



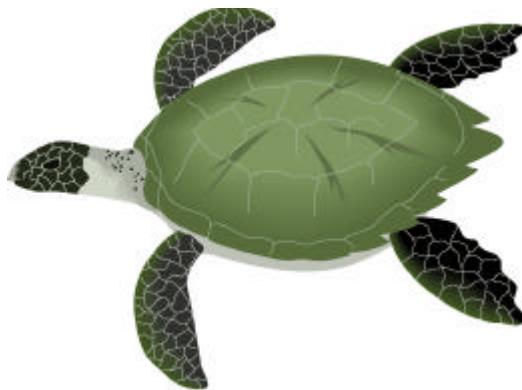
United States Air Force  
15th Air Base Wing  
Environmental Restoration Program

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# Waimanalo Stream ITIR

## EE/CA for OU1

### Bellows Air Force Station Oahu, Hawaii



## Attachment B

### Data Processing Procedures

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## Attachment B

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# Data Processing Procedures for Waimanalo Stream During the Bellows OU1 EE/CA

Prior to data evaluation, the “raw” data collected at Waimanalo Stream during the Bellows OU1 EE/CA were processed to produce a “working” data set. Data processing activities included:

- ? Resolving multiple results for a single chemical from different analytical methods (e.g., PAHs from both SW8270B and SW8310) to produce a single value for each surface water and surface sediment sample;
- ? Resolving field duplicate results to produce a single value for each surface water and surface sediment sampling location; and

The procedures for processing the data are described in the following sections.

### B.1 Resolving Multiple Results for Single Chemicals

These rules were followed for creating a single set of results for each surface water and surface sediment sample and each chemical:

- ? All non-qualified valid detections were used over qualified detections.
- ? The lowest quantitation limit was used when all results were nondetections.
- ? If there were two or more detections:
  - ? If the qualifiers were the same (e.g., both non-qualified, both J, both F, etc.), then the values were averaged and qualified based on the original qualifier.
  - ? If the all results were qualified and the qualifiers were different, then the following hierarchy was used:
    - ? J-qualified data were selected over M-, F-, and B-qualified data.
    - ? M-qualified data were selected over F-qualified data.
    - ? F-qualified data were selected over B-qualified data.

The results of this process for data obtained from Waimanalo Stream are presented in Table B-1.

## B.2 Resolving Field Duplicate Results

These rules were followed for creating a single set of results for each sampling location and chemical:

- ? If both results were detections, the single result was calculated as the average of the two duplicate results. If the qualifiers were identical (e.g., both were non-qualified or both J-qualified), the same qualifier was assigned to the averaged result. If the qualifiers were different (e.g., one was non-qualified and the other J-qualified), a “D” qualifier was assigned to the averaged result.
- ? If one result was a detection and the other was a nondetection:
  - ? If the nondetection was less than the detection, the detected result was added to one-half of the nondetected result and a single result was calculated from the mean of these two results. A “D” qualifier was assigned to the averaged result.
  - ? If the nondetection was greater than the detection, the single result became the detected result and the qualifier corresponding to the detection remained.
- ? The lowest quantitation limit was used when both results were nondetections.

The results of this process for data obtained from Waimanalo Stream during the Bellows OU1 EE/CA are presented in Table B-2.

**Table B-1**

**Resolution of Multiple Results from Different Analytical Methods for Waimanalo Stream**

*Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	QA/QC		CAS	Units	SW8260	SW8270	SW8310	Selected Result	Associated Method	
	Type	Chemical								
WS-SD001A	N	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0007	U	0.18 U	0.0007 U	SW8260	
WS-SD001A	N	1,2-DCB	95-50-1	mg/kg	0.0003	U	0.25 U	0.0003 U	SW8260	
WS-SD001A	N	1,3-DCB	541-73-1	mg/kg	0.0004	U	0.18 U	0.0004 U	SW8260	
WS-SD001A	N	1,4-DCB	106-46-7	mg/kg	0.0005	U	0.24 U	0.0005 U	SW8260	
WS-SD001A	N	Acenaphthene	83-32-9	mg/kg		0.19 U	0.03 U	0.03 U	SW8310	
WS-SD001A	N	Acenaphthylene	208-96-8	mg/kg		0.18 U	0.049 U	0.049 U	SW8310	
WS-SD001A	N	Anthracene	120-12-7	mg/kg		0.21 U	0.002 U	0.002 U	SW8310	
WS-SD001A	N	Benzo (a) anthracene	56-55-3	mg/kg		0.25 U	0.0047 F	0.0047 F	SW8310	
WS-SD001A	N	Benzo (a) pyrene	50-32-8	mg/kg		0.17 UM	0.0031 U	0.0031 U	SW8310	
WS-SD001A	N	Benzo (b) fluoranthene	205-99-2	mg/kg		0.23 U	0.0057 U	0.0057 U	SW8310	
WS-SD001A	N	Benzo (g,h,i) perylene	191-24-2	mg/kg		0.15 UM	0.008 F	0.008 F	SW8310	
WS-SD001A	N	Chrysene	218-01-9	mg/kg		0.22 U	0.01 F	0.01 F	SW8310	
WS-SD001A	N	Dibenzo (a,h) anthracene	53-70-3	mg/kg		0.2 U	0.007 U	0.007 U	SW8310	
WS-SD001A	N	Fluoranthene	206-44-0	mg/kg		0.17 U	0.004 U	0.004 U	SW8310	
WS-SD001A	N	Fluorene	86-73-7	mg/kg		0.12 U	0.005 U	0.005 U	SW8310	
WS-SD001A	N	Hexachlorobutadiene	87-68-3	mg/kg	0.0006	UM	0.18 U	0.0006 U	SW8260	
WS-SD001A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	mg/kg		0.15 UM	0.014 F	0.014 F	SW8310	
WS-SD001A	N	Naphthalene	91-20-3	mg/kg	0.0007	U	0.19 U	0.002 U	0.0007 U	SW8260
WS-SD001A	N	Phenanthrene	85-01-8	mg/kg		0.16 U	0.004 F	0.004 F	SW8310	
WS-SD001A	N	Pyrene	129-00-0	mg/kg		0.17 UM	0.008 F	0.008 F	SW8310	
WS-SD002A	N	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0009	U	0.23 U	0.0009 U	SW8260	
WS-SD002A	N	1,2-DCB	95-50-1	mg/kg	0.0003	U	0.32 U	0.0003 U	SW8260	
WS-SD002A	N	1,3-DCB	541-73-1	mg/kg	0.0006	U	0.23 U	0.0006 U	SW8260	
WS-SD002A	N	1,4-DCB	106-46-7	mg/kg	0.0007	U	0.3 U	0.0007 U	SW8260	
WS-SD002A	N	Acenaphthene	83-32-9	mg/kg		0.24 U	0.04 U	0.04 U	SW8310	
WS-SD002A	N	Acenaphthylene	208-96-8	mg/kg		0.24 U	0.063 U	0.063 U	SW8310	
WS-SD002A	N	Anthracene	120-12-7	mg/kg		0.27 U	0.015 F	0.015 F	SW8310	
WS-SD002A	N	Benzo (a) anthracene	56-55-3	mg/kg		0.37 F	0.161	0.161	SW8310	
WS-SD002A	N	Benzo (a) pyrene	50-32-8	mg/kg		0.22 U	0.181	0.181	SW8310	
WS-SD002A	N	Benzo (b) fluoranthene	205-99-2	mg/kg		0.35 F	0.205	0.205	SW8310	
WS-SD002A	N	Benzo (g,h,i) perylene	191-24-2	mg/kg		0.2 U	0.186	0.186	SW8310	
WS-SD002A	N	Chrysene	218-01-9	mg/kg		0.36 F	0.18 F	0.27 F	AVG	
WS-SD002A	N	Dibenzo (a,h) anthracene	53-70-3	mg/kg		0.25 U	0.008 U	0.008 U	SW8310	
WS-SD002A	N	Fluoranthene	206-44-0	mg/kg		0.43 F	0.277 F	0.3535 F	AVG	
WS-SD002A	N	Fluorene	86-73-7	mg/kg		0.15 U	0.006 U	0.006 U	SW8310	
WS-SD002A	N	Hexachlorobutadiene	87-68-3	mg/kg	0.0008	U	0.23 U	0.0008 U	SW8260	
WS-SD002A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	mg/kg		0.19 U	0.342 J	0.342 J	SW8310	
WS-SD002A	N	Naphthalene	91-20-3	mg/kg	0.0009	U	0.25 U	0.009 U	SW8260	
WS-SD002A	N	Phenanthrene	85-01-8	mg/kg		0.21 U	0.132 F	0.132 F	SW8310	
WS-SD002A	N	Pyrene	129-00-0	mg/kg		0.21 U	0.239 F	0.239 F	SW8310	
WS-SD003A	N	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0007	U	0.17 U	0.0007 U	SW8260	
WS-SD003A	N	1,2-DCB	95-50-1	mg/kg	0.0003	U	0.24 U	0.0003 U	SW8260	
WS-SD003A	N	1,3-DCB	541-73-1	mg/kg	0.0004	U	0.17 U	0.0004 U	SW8260	
WS-SD003A	N	1,4-DCB	106-46-7	mg/kg	0.0005	U	0.22 U	0.0005 U	SW8260	
WS-SD003A	N	Acenaphthene	83-32-9	mg/kg		0.17 U	0.03 U	0.03 U	SW8310	
WS-SD003A	N	Acenaphthylene	208-96-8	mg/kg		0.17 U	0.046 U	0.046 U	SW8310	
WS-SD003A	N	Anthracene	120-12-7	mg/kg		0.2 U	0.002 U	0.002 U	SW8310	
WS-SD003A	N	Benzo (a) anthracene	56-55-3	mg/kg		0.23 U	0.0024 F	0.0024 F	SW8310	
WS-SD003A	N	Benzo (a) pyrene	50-32-8	mg/kg		0.16 U	0.0111 F	0.0111 F	SW8310	
WS-SD003A	N	Benzo (b) fluoranthene	205-99-2	mg/kg		0.21 U	0.0054 U	0.0054 U	SW8310	
WS-SD003A	N	Benzo (g,h,i) perylene	191-24-2	mg/kg		0.14 U	0.008 F	0.008 F	SW8310	
WS-SD003A	N	Chrysene	218-01-9	mg/kg		0.21 U	0.004 F	0.004 F	SW8310	
WS-SD003A	N	Dibenzo (a,h) anthracene	53-70-3	mg/kg		0.19 U	0.006 U	0.006 U	SW8310	
WS-SD003A	N	Fluoranthene	206-44-0	mg/kg		0.16 U	0.004 U	0.004 U	SW8310	
WS-SD003A	N	Fluorene	86-73-7	mg/kg		0.11 U	0.005 U	0.005 U	SW8310	

Table B-1

## Resolution of Multiple Results from Different Analytical Methods for Waimanalo Stream

Bellows OU1 EE/CA, Bellows AFS, Hawaii

Sample ID	QA/QC		CAS	Units	SW8260	SW8270	SW8310	Selected Result	Associated Method
	Type	Chemical							
WS-SD003A	N	Hexachlorobutadiene	87-68-3	mg/kg	0.0006	U 0.17	U	0.0006	U SW8260
WS-SD003A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	mg/kg		0.14	U 0.013	F	0.013 F SW8310
WS-SD003A	N	Naphthalene	91-20-3	mg/kg	0.0007	U 0.18	U 0.02	U	0.0007 U SW8260
WS-SD003A	N	Phenanthrene	85-01-8	mg/kg		0.15	U 0.003	U	0.003 U SW8310
WS-SD003A	N	Pyrene	129-00-0	mg/kg		0.16	U 0.007	F	0.007 F SW8310
WS-SD004A	N	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0006	U 0.14	U		0.0006 U SW8260
WS-SD004A	N	1,2-DCB	95-50-1	mg/kg	0.0002	U 0.2	U		0.0002 U SW8260
WS-SD004A	N	1,3-DCB	541-73-1	mg/kg	0.0004	U 0.14	U		0.0004 U SW8260
WS-SD004A	N	1,4-DCB	106-46-7	mg/kg	0.0004	U 0.19	U		0.0004 U SW8260
WS-SD004A	N	Acenaphthene	83-32-9	mg/kg		0.15	U 0.02	U	0.02 U SW8310
WS-SD004A	N	Acenaphthylene	208-96-8	mg/kg		0.15	U 0.039	U	0.039 U SW8310
WS-SD004A	N	Anthracene	120-12-7	mg/kg		0.17	U 0.002	U	0.002 U SW8310
WS-SD004A	N	Benzo (a) anthracene	56-55-3	mg/kg		0.2	U 0.002	U	0.002 U SW8310
WS-SD004A	N	Benzo (a) pyrene	50-32-8	mg/kg		0.14	U 0.0025	U	0.0025 U SW8310
WS-SD004A	N	Benzo (b) fluoranthene	205-99-2	mg/kg		0.18	U 0.0046	U	0.0046 U SW8310
WS-SD004A	N	Benzo (g,h,i) perylene	191-24-2	mg/kg		0.12	U 0.006	U	0.006 U SW8310
WS-SD004A	N	Chrysene	218-01-9	mg/kg		0.18	U 0.002	U	0.002 U SW8310
WS-SD004A	N	Dibenzo (a,h) anthracene	53-70-3	mg/kg		0.16	U 0.005	U	0.005 U SW8310
WS-SD004A	N	Fluoranthene	206-44-0	mg/kg		0.13	U 0.003	U	0.003 U SW8310
WS-SD004A	N	Fluorene	86-73-7	mg/kg		0.1	U 0.004	U	0.004 U SW8310
WS-SD004A	N	Hexachlorobutadiene	87-68-3	mg/kg	0.0005	U 0.14	U		0.0005 U SW8260
WS-SD004A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	mg/kg		0.12	U 0.009	U	0.009 U SW8310
WS-SD004A	N	Naphthalene	91-20-3	mg/kg	0.0006	U 0.15	U 0.02	U	0.0006 U SW8260
WS-SD004A	N	Phenanthrene	85-01-8	mg/kg		0.13	U 0.002	U	0.002 U SW8310
WS-SD004A	N	Pyrene	129-00-0	mg/kg		0.13	U 0.002	U	0.002 U SW8310
WS-SD005A	N	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0005	U 0.14	U		0.0005 U SW8260
WS-SD005A	N	1,2-DCB	95-50-1	mg/kg	0.0002	U 0.19	U		0.0002 U SW8260
WS-SD005A	N	1,3-DCB	541-73-1	mg/kg	0.0003	U 0.13	U		0.0003 U SW8260
WS-SD005A	N	1,4-DCB	106-46-7	mg/kg	0.0004	U 0.18	U		0.0004 U SW8260
WS-SD005A	N	Acenaphthene	83-32-9	mg/kg		0.14	U 0.02	U	0.02 U SW8310
WS-SD005A	N	Acenaphthylene	208-96-8	mg/kg		0.14	U 0.038	U	0.038 U SW8310
WS-SD005A	N	Anthracene	120-12-7	mg/kg		0.16	U 0.002	U	0.002 U SW8310
WS-SD005A	N	Benzo (a) anthracene	56-55-3	mg/kg		0.19	U 0.0019	U	0.0019 U SW8310
WS-SD005A	N	Benzo (a) pyrene	50-32-8	mg/kg		0.13	U 0.0023	U	0.0023 U SW8310
WS-SD005A	N	Benzo (b) fluoranthene	205-99-2	mg/kg		0.17	U 0.0044	U	0.0044 U SW8310
WS-SD005A	N	Benzo (g,h,i) perylene	191-24-2	mg/kg		0.12	U 0.006	U	0.006 U SW8310
WS-SD005A	N	Chrysene	218-01-9	mg/kg		0.17	U 0.002	U	0.002 U SW8310
WS-SD005A	N	Dibenzo (a,h) anthracene	53-70-3	mg/kg		0.15	U 0.005	U	0.005 U SW8310
WS-SD005A	N	Fluoranthene	206-44-0	mg/kg		0.13	U 0.003	U	0.003 U SW8310
WS-SD005A	N	Fluorene	86-73-7	mg/kg		0.09	U 0.004	U	0.004 U SW8310
WS-SD005A	N	Hexachlorobutadiene	87-68-3	mg/kg	0.0005	U 0.14	U		0.0005 U SW8260
WS-SD005A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	mg/kg		0.11	U 0.008	U	0.008 U SW8310
WS-SD005A	N	Naphthalene	91-20-3	mg/kg	0.0005	U 0.15	U 0.02	U	0.0005 U SW8260
WS-SD005A	N	Phenanthrene	85-01-8	mg/kg		0.12	U 0.002	U	0.002 U SW8310
WS-SD005A	N	Pyrene	129-00-0	mg/kg		0.13	U 0.002	U	0.002 U SW8310
WS-SD103A	FD	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0007	U 0.18	U		0.0007 U SW8260
WS-SD103A	FD	1,2-DCB	95-50-1	mg/kg	0.0003	U 0.25	U		0.0003 U SW8260
WS-SD103A	FD	1,3-DCB	541-73-1	mg/kg	0.0005	U 0.18	U		0.0005 U SW8260
WS-SD103A	FD	1,4-DCB	106-46-7	mg/kg	0.0005	U 0.24	U		0.0005 U SW8260
WS-SD103A	FD	Acenaphthene	83-32-9	mg/kg		0.19	U 0.03	U	0.03 U SW8310
WS-SD103A	FD	Acenaphthylene	208-96-8	mg/kg		0.19	U 0.05	U	0.05 U SW8310
WS-SD103A	FD	Anthracene	120-12-7	mg/kg		0.21	U 0.003	U	0.003 U SW8310
WS-SD103A	FD	Benzo (a) anthracene	56-55-3	mg/kg		0.25	U 0.0265		0.0265 SW8310
WS-SD103A	FD	Benzo (a) pyrene	50-32-8	mg/kg		0.18	U 0.0336		0.0336 SW8310
WS-SD103A	FD	Benzo (b) fluoranthene	205-99-2	mg/kg		0.23	U 0.0394	J	0.0394 J SW8310

**Table B-1**

**Resolution of Multiple Results from Different Analytical Methods for Waimanalo Stream**

*Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	QA/QC		CAS	Units	SW8260	SW8270	SW8310	Selected Result	Associated Method
	Type	Chemical							
WS-SD103A	FD	Benzo (g,h,i) perylene	191-24-2	mg/kg		0.16 U	0.038 F	0.038 F	SW8310
WS-SD103A	FD	Chrysene	218-01-9	mg/kg		0.22 U	0.03 F	0.03 F	SW8310
WS-SD103A	FD	Dibenzo (a,h) anthracene	53-70-3	mg/kg		0.2 U	0.007 U	0.007 U	SW8310
WS-SD103A	FD	Fluoranthene	206-44-0	mg/kg		0.17 U	0.043 F	0.043 F	SW8310
WS-SD103A	FD	Fluorene	86-73-7	mg/kg		0.12 U	0.005 U	0.005 U	SW8310
WS-SD103A	FD	Hexachlorobutadiene	87-68-3	mg/kg	0.0006 U	0.18 U		0.0006 U	SW8260
WS-SD103A	FD	Indeno (1,2,3-c,d) pyrene	193-39-5	mg/kg		0.15 U	0.111 J	0.111 J	SW8310
WS-SD103A	FD	Naphthalene	91-20-3	mg/kg	0.0007 U	0.2 U	0.03 U	0.0007 U	SW8260
WS-SD103A	FD	Phenanthrene	85-01-8	mg/kg		0.16 U	0.01 F	0.01 F	SW8310
WS-SD103A	FD	Pyrene	129-00-0	mg/kg		0.17 U	0.043 F	0.043 F	SW8310
WS-SW001A	N	1,2,4-Trichlorobenzene	120-82-1	µg/L	0.08 U	1.69 U		0.08 U	SW8260
WS-SW001A	N	1,2-DCB	95-50-1	µg/L	0.13 U	1.71 U		0.13 U	SW8260
WS-SW001A	N	1,3-DCB	541-73-1	µg/L	0.1 U	1.76 U		0.1 U	SW8260
WS-SW001A	N	1,4-DCB	106-46-7	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WS-SW001A	N	Acenaphthene	83-32-9	µg/L		1.35 U	0.11 U	0.11 U	SW8310
WS-SW001A	N	Acenaphthylene	208-96-8	µg/L		1.24 U	0.2 U	0.2 U	SW8310
WS-SW001A	N	Anthracene	120-12-7	µg/L		1.15 U	0.01 U	0.01 U	SW8310
WS-SW001A	N	Benzo (a) anthracene	56-55-3	µg/L		1.15 U	0.015 U	0.015 U	SW8310
WS-SW001A	N	Benzo (a) pyrene	50-32-8	µg/L		1.03 U	0.016 U	0.016 U	SW8310
WS-SW001A	N	Benzo (b) fluoranthene	205-99-2	µg/L		1.46 U	0.032 U	0.032 U	SW8310
WS-SW001A	N	Benzo (g,h,i) perylene	191-24-2	µg/L		1.02 U	0.041 U	0.041 U	SW8310
WS-SW001A	N	Chrysene	218-01-9	µg/L		1.18 U	0.01 U	0.01 U	SW8310
WS-SW001A	N	Dibenzo (a,h) anthracene	53-70-3	µg/L		1.04 U	0.04 U	0.04 U	SW8310
WS-SW001A	N	Fluoranthene	206-44-0	µg/L		1.32 U	0.02 U	0.02 U	SW8310
WS-SW001A	N	Fluorene	86-73-7	µg/L		1.31 U	0.02 U	0.02 U	SW8310
WS-SW001A	N	Hexachlorobutadiene	87-68-3	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WS-SW001A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	µg/L		1.1 U	0.036 U	0.036 U	SW8310
WS-SW001A	N	Naphthalene	91-20-3	µg/L	0.09 U	1.65 U	0.1 U	0.09 U	SW8260
WS-SW001A	N	Phenanthrene	85-01-8	µg/L		1.21 U	0.01 U	0.01 U	SW8310
WS-SW001A	N	Pyrene	129-00-0	µg/L		1.53 U	0.03 U	0.03 U	SW8310
WS-SW002A	N	1,2,4-Trichlorobenzene	120-82-1	µg/L	0.12 U	1.69 U		0.12 U	SW8260
WS-SW002A	N	1,2-DCB	95-50-1	µg/L	0.09 U	1.71 U		0.09 U	SW8260
WS-SW002A	N	1,3-DCB	541-73-1	µg/L	0.08 U	1.76 U		0.08 U	SW8260
WS-SW002A	N	1,4-DCB	106-46-7	µg/L	0.09 U	1.69 U		0.09 U	SW8260
WS-SW002A	N	Acenaphthene	83-32-9	µg/L		1.35 U	0.11 U	0.11 U	SW8310
WS-SW002A	N	Acenaphthylene	208-96-8	µg/L		1.24 U	0.2 U	0.2 U	SW8310
WS-SW002A	N	Anthracene	120-12-7	µg/L		1.15 U	0.01 U	0.01 U	SW8310
WS-SW002A	N	Benzo (a) anthracene	56-55-3	µg/L		1.15 U	0.015 U	0.015 U	SW8310
WS-SW002A	N	Benzo (a) pyrene	50-32-8	µg/L		1.03 U	0.016 U	0.016 U	SW8310
WS-SW002A	N	Benzo (b) fluoranthene	205-99-2	µg/L		1.46 U	0.032 U	0.032 U	SW8310
WS-SW002A	N	Benzo (g,h,i) perylene	191-24-2	µg/L		1.02 U	0.041 U	0.041 U	SW8310
WS-SW002A	N	Chrysene	218-01-9	µg/L		1.18 U	0.01 U	0.01 U	SW8310
WS-SW002A	N	Dibenzo (a,h) anthracene	53-70-3	µg/L		1.04 U	0.04 U	0.04 U	SW8310
WS-SW002A	N	Fluoranthene	206-44-0	µg/L		1.32 U	0.02 U	0.02 U	SW8310
WS-SW002A	N	Fluorene	86-73-7	µg/L		1.31 U	0.02 U	0.02 U	SW8310
WS-SW002A	N	Hexachlorobutadiene	87-68-3	µg/L	0.09 U	1.69 U		0.09 U	SW8260
WS-SW002A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	µg/L		1.1 U	0.036 U	0.036 U	SW8310
WS-SW002A	N	Naphthalene	91-20-3	µg/L	0.1 U	1.65 U	0.1 U	0.1 U	SW8260
WS-SW002A	N	Phenanthrene	85-01-8	µg/L		1.21 U	0.01 U	0.01 U	SW8310
WS-SW002A	N	Pyrene	129-00-0	µg/L		1.53 U	0.03 U	0.03 U	SW8310
WS-SW003A	N	1,2,4-Trichlorobenzene	120-82-1	µg/L	0.12 U	1.69 U		0.12 U	SW8260
WS-SW003A	N	1,2-DCB	95-50-1	µg/L	0.09 U	1.71 U		0.09 U	SW8260
WS-SW003A	N	1,3-DCB	541-73-1	µg/L	0.08 U	1.76 U		0.08 U	SW8260
WS-SW003A	N	1,4-DCB	106-46-7	µg/L	0.09 U	1.69 U		0.09 U	SW8260
WS-SW003A	N	Acenaphthene	83-32-9	µg/L		1.35 U	0.11 U	0.11 U	SW8310

Table B-1

## Resolution of Multiple Results from Different Analytical Methods for Waimanalo Stream

Bellows OU1 EE/CA, Bellows AFS, Hawaii

Sample ID	QA/QC		CAS	Units	SW8260	SW8270	SW8310	Selected Result	Associated Method
	Type	Chemical							
WS-SW003A	N	Acenaphthylene	208-96-8	µg/L		1.24 U	0.2 U	0.2 U	SW8310
WS-SW003A	N	Anthracene	120-12-7	µg/L		1.15 U	0.01 U	0.01 U	SW8310
WS-SW003A	N	Benzo (a) anthracene	56-55-3	µg/L		1.15 U	0.015 U	0.015 U	SW8310
WS-SW003A	N	Benzo (a) pyrene	50-32-8	µg/L		1.03 U	0.016 U	0.016 U	SW8310
WS-SW003A	N	Benzo (b) fluoranthene	205-99-2	µg/L		1.46 U	0.032 U	0.032 U	SW8310
WS-SW003A	N	Benzo (g,h,i) perylene	191-24-2	µg/L		1.02 U	0.041 U	0.041 U	SW8310
WS-SW003A	N	Chrysene	218-01-9	µg/L		1.18 U	0.01 U	0.01 U	SW8310
WS-SW003A	N	Dibenzo (a,h) anthracene	53-70-3	µg/L		1.04 U	0.04 U	0.04 U	SW8310
WS-SW003A	N	Fluoranthene	206-44-0	µg/L		1.32 U	0.02 U	0.02 U	SW8310
WS-SW003A	N	Fluorene	86-73-7	µg/L		1.31 U	0.02 U	0.02 U	SW8310
WS-SW003A	N	Hexachlorobutadiene	87-68-3	µg/L	0.09 U	1.69 U		0.09 U	SW8260
WS-SW003A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	µg/L		1.1 U	0.036 U	0.036 U	SW8310
WS-SW003A	N	Naphthalene	91-20-3	µg/L	0.1 U	1.65 U	0.1 U	0.1 U	SW8260
WS-SW003A	N	Phenanthrene	85-01-8	µg/L		1.21 U	0.01 U	0.01 U	SW8310
WS-SW003A	N	Pyrene	129-00-0	µg/L		1.53 U	0.03 U	0.03 U	SW8310
WS-SW004A	N	1,2,4-Trichlorobenzene	120-82-1	µg/L	0.08 U	1.69 U		0.08 U	SW8260
WS-SW004A	N	1,2-DCB	95-50-1	µg/L	0.13 U	1.71 U		0.13 U	SW8260
WS-SW004A	N	1,3-DCB	541-73-1	µg/L	0.1 U	1.76 U		0.1 U	SW8260
WS-SW004A	N	1,4-DCB	106-46-7	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WS-SW004A	N	Acenaphthene	83-32-9	µg/L		1.35 U	0.11 U	0.11 U	SW8310
WS-SW004A	N	Acenaphthylene	208-96-8	µg/L		1.24 U	0.2 U	0.2 U	SW8310
WS-SW004A	N	Anthracene	120-12-7	µg/L		1.15 U	0.01 U	0.01 U	SW8310
WS-SW004A	N	Benzo (a) anthracene	56-55-3	µg/L		1.15 U	0.015 U	0.015 U	SW8310
WS-SW004A	N	Benzo (a) pyrene	50-32-8	µg/L		1.03 U	0.016 U	0.016 U	SW8310
WS-SW004A	N	Benzo (b) fluoranthene	205-99-2	µg/L		1.46 U	0.032 U	0.032 U	SW8310
WS-SW004A	N	Benzo (g,h,i) perylene	191-24-2	µg/L		1.02 U	0.041 U	0.041 U	SW8310
WS-SW004A	N	Chrysene	218-01-9	µg/L		1.18 U	0.01 U	0.01 U	SW8310
WS-SW004A	N	Dibenzo (a,h) anthracene	53-70-3	µg/L		1.04 U	0.04 U	0.04 U	SW8310
WS-SW004A	N	Fluoranthene	206-44-0	µg/L		1.32 U	0.02 U	0.02 U	SW8310
WS-SW004A	N	Fluorene	86-73-7	µg/L		1.31 U	0.02 U	0.02 U	SW8310
WS-SW004A	N	Hexachlorobutadiene	87-68-3	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WS-SW004A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	µg/L		1.1 U	0.036 U	0.036 U	SW8310
WS-SW004A	N	Naphthalene	91-20-3	µg/L	0.09 U	1.65 U	0.1 U	0.09 U	SW8260
WS-SW004A	N	Phenanthrene	85-01-8	µg/L		1.21 U	0.01 U	0.01 U	SW8310
WS-SW004A	N	Pyrene	129-00-0	µg/L		1.53 U	0.03 U	0.03 U	SW8310
WS-SW005A	N	1,2,4-Trichlorobenzene	120-82-1	µg/L	0.08 U	1.69 U		0.08 U	SW8260
WS-SW005A	N	1,2-DCB	95-50-1	µg/L	0.13 U	1.71 U		0.13 U	SW8260
WS-SW005A	N	1,3-DCB	541-73-1	µg/L	0.1 U	1.76 U		0.1 U	SW8260
WS-SW005A	N	1,4-DCB	106-46-7	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WS-SW005A	N	Acenaphthene	83-32-9	µg/L		1.35 U	0.11 U	0.11 U	SW8310
WS-SW005A	N	Acenaphthylene	208-96-8	µg/L		1.24 U	0.2 U	0.2 U	SW8310
WS-SW005A	N	Anthracene	120-12-7	µg/L		1.15 U	0.01 U	0.01 U	SW8310
WS-SW005A	N	Benzo (a) anthracene	56-55-3	µg/L		1.15 U	0.015 U	0.015 U	SW8310
WS-SW005A	N	Benzo (a) pyrene	50-32-8	µg/L		1.03 U	0.016 U	0.016 U	SW8310
WS-SW005A	N	Benzo (b) fluoranthene	205-99-2	µg/L		1.46 U	0.032 U	0.032 U	SW8310
WS-SW005A	N	Benzo (g,h,i) perylene	191-24-2	µg/L		1.02 U	0.041 U	0.041 U	SW8310
WS-SW005A	N	Chrysene	218-01-9	µg/L		1.18 U	0.01 U	0.01 U	SW8310
WS-SW005A	N	Dibenzo (a,h) anthracene	53-70-3	µg/L		1.04 U	0.04 U	0.04 U	SW8310
WS-SW005A	N	Fluoranthene	206-44-0	µg/L		1.32 U	0.02 U	0.02 U	SW8310
WS-SW005A	N	Fluorene	86-73-7	µg/L		1.31 U	0.02 U	0.02 U	SW8310
WS-SW005A	N	Hexachlorobutadiene	87-68-3	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WS-SW005A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	µg/L		1.1 U	0.036 U	0.036 U	SW8310
WS-SW005A	N	Naphthalene	91-20-3	µg/L	0.09 U	1.65 U	0.1 U	0.09 U	SW8260
WS-SW005A	N	Phenanthrene	85-01-8	µg/L		1.21 U	0.01 U	0.01 U	SW8310
WS-SW005A	N	Pyrene	129-00-0	µg/L		1.53 U	0.03 U	0.03 U	SW8310

Table B-1

## Resolution of Multiple Results from Different Analytical Methods for Waimanalo Stream

Bellows OU1 EE/CA, Bellows AFS, Hawaii

Sample ID	QA/QC		CAS	Units	SW8260	SW8270	SW8310	Selected Result	Associated Method
	Type	Chemical							
WS-SW103A	FD	1,2,4-Trichlorobenzene	120-82-1	µg/L	0.12 U	1.69 U		0.12 U	SW8260
WS-SW103A	FD	1,2-DCB	95-50-1	µg/L	0.09 U	1.71 U		0.09 U	SW8260
WS-SW103A	FD	1,3-DCB	541-73-1	µg/L	0.08 U	1.76 U		0.08 U	SW8260
WS-SW103A	FD	1,4-DCB	106-46-7	µg/L	0.09 U	1.69 U		0.09 U	SW8260
WS-SW103A	FD	Acenaphthene	83-32-9	µg/L		1.35 U	0.11 U	0.11 U	SW8310
WS-SW103A	FD	Acenaphthylene	208-96-8	µg/L		1.24 U	0.2 U	0.2 U	SW8310
WS-SW103A	FD	Anthracene	120-12-7	µg/L		1.15 U	0.01 U	0.01 U	SW8310
WS-SW103A	FD	Benzo (a) anthracene	56-55-3	µg/L		1.15 U	0.015 U	0.015 U	SW8310
WS-SW103A	FD	Benzo (a) pyrene	50-32-8	µg/L		1.03 U	0.016 U	0.016 U	SW8310
WS-SW103A	FD	Benzo (b) fluoranthene	205-99-2	µg/L		1.46 U	0.032 U	0.032 U	SW8310
WS-SW103A	FD	Benzo (g,h,i) perylene	191-24-2	µg/L		1.02 U	0.041 U	0.041 U	SW8310
WS-SW103A	FD	Chrysene	218-01-9	µg/L		1.18 U	0.01 U	0.01 U	SW8310
WS-SW103A	FD	Dibenzo (a,h) anthracene	53-70-3	µg/L		1.04 U	0.04 U	0.04 U	SW8310
WS-SW103A	FD	Fluoranthene	206-44-0	µg/L		1.32 U	0.02 U	0.02 U	SW8310
WS-SW103A	FD	Fluorene	86-73-7	µg/L		1.31 U	0.02 U	0.02 U	SW8310
WS-SW103A	FD	Hexachlorobutadiene	87-68-3	µg/L	0.09 U	1.69 U		0.09 U	SW8260
WS-SW103A	FD	Indeno (1,2,3-c,d) pyrene	193-39-5	µg/L		1.1 U	0.036 U	0.036 U	SW8310
WS-SW103A	FD	Naphthalene	91-20-3	µg/L	0.1 U	1.65 U	0.1 U	0.1 U	SW8260
WS-SW103A	FD	Phenanthrene	85-01-8	µg/L		1.21 U	0.01 U	0.01 U	SW8310
WS-SW103A	FD	Pyrene	129-00-0	µg/L		1.53 U	0.03 U	0.03 U	SW8310
WSU-SD001A	N	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0005 U	0.11 U		0.0005 U	SW8260
WSU-SD001A	N	1,2-DCB	95-50-1	mg/kg	0.0002 U	0.16 U		0.0002 U	SW8260
WSU-SD001A	N	1,3-DCB	541-73-1	mg/kg	0.0003 U	0.11 U		0.0003 U	SW8260
WSU-SD001A	N	1,4-DCB	106-46-7	mg/kg	0.0003 U	0.15 U		0.0003 U	SW8260
WSU-SD001A	N	Hexachlorobutadiene	87-68-3	mg/kg	0.0004 U	0.11 U		0.0004 U	SW8260
WSU-SD001A	N	Naphthalene	91-20-3	mg/kg	0.0004 U	0.12 U		0.0004 U	SW8260
WSU-SD002A	N	1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.0006 U	0.15 U		0.0006 U	SW8260
WSU-SD002A	N	1,2-DCB	95-50-1	mg/kg	0.0002 U	0.21 U		0.0002 U	SW8260
WSU-SD002A	N	1,3-DCB	541-73-1	mg/kg	0.0004 U	0.15 U		0.0004 U	SW8260
WSU-SD002A	N	1,4-DCB	106-46-7	mg/kg	0.0004 U	0.2 U		0.0004 U	SW8260
WSU-SD002A	N	Acenaphthene	83-32-9	mg/kg		0.16 U	0.03 U	0.03 U	SW8310
WSU-SD002A	N	Acenaphthylene	208-96-8	mg/kg		0.16 U	0.041 U	0.041 U	SW8310
WSU-SD002A	N	Anthracene	120-12-7	mg/kg		0.17 U	0.029 F	0.029 F	SW8310
WSU-SD002A	N	Benzo (a) anthracene	56-55-3	mg/kg		0.21 U	0.135	0.135	SW8310
WSU-SD002A	N	Benzo (a) pyrene	50-32-8	mg/kg		0.14 U	0.132	0.132	SW8310
WSU-SD002A	N	Benzo (b) fluoranthene	205-99-2	mg/kg		0.19 U	0.125	0.125	SW8310
WSU-SD002A	N	Benzo (g,h,i) perylene	191-24-2	mg/kg		0.13 U	0.105	0.105	SW8310
WSU-SD002A	N	Chrysene	218-01-9	mg/kg		0.19 U	0.18 J	0.18 J	SW8310
WSU-SD002A	N	Dibenzo (a,h) anthracene	53-70-3	mg/kg		0.17 U	0.006 U	0.006 U	SW8310
WSU-SD002A	N	Fluoranthene	206-44-0	mg/kg		0.14 U	0.377	0.377	SW8310
WSU-SD002A	N	Fluorene	86-73-7	mg/kg		0.1 U	0.004 U	0.004 U	SW8310
WSU-SD002A	N	Hexachlorobutadiene	87-68-3	mg/kg	0.0005 U	0.15 U		0.0005 U	SW8260
WSU-SD002A	N	Indeno (1,2,3-c,d) pyrene	193-39-5	mg/kg		0.12 U	0.199 J	0.199 J	SW8310
WSU-SD002A	N	Naphthalene	91-20-3	mg/kg	0.0006 U	0.16 U	0.02 U	0.0006 U	SW8260
WSU-SD002A	N	Phenanthrene	85-01-8	mg/kg		0.13 U	0.272 F	0.272 F	SW8310
WSU-SD002A	N	Pyrene	129-00-0	mg/kg		0.14 U	0.331	0.331	SW8310
WSU-SW001/N	N	1,2,4-Trichlorobenzene	120-82-1	µg/L	0.08 U	1.69 U		0.08 U	SW8260
WSU-SW001/N	N	1,2-DCB	95-50-1	µg/L	0.13 U	1.71 U		0.13 U	SW8260
WSU-SW001/N	N	1,3-DCB	541-73-1	µg/L	0.1 U	1.76 U		0.1 U	SW8260
WSU-SW001/N	N	1,4-DCB	106-46-7	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WSU-SW001/N	N	Acenaphthene	83-32-9	µg/L		1.35 U	0.11 U	0.11 U	SW8310
WSU-SW001/N	N	Acenaphthylene	208-96-8	µg/L		1.24 U	0.2 U	0.2 U	SW8310
WSU-SW001/N	N	Anthracene	120-12-7	µg/L		1.15 U	0.01 U	0.01 U	SW8310
WSU-SW001/N	N	Benzo (a) anthracene	56-55-3	µg/L		1.15 U	0.015 U	0.015 U	SW8310
WSU-SW001/N	N	Benzo (a) pyrene	50-32-8	µg/L		1.03 U	0.016 U	0.016 U	SW8310

**Table B-1**

**Resolution of Multiple Results from Different Analytical Methods for Waimanalo Stream**

*Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	QA/QC		CAS	Units	SW8260	SW8270	SW8310	Selected Result	Associated Method
	Type	Chemical							
WSU-SW001/N		Benzo (b) fluoranthene	205-99-2	µg/L		1.46 U	0.032 U	0.032 U	SW8310
WSU-SW001/N		Benzo (g,h,i) perylene	191-24-2	µg/L		1.02 U	0.041 U	0.041 U	SW8310
WSU-SW001/N		Chrysene	218-01-9	µg/L		1.18 U	0.01 U	0.01 U	SW8310
WSU-SW001/N		Dibenzo (a,h) anthracene	53-70-3	µg/L		1.04 U	0.04 U	0.04 U	SW8310
WSU-SW001/N		Fluoranthene	206-44-0	µg/L		1.32 U	0.02 U	0.02 U	SW8310
WSU-SW001/N		Fluorene	86-73-7	µg/L		1.31 U	0.02 U	0.02 U	SW8310
WSU-SW001/N		Hexachlorobutadiene	87-68-3	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WSU-SW001/N		Indeno (1,2,3-c,d) pyrene	193-39-5	µg/L		1.1 U	0.036 U	0.036 U	SW8310
WSU-SW001/N		Naphthalene	91-20-3	µg/L	0.09 U	1.65 U	0.1 U	0.09 U	SW8260
WSU-SW001/N		Phenanthrene	85-01-8	µg/L		1.21 U	0.01 U	0.01 U	SW8310
WSU-SW001/N		Pyrene	129-00-0	µg/L		1.53 U	0.03 U	0.03 U	SW8310
WSU-SW002/N		1,2,4-Trichlorobenzene	120-82-1	µg/L	0.08 U	1.69 U		0.08 U	SW8260
WSU-SW002/N		1,2-DCB	95-50-1	µg/L	0.13 U	1.71 U		0.13 U	SW8260
WSU-SW002/N		1,3-DCB	541-73-1	µg/L	0.1 U	1.76 U		0.1 U	SW8260
WSU-SW002/N		1,4-DCB	106-46-7	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WSU-SW002/N		Acenaphthene	83-32-9	µg/L		1.35 U	0.11 U	0.11 U	SW8310
WSU-SW002/N		Acenaphthylene	208-96-8	µg/L		1.24 U	0.2 U	0.2 U	SW8310
WSU-SW002/N		Anthracene	120-12-7	µg/L		1.15 U	0.01 U	0.01 U	SW8310
WSU-SW002/N		Benzo (a) anthracene	56-55-3	µg/L		1.15 U	0.015 U	0.015 U	SW8310
WSU-SW002/N		Benzo (a) pyrene	50-32-8	µg/L		1.03 U	0.016 U	0.016 U	SW8310
WSU-SW002/N		Benzo (b) fluoranthene	205-99-2	µg/L		1.46 U	0.032 U	0.032 U	SW8310
WSU-SW002/N		Benzo (g,h,i) perylene	191-24-2	µg/L		1.02 U	0.041 U	0.041 U	SW8310
WSU-SW002/N		Chrysene	218-01-9	µg/L		1.18 U	0.01 U	0.01 U	SW8310
WSU-SW002/N		Dibenzo (a,h) anthracene	53-70-3	µg/L		1.04 U	0.04 U	0.04 U	SW8310
WSU-SW002/N		Fluoranthene	206-44-0	µg/L		1.32 U	0.02 U	0.02 U	SW8310
WSU-SW002/N		Fluorene	86-73-7	µg/L		1.31 U	0.02 U	0.02 U	SW8310
WSU-SW002/N		Hexachlorobutadiene	87-68-3	µg/L	0.11 U	1.69 U		0.11 U	SW8260
WSU-SW002/N		Indeno (1,2,3-c,d) pyrene	193-39-5	µg/L		1.1 U	0.036 U	0.036 U	SW8310
WSU-SW002/N		Naphthalene	91-20-3	µg/L	0.09 U	1.65 U	0.1 U	0.09 U	SW8260
WSU-SW002/N		Phenanthrene	85-01-8	µg/L		1.21 U	0.01 U	0.01 U	SW8310
WSU-SW002/N		Pyrene	129-00-0	µg/L		1.53 U	0.03 U	0.03 U	SW8310

**Notes:**

Abbreviations

mg/kg = milligrams per kilogram  
 N = normal sample  
 FD = field duplicate

Data Qualifiers

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).  
 J = The analyte was positively identified; the quantitation is an estimation.  
 U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

**Table B-2****Resolution of Field Duplicate Results for Waimanalo Stream***Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	Chemical	CAS	Normal	Field	Selected	Selected
			Environmental Sample	Duplicate	Result	Qualifier
WS-SD003A	Aluminum	7429-90-5	23500	22200	22850	
WS-SD003A	Barium	7440-39-3	11.5	13.1	12.3	
WS-SD003A	Beryllium	7440-41-7	0.37 F	0.43 F	0.4 F	
WS-SD003A	Cadmium	7440-43-9	0.73 F	0.69 F	0.71 F	
WS-SD003A	Calcium	7440-70-2	90500	92300	91400	
WS-SD003A	Chromium	7440-47-3	101	111	106	
WS-SD003A	Cobalt	7440-48-4	19	20.7 F	19.85 D	
WS-SD003A	Copper	7440-50-8	43.7	49.7	46.7	
WS-SD003A	Iron	7439-89-6	34600 J	35300 J	34950 J	
WS-SD003A	Magnesium	7439-95-4	8280	9220	8750	
WS-SD003A	Manganese	7439-96-5	217	235	226	
WS-SD003A	Nickel	7440-02-0	77.9	81.6	79.75	
WS-SD003A	Potassium	7440-09-7	1280	1530	1405	
WS-SD003A	Silver	7440-22-4	0.58 U	0.62 U	0.58 U	
WS-SD003A	Sodium	7440-23-5	7740	8740	8240	
WS-SD003A	Vanadium	7440-62-2	81.9	92.6	87.25	
WS-SD003A	Zinc	7440-66-6	65	72.6	68.8	
WS-SD003A	Antimony	7440-36-0	2.03 U	2.2 U	2.03 U	
WS-SD003A	Arsenic	7440-38-2	7.9 F	6.2 F	7.05 F	
WS-SD003A	Lead	7439-92-1	8.1 F	9.8 F	8.95 F	
WS-SD003A	Mercury	7439-97-6	0.1 U	0.1 U	0.1 U	
WS-SD003A	Selenium	7782-49-2	1.57 U	1.7 U	1.57 U	
WS-SD003A	Thallium	7440-28-0	1.34 U	1.45 U	1.34 U	
WS-SD003A	TPH-Diesel	TPH-DIESEL	14.7 U	29 F	18.175 D F	
WS-SD003A	TPH-Gasoline	TPH-GASOLINI	0.01 F	0.01 U	0.0075 D F	
WS-SD003A	4,4'-DDD	72-54-8	0.0032 F	0.006 F	0.0046 F	
WS-SD003A	4,4'-DDE	72-55-9	0.0028 F	0.00079 U	0.0015975 D F	
WS-SD003A	4,4'-DDT	50-29-3	0.0042 F	0.014 F	0.0091 F	
WS-SD003A	Aldrin	309-00-2	0.0017 F	0.0024 F	0.00205 F	
WS-SD003A	Dieldrin	60-57-1	0.004 F	0.0015 F	0.00275 F	
WS-SD003A	Endosulfan I	959-98-8	0.007 F	0.0011 U	0.003775 D F	
WS-SD003A	Endosulfan II	33213-65-9	0.0019 U	0.0047 F	0.002825 D F	
WS-SD003A	Endosulfan sulfate	1031-07-8	0.0026 F	0.0039 F	0.00325 F	
WS-SD003A	Endrin	72-20-8	0.0022 U	0.012 F	0.00655 D F	
WS-SD003A	Heptachlor	76-44-8	2.8 J	0.072 J	1.436 J	
WS-SD003A	Heptachlor epoxide	1024-57-3	0.0016 F	0.0035 F	0.00255 F	
WS-SD003A	Methoxychlor	72-43-5	0.0064 F	0.0068 F	0.0066 F	
WS-SD003A	alpha-BHC	319-84-6	0.00048 U	0.0043 F	0.00227 D F	
WS-SD003A	beta-BHC	319-85-7	0.0082 F	0.012 F	0.0101 F	
WS-SD003A	delta-BHC	319-86-8	0.00031 U	0.00033 U	0.00031 U	
WS-SD003A	gamma-BHC (Lindane)	58-89-9	0.43 J	0.5 J	0.465 J	
WS-SD003A	Aroclor-1016	12674-11-2	0.14 U	0.075 U	0.075 U	
WS-SD003A	Aroclor-1221	11104-28-2	0.15 U	0.084 U	0.084 U	
WS-SD003A	Aroclor-1232	11141-16-5	0.13 U	0.072 U	0.072 U	
WS-SD003A	Aroclor-1242	53469-21-9	0.16 U	0.089 U	0.089 U	
WS-SD003A	Aroclor-1248	12672-29-6	0.22 U	0.12 U	0.12 U	
WS-SD003A	Aroclor-1254	11097-69-1	0.038 U	0.021 U	0.021 U	
WS-SD003A	Aroclor-1260	11096-82-5	0.054 U	0.03 U	0.03 U	

**Table B-2****Resolution of Field Duplicate Results for Waimanalo Stream***Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	Chemical	CAS	Normal	Field	Selected	Selected
			Environmental	Duplicate	Result	Qualifier
WS-SD003A	2,4,5-T	93-76-5	0.0092 U	0.0099 U	0.0092 U	
WS-SD003A	2,4,5-TP (Silvex)	93-72-1	0.0087 U	0.0094 U	0.0087 U	
WS-SD003A	2,4-D	94-75-7	0.036 U	0.039 U	0.036 U	
WS-SD003A	2,4-DB	94-82-6	0.046 U	0.05 U	0.046 U	
WS-SD003A	Dalapon	75-99-0	0.04 U	0.044 U	0.04 U	
WS-SD003A	Dicamba	1918-00-9	0.019 U	0.02 U	0.019 U	
WS-SD003A	Dichloroprop	120-36-5	0.029 U	0.031 U	0.029 U	
WS-SD003A	Dinoseb	88-85-7	0.011 U	0.012 U	0.011 U	
WS-SD003A	MCPA	94-74-6	6.6 U	7.2 U	6.6 U	
WS-SD003A	MCPP	93-65-2	3.4 U	3.7 U	3.4 U	
WS-SD003A	1,1,1,2-Tetrachloroethane	630-20-6	0.0003 U	0.0004 U	0.0003 U	
WS-SD003A	1,1,1-TCA	71-55-6	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	1,1,2,2-Tetrachloroethane	79-34-5	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	1,1,2-TCA	79-00-5	0.0006 U	0.0006 U	0.0006 U	
WS-SD003A	1,1-DCA	75-34-3	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	1,1-DCE	75-35-4	0.0008 U	0.0008 U	0.0008 U	
WS-SD003A	1,1-Dichloropropene	563-58-6	0.0005 U	0.0006 U	0.0005 U	
WS-SD003A	1,2,3-Trichlorobenzene	87-61-6	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	1,2,3-Trichloropropane	96-18-4	0.001 U	0.002 U	0.001 U	
WS-SD003A	1,2,4-Trichlorobenzene	120-82-1	0.0007 U	0.0007 U	0.0007 U	
WS-SD003A	1,2,4-Trimethylbenzene	95-63-6	0.0003 U	0.0003 U	0.0003 U	
WS-SD003A	1,2-DCA	107-06-2	0.0003 U	0.0004 U	0.0003 U	
WS-SD003A	1,2-DCB	95-50-1	0.0003 U	0.0003 U	0.0003 U	
WS-SD003A	1,2-Dibromo-3-chloropropane	96-12-8	0.001 U	0.002 U	0.001 U	
WS-SD003A	1,2-Dichloropropane	78-87-5	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	1,2-EDB	106-93-4	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	1,3,5-Trimethylbenzene	108-67-8	0.0004 U	0.0005 U	0.0004 U	
WS-SD003A	1,3-DCB	541-73-1	0.0004 U	0.0005 U	0.0004 U	
WS-SD003A	1,3-Dichloropropane	142-28-9	0.0006 U	0.0006 U	0.0006 U	
WS-SD003A	1,4-DCB	106-46-7	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	1-Chlorohexane	544-10-5	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	2,2-Dichloropropane	594-20-7	0.001 U	0.001 U	0.001 U	
WS-SD003A	2-Chlorotoluene	95-49-8	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	4-Chlorotoluene	106-43-4	0.0004 U	0.0005 U	0.0004 U	
WS-SD003A	Benzene	71-43-2	0.0004 U	0.0005 U	0.0004 U	
WS-SD003A	Bromobenzene	108-86-1	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	Bromochloromethane	74-97-5	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	Bromodichloromethane	75-27-4	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	Bromoform	75-25-2	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	Bromomethane	74-83-9	0.0004 U	0.0005 U	0.0004 U	
WS-SD003A	Carbon tetrachloride	56-23-5	0.001 U	0.001 U	0.001 U	
WS-SD003A	Chlorobenzene	108-90-7	0.0004 U	0.0005 U	0.0004 U	
WS-SD003A	Chloroethane	75-00-3	0.0005 U	0.0006 U	0.0005 U	
WS-SD003A	Chloroform	67-66-3	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	Chloromethane	74-87-3	0.0005 U	0.0005 U	0.0005 U	
WS-SD003A	Cis-1,2-DCE	156-59-2	0.0006 U	0.0006 U	0.0006 U	
WS-SD003A	Cis-1,3-Dichloropropene	10061-01-5	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	Dibromochloromethane	124-48-1	0.0004 U	0.0005 U	0.0004 U	

**Table B-2****Resolution of Field Duplicate Results for Waimanalo Stream***Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	Chemical	CAS	Normal	Field	Selected	Selected
			Environmental	Duplicate	Result	Qualifier
WS-SD003A	Dibromomethane	74-95-3	0.0005 U	0.001 U	0.0005 U	
WS-SD003A	Dichlorodifluoromethane	75-71-8	0.0006 U	0.0007 U	0.0006 U	
WS-SD003A	Ethylbenzene	100-41-4	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	Hexachlorobutadiene	87-68-3	0.0006 U	0.0006 U	0.0006 U	
WS-SD003A	Isopropylbenzene	98-82-8	0.0003 U	0.0003 U	0.0003 U	
WS-SD003A	Methylene chloride	75-09-2	0.0007 U	0.0007 U	0.0007 U	
WS-SD003A	Naphthalene	91-20-3	0.0007 U	0.0007 U	0.0007 U	
WS-SD003A	Sec-Butylbenzene	135-98-8	0.0003 U	0.0003 U	0.0003 U	
WS-SD003A	Styrene	100-42-5	0.0003 U	0.0003 U	0.0003 U	
WS-SD003A	TCE	79-01-6	0.0005 U	0.001 U	0.0005 U	
WS-SD003A	Tert-Butylbenzene	98-06-6	0.0003 U	0.0003 U	0.0003 U	
WS-SD003A	Tetrachloroethene	127-18-4	0.0005 U	0.0006 U	0.0005 U	
WS-SD003A	Toluene	108-88-3	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	Trans-1,2-DCE	156-60-5	0.0009 U	0.0009 U	0.0009 U	
WS-SD003A	Trans-1,3-Dichloropropene	10061-02-6	0.0004 U	0.0005 U	0.0004 U	
WS-SD003A	Trichlorofluoromethane	75-69-4	0.0007 U	0.0007 U	0.0007 U	
WS-SD003A	Vinyl chloride	75-01-4	0.0007 U	0.0008 U	0.0007 U	
WS-SD003A	m, p-Xylene	108-38-3/1	0.001 U	0.001 U	0.001 U	
WS-SD003A	n-Butylbenzene	104-51-8	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	n-Propylbenzene	103-65-1	0.0004 U	0.0004 U	0.0004 U	
WS-SD003A	o-Xylene	95-47-6	0.0002 U	0.0002 U	0.0002 U	
WS-SD003A	p-Isopropyltoluene	99-87-6	0.0003 U	0.0003 U	0.0003 U	
WS-SD003A	2,4,5-Trichlorophenol	95-95-4	0.39 U	0.42 U	0.39 U	
WS-SD003A	2,4,6-Trichlorophenol	88-06-2	0.157 U	0.17 U	0.157 U	
WS-SD003A	2,4-DNT	121-14-2	0.26 U	0.28 U	0.26 U	
WS-SD003A	2,4-Dichlorophenol	120-83-2	0.136 U	0.147 U	0.136 U	
WS-SD003A	2,4-Dimethylphenol	105-67-9	0.197 U	0.213 U	0.197 U	
WS-SD003A	2,4-Dinitrophenol	51-28-5	0.43 U	0.46 U	0.43 U	
WS-SD003A	2,6-DNT	606-20-2	0.16 U	0.17 U	0.16 U	
WS-SD003A	2-Chloronaphthalene	91-58-7	0.15 U	0.17 U	0.15 U	
WS-SD003A	2-Chlorophenol	95-57-8	0.194 U	0.21 U	0.194 U	
WS-SD003A	2-Methylnaphthalene	91-57-6	0.16 U	0.18 U	0.16 U	
WS-SD003A	2-Methylphenol	95-48-7	0.242 U	0.263 U	0.242 U	
WS-SD003A	2-Nitroaniline	88-74-4	0.43 U	0.47 U	0.43 U	
WS-SD003A	2-Nitrophenol	88-75-5	0.2 U	0.217 U	0.2 U	
WS-SD003A	3,3'-Dichlorobenzidine	91-94-1	0.29 U	0.32 U	0.29 U	
WS-SD003A	3-Nitroaniline	99-09-2	0.43 U	0.47 U	0.43 U	
WS-SD003A	4,6-Dinitro-2-methylphenol	534-52-1	0.55 U	0.6 U	0.55 U	
WS-SD003A	4-Bromophenyl phenyl ether	101-55-3	0.21 U	0.23 U	0.21 U	
WS-SD003A	4-Chloro-3-methylphenol	59-50-7	0.19 U	0.21 U	0.19 U	
WS-SD003A	4-Chloroaniline	106-47-8	0.23 U	0.25 U	0.23 U	
WS-SD003A	4-Chlorophenyl phenyl ether	7005-72-3	0.14 U	0.16 U	0.14 U	
WS-SD003A	4-Methylphenol	106-44-5	0.166 U	0.18 U	0.166 U	
WS-SD003A	4-Nitroaniline	100-01-6	0.67 U	0.73 U	0.67 U	
WS-SD003A	4-Nitrophenol	100-02-7	0.32 U	0.35 U	0.32 U	
WS-SD003A	Benzoic acid	65-85-0	0.47 U	0.51 U	0.47 U	
WS-SD003A	Benzyl alcohol	100-51-6	0.23 U	0.25 U	0.23 U	
WS-SD003A	Bis (2-chloroethoxy) methane	111-91-1	0.17 U	0.19 U	0.17 U	

**Table B-2****Resolution of Field Duplicate Results for Waimanalo Stream***Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	Chemical	CAS	Normal	Field	Selected	Selected
			Environmental Sample	Duplicate	Result	Qualifier
WS-SD003A	Bis (2-chloroethyl) ether	111-44-4	0.23 U	0.24 U	0.23 U	
WS-SD003A	Bis (2-chloroisopropyl) ether	108-60-1	0.15 U	0.16 U	0.15 U	
WS-SD003A	Bis (2-ethylhexyl) phthalate	117-81-7	0.29 U	0.31 U	0.29 U	
WS-SD003A	Butyl benzylphthalate	85-68-7	0.24 U	0.26 U	0.24 U	
WS-SD003A	Di-n-butylphthalate	84-74-2	0.13 U	0.2 F	0.1325 D	F
WS-SD003A	Di-n-octylphthalate	117-84-0	0.07 U	0.07 U	0.07 U	
WS-SD003A	Dibenzofuran	132-64-9	0.14 U	0.15 U	0.14 U	
WS-SD003A	Diethyl phthalate	84-66-2	0.25 U	0.27 U	0.25 U	
WS-SD003A	Dimethyl phthalate	131-11-3	0.14 U	0.15 U	0.14 U	
WS-SD003A	Hexachlorobenzene	118-74-1	0.17 U	0.18 U	0.17 U	
WS-SD003A	Hexachlorocyclopentadiene	77-47-4	0.39 U	0.42 U	0.39 U	
WS-SD003A	Hexachloroethane	67-72-1	0.24 U	0.26 U	0.24 U	
WS-SD003A	Isophorone	78-59-1	0.17 U	0.18 U	0.17 U	
WS-SD003A	N-Nitrosodi-n-propylamine	621-64-7	0.21 U	0.23 U	0.21 U	
WS-SD003A	N-Nitrosodiphenylamine	86-30-6	0.18 U	0.2 U	0.18 U	
WS-SD003A	Nitrobenzene	98-95-3	0.19 U	0.2 U	0.19 U	
WS-SD003A	Pentachlorophenol	87-86-5	0.61 U	0.66 U	0.61 U	
WS-SD003A	Phenol	108-95-2	0.168 U	0.182 U	0.168 U	
WS-SD003A	Acenaphthene	83-32-9	0.03 U	0.03 U	0.03 U	
WS-SD003A	Acenaphthylene	208-96-8	0.046 U	0.05 U	0.046 U	
WS-SD003A	Anthracene	120-12-7	0.002 U	0.003 U	0.002 U	
WS-SD003A	Benzo (a) anthracene	56-55-3	0.0024 F	0.0265	0.01445 D	
WS-SD003A	Benzo (a) pyrene	50-32-8	0.0111 F	0.0336	0.02235 D	
WS-SD003A	Benzo (b) fluoranthene	205-99-2	0.0054 U	0.0394 J	0.02105 D	J
WS-SD003A	Benzo (g,h,i) perylene	191-24-2	0.008 F	0.038 F	0.023 F	
WS-SD003A	Benzo (k) fluoranthene	207-08-9	0.0027 U	0.0179 F	0.009625 D	F
WS-SD003A	Chrysene	218-01-9	0.004 F	0.03 F	0.017 F	
WS-SD003A	Dibenzo (a,h) anthracene	53-70-3	0.006 U	0.007 U	0.006 U	
WS-SD003A	Fluoranthene	206-44-0	0.004 U	0.043 F	0.0225 D	F
WS-SD003A	Fluorene	86-73-7	0.005 U	0.005 U	0.005 U	
WS-SD003A	Indeno (1,2,3-c,d) pyrene	193-39-5	0.013 F	0.111 J	0.062 D	F
WS-SD003A	Phenanthrene	85-01-8	0.003 U	0.01 F	0.00575 D	F
WS-SD003A	Pyrene	129-00-0	0.007 F	0.043 F	0.025 F	
WS-SW003A	Aluminum	7429-90-5	0.05 F	0.06 F	0.055 F	
WS-SW003A	Barium	7440-39-3	0.0167	0.0165	0.0166	
WS-SW003A	Beryllium	7440-41-7	0.001 U	0.001 U	0.001 U	
WS-SW003A	Cadmium	7440-43-9	0.001 U	0.001 U	0.001 U	
WS-SW003A	Calcium	7440-70-2	140	139	139.5	
WS-SW003A	Chromium	7440-47-3	0.004 U	0.004 U	0.004 U	
WS-SW003A	Cobalt	7440-48-4	0.003 U	0.003 U	0.003 U	
WS-SW003A	Copper	7440-50-8	0.001 U	0.001 U	0.001 U	
WS-SW003A	Iron	7439-89-6	0.107 F	0.116 F	0.1115 F	
WS-SW003A	Magnesium	7439-95-4	397 B	392 B	394.5 B	
WS-SW003A	Manganese	7439-96-5	0.089	0.0906	0.0898	
WS-SW003A	Nickel	7440-02-0	0.006 U	0.006 U	0.006 U	
WS-SW003A	Potassium	7440-09-7	116	114	115	
WS-SW003A	Silver	7440-22-4	0.002 U	0.002 U	0.002 U	
WS-SW003A	Sodium	7440-23-5	3140 B	3030 B	3085 B	

**Table B-2****Resolution of Field Duplicate Results for Waimanalo Stream***Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	Chemical	CAS	Normal	Field	Selected	Selected
			Environmental Sample	Duplicate	Result	Qualifier
WS-SW003A	Thallium	7440-28-0	0.011 U	0.011 U	0.011 U	
WS-SW003A	Vanadium	7440-62-2	0.005 F	0.005 F	0.005 F	
WS-SW003A	Zinc	7440-66-6	0.044	0.002 U	0.0225 D	
WS-SW003A	Antimony	7440-36-0	0.0066 U	0.0082 F	0.00575 D	F
WS-SW003A	Arsenic	7440-38-2	0.0069 U	0.0069 U	0.0069 U	
WS-SW003A	Lead	7439-92-1	0.008 U	0.008 U	0.008 U	
WS-SW003A	Mercury	7439-97-6	0.0001 U	0.0001 U	0.0001 U	
WS-SW003A	Selenium	7782-49-2	0.0058 U	0.0058 U	0.0058 U	
WS-SW003A	TPH-Diesel	TPH-DIESEL	0.01 U	0.01 U	0.01 U	
WS-SW003A	TPH-Gasoline	TPH-GASOLIN	0.01 F	0.01 U	0.0075 D	F
WS-SW003A	4,4'-DDD	72-54-8	0.01 U	0.01 U	0.01 U	
WS-SW003A	4,4'-DDE	72-55-9	0.01 U	0.01 U	0.01 U	
WS-SW003A	4,4'-DDT	50-29-3	0.02 U	0.17 F	0.09 D	F
WS-SW003A	Aldrin	309-00-2	0.094 F	0.12 F	0.107 F	
WS-SW003A	Chlordane (Alpha)	5103-71-9	0.01 U	0.01 U	0.01 U	
WS-SW003A	Chlordane (Gamma)	5103-74-2	0.01 U	0.01 U	0.01 U	
WS-SW003A	Dieldrin	60-57-1	0.01 U	0.01 U	0.01 U	
WS-SW003A	Endosulfan I	959-98-8	0.01 U	0.01 U	0.01 U	
WS-SW003A	Endosulfan II	33213-65-9	0.02 U	0.02 U	0.02 U	
WS-SW003A	Endosulfan sulfate	1031-07-8	0.14 F	0.16 F	0.15 F	
WS-SW003A	Endrin	72-20-8	0.03 U	0.03 U	0.03 U	
WS-SW003A	Endrin aldehyde	7421-93-4	0.04 U	0.05 F	0.035 D	F
WS-SW003A	Heptachlor	76-44-8	0.039 F	0.01 U	0.022 D	F
WS-SW003A	Heptachlor epoxide	1024-57-3	0.061 F	0.014 F	0.0375 F	
WS-SW003A	Methoxychlor	72-43-5	0.02 U	0.02 U	0.02 U	
WS-SW003A	alpha-BHC	319-84-6	0.01 U	0.01 U	0.01 U	
WS-SW003A	beta-BHC	319-85-7	0.01 U	0.01 U	0.01 U	
WS-SW003A	delta-BHC	319-86-8	0.01 U	0.01 U	0.01 U	
WS-SW003A	gamma-BHC (Lindane)	58-89-9	0.01 U	0.01 U	0.01 U	
WS-SW003A	Aroclor-1016	12674-11-2	0.051 U	0.051 U	0.051 U	
WS-SW003A	Aroclor-1221	11104-28-2	0.08 U	0.08 U	0.08 U	
WS-SW003A	Aroclor-1232	11141-16-5	0.13 U	0.13 U	0.13 U	
WS-SW003A	Aroclor-1242	53469-21-9	0.29 U	0.29 U	0.29 U	
WS-SW003A	Aroclor-1248	12672-29-6	0.086 U	0.086 U	0.086 U	
WS-SW003A	Aroclor-1254	11097-69-1	0.12 U	0.12 U	0.12 U	
WS-SW003A	Aroclor-1260	11096-82-5	0.069 U	0.069 U	0.069 U	
WS-SW003A	2,4,5-T	93-76-5	0.23 U	0.23 U	0.23 U	
WS-SW003A	2,4-D	94-75-7	0.52 U	0.52 U	0.52 U	
WS-SW003A	Dalapon	75-99-0	0.93 U	0.93 U	0.93 U	
WS-SW003A	Dicamba	1918-00-9	0.38 U	0.38 U	0.38 U	
WS-SW003A	MCPA	94-74-6	54 U	54 U	54 U	
WS-SW003A	MCPP	93-65-2	22 U	22 U	22 U	
WS-SW003A	1,1,1,2-Tetrachloroethane	630-20-6	0.09 U	0.09 U	0.09 U	
WS-SW003A	1,1,1-TCA	71-55-6	0.11 U	0.11 U	0.11 U	
WS-SW003A	1,1,2,2-Tetrachloroethane	79-34-5	0.09 U	0.09 U	0.09 U	
WS-SW003A	1,1,2-TCA	79-00-5	0.14 U	0.14 U	0.14 U	
WS-SW003A	1,1-DCA	75-34-3	0.11 U	0.11 U	0.11 U	
WS-SW003A	1,1-DCE	75-35-4	0.09 U	0.09 U	0.09 U	

**Table B-2****Resolution of Field Duplicate Results for Waimanalo Stream***Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	Chemical	CAS	Normal	Field	Selected	Selected
			Environmental Sample	Duplicate	Result	Qualifier
WS-SW003A	1,1-Dichloropropene	563-58-6	0.21 U	0.21 U	0.21 U	
WS-SW003A	1,2,3-Trichlorobenzene	87-61-6	0.12 U	0.12 U	0.12 U	
WS-SW003A	1,2,3-Trichloropropane	96-18-4	0.15 U	0.15 U	0.15 U	
WS-SW003A	1,2,4-Trichlorobenzene	120-82-1	0.12 U	0.12 U	0.12 U	
WS-SW003A	1,2,4-Trimethylbenzene	95-63-6	0.09 U	0.09 U	0.09 U	
WS-SW003A	1,2-DCA	107-06-2	0.1 U	0.1 U	0.1 U	
WS-SW003A	1,2-DCB	95-50-1	0.09 U	0.09 U	0.09 U	
WS-SW003A	1,2-Dibromo-3-chloropropane	96-12-8	0.51 U	0.51 U	0.51 U	
WS-SW003A	1,2-Dichloropropane	78-87-5	0.08 U	0.08 U	0.08 U	
WS-SW003A	1,2-EDB	106-93-4	0.13 U	0.13 U	0.13 U	
WS-SW003A	1,3,5-Trimethylbenzene	108-67-8	0.09 U	0.09 U	0.09 U	
WS-SW003A	1,3-DCB	541-73-1	0.08 U	0.08 U	0.08 U	
WS-SW003A	1,3-Dichloropropane	142-28-9	0.11 U	0.11 U	0.11 U	
WS-SW003A	1,4-DCB	106-46-7	0.09 U	0.09 U	0.09 U	
WS-SW003A	1-Chlorohexane	544-10-5	0.07 U	0.07 U	0.07 U	
WS-SW003A	2,2-Dichloropropane	594-20-7	0.17 U	0.17 U	0.17 U	
WS-SW003A	2-Chlorotoluene	95-49-8	0.09 U	0.09 U	0.09 U	
WS-SW003A	4-Chlorotoluene	106-43-4	0.1 U	0.1 U	0.1 U	
WS-SW003A	Benzene	71-43-2	0.07 U	0.07 U	0.07 U	
WS-SW003A	Bromobenzene	108-86-1	0.06 U	0.06 U	0.06 U	
WS-SW003A	Bromochloromethane	74-97-5	0.13 U	0.13 U	0.13 U	
WS-SW003A	Bromodichloromethane	75-27-4	0.09 U	0.09 U	0.09 U	
WS-SW003A	Bromoform	75-25-2	0.09 U	0.09 U	0.09 U	
WS-SW003A	Bromomethane	74-83-9	0.08 U	0.08 U	0.08 U	
WS-SW003A	Carbon tetrachloride	56-23-5	0.18 U	0.18 U	0.18 U	
WS-SW003A	Chlorobenzene	108-90-7	0.06 U	0.06 U	0.06 U	
WS-SW003A	Chloroethane	75-00-3	0.09 U	0.09 U	0.09 U	
WS-SW003A	Chloroform	67-66-3	0.1 U	0.1 U	0.1 U	
WS-SW003A	Chloromethane	74-87-3	0.13 U	0.13 U	0.13 U	
WS-SW003A	Cis-1,2-DCE	156-59-2	0.21 U	0.21 U	0.21 U	
WS-SW003A	Cis-1,3-Dichloropropene	10061-01-5	0.1 U	0.1 U	0.1 U	
WS-SW003A	Dibromochloromethane	124-48-1	0.13 U	0.13 U	0.13 U	
WS-SW003A	Dibromomethane	74-95-3	0.12 U	0.12 U	0.12 U	
WS-SW003A	Dichlorodifluoromethane	75-71-8	0.08 U	0.08 U	0.08 U	
WS-SW003A	Ethylbenzene	100-41-4	0.07 U	0.07 U	0.07 U	
WS-SW003A	Hexachlorobutadiene	87-68-3	0.09 U	0.09 U	0.09 U	
WS-SW003A	Isopropylbenzene	98-82-8	0.07 U	0.07 U	0.07 U	
WS-SW003A	Methylene chloride	75-09-2	0.05 U	0.05 U	0.05 U	
WS-SW003A	Naphthalene	91-20-3	0.1 U	0.1 U	0.1 U	
WS-SW003A	Sec-Butylbenzene	135-98-8	0.08 U	0.08 U	0.08 U	
WS-SW003A	Styrene	100-42-5	0.07 U	0.07 U	0.07 U	
WS-SW003A	TCE	79-01-6	0.09 U	0.09 U	0.09 U	
WS-SW003A	Tert-Butylbenzene	98-06-6	0.09 U	0.09 U	0.09 U	
WS-SW003A	Tetrachloroethene	127-18-4	0.1 U	0.1 U	0.1 U	
WS-SW003A	Toluene	108-88-3	0.21 F	0.09 U	0.1275 D	F
WS-SW003A	Trans-1,2-DCE	156-60-5	0.12 U	0.12 U	0.12 U	
WS-SW003A	Trans-1,3-Dichloropropene	10061-02-6	0.14 U	0.14 U	0.14 U	
WS-SW003A	Trichlorofluoromethane	75-69-4	0.1 U	0.1 U	0.1 U	

**Table B-2****Resolution of Field Duplicate Results for Waimanalo Stream***Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	Chemical	CAS	Normal	Field	Selected	Selected
			Environmental Sample	Duplicate	Result	Qualifier
WS-SW003A	Vinyl chloride	75-01-4	0.08 U	0.08 U	0.08 U	
WS-SW003A	m, p-Xylene	108-38-3/1	0.1 U	0.1 U	0.1 U	
WS-SW003A	n-Butylbenzene	104-51-8	0.08 U	0.08 U	0.08 U	
WS-SW003A	n-Propylbenzene	103-65-1	0.08 U	0.08 U	0.08 U	
WS-SW003A	o-Xylene	95-47-6	0.07 U	0.07 U	0.07 U	
WS-SW003A	p-Isopropyltoluene	99-87-6	0.09 U	0.09 U	0.09 U	
WS-SW003A	2,4,5-Trichlorophenol	95-95-4	4.32 U	4.32 U	4.32 U	
WS-SW003A	2,4,6-Trichlorophenol	88-06-2	1.5 U	1.5 U	1.5 U	
WS-SW003A	2,4-DNT	121-14-2	1.36 U	1.36 U	1.36 U	
WS-SW003A	2,4-Dichlorophenol	120-83-2	1.54 U	1.54 U	1.54 U	
WS-SW003A	2,4-Dimethylphenol	105-67-9	1.62 U	1.62 U	1.62 U	
WS-SW003A	2,4-Dinitrophenol	51-28-5	5.14 U	5.14 U	5.14 U	
WS-SW003A	2,6-DNT	606-20-2	1.2 U	1.2 U	1.2 U	
WS-SW003A	2-Chloronaphthalene	91-58-7	1.25 U	1.25 U	1.25 U	
WS-SW003A	2-Chlorophenol	95-57-8	1.88 U	1.88 U	1.88 U	
WS-SW003A	2-Methylnaphthalene	91-57-6	1.66 U	1.66 U	1.66 U	
WS-SW003A	2-Methylphenol	95-48-7	1.66 U	1.66 U	1.66 U	
WS-SW003A	2-Nitroaniline	88-74-4	4.28 U	4.28 U	4.28 U	
WS-SW003A	2-Nitrophenol	88-75-5	1.4 U	1.4 U	1.4 U	
WS-SW003A	3-Nitroaniline	99-09-2	3.95 U	3.95 U	3.95 U	
WS-SW003A	4,6-Dinitro-2-methylphenol	534-52-1	4.8 U	4.8 U	4.8 U	
WS-SW003A	4-Bromophenyl phenyl ether	101-55-3	1.09 U	1.09 U	1.09 U	
WS-SW003A	4-Chloro-3-methylphenol	59-50-7	1.36 U	1.36 U	1.36 U	
WS-SW003A	4-Chloroaniline	106-47-8	1.33 U	1.33 U	1.33 U	
WS-SW003A	4-Chlorophenyl phenyl ether	7005-72-3	1.37 U	1.37 U	1.37 U	
WS-SW003A	4-Methylphenol	106-44-5	1.59 U	1.59 U	1.59 U	
WS-SW003A	4-Nitroaniline	100-01-6	4.56 U	4.56 U	4.56 U	
WS-SW003A	4-Nitrophenol	100-02-7	3.89 U	3.89 U	3.89 U	
WS-SW003A	Benzyl alcohol	100-51-6	1.56 U	1.56 U	1.56 U	
WS-SW003A	Bis (2-chloroethoxy) methane	111-91-1	1.38 U	1.38 U	1.38 U	
WS-SW003A	Bis (2-chloroethyl) ether	111-44-4	1.86 U	1.86 U	1.86 U	
WS-SW003A	Bis (2-chloroisopropyl) ether	108-60-1	1.7 U	1.7 U	1.7 U	
WS-SW003A	Bis (2-ethylhexyl) phthalate	117-81-7	2.59 U	2.59 U	2.59 U	
WS-SW003A	Butyl benzylphthalate	85-68-7	1.32 U	1.32 U	1.32 U	
WS-SW003A	Di-n-butylphthalate	84-74-2	1.66 F	1.04 U	1.09 D	F
WS-SW003A	Di-n-octylphthalate	117-84-0	1.75 U	1.75 U	1.75 U	
WS-SW003A	Dibenzofuran	132-64-9	1.31 U	1.31 U	1.31 U	
WS-SW003A	Diethyl phthalate	84-66-2	2.51 U	2.51 U	2.51 U	
WS-SW003A	Dimethyl phthalate	131-11-3	1.26 U	1.26 U	1.26 U	
WS-SW003A	Hexachlorobenzene	118-74-1	1.25 U	1.25 U	1.25 U	
WS-SW003A	Hexachlorocyclopentadiene	77-47-4	4.36 U	4.36 U	4.36 U	
WS-SW003A	Hexachloroethane	67-72-1	1.76 U	1.76 U	1.76 U	
WS-SW003A	Isophorone	78-59-1	1.35 U	1.35 U	1.35 U	
WS-SW003A	N-Nitrosodi-n-propylamine	621-64-7	1.73 U	1.73 U	1.73 U	
WS-SW003A	N-Nitrosodiphenylamine	86-30-6	1.28 U	1.28 U	1.28 U	
WS-SW003A	Nitrobenzene	98-95-3	1.65 U	1.65 U	1.65 U	
WS-SW003A	Pentachlorophenol	87-86-5	3.44 U	3.44 U	3.44 U	
WS-SW003A	Phenol	108-95-2	1.51 U	1.51 U	1.51 U	

**Table B-2****Resolution of Field Duplicate Results for Waimanalo Stream***Bellows OU1 EE/CA, Bellows AFS, Hawaii*

Sample ID	Chemical	CAS	Normal	Field	Selected	Selected
			Environmental Sample	Duplicate	Result	Qualifier
WS-SW003A	Acenaphthene	83-32-9	0.11 U	0.11 U	0.11 U	
WS-SW003A	Acenaphthylene	208-96-8	0.2 U	0.2 U	0.2 U	
WS-SW003A	Anthracene	120-12-7	0.01 U	0.01 U	0.01 U	
WS-SW003A	Benzo (a) anthracene	56-55-3	0.015 U	0.015 U	0.015 U	
WS-SW003A	Benzo (a) pyrene	50-32-8	0.016 U	0.016 U	0.016 U	
WS-SW003A	Benzo (b) fluoranthene	205-99-2	0.032 U	0.032 U	0.032 U	
WS-SW003A	Benzo (g,h,i) perylene	191-24-2	0.041 U	0.041 U	0.041 U	
WS-SW003A	Benzo (k) fluoranthene	207-08-9	0.016 U	0.016 U	0.016 U	
WS-SW003A	Chrysene	218-01-9	0.01 U	0.01 U	0.01 U	
WS-SW003A	Dibenzo (a,h) anthracene	53-70-3	0.04 U	0.04 U	0.04 U	
WS-SW003A	Fluoranthene	206-44-0	0.02 U	0.02 U	0.02 U	
WS-SW003A	Fluorene	86-73-7	0.02 U	0.02 U	0.02 U	
WS-SW003A	Indeno (1,2,3-c,d) pyrene	193-39-5	0.036 U	0.036 U	0.036 U	
WS-SW003A	Phenanthrene	85-01-8	0.01 U	0.01 U	0.01 U	
WS-SW003A	Pyrene	129-00-0	0.03 U	0.03 U	0.03 U	
WS-SW003Ai	Aluminum,dissolved	7429-90-5-D	0.02 F	0.02 F	0.02 F	
WS-SW003Ai	Barium,dissolved	7440-39-3-D	0.0167	0.0167	0.0167	
WS-SW003Ai	Beryllium,dissolved	7440-41-7-D	0.001 U	0.001 U	0.001 U	
WS-SW003Ai	Cadmium,dissolved	7440-43-9-D	0.001 U	0.001 U	0.001 U	
WS-SW003Ai	Calcium,dissolved	7440-70-2-D	145	143	144	
WS-SW003Ai	Chromium,dissolved	7440-47-3-D	0.004 U	0.004 U	0.004 U	
WS-SW003Ai	Cobalt,dissolved	7440-48-4-D	0.003 U	0.003 U	0.003 U	
WS-SW003Ai	Copper,dissolved	7440-50-8-D	0.001 U	0.001 U	0.001 U	
WS-SW003Ai	Iron,dissolved	7439-89-6-D	0.002 U	0.058 F	0.0295 D F	
WS-SW003Ai	Magnesium,dissolved	7439-95-4-D	412 B	407 B	409.5 B	
WS-SW003Ai	Manganese,dissolved	7439-96-5-D	0.087	0.085	0.086	
WS-SW003Ai	Nickel,dissolved	7440-02-0-D	0.006 U	0.009 F	0.006 D F	
WS-SW003Ai	Potassium,dissolved	7440-09-7-D	118	116	117	
WS-SW003Ai	Silver,dissolved	7440-22-4-D	0.002 U	0.002 U	0.002 U	
WS-SW003Ai	Sodium,dissolved	7440-23-5-D	3120 B	3100 B	3110 B	
WS-SW003Ai	Thallium,dissolved	7440-28-0-D	0.011 U	0.011 U	0.011 U	
WS-SW003Ai	Vanadium,dissolved	7440-62-2-D	0.004 F	0.005 F	0.0045 F	
WS-SW003Ai	Zinc,dissolved	7440-66-6-D	0.003 F	0.005 F	0.004 F	
WS-SW003Ai	Antimony,dissolved	7440-36-0-D	0.0066 U	0.0066 U	0.0066 U	
WS-SW003Ai	Arsenic,dissolved	7440-38-2-D	0.0069 U	0.0069 U	0.0069 U	
WS-SW003Ai	Lead,dissolved	7439-92-1-D	0.008 U	0.008 U	0.008 U	
WS-SW003Ai	Mercury,dissolved	7439-97-6-D	0.0001 U	0.0001 U	0.0001 U	
WS-SW003Ai	Selenium,dissolved	7782-49-2-D	0.0058 U	0.0058 U	0.0058 U	

**Notes:**Data Qualifiers

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

J = The analyte was positively identified; the quantitation is an estimation.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

B = The analyte was found in an associated blank, as well as in the sample.

D = Applied to averaged results when non "U" qualifiers are not identical.