



## King County

Department of Natural Resources and Parks  
Water and Land Resources Division

### Environmental Laboratory

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## King County Environmental Laboratory

**June 13, 2019**

### **Stormwater Action Monitoring Effectiveness Studies *Pilot Study for Non-Proprietary Dissolved Metals Treatment: Oyster Shell Retrofits in Catch Basins***

Equipment Blank collected April 4, 2019  
L71971-1

#### **Notes:**

- The blank sample was collected by running reverse osmosis (r.o.) water through sampling equipment, and analyzing the resulting sample for a variety of conventional and metals constituents.

#### **Conventionals QC Information**

Samples were analyzed in the following workgroups:

**DOC:** WG163080

**ortho-phosphate-P:** WG163054

**pH:** WG163012

**TOC:** WG163080

**Total N:** WG163133

**Total P:** WG163133

**TSS:** WG163043

All QC results for conventionals parameters were within laboratory control limits with this exception.

The holding time for **pH** analysis is <15 minutes. The sample pH result was qualified H since analysis occurred after the holding time had expired.

#### **Metals QC Information**

The following elements were analyzed:

#### **Total Metals and Hardness by ICPMS**

**WG163117**

All QC results for total metals parameters were within laboratory control limits.

**Dissolved Metals by ICPMS**

**WG163253**

All QC results for total metals parameters were within laboratory control limits.

## Sample Data

# King County Environmental Lab Analytical Report

Project: 421195-181  
 Locator: FIELDBLANK  
 Descrip: FIELD BLANK  
 Sample: L71971-1  
 Matrix: LN BLANK WTR  
 ColDate: 4/4/19 11:30

**WET Weight Basis**

Parameters	Value	Qual	MDL	RDL	Units
<b>CV SM2540-D</b>					
Total Suspended Solids		<MDL	0.5	1	mg/L
<b>CV SM4500-H-B</b>					
pH	5.9	H			pH
<b>CV SM4500-N-C</b>					
Total Nitrogen		<MDL	0.05	0.1	mg/L
<b>CV SM4500-P-B,F</b>					
Total Phosphorus		<MDL	0.005	0.01	mg/L
<b>CV SM4500-P-F</b>					
Orthophosphate Phosphorus		<MDL	0.0005	0.002	mg/L
<b>CV SM5310-B</b>					
Dissolved Organic Carbon		<MDL	0.5	1	mg/L
Total Organic Carbon		<MDL	0.5	1	mg/L
<b>ES NONE</b>					
Sample Function	Field Equipment Blank				none
<b>MT EPA 200.8 (MOD)</b>					
Cadmium, Dissolved, ICP-MS		<MDL	0.05	0.25	ug/L
Cadmium, Total, ICP-MS		<MDL	0.05	0.25	ug/L
Calcium, Total, ICP-MS		<MDL	50	50	ug/L
Copper, Dissolved, ICP-MS	0.5	<RDL	0.2	2	ug/L
Copper, Total, ICP-MS	0.25	<RDL	0.2	2	ug/L
Lead, Dissolved, ICP-MS		<MDL	0.1	0.5	ug/L
Lead, Total, ICP-MS		<MDL	0.1	0.5	ug/L
Magnesium, Total, ICP-MS		<MDL	50	50	ug/L
Zinc, Dissolved, ICP-MS		<MDL	0.5	2.5	ug/L
Zinc, Total, ICP-MS	0.76	<RDL	0.5	2.5	ug/L
<b>MT EPA 200.8 (MOD)*SM2340B</b>					
Hardness, Calc		<MDL	0.331	0.331	mg CaCO3/L

## **Quality Control Data**

## WG163012 Alkalinity, Conductivity, pH

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	CVPH	BLANK WTR	4/4/2019 11:30	4/4/2019 14:43	4/4/2019 14:43	WG163012-20,-21,-22	Field Equipment Blank
L72038-1	421155	Quality Assurance	CVALK	FRESH WTR	3/29/2019 0:00	4/4/2019 8:49	4/4/2019 8:49	WG163012-1,-2,-3,-4,-5,-6	
L72038-2	421155	Quality Assurance	CVALK	FRESH WTR	3/29/2019 0:00	4/4/2019 8:56	4/4/2019 8:56	WG163012-1,-2,-3,-4,-5,-6	
L72039-1	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-BI-H	LEACHATE	4/2/2019 8:35	4/4/2019 10:02	4/4/2019 10:02	WG163012-9	
L72039-1	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-CA	LEACHATE	4/2/2019 8:35	4/4/2019 10:02	4/4/2019 10:02	WG163012-9	
L72039-1	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-H	LEACHATE	4/2/2019 8:35	4/4/2019 10:02	4/4/2019 10:02	WG163012-7,-8,-9,-10,-11	
L72039-1	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVCOND	LEACHATE	4/2/2019 8:35	4/4/2019 13:37	4/4/2019 13:37	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72039-2	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-BI-H	LEACHATE	4/2/2019 8:35	4/4/2019 10:07	4/4/2019 10:07	WG163012-9	
L72039-2	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-CA	LEACHATE	4/2/2019 8:35	4/4/2019 10:07	4/4/2019 10:07	WG163012-9	
L72039-2	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-H	LEACHATE	4/2/2019 8:35	4/4/2019 10:07	4/4/2019 10:07	WG163012-7,-8,-9,-10,-11	
L72039-2	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVCOND	LEACHATE	4/2/2019 8:35	4/4/2019 13:38	4/4/2019 13:38	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72039-3	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-BI-H	LEACHATE	4/2/2019 9:15	4/4/2019 11:09	4/4/2019 11:09	WG163012-9	
L72039-3	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-CA-H	LEACHATE	4/2/2019 9:15	4/4/2019 11:09	4/4/2019 11:09		
L72039-3	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-H	LEACHATE	4/2/2019 9:15	4/4/2019 11:09	4/4/2019 11:09	WG163012-7,-8,-9,-10,-11	
L72039-3	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVCOND	LEACHATE	4/2/2019 9:15	4/4/2019 13:50	4/4/2019 13:50	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72039-4	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-BI-H	LEACHATE	4/2/2019 10:05	4/4/2019 10:22	4/4/2019 10:22	WG163012-9	
L72039-4	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-CA	LEACHATE	4/2/2019 10:05	4/4/2019 10:22	4/4/2019 10:22	WG163012-9	
L72039-4	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-H	LEACHATE	4/2/2019 10:05	4/4/2019 10:22	4/4/2019 10:22	WG163012-7,-8,-9,-10,-11	
L72039-4	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVCOND	LEACHATE	4/2/2019 10:05	4/4/2019 13:47	4/4/2019 13:47	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72039-5	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-BI-H	LEACHATE	4/2/2019 11:00	4/4/2019 10:12	4/4/2019 10:12	WG163012-9	
L72039-5	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-CA	LEACHATE	4/2/2019 11:00	4/4/2019 10:12	4/4/2019 10:12	WG163012-9	
L72039-5	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-H	LEACHATE	4/2/2019 11:00	4/4/2019 10:12	4/4/2019 10:12	WG163012-7,-8,-9,-10,-11	
L72039-5	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVCOND	LEACHATE	4/2/2019 11:00	4/4/2019 13:42	4/4/2019 13:42	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72039-6	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-BI-H	LEACHATE	4/3/2019 10:15	4/4/2019 10:56	4/4/2019 10:56	WG163012-9	
L72039-6	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-CA	LEACHATE	4/3/2019 10:15	4/4/2019 10:56	4/4/2019 10:56	WG163012-9	
L72039-6	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVALK-H	LEACHATE	4/3/2019 10:15	4/4/2019 10:56	4/4/2019 10:56	WG163012-7,-8,-9,-10,-11	
L72039-6	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVCOND	LEACHATE	4/3/2019 10:15	4/4/2019 13:49	4/4/2019 13:49	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72041-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVALK-H	LEACHATE	4/2/2019 9:28	4/4/2019 10:30	4/4/2019 10:30	WG163012-7,-8,-9,-10,-11	
L72041-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVCOND	LEACHATE	4/2/2019 9:28	4/4/2019 13:46	4/4/2019 13:46	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72041-3	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVALK-H	LEACHATE	4/3/2019 9:40	4/4/2019 10:37	4/4/2019 10:37	WG163012-7,-8,-9,-10,-11	
L72041-3	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVCOND	LEACHATE	4/3/2019 9:40	4/4/2019 13:43	4/4/2019 13:43	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72041-4	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVALK-H	LEACHATE	4/2/2019 14:29	4/4/2019 10:45	4/4/2019 10:45	WG163012-7,-8,-9,-10,-11	
L72041-4	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVCOND	LEACHATE	4/2/2019 14:29	4/4/2019 13:48	4/4/2019 13:48	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72041-5	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVALK-H	LEACHATE	4/3/2019 8:30	4/4/2019 9:47	4/4/2019 9:47	WG163012-7,-8,-9,-10,-11	
L72041-5	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVCOND	LEACHATE	4/3/2019 8:30	4/4/2019 13:40	4/4/2019 13:40	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72041-7	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVALK-H	LEACHATE	4/3/2019 8:30	4/4/2019 9:56	4/4/2019 9:56	WG163012-7,-8,-9,-10,-11	
L72041-7	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVCOND	LEACHATE	4/3/2019 8:30	4/4/2019 13:41	4/4/2019 13:41	WG163012-12,-13,-14,-15,-16,-17,-18,-19	
L72098-1	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVALK	BLANK WTR	4/2/2019 10:45	4/4/2019 8:20	4/4/2019 8:20	WG163012-1,-2,-3,-4,-5,-6	Equipment Blank

King County Environmental Laboratory Batch Report

Mercer Island Oyster Shell Retrofit Project 04APR2019

L72110-1	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVALK	BLANK WTR	4/3/2019 14:10	4/4/2019 8:36	4/4/2019 8:36	WG163012-1,-2,-3,-4,-5,-6	FB @ CS030
L72110-2	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVALK	BLANK WTR	4/3/2019 14:45	4/4/2019 8:42	4/4/2019 8:42	WG163012-1,-2,-3,-4,-5,-6	FB @ CS030
WG163012-1	MDLCK		CVALK	BLANK WTR		4/4/2019 8:04	4/4/2019 8:04	WG163012-1,-2,-3,-4,-5,-6	LEVEL1
WG163012-2	LCS		CVALK	BLANK WTR		4/4/2019 8:12	4/4/2019 8:12	WG163012-1,-2,-3,-4,-5,-6	LEVEL3
WG163012-3	LD		CVALK	BLANK WTR		4/4/2019 8:28	4/4/2019 8:28	WG163012-1,-2,-3,-4,-5,-6	L72098-1
WG163012-4	LD		CVALK	FRESH WTR		4/4/2019 9:03	4/4/2019 9:03	WG163012-1,-2,-3,-4,-5,-6	L72038-2
WG163012-5	LCS		CVALK	BLANK WTR		4/4/2019 9:10	4/4/2019 9:10	WG163012-1,-2,-3,-4,-5,-6	LEVEL1
WG163012-6	LCS		CVALK	BLANK WTR		4/4/2019 9:20	4/4/2019 9:20	WG163012-1,-2,-3,-4,-5,-6	LEVEL3
WG163012-7	MDLCK		CVALK-H	BLANK WTR		4/4/2019 9:34	4/4/2019 9:34	WG163012-7,-8,-9,-10,-11	LEVEL2
WG163012-8	LCS		CVALK-H	BLANK WTR		4/4/2019 9:38	4/4/2019 9:38	WG163012-7,-8,-9,-10,-11	LEVEL4
WG163012-9	LD		CVALK-BI-H	LEACHATE		4/4/2019 10:17	4/4/2019 10:17	WG163012-9	L72039-5
WG163012-9	LD		CVALK-CA	LEACHATE		4/4/2019 10:17	4/4/2019 10:17	WG163012-9	L72039-5
WG163012-9	LD		CVALK-H	LEACHATE		4/4/2019 10:17	4/4/2019 10:17	WG163012-7,-8,-9,-10,-11	L72039-5
WG163012-10	LCS		CVALK-H	BLANK WTR		4/4/2019 11:21	4/4/2019 11:21	WG163012-7,-8,-9,-10,-11	LEVEL5
WG163012-11	LCS		CVALK-H	BLANK WTR		4/4/2019 11:30	4/4/2019 11:30	WG163012-7,-8,-9,-10,-11	LEVEL6
WG163012-12	MDLCK		CVCOND	BLANK WTR		4/4/2019 13:29	4/4/2019 13:29	WG163012-12,-13,-14,-15,-16,-17,-18,-19	LEVEL1
WG163012-13	LCS		CVCOND	BLANK WTR		4/4/2019 13:31	4/4/2019 13:31	WG163012-12,-13,-14,-15,-16,-17,-18,-19	LEVEL2
WG163012-14	LCS		CVCOND	BLANK WTR		4/4/2019 13:32	4/4/2019 13:32	WG163012-12,-13,-14,-15,-16,-17,-18,-19	LEVEL3
WG163012-15	LCS		CVCOND	BLANK WTR		4/4/2019 13:34	4/4/2019 13:34	WG163012-12,-13,-14,-15,-16,-17,-18,-19	LEVEL4
WG163012-16	LD		CVCOND	LEACHATE		4/4/2019 13:45	4/4/2019 13:45	WG163012-12,-13,-14,-15,-16,-17,-18,-19	L72041-3
WG163012-17	LCS		CVCOND	BLANK WTR		4/4/2019 13:54	4/4/2019 13:54	WG163012-12,-13,-14,-15,-16,-17,-18,-19	LEVEL2
WG163012-18	LCS		CVCOND	BLANK WTR		4/4/2019 13:55	4/4/2019 13:55	WG163012-12,-13,-14,-15,-16,-17,-18,-19	LEVEL3
WG163012-19	LCS		CVCOND	BLANK WTR		4/4/2019 13:56	4/4/2019 13:56	WG163012-12,-13,-14,-15,-16,-17,-18,-19	LEVEL4
WG163012-20	LCS		CVPH	BLANK WTR		4/4/2019 14:30	4/4/2019 14:30	WG163012-20,-21,-22	LEVEL1
WG163012-21	LD		CVPH	BLANK WTR		4/4/2019 14:39	4/4/2019 14:39	WG163012-20,-21,-22	L71971-1
WG163012-22	LCS		CVPH	BLANK WTR		4/4/2019 14:46	4/4/2019 14:46	WG163012-20,-21,-22	LEVEL1

## WG163043 TSS, VSS, FIXED-SS

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	CVTSS	BLANK WTR	4/4/2019 11:30	4/5/2019 16:08	4/8/2019 8:30	WG163043-4,-1,-2,-5,-6,-3	Field Equipment Blank
L72036-1	421195-240	Horseshoe Lake WQ	CVTSS	FRESH WTR	4/4/2019 11:16	4/5/2019 16:08	4/8/2019 8:31	WG163043-4,-1,-2,-5,-6,-3	
L72036-2	421195-240	Horseshoe Lake WQ	CVTSS	FRESH WTR	4/4/2019 11:40	4/5/2019 16:08	4/8/2019 8:31	WG163043-4,-1,-2,-5,-6,-3	
L72036-3	421195-240	Horseshoe Lake WQ	CVTSS	FRESH WTR	4/4/2019 11:59	4/5/2019 16:08	4/8/2019 8:31	WG163043-4,-1,-2,-5,-6,-3	
L72039-6	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVTSS	LEACHATE	4/3/2019 10:15	4/8/2019 13:07	4/8/2019 15:36	WG163043-4,-1,-2,-5,-6,-3	
L72039-6	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVTSS-FIXED	LEACHATE	4/3/2019 10:15	4/8/2019 13:07	4/9/2019 8:17	WG163043-5,-6,-3	
L72039-6	421422-CHLS-M_1	SWD-CHLS-M_Mod Cedar Hills Leachate Monthly Modified	CVVSS	LEACHATE	4/3/2019 10:15	4/8/2019 13:07	4/9/2019 8:17	WG163043-4,-1,-2,-5,-6,-3	
L72041-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTSS	LEACHATE	4/2/2019 9:28	4/5/2019 16:08	4/8/2019 8:34	WG163043-4,-1,-2,-5,-6,-3	
L72041-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVVSS	LEACHATE	4/2/2019 9:28	4/5/2019 16:08	4/8/2019 12:17	WG163043-4,-1,-2,-5,-6,-3	
L72041-3	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTSS	LEACHATE	4/3/2019 9:40	4/5/2019 16:08	4/8/2019 8:35	WG163043-4,-1,-2,-5,-6,-3	
L72041-3	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVVSS	LEACHATE	4/3/2019 9:40	4/5/2019 16:08	4/8/2019 12:21	WG163043-4,-1,-2,-5,-6,-3	
L72041-4	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTSS	LEACHATE	4/2/2019 14:29	4/5/2019 16:08	4/8/2019 8:35	WG163043-4,-1,-2,-5,-6,-3	
L72041-4	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVVSS	LEACHATE	4/2/2019 14:29	4/5/2019 16:08	4/8/2019 12:20	WG163043-4,-1,-2,-5,-6,-3	
L72041-5	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTSS	LEACHATE	4/3/2019 8:30	4/5/2019 16:08	4/8/2019 8:36	WG163043-4,-1,-2,-5,-6,-3	
L72041-5	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVVSS	LEACHATE	4/3/2019 8:30	4/5/2019 16:08	4/8/2019 12:20	WG163043-4,-1,-2,-5,-6,-3	
L72041-7	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTSS	LEACHATE	4/3/2019 8:30	4/5/2019 16:08	4/8/2019 8:36	WG163043-4,-1,-2,-5,-6,-3	
L72041-7	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVVSS	LEACHATE	4/3/2019 8:30	4/5/2019 16:08	4/8/2019 12:14	WG163043-4,-1,-2,-5,-6,-3	
L72110-1	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVTSS	BLANK WTR	4/3/2019 14:10	4/5/2019 16:08	4/8/2019 8:30	WG163043-4,-1,-2,-5,-6,-3	FB @ CS030
L72110-1	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVVSS	BLANK WTR	4/3/2019 14:10	4/5/2019 16:08	4/8/2019 12:16	WG163043-4,-1,-2,-5,-6,-3	FB @ CS030
L72110-2	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVTSS	BLANK WTR	4/3/2019 14:45	4/5/2019 16:08	4/8/2019 8:30	WG163043-4,-1,-2,-5,-6,-3	FB @ CS030
L72110-2	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVVSS	BLANK WTR	4/3/2019 14:45	4/5/2019 16:08	4/8/2019 12:21	WG163043-4,-1,-2,-5,-6,-3	FB @ CS030
L72120-1	421422-CHSW-E	SWD-CHSW E Cedar Hills Emergency	CVTSS	FRESH WTR	4/5/2019 8:10	4/5/2019 16:08	4/8/2019 8:32	WG163043-4,-1,-2,-5,-6,-3	
L72120-1	421422-CHSW-E	SWD-CHSW E Cedar Hills Emergency	CVVSS	FRESH WTR	4/5/2019 8:10	4/5/2019 16:08	4/8/2019 12:19	WG163043-4,-1,-2,-5,-6,-3	
L72120-3	421422-CHSW-E	SWD-CHSW E Cedar Hills Emergency	CVTSS	FRESH WTR	4/5/2019 7:40	4/5/2019 16:08	4/8/2019 8:32	WG163043-4,-1,-2,-5,-6,-3	
L72120-3	421422-CHSW-E	SWD-CHSW E Cedar Hills Emergency	CVVSS	FRESH WTR	4/5/2019 7:40	4/5/2019 16:08	4/8/2019 12:15	WG163043-4,-1,-2,-5,-6,-3	
WG163043-1	MB		CVTSS	BLANK WTR		4/5/2019 16:08	4/8/2019 9:53	WG163043-4,-1,-2,-5,-6,-3	MB1
WG163043-1	MB		CVVSS	BLANK WTR		4/5/2019 16:08	4/8/2019 12:15	WG163043-4,-1,-2,-5,-6,-3	MB1
WG163043-2	LCS		CVTSS	BLANK WTR		4/5/2019 16:08	4/8/2019 9:55	WG163043-4,-1,-2,-5,-6,-3	LEVEL2 #57209
WG163043-2	LCS		CVVSS	BLANK WTR		4/5/2019 16:08	4/8/2019 12:18	WG163043-4,-1,-2,-5,-6,-3	LEVEL2 #57209
WG163043-3	LD		CVTSS	LEACHATE		4/8/2019 13:07	4/8/2019 15:36	WG163043-4,-1,-2,-5,-6,-3	L72039-6
WG163043-3	LD		CVTSS-FIXED	LEACHATE		4/8/2019 13:07	4/9/2019 8:16	WG163043-5,-6,-3	L72039-6
WG163043-3	LD		CVVSS	LEACHATE		4/8/2019 13:07	4/9/2019 8:16	WG163043-4,-1,-2,-5,-6,-3	L72039-6
WG163043-4	LD		CVTSS	FRESH WTR		4/5/2019 16:08	4/8/2019 8:32	WG163043-4,-1,-2,-5,-6,-3	L72120-3
WG163043-4	LD		CVVSS	FRESH WTR		4/5/2019 16:08	4/8/2019 12:18	WG163043-4,-1,-2,-5,-6,-3	L72120-3
WG163043-5	MB		CVTSS	BLANK WTR		4/8/2019 13:07	4/8/2019 15:35	WG163043-4,-1,-2,-5,-6,-3	MB2
WG163043-5	MB		CVTSS-FIXED	BLANK WTR		4/8/2019 13:07	4/9/2019 8:15	WG163043-5,-6,-3	MB2
WG163043-5	MB		CVVSS	BLANK WTR		4/8/2019 13:07	4/9/2019 8:15	WG163043-4,-1,-2,-5,-6,-3	MB2
WG163043-6	LCS		CVTSS	BLANK WTR		4/8/2019 13:07	4/8/2019 15:36	WG163043-4,-1,-2,-5,-6,-3	LEVEL2 #57214



WG163043-6 LCS  
WG163043-6 LCS

CVTSS-FIXED BLANK WTR  
CVVSS BLANK WTR

4/8/2019 13:07  
4/8/2019 13:07

4/9/2019 8:16  
4/9/2019 8:16

WG163043-5,-6,-3  
WG163043-4,-1,-2,-5,-6,-3

LEVEL2 #57214  
LEVEL2 #57214

## WG163054 Dissolved Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	CVORTHOP	BLANK WTR	4/4/2019 11:30	4/9/2019 7:15	4/9/2019 12:44	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	Field Equipment Blank
L72006-1	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	4/8/2019 10:22	4/9/2019 7:15	4/9/2019 12:50	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72036-1	421195-240	Horseshoe Lake WQ	CVNH3-FL	FRESH WTR	4/4/2019 11:16	4/9/2019 7:15	4/9/2019 9:09	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72036-1	421195-240	Horseshoe Lake WQ	CVNO23	FRESH WTR	4/4/2019 11:16	4/9/2019 7:15	4/9/2019 9:09	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72036-1	421195-240	Horseshoe Lake WQ	CVORTHOP	FRESH WTR	4/4/2019 11:16	4/9/2019 7:15	4/9/2019 9:09	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72036-2	421195-240	Horseshoe Lake WQ	CVNH3-FL	FRESH WTR	4/4/2019 11:40	4/9/2019 7:15	4/9/2019 12:54	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72036-2	421195-240	Horseshoe Lake WQ	CVNO23	FRESH WTR	4/4/2019 11:40	4/9/2019 7:15	4/9/2019 12:54	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72036-2	421195-240	Horseshoe Lake WQ	CVORTHOP	FRESH WTR	4/4/2019 11:40	4/9/2019 7:15	4/9/2019 12:54	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72036-3	421195-240	Horseshoe Lake WQ	CVNH3-FL	FRESH WTR	4/4/2019 11:59	4/9/2019 7:15	4/9/2019 12:57	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72036-3	421195-240	Horseshoe Lake WQ	CVNO23	FRESH WTR	4/4/2019 11:59	4/9/2019 7:15	4/9/2019 12:57	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72036-3	421195-240	Horseshoe Lake WQ	CVORTHOP	FRESH WTR	4/4/2019 11:59	4/9/2019 7:15	4/9/2019 12:57	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-1	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 7:27	4/9/2019 7:15	4/9/2019 9:18	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-1	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 7:27	4/9/2019 7:15	4/9/2019 9:18	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-1	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 7:27	4/9/2019 7:15	4/9/2019 9:18	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-2	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 7:31	4/9/2019 7:15	4/9/2019 9:34	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-2	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 7:31	4/9/2019 7:15	4/9/2019 9:34	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-2	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 7:31	4/9/2019 7:15	4/9/2019 9:34	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-3	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 8:08	4/9/2019 7:15	4/9/2019 9:37	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-3	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 8:08	4/9/2019 7:15	4/9/2019 9:37	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-3	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 8:08	4/9/2019 7:15	4/9/2019 9:37	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-4	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 8:11	4/9/2019 7:15	4/9/2019 9:40	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-4	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 8:11	4/9/2019 7:15	4/9/2019 9:40	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-4	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 8:11	4/9/2019 7:15	4/9/2019 9:40	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-5	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 8:15	4/9/2019 7:15	4/9/2019 9:44	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-5	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 8:15	4/9/2019 7:15	4/9/2019 9:44	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-5	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 8:15	4/9/2019 7:15	4/9/2019 9:44	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-6	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 8:18	4/9/2019 7:15	4/9/2019 9:47	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-6	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 8:18	4/9/2019 7:15	4/9/2019 9:47	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-6	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 8:18	4/9/2019 7:15	4/9/2019 9:47	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-8	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 8:53	4/9/2019 7:15	4/9/2019 9:50	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-8	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 8:53	4/9/2019 7:15	4/9/2019 9:50	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-8	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 8:53	4/9/2019 7:15	4/9/2019 9:50	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-9	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 8:56	4/9/2019 7:15	4/9/2019 9:53	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-9	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 8:56	4/9/2019 7:15	4/9/2019 9:53	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-9	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 8:56	4/9/2019 7:15	4/9/2019 9:53	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-10	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 9:45	4/9/2019 7:15	4/9/2019 9:56	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-10	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 9:45	4/9/2019 7:15	4/9/2019 9:56	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-10	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 9:45	4/9/2019 7:15	4/9/2019 9:56	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	



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L72101-25	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 10:50	4/9/2019 7:15	4/9/2019 11:50	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-26	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 10:49	4/9/2019 7:15	4/9/2019 11:53	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-26	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 10:49	4/9/2019 7:15	4/9/2019 11:53	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-26	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 10:49	4/9/2019 7:15	4/9/2019 11:53	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-27	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 10:48	4/9/2019 7:15	4/9/2019 11:57	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-27	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 10:48	4/9/2019 7:15	4/9/2019 11:57	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-27	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 10:48	4/9/2019 7:15	4/9/2019 11:57	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-28	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 10:48	4/9/2019 7:15	4/9/2019 12:00	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-28	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 10:48	4/9/2019 7:15	4/9/2019 12:00	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-28	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 10:48	4/9/2019 7:15	4/9/2019 12:00	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-29	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 10:47	4/9/2019 7:15	4/9/2019 12:03	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-29	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 10:47	4/9/2019 7:15	4/9/2019 12:03	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-29	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 10:47	4/9/2019 7:15	4/9/2019 12:03	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-31	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 12:20	4/9/2019 7:15	4/9/2019 12:06	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-31	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 12:20	4/9/2019 7:15	4/9/2019 12:06	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-31	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 12:20	4/9/2019 7:15	4/9/2019 12:06	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-32	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 12:19	4/9/2019 7:15	4/9/2019 12:09	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-32	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 12:19	4/9/2019 7:15	4/9/2019 12:09	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-32	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 12:19	4/9/2019 7:15	4/9/2019 12:09	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-33	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 12:19	4/9/2019 7:15	4/9/2019 12:12	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-33	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 12:19	4/9/2019 7:15	4/9/2019 12:12	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-33	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 12:19	4/9/2019 7:15	4/9/2019 12:12	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-34	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 12:18	4/9/2019 7:15	4/9/2019 12:16	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-34	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 12:18	4/9/2019 7:15	4/9/2019 12:16	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-34	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 12:18	4/9/2019 7:15	4/9/2019 12:16	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-35	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 12:17	4/9/2019 7:15	4/9/2019 12:31	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	
L72101-35	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 12:17	4/9/2019 7:15	4/9/2019 12:31	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-35	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 12:17	4/9/2019 7:15	4/9/2019 12:31	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72101-37	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	4/8/2019 7:26	4/9/2019 7:15	4/9/2019 12:38	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	FFB
L72101-37	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	4/8/2019 7:26	4/9/2019 7:15	4/9/2019 12:38	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	FFB
L72101-37	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	4/8/2019 7:26	4/9/2019 7:15	4/9/2019 12:38	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	FFB
L72101-38	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	4/8/2019 11:05	4/9/2019 7:15	4/9/2019 12:41	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	FFB
L72101-38	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	4/8/2019 11:05	4/9/2019 7:15	4/9/2019 12:41	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	FFB
L72101-38	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	4/8/2019 11:05	4/9/2019 7:15	4/9/2019 12:41	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	FFB
L72101-39	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	4/8/2019 8:50	4/9/2019 7:15	4/9/2019 12:47	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	FREP_L72101-8
L72101-39	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	4/8/2019 8:50	4/9/2019 7:15	4/9/2019 12:47	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	FREP_L72101-8
L72101-39	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	4/8/2019 8:50	4/9/2019 7:15	4/9/2019 12:47	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	FREP_L72101-8
WG163054-1	MB		CVNH3-FL	BLANK WTR		4/9/2019 7:15	4/9/2019 8:50	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	MB1 4/9/19 7:15
WG163054-1	MB		CVNO23	BLANK WTR		4/9/2019 7:15	4/9/2019 8:50	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	MB1 4/9/19 7:15
WG163054-1	MB		CVORTHOP	BLANK WTR		4/9/2019 7:15	4/9/2019 8:50	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	MB1 4/9/19 7:15
WG163054-2	SB		CVNH3-FL	BLANK WTR		4/9/2019 7:15	4/9/2019 8:53	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	WG163054-1

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WG163054-2	SB	CVNO23	BLANK WTR	4/9/2019 7:15	4/9/2019 8:53	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	WG163054-1
WG163054-2	SB	CVORTHOP	BLANK WTR	4/9/2019 7:15	4/9/2019 8:53	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	WG163054-1
WG163054-3	LCS	CVNH3-FL	BLANK WTR	4/9/2019 8:56	4/9/2019 8:56	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	LEVEL1
WG163054-3	LCS	CVNO23	BLANK WTR	4/9/2019 8:56	4/9/2019 8:56	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	LEVEL1
WG163054-3	LCS	CVORTHOP	BLANK WTR	4/9/2019 8:56	4/9/2019 8:56	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	LEVEL1
WG163054-4	MDLCK	CVNH3-FL	BLANK WTR	4/9/2019 7:15	4/9/2019 9:02	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	LEVEL1
WG163054-4	MDLCK	CVNO23	BLANK WTR	4/9/2019 7:15	4/9/2019 9:02	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	LEVEL1
WG163054-4	MDLCK	CVORTHOP	BLANK WTR	4/9/2019 7:15	4/9/2019 9:02	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	LEVEL1
WG163054-5	LD	CVNH3-FL	FRESH WTR	4/9/2019 7:15	4/9/2019 10:31	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	L72101-16
WG163054-5	LD	CVNO23	FRESH WTR	4/9/2019 7:15	4/9/2019 10:31	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	L72101-16
WG163054-5	LD	CVORTHOP	FRESH WTR	4/9/2019 7:15	4/9/2019 10:31	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	L72101-16
WG163054-6	MS	CVNH3-FL	FRESH WTR	4/9/2019 7:15	4/9/2019 10:34	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	L72101-16
WG163054-6	MS	CVNO23	FRESH WTR	4/9/2019 7:15	4/9/2019 10:34	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	L72101-16
WG163054-6	MS	CVORTHOP	FRESH WTR	4/9/2019 7:15	4/9/2019 10:34	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	L72101-16
WG163054-7	MB	CVNH3-FL	BLANK WTR	4/9/2019 7:15	4/9/2019 11:03	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	MB2 4/9/19 7:15
WG163054-7	MB	CVNO23	BLANK WTR	4/9/2019 7:15	4/9/2019 11:03	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	MB2 4/9/19 7:15
WG163054-7	MB	CVORTHOP	BLANK WTR	4/9/2019 7:15	4/9/2019 11:03	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	MB2 4/9/19 7:15
WG163054-8	LCS	CVNH3-FL	BLANK WTR	4/9/2019 11:06	4/9/2019 11:06	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	LEVEL1
WG163054-8	LCS	CVNO23	BLANK WTR	4/9/2019 11:06	4/9/2019 11:06	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	LEVEL1
WG163054-8	LCS	CVORTHOP	BLANK WTR	4/9/2019 11:06	4/9/2019 11:06	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	LEVEL1
WG163054-9	LD	CVNH3-FL	FRESH WTR	4/9/2019 7:15	4/9/2019 11:25	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	L72101-23
WG163054-9	LD	CVNO23	FRESH WTR	4/9/2019 7:15	4/9/2019 11:25	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	L72101-23
WG163054-9	LD	CVORTHOP	FRESH WTR	4/9/2019 7:15	4/9/2019 11:25	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	L72101-23
WG163054-10	MS	CVNH3-FL	FRESH WTR	4/9/2019 7:15	4/9/2019 11:28	WG163054-2,-3,-4,-5,-6,-7,-8,-9,-1,-10	L72101-23
WG163054-10	MS	CVNO23	FRESH WTR	4/9/2019 7:15	4/9/2019 11:28	WG163054-2,-1,-3,-4,-5,-6,-7,-8,-9,-10	L72101-23
WG163054-10	MS	CVORTHOP	FRESH WTR	4/9/2019 7:15	4/9/2019 11:28	WG163054-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	L72101-23

## WG163080 TOC

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	CVDOC	BLANK WTR	4/4/2019 11:30	4/8/2019 13:38	4/8/2019 13:38		Field Equipment Blank
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	CVTOC	BLANK WTR	4/4/2019 11:30	4/8/2019 14:35	4/8/2019 14:35	WG163080-1,-2,-3,-4,-5,-6	Field Equipment Blank
L72098-1	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVTOC	BLANK WTR	4/2/2019 10:45	4/8/2019 14:09	4/8/2019 14:09	WG163080-1,-2,-3,-4,-5,-6	Equipment Blank
L72110-1	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVTOC	BLANK WTR	4/3/2019 14:10	4/8/2019 14:20	4/8/2019 14:20	WG163080-1,-2,-3,-4,-5,-6	FB @ CS030
L72110-2	423670	HLKK CSO System Characterization (Hanford, Lander, King, Kingdome)	CVTOC	BLANK WTR	4/3/2019 14:45	4/8/2019 14:26	4/8/2019 14:26	WG163080-1,-2,-3,-4,-5,-6	FB @ CS030
L72120-1	421422-CHSW-E	SWD-CHSW E Cedar Hills Emergency	CVTOC	FRESH WTR	4/5/2019 8:10	4/8/2019 13:22	4/8/2019 13:22	WG163080-1,-2,-3,-4,-5,-6	
L72120-3	421422-CHSW-E	SWD-CHSW E Cedar Hills Emergency	CVTOC	FRESH WTR	4/5/2019 7:40	4/8/2019 13:15	4/8/2019 13:15	WG163080-1,-2,-3,-4,-5,-6	
WG163080-1	MDLCK		CVTOC	BLANK WTR		4/8/2019 12:36	4/8/2019 12:36	WG163080-1,-2,-3,-4,-5,-6	LEVEL1
WG163080-2	MB		CVTOC	BLANK WTR		4/8/2019 12:44	4/8/2019 12:44	WG163080-1,-2,-3,-4,-5,-6	MB 4/8/19
WG163080-3	SB		CVTOC	BLANK WTR		4/8/2019 12:50	4/8/2019 12:50	WG163080-1,-2,-3,-4,-5,-6	WG163080-2
WG163080-4	LCS		CVTOC	BLANK WTR		4/8/2019 12:59	4/8/2019 12:59	WG163080-1,-2,-3,-4,-5,-6	LEVEL1
WG163080-5	LD		CVTOC	FRESH WTR		4/8/2019 13:30	4/8/2019 13:30	WG163080-1,-2,-3,-4,-5,-6	L72120-1
WG163080-6	MS		CVTOC	FRESH WTR		4/8/2019 14:42	4/8/2019 14:42	WG163080-1,-2,-3,-4,-5,-6	L72120-1

## WG163133 Total N and Total P

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	CVTOTN	BLANK WTR	4/4/2019 11:30	4/10/2019 7:50	4/18/2019 10:38	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	Field Equipment Blank
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	CVTOTP	BLANK WTR	4/4/2019 11:30	4/10/2019 7:50	4/18/2019 10:38	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	Field Equipment Blank
L71986-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 9:30	4/10/2019 7:50	4/18/2019 8:39	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 9:30	4/10/2019 7:50	4/18/2019 8:39	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 9:59	4/10/2019 7:50	4/18/2019 8:41	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 9:59	4/10/2019 7:50	4/18/2019 8:41	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 10:33	4/10/2019 7:50	4/18/2019 8:43	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 10:33	4/10/2019 7:50	4/18/2019 8:43	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 10:58	4/10/2019 7:50	4/18/2019 8:44	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 10:58	4/10/2019 7:50	4/18/2019 8:44	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 11:18	4/10/2019 7:50	4/18/2019 8:46	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 11:18	4/10/2019 7:50	4/18/2019 8:46	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 11:57	4/10/2019 7:50	4/18/2019 8:55	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 11:57	4/10/2019 7:50	4/18/2019 8:55	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-7	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 12:18	4/10/2019 7:50	4/18/2019 8:57	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-7	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 12:18	4/10/2019 7:50	4/18/2019 8:57	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 12:47	4/10/2019 7:50	4/18/2019 8:59	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 12:47	4/10/2019 7:50	4/18/2019 8:59	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-9	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 13:11	4/10/2019 7:50	4/18/2019 9:01	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-9	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 13:11	4/10/2019 7:50	4/18/2019 9:01	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-10	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 13:27	4/10/2019 7:50	4/18/2019 9:03	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-10	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 13:27	4/10/2019 7:50	4/18/2019 9:03	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-11	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 13:58	4/10/2019 7:50	4/18/2019 9:05	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-11	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 13:58	4/10/2019 7:50	4/18/2019 9:05	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-12	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 14:09	4/10/2019 7:50	4/18/2019 9:06	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-12	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 14:09	4/10/2019 7:50	4/18/2019 9:06	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71986-13	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 14:35	4/10/2019 7:50	4/18/2019 9:32	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71986-13	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 14:35	4/10/2019 7:50	4/18/2019 9:32	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 9:09	4/10/2019 7:50	4/18/2019 9:52	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 9:09	4/10/2019 7:50	4/18/2019 9:52	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 9:43	4/10/2019 7:50	4/18/2019 9:58	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 9:43	4/10/2019 7:50	4/18/2019 9:58	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 10:22	4/10/2019 7:50	4/18/2019 10:00	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 10:22	4/10/2019 7:50	4/18/2019 10:00	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 10:43	4/10/2019 7:50	4/18/2019 10:01	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 10:43	4/10/2019 7:50	4/18/2019 10:01	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 10:54	4/10/2019 7:50	4/18/2019 10:03	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 10:54	4/10/2019 7:50	4/18/2019 10:03	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	

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L71988-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 11:29	4/10/2019 7:50	4/18/2019 10:12	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 11:29	4/10/2019 7:50	4/18/2019 10:12	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-7	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 11:54	4/10/2019 7:50	4/18/2019 10:14	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-7	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 11:54	4/10/2019 7:50	4/18/2019 10:14	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 12:12	4/10/2019 7:50	4/18/2019 10:16	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 12:12	4/10/2019 7:50	4/18/2019 10:16	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-9	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 12:28	4/10/2019 7:50	4/18/2019 10:18	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-9	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 12:28	4/10/2019 7:50	4/18/2019 10:18	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-10	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 12:52	4/10/2019 7:50	4/18/2019 10:20	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-10	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 12:52	4/10/2019 7:50	4/18/2019 10:20	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-11	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 13:17	4/10/2019 7:50	4/18/2019 10:22	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71988-11	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 13:17	4/10/2019 7:50	4/18/2019 10:22	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L71988-13	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	4/9/2019 12:55	4/10/2019 7:50	4/18/2019 10:23	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	FREP @ L71988.10
L71988-13	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	4/9/2019 12:55	4/10/2019 7:50	4/18/2019 10:23	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	FREP @ L71988.10
L71989-1	421874-510	City of Sammamish Monthly Stream Monitoring	CVTOTN	FRESH WTR	4/9/2019 10:35	4/10/2019 7:50	4/18/2019 9:30	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L71989-1	421874-510	City of Sammamish Monthly Stream Monitoring	CVTOTP	FRESH WTR	4/9/2019 10:35	4/10/2019 7:50	4/18/2019 9:30	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72006-1	421195-150	Beaver Lake	CVTOTP	FRESH WTR	4/8/2019 10:22	4/10/2019 7:50	4/18/2019 9:38	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72006-2	421195-150	Beaver Lake	CVTOTP	FRESH WTR	4/8/2019 10:05	4/10/2019 7:50	4/18/2019 9:47	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72006-3	421195-150	Beaver Lake	CVTOTP	FRESH WTR	4/8/2019 10:52	4/10/2019 7:50	4/18/2019 9:49	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72006-4	421195-150	Beaver Lake	CVTOTP	FRESH WTR	4/8/2019 10:30	4/10/2019 7:50	4/18/2019 9:50	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72007-1	421195-210	Hicklin Lake Routine	CVTOTN	FRESH WTR	4/9/2019 11:10	4/10/2019 7:50	4/18/2019 9:08	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72007-1	421195-210	Hicklin Lake Routine	CVTOTP	FRESH WTR	4/9/2019 11:10	4/10/2019 7:50	4/18/2019 9:08	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72007-2	421195-210	Hicklin Lake Routine	CVTOTN	FRESH WTR	4/9/2019 11:10	4/10/2019 7:50	4/18/2019 9:10	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72007-2	421195-210	Hicklin Lake Routine	CVTOTP	FRESH WTR	4/9/2019 11:10	4/10/2019 7:50	4/18/2019 9:10	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72007-3	421195-210	Hicklin Lake Routine	CVTOTN	FRESH WTR	4/9/2019 10:00	4/10/2019 7:50	4/18/2019 9:12	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72007-3	421195-210	Hicklin Lake Routine	CVTOTP	FRESH WTR	4/9/2019 10:00	4/10/2019 7:50	4/18/2019 9:12	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72007-4	421195-210	Hicklin Lake Routine	CVTOTN	FRESH WTR	4/9/2019 10:00	4/10/2019 7:50	4/18/2019 9:21	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72007-4	421195-210	Hicklin Lake Routine	CVTOTP	FRESH WTR	4/9/2019 10:00	4/10/2019 7:50	4/18/2019 9:21	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72007-5	421195-210	Hicklin Lake Routine	CVTOTN	FRESH WTR	4/9/2019 11:36	4/10/2019 7:50	4/18/2019 9:27	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72007-5	421195-210	Hicklin Lake Routine	CVTOTP	FRESH WTR	4/9/2019 11:36	4/10/2019 7:50	4/18/2019 9:27	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72007-6	421195-210	Hicklin Lake Routine	CVTOTN	FRESH WTR	4/9/2019 9:42	4/10/2019 7:50	4/18/2019 9:28	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72007-6	421195-210	Hicklin Lake Routine	CVTOTP	FRESH WTR	4/9/2019 9:42	4/10/2019 7:50	4/18/2019 9:28	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72036-1	421195-240	Horseshoe Lake WQ	CVTOTN	FRESH WTR	4/4/2019 11:16	4/10/2019 7:50	4/18/2019 10:25	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72036-1	421195-240	Horseshoe Lake WQ	CVTOTP	FRESH WTR	4/4/2019 11:16	4/10/2019 7:50	4/18/2019 10:25	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72036-2	421195-240	Horseshoe Lake WQ	CVTOTN	FRESH WTR	4/4/2019 11:40	4/10/2019 7:50	4/18/2019 10:27	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72036-2	421195-240	Horseshoe Lake WQ	CVTOTP	FRESH WTR	4/4/2019 11:40	4/10/2019 7:50	4/18/2019 10:27	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
L72036-3	421195-240	Horseshoe Lake WQ	CVTOTN	FRESH WTR	4/4/2019 11:59	4/10/2019 7:50	4/18/2019 10:29	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	
L72036-3	421195-240	Horseshoe Lake WQ	CVTOTP	FRESH WTR	4/4/2019 11:59	4/10/2019 7:50	4/18/2019 10:29	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	
WG163133-1	MDLCK		CVTOTN	BLANK WTR		4/10/2019 7:50	4/18/2019 8:30	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	LEVEL1
WG163133-1	MDLCK		CVTOTP	BLANK WTR		4/10/2019 7:50	4/18/2019 8:30	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	LEVEL1
WG163133-2	MB		CVTOTN	BLANK WTR		4/10/2019 7:50	4/18/2019 8:32	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	MB1 04/10/19



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WG163133-2	MB	CVTOTP	BLANK WTR	4/10/2019 7:50	4/18/2019 8:32	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	MB1 04/10/19
WG163133-3	SB	CVTOTN	BLANK WTR	4/10/2019 7:50	4/18/2019 8:33	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	WG163133-2
WG163133-3	SB	CVTOTP	BLANK WTR	4/10/2019 7:50	4/18/2019 8:33	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	WG163133-2
WG163133-4	LCS	CVTOTN	BLANK WTR	4/10/2019 7:50	4/18/2019 8:35	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	LEVEL1
WG163133-4	LCS	CVTOTP	BLANK WTR	4/10/2019 7:50	4/18/2019 8:35	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	LEVEL1
WG163133-5	LD	CVTOTN	FRESH WTR	4/10/2019 7:50	4/18/2019 9:23	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	L72007-4
WG163133-5	LD	CVTOTP	FRESH WTR	4/10/2019 7:50	4/18/2019 9:23	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	L72007-4
WG163133-6	MS	CVTOTN	FRESH WTR	4/10/2019 7:50	4/18/2019 9:25	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	L72007-4
WG163133-6	MS	CVTOTP	FRESH WTR	4/10/2019 7:50	4/18/2019 9:25	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	L72007-4
WG163133-7	MB	CVTOTN	BLANK WTR	4/10/2019 7:50	4/18/2019 9:34	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	MB2 04/10/19
WG163133-7	MB	CVTOTP	BLANK WTR	4/10/2019 7:50	4/18/2019 9:34	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	MB2 04/10/19
WG163133-8	LCS	CVTOTN	BLANK WTR	4/10/2019 7:50	4/18/2019 9:36	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	LEVEL1
WG163133-8	LCS	CVTOTP	BLANK WTR	4/10/2019 7:50	4/18/2019 9:36	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	LEVEL1
WG163133-9	LD	CVTOTN	FRESH WTR	4/10/2019 7:50	4/18/2019 9:54	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	L71988-1
WG163133-9	LD	CVTOTP	FRESH WTR	4/10/2019 7:50	4/18/2019 9:54	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	L71988-1
WG163133-10	MS	CVTOTN	FRESH WTR	4/10/2019 7:50	4/18/2019 9:56	WG163133-1,-2,-3,-4,-5,-6,-7,-8,-9,-10	L71988-1
WG163133-10	MS	CVTOTP	FRESH WTR	4/10/2019 7:50	4/18/2019 9:56	WG163133-9,-10,-1,-2,-3,-4,-5,-6,-7,-8	L71988-1

## WG163117 Total Metals and Hardness by ICPMS

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L71855-1	421195-260	Ravensdale Monthly GW	MTICPMS	GRND WTR	4/2/2019 9:30	4/10/2019 7:00	4/11/2019 10:43	WG163117-1,-2,-3,-4,-5,-6	
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	MTHARD-ICPM	BLANK WTR	4/4/2019 11:30	4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	Field Equipment Blank
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	MTICPMS	BLANK WTR	4/4/2019 11:30	4/10/2019 7:00	4/11/2019 10:47	WG163117-1,-2,-3,-4,-5,-6	Field Equipment Blank
L71980-1	421185	WP INPLANT 3 Day INTENSIVE STUDY	MTICPMS	INFLUENT	3/26/2019 8:53	4/10/2019 7:00	4/11/2019 10:50	WG163117-1,-2,-3,-4,-5,-6	
L71980-3	421185	WP INPLANT 3 Day INTENSIVE STUDY	MTICPMS	EFFLUENT	3/26/2019 9:13	4/10/2019 7:00	4/11/2019 10:54	WG163117-1,-2,-3,-4,-5,-6	
L71998-1	421195-240	Horseshoe Lake WQ	MTHARD-ICPM	FRESH WTR	3/27/2019 9:39	4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	
L71998-1	421195-240	Horseshoe Lake WQ	MTICPMS	FRESH WTR	3/27/2019 9:39	4/10/2019 7:00	4/11/2019 11:12	WG163117-1,-2,-3,-4,-5,-6	
L71998-2	421195-240	Horseshoe Lake WQ	MTHARD-ICPM	FRESH WTR	3/27/2019 10:14	4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	
L71998-2	421195-240	Horseshoe Lake WQ	MTICPMS	FRESH WTR	3/27/2019 10:14	4/10/2019 7:00	4/11/2019 11:23	WG163117-1,-2,-3,-4,-5,-6	
L71998-3	421195-240	Horseshoe Lake WQ	MTHARD-ICPM	FRESH WTR	3/27/2019 10:44	4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	
L71998-3	421195-240	Horseshoe Lake WQ	MTICPMS	FRESH WTR	3/27/2019 10:44	4/10/2019 7:00	4/11/2019 11:27	WG163117-1,-2,-3,-4,-5,-6	
L72036-1	421195-240	Horseshoe Lake WQ	MTHARD-ICPM	FRESH WTR	4/4/2019 11:16	4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	
L72036-1	421195-240	Horseshoe Lake WQ	MTICPMS	FRESH WTR	4/4/2019 11:16	4/10/2019 7:00	4/11/2019 11:31	WG163117-1,-2,-3,-4,-5,-6	
L72036-2	421195-240	Horseshoe Lake WQ	MTHARD-ICPM	FRESH WTR	4/4/2019 11:40	4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	
L72036-2	421195-240	Horseshoe Lake WQ	MTICPMS	FRESH WTR	4/4/2019 11:40	4/10/2019 7:00	4/11/2019 11:34	WG163117-1,-2,-3,-4,-5,-6	
L72036-3	421195-240	Horseshoe Lake WQ	MTHARD-ICPM	FRESH WTR	4/4/2019 11:59	4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	
L72036-3	421195-240	Horseshoe Lake WQ	MTICPMS	FRESH WTR	4/4/2019 11:59	4/10/2019 7:00	4/11/2019 11:38	WG163117-1,-2,-3,-4,-5,-6	
WG163117-1	MB		MTHARD-ICPM	BLANK WTR		4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	METHOD BLANK
WG163117-1	MB		MTICPMS	BLANK WTR		4/10/2019 7:00	4/11/2019 10:36	WG163117-1,-2,-3,-4,-5,-6	METHOD BLANK
WG163117-2	SB		MTHARD-ICPM	BLANK WTR		4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	WG163117-1 MS-20
WG163117-2	SB		MTICPMS	BLANK WTR		4/10/2019 7:00	4/11/2019 10:39	WG163117-1,-2,-3,-4,-5,-6	WG163117-1 MS-20
WG163117-3	LD		MTICPMS	EFFLUENT		4/10/2019 7:00	4/11/2019 11:05	WG163117-1,-2,-3,-4,-5,-6	L71980-3 RPD-LIQ
WG163117-4	MS		MTICPMS	EFFLUENT		4/10/2019 7:00	4/11/2019 11:09	WG163117-1,-2,-3,-4,-5,-6	L71980-3 MS-20
WG163117-5	LD		MTHARD-ICPM	FRESH WTR		4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	L71998-1 RPD-LIQ
WG163117-5	LD		MTICPMS	FRESH WTR		4/10/2019 7:00	4/11/2019 11:16	WG163117-1,-2,-3,-4,-5,-6	L71998-1 RPD-LIQ
WG163117-6	MS		MTHARD-ICPM	FRESH WTR		4/10/2019 7:00	4/16/2019 7:58	WG163117-1,-2,-5,-6	L71998-1 MS-20
WG163117-6	MS		MTICPMS	FRESH WTR		4/10/2019 7:00	4/11/2019 11:20	WG163117-1,-2,-3,-4,-5,-6	L71998-1 MS-20

WG163253 Dissolved Metals by ICPMS

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L71571-1	421874-510	City of Sammamish Monthly Stream Monitoring	MTICPMS-DIS	STORM WTR	4/9/2019 8:08	4/17/2019 12:00	4/18/2019 13:23	WG163253-1,-2,-3,-4,-5,-6	
L71971-1	421195-181	Mercer Island Pilot Study - Oyster Shell Retrofits	MTICPMS-DIS	BLANK WTR	4/4/2019 11:30	4/17/2019 12:00	4/18/2019 13:34	WG163253-1,-2,-3,-4,-5,-6	Field Equipment Blank
L71998-1	421195-240	Horseshoe Lake WQ	MTICPMS-DIS	FRESH WTR	3/27/2019 9:39	4/17/2019 12:00	4/18/2019 12:47	WG163253-1,-2,-3,-4,-5,-6	
L71998-2	421195-240	Horseshoe Lake WQ	MTICPMS-DIS	FRESH WTR	3/27/2019 10:14	4/17/2019 12:00	4/18/2019 12:51	WG163253-1,-2,-3,-4,-5,-6	
L71998-3	421195-240	Horseshoe Lake WQ	MTICPMS-DIS	FRESH WTR	3/27/2019 10:44	4/17/2019 12:00	4/18/2019 13:02	WG163253-1,-2,-3,-4,-5,-6	
L72036-1	421195-240	Horseshoe Lake WQ	MTICPMS-DIS	FRESH WTR	4/4/2019 11:16	4/17/2019 12:00	4/18/2019 13:05	WG163253-1,-2,-3,-4,-5,-6	
L72036-2	421195-240	Horseshoe Lake WQ	MTICPMS-DIS	FRESH WTR	4/4/2019 11:40	4/17/2019 12:00	4/18/2019 13:09	WG163253-1,-2,-3,-4,-5,-6	
L72036-3	421195-240	Horseshoe Lake WQ	MTICPMS-DIS	FRESH WTR	4/4/2019 11:59	4/17/2019 12:00	4/18/2019 13:13	WG163253-1,-2,-3,-4,-5,-6	
WG163253-1	MB		MTICPMS-DIS	BLANK WTR		4/17/2019 12:00	4/18/2019 12:40	WG163253-1,-2,-3,-4,-5,-6	METHOD BLANK
WG163253-2	SB		MTICPMS-DIS	BLANK WTR		4/17/2019 12:00	4/18/2019 12:43	WG163253-1,-2,-3,-4,-5,-6	WG163253-1 MS-20
WG163253-3	LD		MTICPMS-DIS	FRESH WTR		4/17/2019 12:00	4/18/2019 12:54	WG163253-1,-2,-3,-4,-5,-6	L71998-2 RPD-LIQ
WG163253-4	MS		MTICPMS-DIS	FRESH WTR		4/17/2019 12:00	4/18/2019 12:58	WG163253-1,-2,-3,-4,-5,-6	L71998-2 MS-20
WG163253-5	LD		MTICPMS-DIS	STORM WTR		4/17/2019 12:00	4/18/2019 13:27	WG163253-1,-2,-3,-4,-5,-6	L71571-1 RPD-LIQ
WG163253-6	MS		MTICPMS-DIS	STORM WTR		4/17/2019 12:00	4/18/2019 13:31	WG163253-1,-2,-3,-4,-5,-6	L71571-1 MS-20

Workgroup: WG163012 Alkalinity, Conductivity, pH

LCS:WG163012-2 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD

(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Alkalinity	1	5 mg CaCO3/L		50	48.4	97		90--110

LD:WG163012-3 L72098-1 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project:423670 Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Alkalinity	1	5 mg CaCO3/L		<MDL	<MDL			0--10

LD:WG163012-4 L72038-2 Matrix: FRESH WTR Listtype:CVALK Method:SM2320-B Project:421155 Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Alkalinity	1	5 mg CaCO3/L		67	67.1	0		0--10

LCS:WG163012-5 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD

(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Alkalinity	1	5 mg CaCO3/L		10	9.52	95		85--115

LCS:WG163012-6 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD

(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Alkalinity	1	5 mg CaCO3/L		50	50.8	102		90--110

LCS:WG163012-8 Matrix: BLANK WTR Listtype:CVALK-H Method:SM2320-B Project: Pkey:STD

(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Alkalinity	10	50 mg CaCO3/L		250	255	102		90--110

LD:WG163012-9 L72039-5 Matrix: LEACHATE Listtype:CVALK-BI-H Method:SM2320-B BI Project:421422-CHLS-M\_MOD Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Alkalinity, Bicarbonate	5	25 mg CaCO3/L		1100	1090	0		0--10

LD:WG163012-9 L72039-5 Matrix: LEACHATE Listtype:CVALK-CA Method:SM2320-B CA Project:421422-CHLS-M\_MOD Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Alkalinity, Carbonate	1	5 mg CaCO3/L		<MDL	<MDL			0--10

LD:WG163012-9 L72039-5 Matrix: LEACHATE Listtype:CVALK-H Method:SM2320-B Project:421422-CHLS-M\_MOD Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Alkalinity	5	25 mg	CaCO3/L	1100	1090	0		0--10

LCS:WG163012-10 Matrix: BLANK WTR Listtype:CVALK-H Method:SM2320-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Alkalinity	10	50 mg	CaCO3/L	500	512	102		90--110

LCS:WG163012-11 Matrix: BLANK WTR Listtype:CVALK-H Method:SM2320-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Alkalinity	10	50 mg	CaCO3/L	2500	2520	101		90--110

LCS:WG163012-13 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	718	100		90--110

LCS:WG163012-14 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	6667	6560	98		90--110

LCS:WG163012-15 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	24800	24500	99		90--110

LD:WG163012-16 L72041-3 Matrix: LEACHATE Listtype:CVCOND Method:SM2510-B Project:421422-CHLS-M Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	9340	9360	0		0--10

LCS:WG163012-17 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	721	100		90--110

LCS:WG163012-18 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	6667	6580	99		90--110

LCS:WG163012-19 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	24800	24500	99		90--110

LCS:WG163012-20 Matrix: BLANK WTR Listtype:CVPH Method:SM4500-H-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
pH			pH	6.86	6.9	101		98--102

LD:WG163012-21 L71971-1 Matrix: BLANK WTR Listtype:CVPH Method:SM4500-H-B Project:421195-181 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Abs. Diff	Qual	Lab Limit
pH			pH	5.9	6	0.1		0--.2

LCS:WG163012-22 Matrix: BLANK WTR Listtype:CVPH Method:SM4500-H-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
pH			pH	6.86	6.9	101		98--102

Workgroup: WG163043 TSS, VSS, FIXED-SS

MB:WG163043-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L		<MDL

MB:WG163043-1 Matrix: BLANK WTR Listtype:CVVSS Method:EPA 160.4 Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Volatile Suspended Solids	0.5	1	mg/L	0.6	<RDL,B

LCS:WG163043-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Suspended Solids	0.5	1	mg/L	62.2	63.4	102		74--126

LCS:WG163043-2 Matrix: BLANK WTR Listtype:CVVSS Method:EPA 160.4 Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Volatile Suspended Solids	0.5	1	mg/L	44.2	46.1	104		73--127

LD:WG163043-3 L72039-6 Matrix: LEACHATE Listtype:CVTSS Method:SM2540-D Project:421422-CHLS-M\_MOD Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	2.5	5	mg/L	43.5	41.5	5		0--25

LD:WG163043-3 L72039-6 Matrix: LEACHATE Listtype:CVTSS-FIXED Method:SM2540-E Project:421422-CHLS-M\_MOD Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Fixed Suspended Solids	2.5	5	mg/L	8.5	9.5	11		0--25

LD:WG163043-3 L72039-6 Matrix: LEACHATE Listtype:CVVSS Method:EPA 160.4 Project:421422-CHLS-M\_MOD Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Volatile Suspended Solids	2.5	5	mg/L	35	32	9		0--25

LD:WG163043-4 L72120-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-E Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	20	40	mg/L	732	768	5		0--25

LD:WG163043-4 L72120-3 Matrix: FRESH WTR Listtype:CVVSS Method:EPA 160.4 Project:421422-CHSW-E Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Volatile Suspended Solids	20	40	mg/L	96	100	4		0--25

MB:WG163043-5 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L		<MDL

MB:WG163043-5 Matrix: BLANK WTR Listtype:CVTSS-FIXED Method:SM2540-E Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Fixed Suspended Solids	0.5	1	mg/L		<MDL

MB:WG163043-5 Matrix: BLANK WTR Listtype:CVVSS Method:EPA 160.4 Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Volatile Suspended Solids	0.5	1	mg/L		<MDL

LCS:WG163043-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Suspended Solids	0.5	1	mg/L	63	66.6	106		74--126

LCS:WG163043-6 Matrix: BLANK WTR Listtype:CVTSS-FIXED Method:SM2540-E Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Fixed Suspended Solids	0.5	1	mg/L	18.2	17.9	98		73--127

LCS:WG163043-6 Matrix: BLANK WTR Listtype:CVVSS Method:EPA 160.4 Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Volatile Suspended Solids	0.5	1	mg/L	44.8	48.7	109		73--127



Workgroup: WG163054 Dissolved Nutrients

MB:WG163054-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.002	0.01	mg/L		<MDL

MB:WG163054-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L		<MDL

MB:WG163054-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.0005	0.002	mg/L		<MDL

SB:WG163054-2 MB:WG163054-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD  
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0379	95		80--120

SB:WG163054-2 MB:WG163054-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD  
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	1	1.04	104		80--120

SB:WG163054-2 MB:WG163054-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD  
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0227	114		80--120

LCS:WG163054-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0496	99		85--115

LCS:WG163054-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	1.02	102		85--115

LCS:WG163054-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0223	111		85--115

LD:WG163054-5 L72101-16 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0025	0.0025			0--20

LD:WG163054-5 L72101-16 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.22	0.219	0		0--20

LD:WG163054-5 L72101-16 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.008	0.00802	0		0--20

MS:WG163054-6 L72101-16 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0025	0.04	0.0439	103		75--125

MS:WG163054-6 L72101-16 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.22	1	1.19	97		75--125

MS:WG163054-6 L72101-16 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.008	0.02	0.0273	96		75--125

MB:WG163054-7 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.002	0.01	mg/L		<MDL

MB:WG163054-7 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L		<MDL

MB:WG163054-7 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.0005	0.002	mg/L		<MDL

LCS:WG163054-8 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0522	104		85--115

LCS:WG163054-8 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	1	100		85--115

LCS:WG163054-8 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0215	108		85--115

LD:WG163054-9 L72101-23 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0152	0.0152	0		0--20

LD:WG163054-9 L72101-23 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.15	0.151	1		0--20

LD:WG163054-9 L72101-23 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0014	0.0014			0--20

MS:WG163054-10 L72101-23 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0152	0.04	0.0565	103		75--125

MS:WG163054-10 L72101-23 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD  
 (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec. Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.15	1	1.16	101	75--125

MS:WG163054-10 L72101-23 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD  
 (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec. Qual	Lab Limit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0014	0.02	0.0215	101	75--125

Workgroup: WG163080 TOC

MB:WG163080-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L		<MDL

SB:WG163080-3 MB:WG163080-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD  
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec. Qual	Lab Limit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.1	101	80--120

LCS:WG163080-4 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Organic Carbon	0.5	1	mg/L	10	10.2	102		85--115

LD:WG163080-5 L72120-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-E Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Organic Carbon	200	400	mg/L	1680	1700	1		0--20

MS:WG163080-6 L72120-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-E Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec. Qual	Lab Limit
Total Organic Carbon	200	400	mg/L	1680	4000	5540	96	75--125

Workgroup: WG163133 Total N and Total P

MB:WG163133-2 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Nitrogen	0.05	0.1	mg/L		<MDL

MB:WG163133-2 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Phosphorus	0.005	0.01	mg/L		<MDL

SB:WG163133-3 MB:WG163133-2 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD  
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.991	99		80--120

SB:WG163133-3 MB:WG163133-2 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD  
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0982	98		80--120

LCS:WG163133-4 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1	0.937	94		85--115

LCS:WG163133-4 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0891	89		85--115

LD:WG163133-5 L72007-4 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-210 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1.22	1.19	2		0--20

LD:WG163133-5 L72007-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-210 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.127	0.131	2		0--20

MS:WG163133-6 L72007-4 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-210 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1.22	1	2.17	95		75--125

MS:WG163133-6 L72007-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-210 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.127	0.1	0.224	96		75--125

MB:WG163133-7 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Nitrogen	0.05	0.1	mg/L		<MDL

MB:WG163133-7 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Phosphorus	0.005	0.01	mg/L		<MDL

LCS:WG163133-8 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1	0.878	88		85--115

LCS:WG163133-8 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD  
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0885	88		85--115

LD:WG163133-9 L71988-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	0.524	0.545	4		0--20

LD:WG163133-9 L71988-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0448	0.0448	0		0--20

MS:WG163133-10 L71988-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec. Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	0.524	1	1.47	94	75--125

MS:WG163133-10 L71988-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec. Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0448	0.1	0.141	96	75--125



Workgroup: WG163117 Total Metals and Hardness by ICPMS

MB:WG163117-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8 (MOD)\*SM2340B Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Hardness, Calc	0.331	0.331 mg CaCO3/L			<MDL

MB:WG163117-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total, ICP-MS	0.1	0.5	ug/L		<MDL
Sodium, Total, ICP-MS	100	100	ug/L		<MDL
Magnesium, Total, ICP-MS	50	50	ug/L		<MDL
Aluminum, Total, ICP-MS	5	10	ug/L		<MDL
Potassium, Total, ICP-MS	100	500	ug/L		<MDL
Calcium, Total, ICP-MS	50	50	ug/L		<MDL
Vanadium, Total, ICP-MS	0.075	0.375	ug/L		<MDL
Chromium, Total, ICP-MS	0.2	1	ug/L		<MDL
Manganese, Total, ICP-MS	0.1	0.5	ug/L		<MDL
Iron, Total, ICP-MS	10	50	ug/L		<MDL
Cobalt, Total, ICP-MS	0.05	0.25	ug/L		<MDL
Nickel, Total, ICP-MS	0.1	0.5	ug/L		<MDL
Copper, Total, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Total, ICP-MS	0.5	2.5	ug/L		<MDL
Arsenic, Total, ICP-MS	0.05	0.25	ug/L		<MDL
Selenium, Total, ICP-MS	0.5	1	ug/L		<MDL
Silver, Total, ICP-MS	0.04	0.2	ug/L		<MDL
Cadmium, Total, ICP-MS	0.05	0.25	ug/L		<MDL
Antimony, Total, ICP-MS	0.3	1	ug/L		<MDL
Barium, Total, ICP-MS	0.5	0.5	ug/L		<MDL
Thallium, Total, ICP-MS	0.1	0.2	ug/L		<MDL
Lead, Total, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG163117-2 MB:WG163117-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8 (MOD)\*SM2340B Project: Pkey:STD  
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec. Qual	Lab Limit
Hardness, Calc	0.331	0.331 mg CaCO3/L		<MDL	33.1	34.4	104	85--115

SB:WG163117-2 MB:WG163117-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project: Pkey:STD  
 (Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.6	98		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	5300	106		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5260	105		85--115
Aluminum, Total, ICP-MS	5	10	ug/L	<MDL	20	21.4	107		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	5160	103		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5090	102		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	20.8	104		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	20.3	102		85--115
Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.5	108		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	5410	108		85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.4	102		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.7	99		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	19.8	99		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.7	103		85--115
Arsenic, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.7	99		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.6	98		85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.5	108		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.7	98		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	18.5	92		85--115
Barium, Total, ICP-MS	0.5	0.5	ug/L	<MDL	20	19.6	98		85--115
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	19.6	98		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.9	105		85--115

LD:WG163117-3 L71980-3 Matrix: EFFLUENT Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421185 Pkey:STD  
 (Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	0.53	0.57			0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	3.11	3.13	1		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	8.26	8.43	2		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	50.4	51	1		0--20
Arsenic, Total, ICP-MS	0.05	0.25	ug/L	1.65	1.64	1		0--20
Selenium, Total, ICP-MS	0.5	1	ug/L	0.69	0.66			0--20
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	0.52	0.52			0--20
Barium, Total, ICP-MS	0.5	0.5	ug/L	7.74	7.74	0		0--20
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.26	0.26			0--20

MS:WG163117-4 L71980-3 Matrix: EFFLUENT Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421185 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec. Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.8	104	75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	0.53	20	20.2	98	75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	3.11	20	22.7	98	75--125
Copper, Total, ICP-MS	0.2	2	ug/L	8.26	20	27.5	96	75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	50.4	20	70	98	75--125
Arsenic, Total, ICP-MS	0.05	0.25	ug/L	1.65	20	22.1	102	75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	0.69	20	20.5	99	75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.3	102	75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95	75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	0.52	20	19.4	94	75--125
Barium, Total, ICP-MS	0.5	0.5	ug/L	7.74	20	27.2	97	75--125
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	18.8	94	75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.26	20	20.5	101	75--125

LD:WG163117-5 L71998-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8 (MOD)\*SM2340B Project:421195-240 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Hardness, Calc	0.331	0.331 mg CaCO3/L		25.6	26	1		0--20

LD:WG163117-5 L71998-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421195-240 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Magnesium, Total, ICP-MS	50	50	ug/L	2080	2090	1		0--20
Aluminum, Total, ICP-MS	5	10	ug/L	41.2	41.5	1		0--20
Calcium, Total, ICP-MS	50	50	ug/L	6820	6940	2		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	<MDL			0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	27.2	27.4	1		0--20
Iron, Total, ICP-MS	10	50	ug/L	240	241	0		0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	0.32	0.3			0--20
Copper, Total, ICP-MS	0.2	2	ug/L	1	0.99			0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	0.73	1.1			0--20
Arsenic, Total, ICP-MS	0.05	0.25	ug/L	0.451	0.462	2		0--20
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	<MDL			0--20
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	<MDL			0--20
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG163117-6 L71998-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8 (MOD)\*SM2340B Project:421195-240 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec. Qual	Lab Limit
Hardness, Calc	0.331	0.331 mg CaCO3/L		25.6	33.1	60.9	107	75--125

MS:WG163117-6 L71998-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8 (MOD) Project:421195-240 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec. Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.7	98	75--125
Magnesium, Total, ICP-MS	50	50	ug/L	2080	5000	7460	108	75--125
Aluminum, Total, ICP-MS	5	10	ug/L	41.2	20	60.4	96	75--125
Calcium, Total, ICP-MS	50	50	ug/L	6820	5000	12100	105	75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	20.7	103	75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	27.2	20	48.9	108	75--125
Iron, Total, ICP-MS	10	50	ug/L	240	5000	5690	109	75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	0.32	20	20.7	102	75--125
Copper, Total, ICP-MS	0.2	2	ug/L	1	20	21.3	101	75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	0.73	20	22.2	107	75--125
Arsenic, Total, ICP-MS	0.05	0.25	ug/L	0.451	20	21	103	75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.5	97	75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.6	108	75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.8	99	75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	18.6	93	75--125
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	19.3	97	75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.7	103	75--125

Workgroup: WG163253 Dissolved Metals by ICPMS

MB:WG163253-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8 (MOD) Project: Pkey:STD  
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Magnesium, Dissolved, ICP-MS	50	50	ug/L		<MDL
Aluminum, Dissolved, ICP-MS	5	10	ug/L		<MDL
Calcium, Dissolved, ICP-MS	50	50	ug/L		<MDL
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L		<MDL
Chromium, Dissolved, ICP-MS	0.2	1	ug/L		<MDL
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Iron, Dissolved, ICP-MS	10	50	ug/L		<MDL
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Copper, Dissolved, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L		<MDL
Arsenic, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Selenium, Dissolved, ICP-MS	0.5	1	ug/L		<MDL
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Antimony, Dissolved, ICP-MS	0.3	1	ug/L		<MDL
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG163253-2 MB:WG163253-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8 (MOD) Project: Pkey:STD  
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.6	93		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	5240	105		85--115
Aluminum, Dissolved, ICP-MS	5	10	ug/L	<MDL	20	20.4	102		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4840	97		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	20	100		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	20.4	102		85--115
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.6	103		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	5210	104		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	100		85--115
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	20.6	103		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20	100		85--115
Arsenic, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.9	95		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	18.8	94		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.5	93		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.7	94		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.3	97		85--115
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	19.7	98		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101		85--115

LD:WG163253-3 L71998-2 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8 (MOD) Project:421195-240 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	3090	3090	0		0--20
Aluminum, Dissolved, ICP-MS	5	10	ug/L	<MDL	<MDL			0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	11300	11500	2		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	<MDL			0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	5.37	5.47	2		0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	20	20			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Copper, Dissolved, ICP-MS	0.2	2	ug/L	0.24	0.27			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	0.87	1.4			0--20
Arsenic, Dissolved, ICP-MS	0.05	0.25	ug/L	0.253	0.255	1		0--20
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	<MDL			0--20
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	<MDL			0--20
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	<MDL			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG163253-4 L71998-2 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8 (MOD) Project:421195-240 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	3090	5000	8170	102		75--125
Aluminum, Dissolved, ICP-MS	5	10	ug/L	<MDL	20	23.7	118		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	11300	5000	16200	97		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	20.5	102		75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	5.37	20	25.5	101		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	20	5000	5240	104		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	0.24	20	20.8	103		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	0.87	20	20.9	100		75--125
Arsenic, Dissolved, ICP-MS	0.05	0.25	ug/L	0.253	20	19.4	96		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	18.8	94		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.4	92		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.4	92		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.2	96		75--125
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	19.6	98		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.8	99		75--125

LD:WG163253-5 L71571-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8 (MOD) Project:421874-510 Pkey:STD  
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Magnesium, Dissolved, ICP-MS	50	50	ug/L	7950	7940	0		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	16200	16200	0		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	1.85	1.93	4		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.41	0.43			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	109	111	1		0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.45	0.46			0--20
Copper, Dissolved, ICP-MS	0.2	2	ug/L	1	1			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2.3	2.3			0--20
Arsenic, Dissolved, ICP-MS	0.05	0.25	ug/L	1.55	1.56	0		0--20
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	<MDL			0--20
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG163253-6 L71571-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8 (MOD) Project:421874-510 Pkey:STD  
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Magnesium, Dissolved, ICP-MS	50	50	ug/L	7950	5000	13000	101		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	16200	5000	20800	92		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	1.85	20	21.8	100		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.41	20	21	103		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	109	5000	5260	103		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.45	20	20.5	100		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	1	20	21.7	103		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2.3	20	22.4	101		75--125
Arsenic, Dissolved, ICP-MS	0.05	0.25	ug/L	1.55	20	20.9	97		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	19	95		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.5	93		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.7	94		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.5	103		75--125

## **Sample Receipt and Chain of Custody Records**



Project: 421195-181

CHAIN OF CUSTODY

Relinquished by <i>[Signature]</i>	Date 4/4/19	Time 1400
Received by <i>[Signature]</i>	Date 4/4/19	Time 1400
Sample Numbers -1		[All]

Sample Number	P71971-1	P71971-2
QC Link		
Locator	FIELDBLANK	FIELDBLANK
Short Loc Desc	FIELDBLANK	FIELDBLANK
Locator Desc	FIELD BLANK	FIELD BLANK
Site	METRO	METRO
Comments	Mercer I. Oyster Shell proj., field equipment blank	Mercer I. Oyster Shell proj, oyster shell blank
Start Date/Time	4/4/19 1130	
End Date/Time		
Time Span		
Sample Depth		
SAMP FUNC		
Dept, Matrix, Prod	3 LN DOC 3 LN ORTHOP 3 LN PH 3 LN TOC 3 LN TOTN 3 LN TOTP 3 LN TSS 6 LN CA-ICPMS 6 LN CD-ICPMS 6 LN CD-ICPMS, DISS 6 LN CU-ICPMS 6 LN CU-ICPMS, DISS 6 LN ICPMS-HARDNESS 6 LN MG-ICPMS 6 LN PB-ICPMS 6 LN PB-ICPMS, DISS 6 LN ZN-ICPMS 6 LN ZN-ICPMS, DISS	6 LN CA-ICPMS 6 LN CD-ICPMS 6 LN CL-ICPMS 6 LN MG-ICPMS 6 LN PB-ICPMS 6 LN ZN-ICPMS

DELETE

HF, JD

WG163345

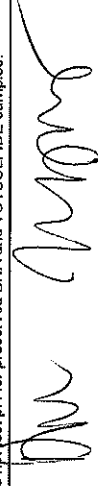
# LIQUID SAMPLE RECEIPT RECORD

Login Number(s): 71977-1	Project No.: 421195	Sub-Contracting: Y/N	List Product(s):
Collect Date(s): 4/11/19	Receive Date: 4/14/19	Changes: Y/N	List Parameter(s):
<b>SAMPLE RECEIPT CONDITIONS</b>			
Condition	Acceptable?	Comment ID	Comment
Labels / Fieldsheets	Y/N		
Container	Y/N		
Temperature (w/ ice)	Y/N/NA		
<b>BOTTLE COUNT (#) AND DESCRIPTION AND SAMPLE NUMBERS</b>			
Bottle Description: Sample Numbers			
#	Condition	Acceptable?	Comment ID
1	40 mL clear vial (VOA):		
	60 mL clear glass (PHYTO):		
	60 mL CWM HDPE:	Y/N	
	125 mL AWM HDPE:	Y/N	
	125 mL CWM HDPE:	Y/N	
	125 mL GANM:		
2	125 mL GANM w/H <sub>2</sub> PO <sub>4</sub> :		
2	250 mL AWM HDPE:		
	250 mL CWM HDPE:		
	250 mL GAWM:		
	250 mL GAWM W/H <sub>2</sub> SO <sub>4</sub> :		
	300 mL WDO (8 hour HT):		
	500 mL AWM HDPE:		
	500 mL CWM HDPE:		
	500 mL CWM PP (MICRO):		
	500 mL HDPE (METALS):		
	500 mL HDPE, double-bagged (METALS):		
	500 mL Teflon (Hg):		
	500 mL Teflon, double-bagged (METALS):		
	500 mL GANM / GAWM:		
	500 mL Polystyrene Filtration Units (METALS):		
	1L AWM HDPE:		
	1L CWM HDPE:		
	1L CWM PP (MICRO):		
	1L GANM:		
	1L GCWMM:		
	1L GAWM w/ H <sub>2</sub> SO <sub>4</sub> :		
	2L CWM HDPE:		
	Other:		
	Other:		
<b>FIELD PRESERVATION CHECKLIST (Circle and/or check applicable selections)</b>			
PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
BNA / pH 6 - 9 w/ H <sub>2</sub> SO <sub>4</sub> or NaOH	√ field sheet for F, pH	Y / N	Notify ORG
CN / pH > 12 w/ NaOH within 15 min	□ Check pH	Y / N	Deliver to CONV
NO23 pH < 2 w/ H <sub>2</sub> SO <sub>4</sub>	□ Check pH	Y / N / NA	Deliver to CONV
CR(VI) / TOR(VI) / pH 9.3 - 9.7 w/ NaOH w/in 15 min	√ field sheet for pH	Y / N	Deliver to CONV
ICP / HG-CVAA-M / pH < 2 w/ HNO <sub>3</sub>	□ Check pH	Y / N	Preserve By SM
O&G / HEM / PHENOL / pH < 2 w/ H <sub>2</sub> SO <sub>4</sub>	Check documentation	Y / N	Preserve By SM
PHYTOPLANKTON / Lugols	Visually inspect	Y / N	Deliver to MICRO
TKN / COD / pH < 2 w/ H <sub>2</sub> SO <sub>4</sub> within 15 min	□ Check pH	Y / N	Preserve By SM
TOC / pH < 2 w/ H <sub>2</sub> PO <sub>4</sub> (NPDES only) & DDC	□ Check pH	Y / N	Preserve By SM
TOTSULFIDE / pH > 9 w/ NaOH, ZnAc	Check documentation	Y / N	Deliver to CONV
WDO / FIXED	Visually inspect	Y / N	Deliver to CONV
Other:			
<b>ROUTINE SM PRESERVATION CHECKLIST (Circle and/or check applicable selections)</b>			
PRODUCT / Preservation	SM Action	Acceptable?	Corrective Action
Chlorinated Pesticides / pH 5 - 9 w/ H <sub>2</sub> SO <sub>4</sub> or NaOH	√ field sheet for F, pH	Y / N	Adjust pH
HG-CVAA-L-Teflon (T/D) / pH < 2 w/ ULTRA HCl	□ Preserve & deliver	NA	NA
ICP / HG-CVAA-M (T/D) / pH < 2 w/ ULTRA HNO <sub>3</sub>	□ Preserve & deliver	NA	NA
ICPMS (Y/D) / pH < 2 w/ ULTRA HNO <sub>3</sub>	□ Preserve & deliver	NA	NA
TOC / pH < 2 w/ H <sub>2</sub> PO <sub>4</sub>	□ Preserve & deliver	NA	NA
Other:			
<b>INTERFERENCE TEST (Circle and/or check applicable selections)</b>			
Product / Interference (SM Action)	Positive Test?	Treated	Corrective Action
BNA / Chlorine (Check documentation)	Y / N / not tested	Y / N	Deliver to ORG
CN / Chlorine (Check documentation)	Y / N / not tested	Y / N	Deliver to CONV
CN / Sulfide (Check field sheet for DF)	Y / N / not tested	Y / N	Deliver to CONV
VOA / Chlorine (Check documentation)	Y / N / not tested	Y / N	Deliver to ORG
Other:			
<b>HEADSPACE CHECK</b>			
PRODUCT (SM Action)	Check For	Acceptable?	Corrective Action
MICRO (Visually inspect)	Headspace (@ 1")	Y / N	Notify MICRO
TOTSULFIDE (Visually inspect)	Headspace (< 1")	Y / N	Notify CONV
VOA (Visually inspect)	Zero headspace	Y / N	Notify ORG
WDO (Visually inspect)	Zero headspace	Y / N	Notify CONV
Other:			
<b>FIELD FILTRATION CHECKLIST (Circle and/or check applicable selections)</b>			
Product (SM Action)	Field Filtered	Field Blank	Corrective Action
ORTHOP (Check Field Sheet)	Y (within 15 min y/n) / N	Y (N)	Deliver to CONV
NO2 / ND3 / NO23 / NH3 / S (Documentation)	Y (within 1 day y/n) / N	Y / N / NA	Deliver to CONV
Dissolved Metals (Check Field Sheet)	Y (within 15 min y/n) / N	Y / N / NA	Deliver to METALS
DOC (Deliver / Notify Unit)	Y (within 15 min or 1 day) / N	Y / (N) / NA	Deliver to CONV
DCOD / CR(VI) (Deliver / Notify Unit)	Y (within 15 min y/n) / N	Y / N / NA	Deliver to CONV
Other:			

CC:  AQUATOX,  CONV,  METALS,  MICRO,  ORG,

**NOTES**

- Deliver dissolved Hg-CVAF samples to METALS for filtration.
- Deliver double-bagged metals samples to METALS for preservation.
- Do not test pH for preserved BNA and TOTSULFIDE samples.
- Deliver pH, WDO, and all MICRO samples ASAP to appropriate section for immediate processing.
- Enter "Time Span" for composite samples during sample login.
- Spill algae sample into 60 mL clear glass if PHYTOQUAL is requested.

SM Signature: 

Date / Time Completed: APR 04 19 14:14

**King County Environmental Laboratory**

Login Report (LN01): L71971

Reported 04-Apr-2019 4:53 pm by SKINNERD

Sample	Locator	Collectdate	Login Date	Due Date
L71971-1	FIELDBLANK	04-APR-19 00:00:00	04-APR-19	04-MAY-19

Project: 421195-181 Mercer Island Pilot Study - Oyster Shell Retrofits

Sample Comment: Mercer I. Oyster Shell proj., field equipment blank

Matrix	Class	Product	Source	Status
BLANK WTR	S	SAMP FUNC	ELD	NEED
BLANK WTR	S	DOC	ELD	NEED
BLANK WTR	S	ZN-ICPMS, DISS	ELD	NEED
BLANK WTR	S	ZN-ICPMS	ELD	NEED
BLANK WTR	S	PB-ICPMS, DISS	ELD	NEED
BLANK WTR	S	PB-ICPMS	ELD	NEED
BLANK WTR	C	MG-ICPMS	ELD	NEED
BLANK WTR	C	ICPMS-HARDNESS	ELD	NEED
BLANK WTR	S	ORTHOP	ELD	NEED
BLANK WTR	S	PH	ELD	NEED
BLANK WTR	S	TOC	ELD	NEED
BLANK WTR	S	TOTN	ELD	NEED
BLANK WTR	S	TOTP	ELD	NEED
BLANK WTR	S	TSS	ELD	NEED
BLANK WTR	C	CA-ICPMS	ELD	NEED
BLANK WTR	S	CD-ICPMS	ELD	NEED
BLANK WTR	S	CD-ICPMS, DISS	ELD	NEED
BLANK WTR	S	CU-ICPMS	ELD	NEED
BLANK WTR	S	CU-ICPMS, DISS	ELD	NEED