

FIELD EQUIPMENT VERIFICATION (PRE/POST A WEEKLY SAMPLING)

Session No:	Verifiers:	Pre date:	Pre time:	Post Date:	Post time:
SM - 4	Sofia	12.19.17	9:00 am	12/20/17	11:15



Hui O Ka Wai Ola, 09/07

QA/QC Check	Inst #	Probe #	Last Cal Date	PRE: Verification Value	POST: Verification Value	Acceptable Range (Check range)	Comments/ Notes	QA?
Temperature	2	S-1	n/a	20.6	24.3	± 1°C of NIST	Within 1°C	
	2	S-2	n/a	20.9	-			
	2	S-2	n/a	20.8	24.5			
Salinity				35	35	± 3‰, blank	33.95 - 36.05	
	2	1	9/19/17	34.9	-			
	2	2	11/6/17	35	34.8	0.14		
Dissolved Oxygen				100%	100%	Post-check ± 5 % of pre-check (0-100%)	80 - 120 %	
	2	1	9/19/17	99.7	-			
	2	2	9/19/17	99.9	99.8			
pH				7.01	7.00	± 3 % of calibration solution (6-8)	6.79 - 7.21	
	2	1	12/18/17	7.02	-			
	2	2	12/18/17	7.01	7.18	10.20		

QA: * Are pre- and post within one week?

* Delay times are ok?

* Other equipment issues?

Team/Session	Samplers Last Name, 1st Initial		Instrument #	pH #	DO #	Salinity #	Date:
Kamaole	Noteaker: Danna Howard		400: 2	2	2	2	12/19/17
4	Others: Soft Graves, Audrey Quinn, Steve Pasick		2100q: 2				

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 KWP171219	8:13	24.5	34.4	6.47	94.4	8.08	20.1	20.7	19.8	2	4	-	5	2	<input type="checkbox"/>	<input type="checkbox"/>
Kihel South KKS171219	8:35	25.1	34.0	6.04	88.9	8.12	7.32 -6.1	7.37	7.28	0	1	0	3	-	<input type="checkbox"/>	<input type="checkbox"/>
Kalama Park KKP171219	8:50	25.0	34.4	6.44	94.8	8.14	4.99	5.53	5.33	1	2	3	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Cove Park KCP171219	9:05	25.2	33.3	6.22	90.7	8.12	3.37	4.06	3.74	1	1	10	-	-	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole I KKO171219	9:29	25.2	34.9	6.44	98.4	8.20	1.72	1.20	1.38	1	2	5	18	-	<input type="checkbox"/>	<input type="checkbox"/>
Kamaole III KKT171219	9:45	25.4	35.1	6.58	98.0	8.18	.69	.65	.92	1	2	18	25	-	<input type="checkbox"/>	<input type="checkbox"/>

COASTAL AND ENVIRONMENTAL CONDITION NOTES

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/Skaters/Surfers, On beach, Campers

Most recent Low & High tide Time (Lahaina station) indicate Falling or Rising	Low: 11:23am High: 5:25am (Falling)
Moon Day (from new)	3
Cloud Cover (0-8):	8
Rain Conditions (last 24 hours)	-
Wind Direction (Trades? Kona?):	Kona
Streams flowing? (Y/N)	

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

VOJ
 Camp fire @ KWP

Turbidity Verification		Blank	Low	Med	High
Standard			5.85	54.5	574
Pre	.06		5.84	54.6	573
Post	0.05		5.83	54.5	573

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

Signature (Team Lead): *[Signature]* Print name here: Sofia du la Sota.

WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1 st Initial	Date:
Kamaole 4	Donna Howard		12/19/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
KWP171219-N-1	Waipuli Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:13	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
KKS171219-N-1	Kihai 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"/>
KKP171219-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"/>
KCP171219-N-1	Cove Park	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:05	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
KKO171219-N-1	Kamaole I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:29	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
KKT171219-N-1	Kamaole III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:45	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): Donna Howard Print name here: Donna Howard

Team/ Session	Samplers										Instrument #	pH #	DO #	Salinity #	Date:	
	Last Name, 1st Initial															
Makena	Notes: Alfred Wolf										400: 2	2	2	2	12/20/17	
4	Others: Lory Tina										2100q: 2					
Location Name	Time	Temp (C)	Sal (ppt)	DO (mg/L)	DO Sat (%)	pH	Turbidity (NTU)			Waves	Wind	People (within 100 ft)			TSS ?	Nutrient Duplicate ?
Makena Landing MML171220	8:05	24.5	35.4	6.71	98.6	8.31	1.11	1.46	1.14	0	2	0	8	0	<input type="checkbox"/>	<input type="checkbox"/>
South Maluaka Beach MMB171220	8:30	24.4	35.3	6.75	99.0	8.30	0.84	0.92	1.23	2	4	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Oneuli MON171220	8:55	24.5	35.3	6.74	98.9	8.28	1.67	2.37	1.85	2	4	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Makena Beach Shoreline MBS171220	9:17	24.7	35.4	6.68	98.3	8.31	0.55	0.59	0.55	1	2	0	2	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahili Kinau North MAN171220	8:56	24.4	35.2	6.37	93.4	8.17	0.72	0.76	0.87	0	1	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>
Ahili Kinau South MAS171220	9:36	24.4	34.3	6.56	95.5	8.16	0.88	0.93	0.97	1	2	0	0	0	<input type="checkbox"/>	<input type="checkbox"/>

COASTAL AND ENVIRONMENTAL CONDITION NOTES

Most recent Low & High tide Time
(Lahaina station) indicate Falling or Rising

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

Moon Day (from new)	Low: 12pm High: 5:57am (Falling)
Cloud Cover (0-8):	3
Rain Conditions (last 24 hours)	8
Wind Direction (Trades? Kona?)	Mist
Streams flowing? (Y/N)	Trades
	N

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

Turbidity Verification				
	Blank	Low	Med	High
Standard		5.85	54.5	574
Pre	0.05	5.76	54.3	573
Post	0.06	5.83	54.9	573

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

Signature (Team Lead):

Print name here:

Hula

Sofia de la Sota

WATER QUALITY SAMPLING:

Team:	Notetaker:	Last Name, 1 st Initial	Date:
MAK - 4	Alfred Wolf		12/20/17

Sample No	Location Name	Sample taken?	Storm sample?	Time	Vol (mL)	Protocol notes	Comments
Nutrients							
MMML171220-N-1	Makana Landing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:05	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MMMB171220-N-1	South Maluaka Beach	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:30	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MONI171220-N-1	Oneuli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8:55	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MBSI171220-N-1	Makana Beach Shoreline	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:17	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MANI171220-N-1	Ahihi Kinau North	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:34	125	Washed, rinsed syringes; acid washed bottles; 0.2 um disposable filters	<input type="checkbox"/>
MASI171220-N-1	Ahihi Kinau South	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:56	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"/>
		<input type="checkbox"/>	<input type="checkbox"/>		500		<input type="checkbox"/>

Signature (Team Lead): *John Wolf* Print name here: *John de la Peña*