	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
South Maluaka Beach MMB180110	8:25	23.9	34.8	6.87	99	8.16	1.39	1.99	1.57	3	0	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Oneuli MON180110	8:52	24.3	34.9	6.81	98.7	8.13	2.39	2.13	2.16	3	0	0	3	0	<input type="checkbox"/>	<input type="checkbox"/>
Makena Beach Shoreline MBS180110	9:15	24.6	35.3	6.72	98.2	8.20	0.44	0.46	0.44	1	0	1	2	1	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau North MAN180110	9:45	24.7	35.1	7.11	104.0	8.10	0.86	0.80	0.85	0	0	3	10	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahihi Kinau South MAS180110	10:10	24.5	35.2	6.67	97.3	8.10	0.57	0.56	0.83	0	0	6	2	3	<input type="checkbox"/>	<input type="checkbox"/>

#### COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low: 6am (rising) High: 10:48am
Moon Day (from new)	24
Cloud Cover (0-8):	0
Rain Conditions (last 24 hours)	0
Wind Direction (Trades? Kona?):	0
Streams flowing? (Y/N)	0

QA Notes and Comments (Trends? Equip problems? Errors? Concerns?  
Use back of form if needed.)

High reading on blank turbidity  
(verification)

Waves: 0 ft = no waves; 1 ft = small waves; 2 ft = knee high; 3 ft = waist high  
Wind: 0 = calm, 1 = light air, 2 = light breeze, 3 = gentle breeze, 4 = moderate breeze  
People: Swimmers/Kayakers/Surfers, On beach, Campers

#### Turbidity Verification

	Blank	Low	Med	High
Standard	0.05	5.95	56.6	590
Pre	0.07	6.03	56.6	591
Post	0.05	5.94	56.8	590

	Total # of samples	Relinquished To:	Contact
Sediment	-	-	-
Nutrient	6	NMS	Sofia
Bacteria	-	-	-

Signature (Team Lead):

Sofia de la Bta

Print name here:

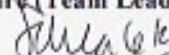
Sofia de la Bta



**WATER QUALITY SAMPLING:**

Team:	Notetaker:	Last Name, 1 <sup>st</sup> Initial	Date:
MAK - 5	long lowder		01/10/18

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
MML180110-N-1	Makena Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7:59	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MMB180110-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:25	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MON180110-N-1	Oneuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:52	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MBS180110-N-1	Makena Beach Shoreline	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:15	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MAN180110-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:45	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MAS180110-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:10	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
Sediment							
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>

**Signature (Team Lead):**

**Print name here:**
